



City of Calabasas General Plan Update

Draft Program Environmental Impact Report

prepared by

City of Calabasas

Planning Division, Department of Community Development
100 Civic Center Way
Calabasas, California 91302

prepared with the assistance of

Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003

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RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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- Appendix B Air Quality and Greenhouse Gas
- Appendix C VMT Memorandum and Evacuation Analysis
- Appendix D Noise Measurements
- Appendix E Wildfire Risk Analysis

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Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed update of the City of Calabasas General Plan (General Plan Update). This section summarizes the characteristics, alternatives, and the environmental impacts and mitigation measures associated with the General Plan Update.

Project Synopsis

Project Proponent

City of Calabasas
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General Plan Synopsis

The 2030 General Plan is intended to function as a policy document to guide land use decisions in the city's plan area through the year 2030. The vision for the City was developed with extensive community input and in recognition of the State's planning priorities. The Plan is organized into 13 chapters, including an introduction, implementation section, and 11 topical chapters. The introduction establishes the overall vision for the future and provides context and background information on the city and the 2030 General Plan itself. The 11 topical chapters encompass all the elements required by California General Plan law. A summary of the elements is included in Section 2, *Project Description*. Each element includes information describing current conditions in Calabasas and discusses what the City's plan to accomplish its vision. Each element also discusses its overall purpose, or vision, as it relates to the 2030 General Plan as a whole. The goals and policies in each element outline how the City plans to achieve this vision.

Project Objectives

- Meet State required RHNA for 6th Cycle Housing Element planning period of 2021 - 2029
- Bring the General Plan into conformance with recently enacted State laws
- Identify future housing sites with a collective capacity to meet the City's RHNA, including the requisite buffer capacity
- Locate future housing sites in existing urban areas, in close proximity to transit and commercial services, and to avoid placement of new housing in open space areas

Alternatives

As required by CEQA, this EIR evaluates a range of alternatives to the proposed project. Alternatives analyzed include the following:

- Alternative 1: No Project (continuation of the current General Plan)
- Alternative 2: Avalon Apartments with Affordable Housing Overlay Alternative
- Alternative 3: Rezoned Sites Alternative

Each of the alternatives discussed in this section has certain advantages and disadvantages as compared to the General Plan Update, as described below.

- **Alternative 1: No Project (continuation of the current General Plan)**

Alternative 1 assumes that the City's existing General Plan policies would continue to facilitate development in accordance with existing land use designations. Under Alternative 1, new development would generally result from re-use of properties and conversion of uses in response to market demand (e.g., commercial or office to mixed use). While new development under Alternative 1 would also result from re-use of properties and conversion of uses in response to market demand, this alternative would not adjust the permitted density for the CMU and RM-16/20 zones to a range of 20 to 24 du/acre, and would not include the affordable housing overlay (AHO) on select sites to allow an increase in density up to 45 du/acre plus the applicable density bonus allowed by State law. Therefore, Alternative 1 would not fulfill any project objectives listed above.

Alternative 1 would result in somewhat lesser physical impacts from ground disturbance and operation of development than the proposed General Plan Update because it would be expected to result in less development. Less intensity would result in fewer potential environmental impacts related to both construction and operation, particularly for traffic, air quality, noise, public services and recreation, utilities and service systems, and wildfire than the proposed General Plan Update. Growth under existing land use designations would result in a greater per capita vehicle miles traveled (VMT); therefore, transportation impacts would be greater than those of the proposed General Plan Update.

- **Alternative 2: Avalon Apartments with Affordable Housing Overlay Alternative**

Alternative 2 would include an Affordable Housing Overlay (AHO) zone on the Avalon Apartments site and would increase the permitted density on that site from 20-24 du/acre to 40 du/acre. The allowable development of new units would increase at that site from 132 under the General Plan Update to 620 under this alternative. This alternative would also remove the church site from the sites inventory, and thus would not accommodate development of potentially 111 residential units on that site. Therefore, there would be a net increase of 377 units compared to the General Plan Update, and one fewer site where residential development would occur. Like the proposed General Plan Update, Alternative 2 would meet the City's Regional Housing Needs Assessment (RHNA) allocation.

Alternative 2 would have lesser impacts to biological resources, cultural resources, and wildfire than the proposed General Plan Update. Development under Alternative 2 would occur at one fewer site with a building potentially eligible for listing as a historic resource; therefore, Alternative 2 would result in fewer potential impacts to historic resources. Construction and operational energy demand, population increase, public service demand, and impacts related to utilities and service systems would be greater than under the proposed General Plan Update. Alternative 2 would result in a similar home-based VMT per capita as the proposed General Plan

Update; therefore, transportation impacts would be similar to those of the proposed General Plan Update.

- **Alternative 3: Rezoned Sites Alternative**

Alternative 3 would replace site #2 (Rancho Pet Kennels), #6 (church property), and #8 (Avalon Apartments) in the sites inventory with the three sites: an existing shopping center at the northwest corner of Thousand Oaks Boulevard and Las Virgenes Road; an existing shopping center at the southwest corner of Agoura Road and Las Virgenes Road; and five contiguous lots along Las Virgenes Road south of Agoura Road in the eastern side of the Plan Area south of US-101. Like the proposed General Plan Update, Alternative 3 would meet the City's RHNA allocation.

Impacts to aesthetics, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, population and housing, transportation, and wildfire would be generally similar to the General Plan Update. Alternative 3 would accommodate development at one site potentially having historic value sufficient for local landmark designation. Therefore, Alternative 3 would increase the likelihood of potential impacts to historic resources than the General Plan Update. Construction and operational energy demand, population increase, public service demand, and impacts to utilities and service systems would be greater than under the proposed General Plan Update. Alternative 3 would result in a decrease of home-based VMT per capita than the baseline VMT per capita but slightly less than that of the proposed General Plan Update; therefore, transportation impacts would be slightly greater than those of the proposed General Plan Update.

No other alternatives were identified that would feasibly attain most of the basic project objectives, but also avoid or substantially lessen the significant effects of the General Plan Update.

Areas of Known Controversy

Areas of known controversy, including issues raised by some members of the community are potential impacts to wildlife and biological resources, emergency evacuation, and public safety in wildfire hazard zones.

Issues to be Resolved

Issues to be resolved include whether to adopt the proposed General Plan Update, revised policies, and land use designations.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the General Plan Update, proposed mitigation measures, and residual impacts. Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per Section 15093 of the CEQA Guidelines.

- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure(s)	Residual Impact
Aesthetics		
Impact AES-1. The visual character of the area on north and south sides of US-101 would be expected to improve generally as the 2030 General Plan design policies and the various development standards are implemented. Development on sites proposed in the General Plan Update would not occur in the Mulholland Highway or Old Topanga Road Scenic Corridor. Impacts would be less than significant.	None required	Less than significant
Impact AES-2. There are no State-designated or eligible scenic highways in the Plan Area. There would be no impacts to scenic resources within a State scenic highway. Impacts would be less than significant.	None required	Less than significant
Impact AES-3. The sites proposed under the General Plan Update are in currently developed areas or in those adjacent to developed areas where new development would not degrade visual character or quality. Furthermore, in some cases, views would improve because new development would replace aging structures with those that more clearly meet the City’s design standards and Development Code, including increased landscaping. Impacts would be less than significant.	None required	Less than significant
Impact AES-4. Reasonably foreseeable development under the General Plan Update would result in new sources of light and glare. New development would occur in already urbanized areas where lights and glare are already common. Light and glare would be minimized by General Plan policies and adherence to CALGreen building codes that specify limits on light and glare. Impacts would be less than significant.	None required	Less than significant
Air Quality		
Impact AQ-1. Reasonably foreseeable development under the General Plan Update would result in an increase in air pollutant emissions in the South Central Coast Air Basin. The development of additional residential units would increase population of the Plan Area by 2029, assuming full buildout. Although the General Plan Update would facilitate development beyond what is forecast in the South Coast Air Quality Management District’s (SCAQMD’s) 2016 Air Quality Management Plan (AQMP), it would bring the forecasts for the City’s General Plan and the AQMP into consistency because the new population forecast based on the City’s General Plan Update will be incorporated into SCAQMD’s 2022 AQMP, which SCAQMD is currently in the process of preparing. In addition, the General Plan Update would be consistent with the AQMP control measures through	None required	Less than significant

Impact	Mitigation Measure(s)	Residual Impact
Implementation of policies contained in the Housing and Circulation Element would help reduce air pollutant emissions through transportation and land use design factors that would promote VMT reductions. Impacts would be less than significant.		
Impact AQ-2. Construction activities facilitated by the General Plan Update would generate temporary air pollutant emissions associated with fugitive dust and exhaust emissions. Compliance with Southern California Air Quality Management District (SCAQMD) rules and 2030 General Plan Policies would reduce the overall level of air quality impacts associated with construction activities under the General Plan Update. Impacts would be less than significant.	None required	Less than significant
Impact AQ-3. Construction and operation of reasonably foreseeable development under the General Plan Update would not expose sensitive receptors to substantial concentrations of carbon monoxide or toxic air contaminants. Operation of reasonably foreseeable development under the General Plan Update would not include substantial toxic air contaminants sources and is consistent with California Air Resources Board (CARB) and SCAQMD guidelines. Impacts would be less than significant.	None required	Less than significant
Impact AQ-4. The construction of housing units facilitated by the General Plan Update would generate construction-related odors. The odors would be limited to the construction period for each housing site and would be intermittent and temporary. Certain commercial uses and construction activity under the General Plan Update could generate odors. However, no uses that would generate emissions affecting a substantial number of people are proposed. Impacts would be less than significant.	None required	Less than significant
Biological Resources		
Impact BIO-1. The Plan Area is largely urbanized, and the General Plan Update would prioritize development on infill sites that have been previously developed and/or disturbed. Nevertheless, construction of reasonably foreseeable development under the General Plan Update could potentially adversely impact special-status species or their habitat. Impacts would be potentially significant.	Mitigation Measures MM BIO-1 through MM BIO-5	Less than significant with mitigation incorporated
Impact BIO-2. Reasonably foreseeable development under the General Plan Update could result in construction that may adversely impact riparian habitat or other sensitive natural communities. Impacts would be potentially significant.	Mitigation Measures MM BIO-1, MM BIO-4, and MM BIO-5	Less than significant with mitigation incorporated
Impact BIO-3. Reasonably foreseeable development under the General Plan Update could result in construction that may adversely impact State or federally protected wetlands. Impacts would be potentially significant.	Mitigation Measures MM BIO-1, MM BIO-4, and MM BIO-5	Less than significant with mitigation incorporated
Impact BIO-4. Reasonably foreseeable development under the General Plan could result in construction that would result in potentially significant impacts to local wildlife movement corridors. Impacts would be potentially significant.	Mitigation Measures MM BIO-1 through MM BIO-5	Less than significant with mitigation incorporated
Impact BIO-5. Reasonably foreseeable development under the General Plan Update would adhere to the City's Oak Tree Ordinance and Oak Tree Preservation and Protection Guidelines and would not conflict with the County's General Plan and the Significant Ecological Area (SEA) ordinance. Impacts would be less than significant.	None required	No impact

Impact	Mitigation Measure(s)	Residual Impact
Cultural Resources and Tribal Cultural Resources		
<p>Impact CUL-1. Construction of reasonably foreseeable development under the General Plan Update may adversely affect identified and previously unidentified archaeological cultural resources. Impacts would be potentially significant.</p>	<p>Mitigation Measures MM CUL-1(a) through MM CUL-1(e)</p>	<p>Less than significant with mitigation incorporated</p>
<p>Impact CUL-2. Construction of reasonably foreseeable development under the General Plan Update may adversely affect historic-period buildings and structures. Impacts would be potentially significant.</p>	<p>Mitigation Measures MM CUL-1(a), MM CUL-2(a) through MM CUL-2(c)</p>	<p>Less than significant with mitigation incorporated</p>
<p>Impact CUL-3. Construction of reasonably foreseeable development under the General Plan Update could result in damage to or destruction of human burials; however, adherence to State regulations would reduce potential impacts to a less than significant level.</p>	<p>None required</p>	<p>Less than significant</p>
<p>Impact CUL-4. Construction of reasonably foreseeable development under the General Plan Update could result in disturbance of tribal cultural resources. Impacts would be potentially significant.</p>	<p>Mitigation Measures MM CUL-1(a) through MM CUL-1(e)</p>	<p>Less than significant with mitigation incorporated</p>
Geology and Soils		
<p>Impact GEO-1. Future seismic events could produce ground shaking in the Plan Area could damage structures and/or create adverse health and safety effects. Although reasonably foreseeable development in the city would potentially be exposed to such hazards, it would not exacerbate the potential for seismic impacts. With implementation of General Plan policies and required building codes, impacts would be less than significant.</p>	<p>None required</p>	<p>Less than significant</p>
<p>Impact GEO-2. Future seismic events could result in erosion of topsoil during construction activities. Compliance with the California State Water Resources Control Board (SWRCB) construction requirements would reduce impacts to less than significant.</p>	<p>None required</p>	<p>Less than significant</p>
<p>Impact GEO-3. Future seismic events could result in liquefaction and lateral spreading of soils in the Plan Area. Development in these areas could be subject to liquefaction hazards. Compliance with the California Building Code (CBC) and General Plan policies would reduce potential hazards to less than significant.</p>	<p>None required</p>	<p>Less than significant</p>
<p>Impact GEO-4. New development under the General Plan Update is not anticipated to include the use of septic systems. Therefore, there would be a less than significant impact related to the use of septic tanks or alternative wastewater disposal systems.</p>	<p>None required</p>	<p>Less than significant</p>
<p>Impact GEO-5. Grading and excavation for construction under the General Plan Update could potentially disturb paleontological resources. Impacts would be potentially significant.</p>	<p>Mitigation Measure MM GEO-1</p>	<p>Less than significant with mitigation incorporated</p>

Impact	Mitigation Measure(s)	Residual Impact
Greenhouse Gas Emissions		
<p>Impact GHG-1. Reasonably foreseeable development under the General Plan Update would generate GHG emissions, but annual operational emissions combined with amortized construction emissions would not exceed the locally-applicable, project-specific GHG threshold. In addition, the General Plan Update would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, such as the State’s 2017 Scoping Plan, SCAG’s 2020-2045 RTP/SCS, and local policies contained in the City’s General Plan. Impacts would be less than significant.</p>	None required	Less than significant
Hazards and Hazardous Materials		
<p>Impact HAZ-1. Reasonably foreseeable development under the General Plan Update could result in an incremental increase in the overall routine transport, use, storage, and disposal of hazardous materials in the Plan Area and increase the risk of release of hazardous materials. However, compliance with applicable regulations related to the handling and storage of hazardous materials and compliance with General Plan policies would minimize the risk of spills and the public’s potential exposure to these substances to a less than significant level.</p>	None required	Less than significant
<p>Impact HAZ-2. Reasonably foreseeable development under the General Plan Update could result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Compliance with existing regulatory requirements would minimize risks to schools and students, resulting in a less than significant impact.</p>	None required	Less than significant
<p>Impact HAZ-3. Reasonably foreseeable development under the General Plan Update could result in development on sites contaminated with hazardous materials. Compliance with applicable regulations relating to site cleanup and General Plan goals and policies would minimize impacts from development on contaminated sites. Impacts would be less than significant.</p>	None required	Less than significant
<p>Impact HAZ-4. There are no public or private airports within the Plan Area. The Plan Area is located entirely outside of the area of influence for the nearest airport. Therefore, the General Plan Update would have no impact related to excessive noise hazards within airport land use plan areas or in proximity to airports.</p>	None required	No impact
<p>Impact HAZ-5. According to an evacuation analysis, the General Plan Update would not have a significant effect on emergency evacuation. Implementation of the General Plan policies associated with emergency planning and response, in addition to City emergency planning and local programs such as the Multi-Jurisdictional Hazard Mitigation Plan, would ensure that potential impacts from reasonably foreseeable development under the General Plan Update to emergency response and evacuation would be less than significant.</p>	None required	Less than significant
Hydrology and Water Quality		
<p>Impact HWQ-1. Reasonably foreseeable development under the General Plan Update could increase pollutants in stormwater and wastewater, but General Plan policies and existing regulations would ensure that water quality standards and waste discharge requirements would not be violated. Impacts would be less than significant.</p>	None required	Less than significant

Impact	Mitigation Measure(s)	Residual Impact
<p>Impact HWQ-2. Development facilitated by the General Plan Update would incrementally increase the amount of impervious surface in the Plan Area, which could incrementally reduce the potential for groundwater recharge from infiltration of precipitation. However, the increase in impervious surface area would be marginal and would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. Impacts would be less than significant.</p>	None required	Less than significant
<p>Impact HWD-3. Reasonably foreseeable development under the General Plan Update could alter the existing drainage patterns and increase runoff. However, enforcement of existing regulations would protect the city's existing drainage pattern from substantial alteration and minimize erosion and siltation from such activities. Impacts would be less than significant.</p>	None required	Less than significant
<p>Impact HWD-4. With implementation of existing regulations, reasonably foreseeable development under the General Plan Update would not substantially alter drainage patterns or create or contribute runoff that would result in downstream flooding or impede or redirect flood flows. Impacts would be less than significant.</p>	None required	Less than significant
<p>Impact HWQ-5. Reasonably foreseeable development under the General Plan Update would not impair existing or potential beneficial uses of nearby or downstream water bodies and would not conflict with or obstruct implementation of plans concerning the San Fernando Basin or Thousand Oaks Basin.</p>	None required	Less than significant
Land Use and Planning		
<p>Impact LU-1. The General Plan Update would allow for future residential development that aligns with community desires as well as regional growth objectives and State law, provide for orderly development in the Plan Area, and would not physically divide an established community. Impacts would be less than significant.</p>	None required	Less than significant
<p>Impact LU-2. Reasonably foreseeable development consistent with the General Plan Update (Housing Element, Land Use Element, Safety Element, and Circulation Element) would be required to be consistent with the other 2030 General Plan elements, including policies and programs adopted to address environmental impacts. Despite accommodating growth beyond that anticipated in the current Southern California Association of Governments (SCAG) Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) forecasts and 2030 General Plan, housing growth under the General Plan Update would not be substantial or unplanned, and therefore consistent with State regulations. Therefore, the General Plan Update would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.</p>	None required	Less than significant
Noise		
<p>Impact NOI-1. Construction-related activities associated with reasonably foreseeable development under the General Plan Update would intermittently generate temporary construction noise levels in the vicinity of future projects. Impacts would be potentially significant.</p>	Mitigation Measure MM N-1	Less than significant with mitigation incorporated
<p>Impact NOI-2. Operation of reasonably foreseeable development under the General Plan Update would not result in the generation of a substantial permanent increase in ambient noise levels in the vicinity of the project sites. Impacts would be less than significant.</p>	None required	Less than significant

Impact	Mitigation Measure(s)	Residual Impact
Impact NOI-3. Reasonably foreseeable development under the General Plan Update would not substantially increase traffic and associated noise levels along city roadways. Impacts would be less than significant.	None required	Less than significant
Impact NOI-4. Construction and operation of reasonably foreseeable development under the General Plan Update would not result in the generation of excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant.	None required	Less than significant
Impact NOI-5. The General Plan Update would not expose people residing in the Plan area to excessive noise levels associated with the Van Nuys Airport. There would be no impact.	None required	No impact
Impact NOI-6. The General Plan Update would site new noise-sensitive land uses in areas where existing ambient noise levels fall within the “conditionally acceptable” and “normally unacceptable” ranges of the City’s noise/land use compatibility criteria. However, future development projects would be required to comply with the policies of the City’s General Plan Noise Element, which would minimize future residents’ exposure to high exterior and interior noise levels. Impacts would be less than significant.	None required	Less than significant
Population and Housing		
Impact PH-1. The General Plan Update would be consistent with State requirements for the RHNA. Although the General Plan Update would facilitate development beyond what is forecast in both the 2030 General Plan and SCAG’s 2020 RTP/SCS, it would bring the forecasts for the City’s General Plan and the RTP/SCS into consistency since the RTP/SCS will be updated to reflect new forecasts for each city in the region. Impacts would be less than significant.	None required	Less than significant
Impact PH-2. The General Plan Update is not anticipated to result in the net loss or displacement of housing, necessitating the construction of replacement housing elsewhere, and there would be no impact.	None required	No impact
Public Services and Recreation		
Impact PS-1. Reasonably foreseeable development under the General Plan Update would incrementally increase demand for fire protection service with the Los Angeles County Fire Department, it but would not result in the need to construct new or expanded station facilities. Impacts would be less than significant.	None required	Less than significant
Impact PS-2. Reasonably foreseeable development under the General Plan Update would incrementally increase demand for police protection service with the Los Angeles County Sheriff’s Department, it but would not, in itself, result in the need to construct new or expanded station facilities. Impacts would be less than significant.	None required	Less than significant
Impact PS-3. Reasonably foreseeable development under the General Plan Update could result in an increase in student enrollment. Future developers would be required to pay applicable school impact fees. Any project associated with expanding school facilities, whether related to the construction of new facilities or modernization of existing facilities, would be subject to project-specific environmental review and mitigation pursuant to CEQA. Impacts would be less than significant.	None required	Less than significant

Impact	Mitigation Measure(s)	Residual Impact
<p>Impact PS-4. The General Plan Update would not preclude implementation or expansion of any parkland, trails, or recreation facility. Reasonably foreseeable development under the General Plan Update would increase the city’s population, thus incrementally increasing demand for parks and recreational facilities. Any project associated with new or expanding parkland or recreation facilities would be subject to project-specific environmental review and mitigation pursuant to CEQA. It is anticipated that the City’s review processes would adequately mitigate potential environmental impacts relating to the development of new or redeveloped parkland, open space, or other recreational facilities. Impacts would be less than significant.</p>	None required	Less than significant
<p>Impact PS-5. Reasonably foreseeable development under the General Plan Update would increase the city’s population; however, impacts from development would be offset by payment of proportionate property taxes and sales taxes to the City. Any project associated with new or expanding library facilities would be subject to project-specific environmental review and mitigation pursuant to CEQA. It is anticipated that the City’s review processes would adequately mitigate potential environmental impacts relating to the development of new or redeveloped library facilities. Impacts would be less than significant.</p>	None required	Less than significant
Transportation and Traffic		
<p>Impact T-1. Construction and operation of reasonably foreseeable development under the General Plan Update would not have the potential to interfere with or obstruct the implementation of plans related to the circulation network, such as the SCAG 2020-2045 RTP/SCS, the LA Metro First Last Mile Strategic Plan, the City of Calabasas General Plan, and the Calabasas Pedestrian and Bicycle Plan. Impacts would be less than significant.</p>	None required	Less than significant
<p>Impact T-2. Reasonably foreseeable development and population growth under the General Plan Update would decrease home-based VMT per capita in the Plan Area by more than 15 percent below the baseline VMT per capita. VMT impacts associated with the General Plan Update would be less than significant.</p>	None required	Less than significant
<p>Impact T-3. Reasonably foreseeable development under the General Plan Update would not alter the circulation system in a manner that would substantially increase traffic related hazards. Impacts would be less than significant.</p>	None required	Less than significant
<p>Impact T-4. According to an evacuation analysis, the General Plan Update would not have a significant effect on emergency evacuation. The City’s Development Review procedures, in addition to General Plan policies, would ensure a safe and efficient transportation network and maintain adequate emergency access. Impacts would be less than significant.</p>	None required	Less than significant
Utilities and Service Systems		
<p>Impact UTIL-1. Reasonably foreseeable development under the General Plan Update may require the relocation or construction of new or expanded water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications facilities in the Plan Area. However, such relocation and construction would not cause significant environmental impacts beyond those already identified in this EIR. Impacts would be less than significant.</p>	None required	Less than significant

Impact	Mitigation Measure(s)	Residual Impact
Impact UTIL-2. Although reasonably foreseeable development under the General Plan Update would increase the water demand in the city, this increased demand through 2045 would be served by Las Virgenes Municipal Water District (LVMWD)'s projected and reasonable available water supplies. Impacts would be less than significant.	None required	Less than significant
Impact UTIL-3. Although reasonably foreseeable development under the General Plan Update would increase the amount of wastewater generated in the City, LVMWD's Tapia Water Reclamation Facility would have adequate capacity to serve the anticipated wastewater generation. Impacts would be less than significant.	None required	Less than significant
Impact UTIL-5. Reasonably foreseeable development under the General Plan Update would not generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure including the Calabasas Sanitary Landfill. Reasonably foreseeable development under the General Plan would comply with all federal, State, and local statutes and regulations governing solid waste disposal. Impacts would be less than significant.	None required	Less than significant
Wildfire		
Impact WFR-1. The entire Plan Area is mapped in a Very High Fire Hazard Severity Zone (VHFHSZ). General Plan policies address emergency access, response, and preparedness to maintain evacuation and emergency response plans. All proposed housing sites are located within one mile of an emergency evacuation route and would not alter existing evacuation systems; therefore, the General Plan Update would not impair an emergency response plan or emergency evacuation plan. Impacts would be less than significant.	None required	Less than significant
Impact WFR-2. Reasonably foreseeable development under the General Plan Update would increase the density of development in the Plan Area. New buildings would be required to be constructed according to the latest fire code and safety standards and policies in the General Plan that reduce risk to impacts from wildfire. Compliance with codes, regulations, and proposed policies would not produce direct, or indirect effects that would result in changes to the Plan Area with regard to wildfire risk. Additionally, proposed housing sites are not located in areas associated with adjacent high slopes or other factors that would exacerbate wildfire risk. Impacts would be less than significant.	None required	Less than significant
Impact WFR-3. The General Plan Update policies address installation and maintenance of infrastructure associated with the buildout of the General Plan Update, such as undergrounding utilities, and would not exacerbate fire risk. Impacts would be less than significant.	None required	Less than significant
Impact WFR-4. Proposed housing sites are not located in areas exposed to downslopes or downstream flooding or landslides following a wildfire. Impacts would be less than significant.	None required	Less than significant

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1 Introduction

This program Environmental Impact Report (EIR) examines the potential environmental effects of the proposed City of Calabasas (City) General Plan Update. The General Plan, the California Environmental Quality Act (CEQA) environmental review process, and the legal basis for preparing an EIR are described below.

1.1 Environmental Impact Report Background

The City of Calabasas distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on February 8, 2021 and ending on March 9, 2021. The City held an EIR Scoping Meeting on February 22, 2021. The scoping meeting, held via Zoom (due to Covid-19 restrictions) at 6:00 PM, was aimed at providing information about the proposed project to members of public agencies, interested stakeholders and residents/community members.

The City received letters from five agencies in response to the NOP during the public review period, as well as various verbal comments during the EIR Scoping Meeting. The NOP is presented in Appendix A of this EIR, along with the NOP comments received. Table 1-1 summarizes the content of the letters and verbal comments and where the issues raised are addressed in the EIR.

Table 1-1 NOP Comments and EIR Response

Commenter	Comment/Request	How and Where It Was Addressed
Agency Comments		
California Department of Fish and Wildlife (CDFW)	Recommends preparation of a map of the following areas if present within or adjacent to the City boundary: conservation easements or mitigation lands; threatened and endangered critical habitat; wildlife corridors; sensitive natural communities; aquatic and riparian resources; and urban forests.	Please refer to Section 4.3, <i>Biological Resources</i> , for analysis of impacts to special-status species and habitats, wildlife corridors, potential impacts to wildlife including nesting birds and bats, and mitigation measures.
	Concerned that the project would impact wildlife corridors.	
	Recommends inclusion of measures to avoid potential impacts to nesting birds and concerned about impacts to bird habitat.	
	Concerned about impacts to bat habitat.	
	Concerned about adequate disclosure of potential impacts and adequacy of baseline assessment, mapping and data, mitigation measures, and range of alternatives.	
	Provides instructions for CDFW permits, agreements, and services, and long term management of land mitigation.	

Committer	Comment/Request	How and Where It Was Addressed
California Native Plant Society	<p>Encourages consideration of wildfire risk in the planning process rather than as a safety domain.</p> <p>Encourages prioritization of rezoning and repurposing vacant or underutilized commercial or light industrial sites for residential use, rather than open space.</p> <p>Encourages active conservation of open space.</p>	Please refer to Section 2.0, <i>Project Description</i> , for a discussion of proposed housing sites and locations, Section 4.3, <i>Biological Resources</i> , regarding open space and natural resource preservation, and Section 4.15, <i>Wildfire</i> , which addresses wildfire risk.
County of Los Angeles Fire Department	<p>Notes project-specific fire and life safety requirements during building check review and issuance of a building permit.</p> <p>Requests review of potential impacts to the following: erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and oak trees.</p>	Please refer to Section 4.3, <i>Biological Resources</i> , regarding open space and natural resource preservation, Section 4.4, <i>Cultural Resources and Tribal Cultural Resources</i> , regarding archeological and cultural resources, Section 4.5, <i>Geology and Soils</i> , regarding erosion control measures, and Section 4.15, <i>Wildfire</i> , which addresses wildfire risk.
Native American Heritage Commission	Recommends consultation with Native American tribes that are affiliated with the project area and provides a summary of the requirements for compliance with Assembly Bill (AB 52) and Senate Bill (SB) 18.	Please refer to Section 4.4, <i>Cultural Resources and Tribal Cultural Resources</i> , regarding Native American Tribal consultation and potential impacts to tribal cultural resources.
South Coast Air Quality Management District	<p>Recommends that the Lead Agency use South Coast AQMD’s CEQA Air Quality Handbook and website as guidance when preparing the air quality and greenhouse gas analyses.</p> <p>Notes that the EIR should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated.</p> <p>Recommends resources for mitigation measures related to air quality impacts: South Coast AQMD’s CEQA Air Quality Handbook, South Coast AQMD’s Mitigation Monitoring and Reporting Plan for the 2016 Air Quality Management Plan, and Southern California Association of Government’s Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy.</p>	Please refer to Section 4.2, <i>Air Quality</i> , for analysis of impacts related to criteria air pollution, and Section 4.6, <i>Greenhouse Gas Emissions</i> , for analysis of impacts to greenhouse gas emissions.

Commenter	Comment/Request	How and Where It Was Addressed
Scoping Meeting Comments		
Norma and Mark Citron	Asked about the potential zoning changes and overlay zone.	Please refer to Section 2.0, <i>Project Description</i> .
	Asked about evacuation routes and public safety planning in wildfire hazard zones.	Please refer to Section 4.13, <i>Transportation</i> , which addresses evacuation routes, and Section 4.15, <i>Wildfire</i> , which addresses wildfire risk.
Joe Chilco	Concerned about evacuation routes and public safety planning in wildfire hazard zones, mitigation measures for water runoff, impacts to air quality, timing of project construction, and impacts to endangered species and wildlife corridors.	Please refer to Section 2.0, <i>Project Description</i> , for information regarding timing of implementation, Section 4.2, <i>Air Quality</i> , for analysis of impacts related to criteria air pollution and mitigation, Section 4.3, <i>Biological Resources</i> , regarding sensitive species and habitat protection and impacts to wildlife corridors, Section 4.6, <i>Hydrology and Water Quality</i> , regarding water runoff control measures, Section 4.13, <i>Transportation</i> , which addresses evacuation routes, and Section 4.15, <i>Wildfire</i> , which addresses wildfire risk.
Joanne	Concerned about evacuation routes and public safety planning in wildfire hazard zones, and the effect on public services and traffic.	Please refer to Section 4.12, <i>Public Services and Recreation</i> , for information on impacts to public services, Section 4.13, <i>Transportation</i> , which addresses evacuation routes, and Section 4.15, <i>Wildfire</i> , which addresses wildfire risk.
	Requests a traffic analysis for impacts to freeways and local streets.	Please refer to Section 4.13, <i>Transportation</i> , for information on traffic impacts.

1.2 Purpose and Legal Authority

This EIR has been prepared in accordance with CEQA and the state *CEQA Guidelines*. In accordance with Section 15121 (a) of the state *CEQA Guidelines* (California Code of Regulations (CCR), Title 14, Division 6, Chapter 3), the purpose of an EIR is to inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR fulfills the requirements for a program EIR. Although the legally required contents of a program EIR are the same as those of a project EIR, program EIRs are typically more conceptual and may contain a more general discussion of impacts, alternatives, and mitigation measures than a project EIR. As provided in Section 15168 of the state *CEQA Guidelines*, a program EIR may be prepared on a series of actions that may be characterized as one large project. Use of a program EIR provides the City (as Lead Agency) with the opportunity to consider broad policy alternatives and program-wide mitigation measures and provides the City with greater flexibility to address environmental issues and/or cumulative impacts on a comprehensive basis.

Agencies generally prepare program EIRs for programs or a series of related actions that are linked geographically; are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways.

By its nature, a program EIR considers the “macro” effects associated with implementing a program (such as a general plan update or specific plan).

Once a program EIR has been prepared, subsequent activities in the program must be examined in the light of that program EIR to determine what, if any, additional CEQA documentation needs to be prepared. If the program EIR addresses the program’s effects as specifically and comprehensively as possible, many subsequent activities could be found to be within the scope of the program EIR and additional environmental documents may not be required (CEQA Guidelines Section 15168(c)). When a lead agency relies on a program EIR for a subsequent activity, it must incorporate applicable mitigation measures and alternatives developed in the program EIR into the subsequent activities (CEQA Guidelines Section 15168(c)(3)). If a subsequent activity would have effects not identified in the program EIR, in other words, if a project is not exempt from environmental review per CEQA and the CEQA guidelines or other California law, the lead agency must prepare additional CEQA documentation. In this case, the program EIR still serves a valuable purpose as the first-tier environmental analysis. The CEQA Guidelines (Section 15168(h)) encourage the use of program EIRs, citing five advantages:

1. Provision of a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR
2. Focus on cumulative impacts that might be slighted in a case-by-case analysis
3. Avoidance of continual reconsideration of recurring policy issues
4. Consideration of broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them
5. Reduction of paperwork by encouraging the reuse of data (through tiering)

As a “macro” level environmental document, this program EIR uses macro-level thresholds rather than the project-level thresholds that might otherwise be used for an EIR on a specific development project. It should not be assumed that impacts determined not to be significant at a macro level would not also be significant at a project level. In other words, determination that implementation of the General Plan as a “program” would not have a significant environmental effect does not necessarily mean that an individual project would not have significant effects based on project-level CEQA thresholds, even if the project is consistent with the General Plan.

This EIR has been prepared to analyze potentially significant environmental impacts associated with reasonably foreseeable development under the General Plan Update and addresses appropriate and feasible mitigation measures or project alternatives that would minimize or eliminate these impacts. The EIR is intended to provide decision-makers and the public with information that enables them to consider the environmental consequences of the General Plan Update.

1.3 Scope and Content

As noted in subsection 1.1, *Environmental Impact Report Background*, an NOP was circulated to potentially interested parties on February 8, 2021, and responses received on the NOP were considered when setting the scope and content of the environmental information in this EIR. Subsections 4.1 through 4.15 in Section 4, *Environmental Impact Analysis*, address the resource areas outlined in the bullet points below. Section 5, *Other CEQA Required Discussions*, covers topics, including growth-inducing effects and significant and unavoidable impacts. Environmental topic areas that are addressed in this Program EIR include:

1. Aesthetics
2. Air Quality
3. Biological Resources
4. Cultural Resources and Tribal Cultural Resources
5. Geology and Soils
6. Greenhouse Gas Emissions
7. Hazards and Hazardous Materials
8. Hydrology and Water Quality
9. Land Use and Planning
10. Noise
11. Population and Housing
12. Public Services and Recreation
13. Transportation
14. Utilities and Service Systems
15. Wildfire
16. Effects Found Not to be Significant (Agricultural and Forestry Resources, Energy, and Mineral Resources)

In preparing the EIR, use was made of pertinent City policies and guidelines and other background documents. A full reference list is contained in Section 7, *References and Preparers*.

The alternatives section of the EIR (Section 6) was prepared in accordance with *CEQA Guidelines* Section 15126.6 and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the “environmentally superior” alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required “No Project” alternative and two alternative development scenarios for the City.

1.4 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Calabasas is the lead agency for the project because it holds principal responsibility for approving the project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. The California Department of Housing and Community Development (HCD) is the only responsible agency for the project. HCD is responsible for the review and certification of the Housing Element.

A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. There are no trustee agencies for the project.

1.5 Environmental Review Process

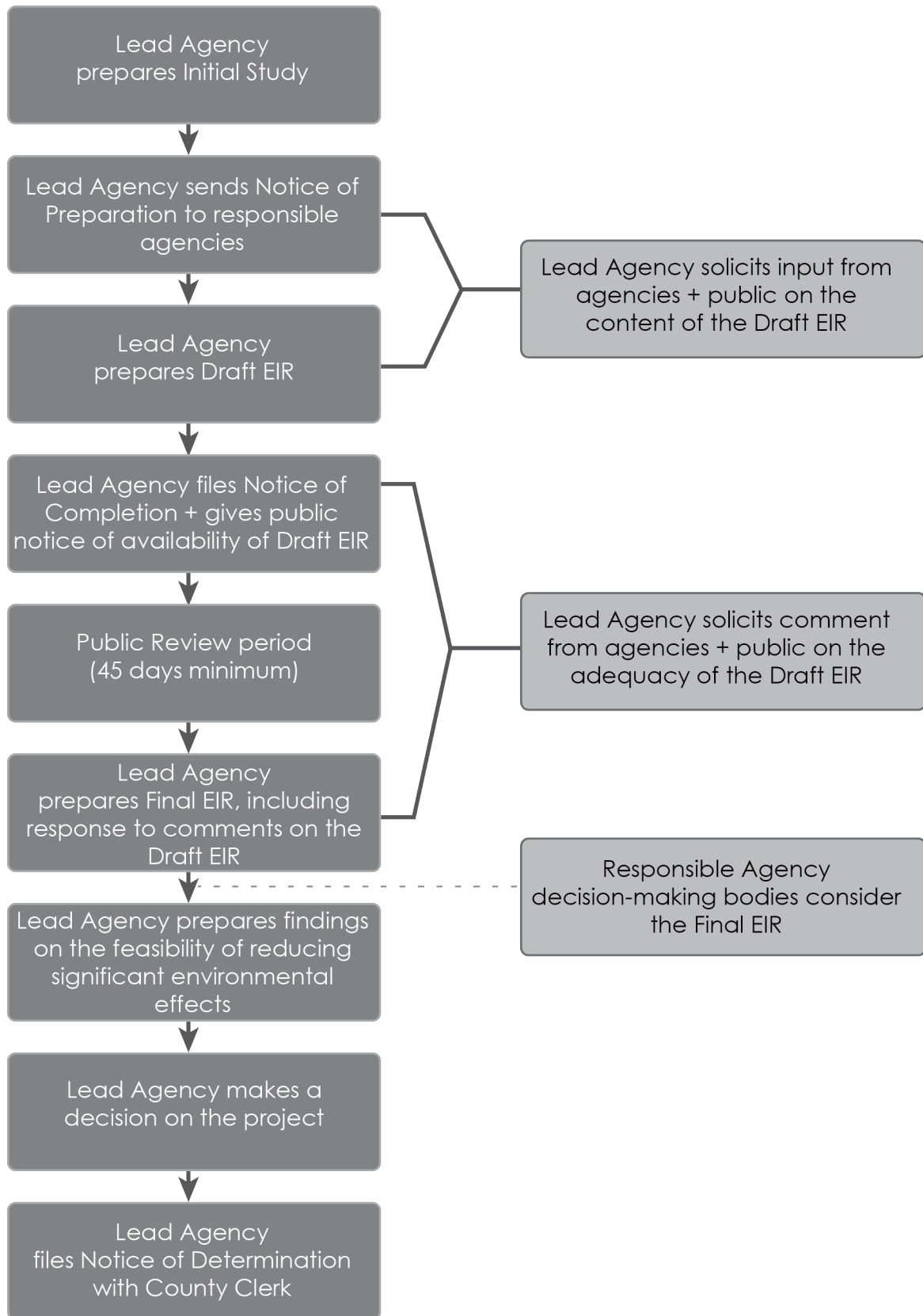
The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

1. **Notice of Preparation (NOP) and Initial Study.** After deciding that an EIR is required, the lead agency (City of Calabasas) must file a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the project could create significant environmental impacts.
2. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.
3. **Notice of Completion (NOC).** The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the NOC to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public and respond in writing to all comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (Public Resources Code 21091).
4. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
5. **Certification of Final EIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision making body reviewed and considered the information in the Final EIR prior to approving a project (*CEQA Guidelines* Section 15090).
6. **Lead Agency Project Decision.** The lead agency may a) disapprove the project because of its significant environmental effects; b) require changes to the project to reduce or avoid significant environmental effects; or c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
8. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation

measures that were adopted or made conditions of project approval to mitigate significant effects.

9. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

Figure 1-1 Environmental Review Process



2 Project Description

The project, herein referred to as the “General Plan Update,” would amend the City of Calabasas General Plan (hereinafter referred to as the “2030 General Plan”) by replacing the current Housing Element with the proposed 2021-2029 Housing Element and updating the Land Use Element of the 2030 General Plan to reflect the new Housing Element. The General Plan Update also includes updates to the Circulation Element to incorporate the vehicle miles traveled (VMT) metric required under CEQA and the Safety Element to reflect recent changes in State law.

This section describes the General Plan Update, including the lead agency, major characteristics, objectives, and discretionary actions needed for approval.

2.1 Lead Agency Name and Address

City of Calabasas
100 Civic Center Way
Calabasas, California 91302

2.2 Lead Agency Contact

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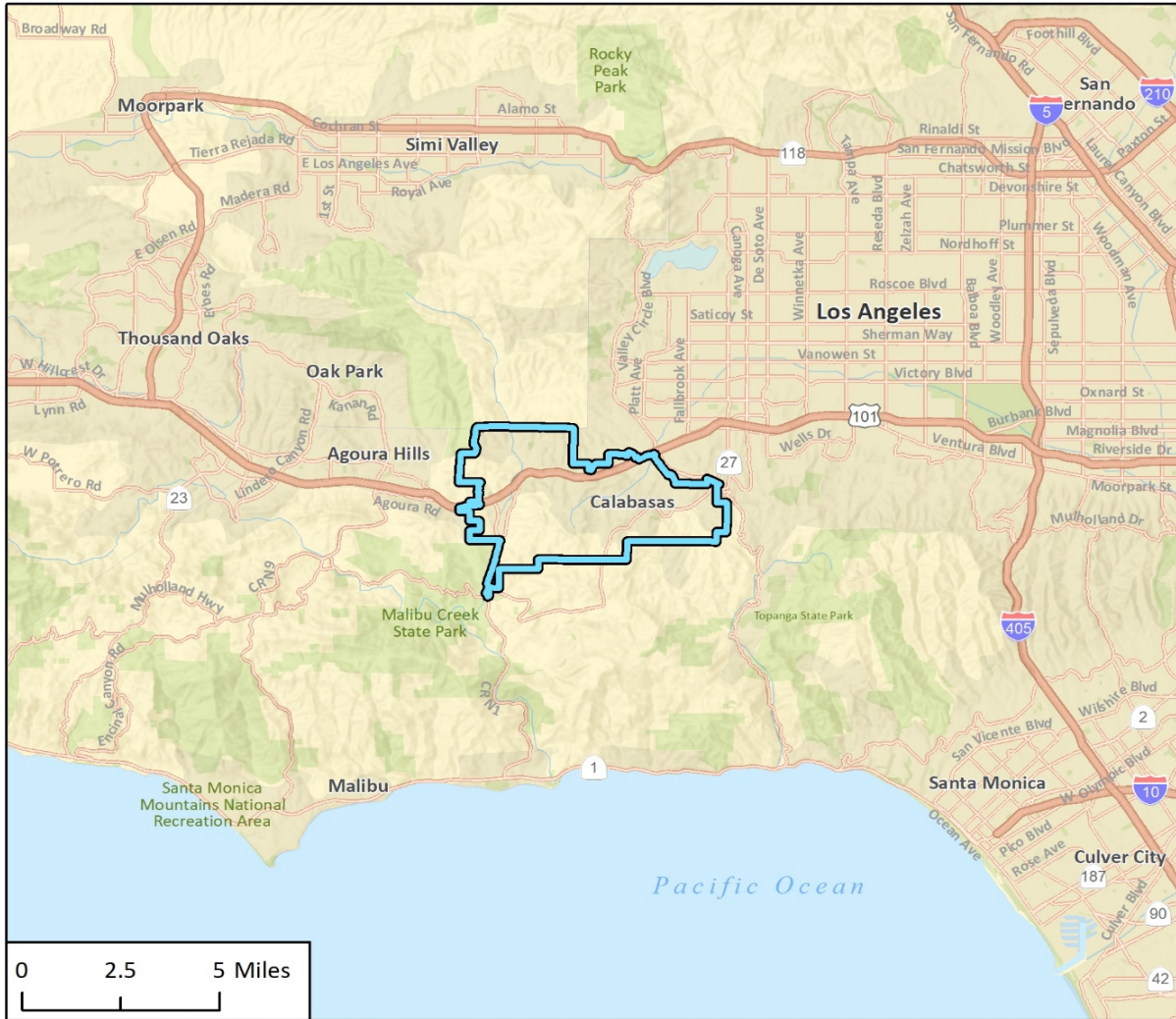
2.3 Project Location

The City of Calabasas (hereinafter referred to as “City”) is in western Los Angeles County along the Ventura Freeway, approximately 25 miles from downtown Los Angeles. Adjacent cities include Agoura Hills to the west, Hidden Hills to the north, and Los Angeles to the east. Unincorporated Los Angeles County is located to the south, west, and north of Calabasas. A portion of the City's northern boundary borders the Ventura County line. U.S. Route 101 (US-101) generally runs east-west along the northern border of the City. Other major transportation routes in and near the City include Mulholland Highway, Calabasas Road, and Old Topanga Canyon Road in the eastern area of the City, and Las Virgenes Road, Lost Hills Road, and Agoura Road in the western area of the City. State Route 27 (SR-27) runs north-south approximately 0.20-mile east of the City.


The study area considered in this EIR includes the entire City of Calabasas Plan Area, which includes all areas within the City's corporate limits and some adjacent areas of unincorporated Los Angeles County, within the City's Sphere of Influence (SOI). These adjacent areas are already pre-zoned and/or identified in the Land Use Element as being potentially appropriate for future annexation, and other territories located within the City's SOI.

The City's corporate limits encompass approximately 13.3 square miles, or 8,512 square acres of land, and the unincorporated portions of the Plan Area total approximately 3.7 square miles (2,362 square acres). The entire Plan Area encompasses approximately 10,874 acres. The regional location of the Plan Area is shown in Figure 2-1 and the City limits and Plan Area boundary are shown in Figure 2-2.

Figure 2-1 Regional Location



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-  Project Location
-  Plan Area

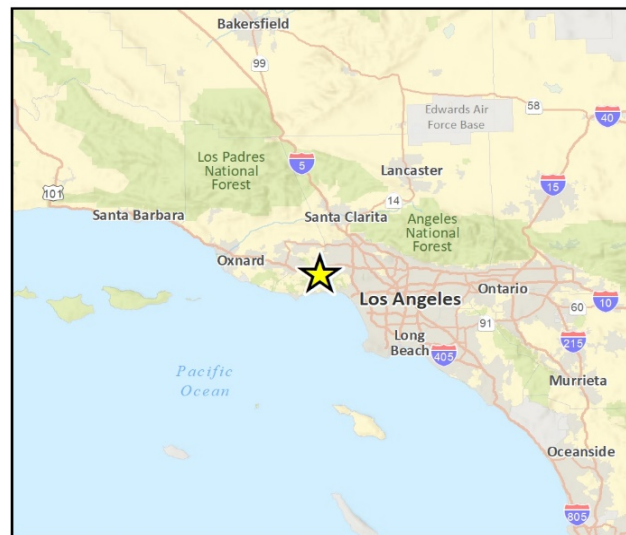
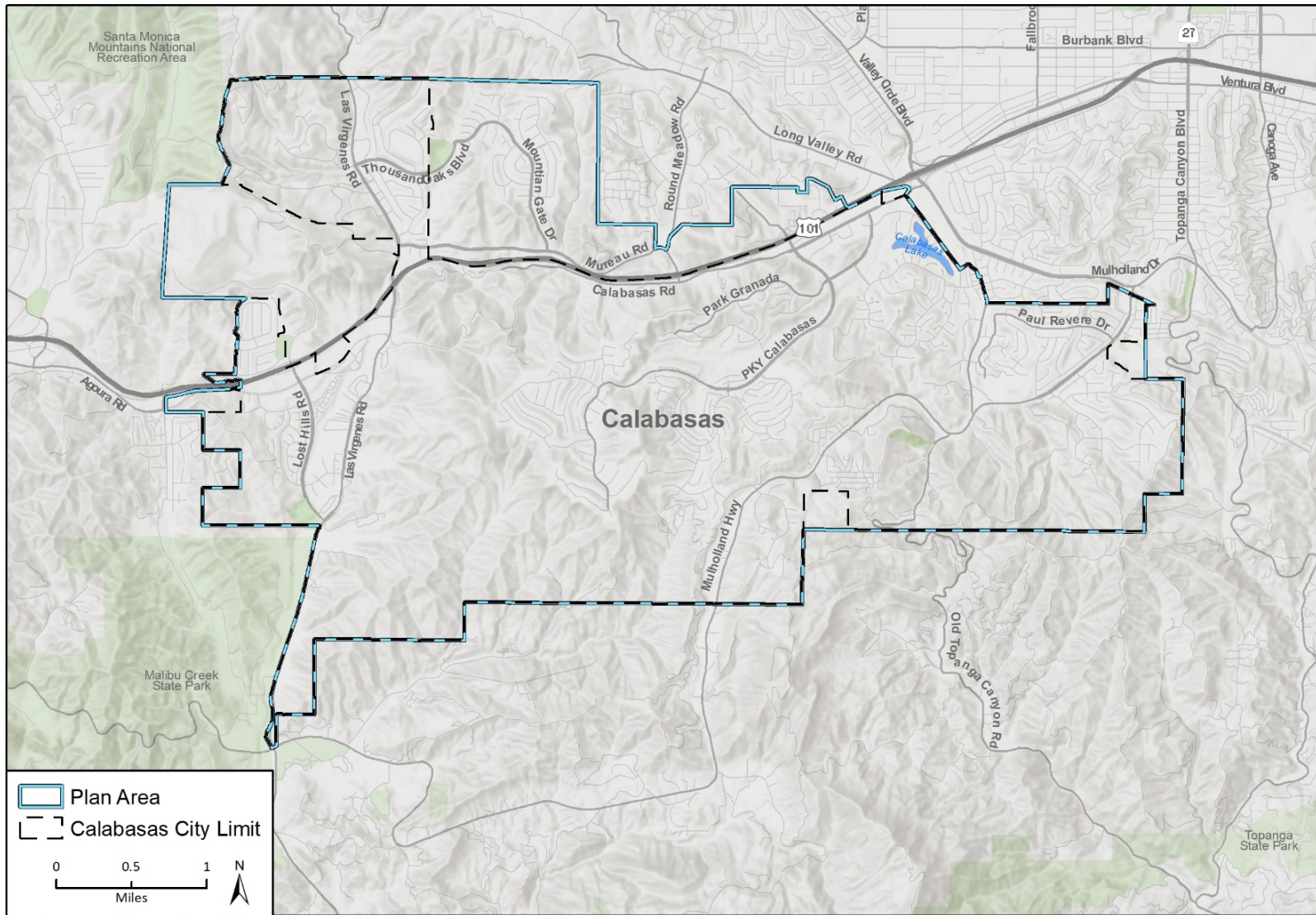


Fig. 1 Regional Location

Figure 2-2 City Limits and Plan Area Boundaries



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2.3.1 Existing Land Uses

The Plan Area includes the City limits and currently unincorporated areas between I-101 (the Ventura Freeway) and Hidden Hills, west of Hidden Hills and south of the Upper Las Virgenes Canyon Open Space Preserve, the Calabasas Landfill, a small area south of I-101 to the west of the City along Agoura Road, a small open space-resource protected area south of the Calabasas Highlands, and the A. E. Wright Middle School located east of Mulholland Highway at the City's eastern boundary.

The Plan area includes single and multifamily residential, business, mixed-use, open space and hillside, and public facilities land uses. The range of housing types reflects the City's largely hillside topography and peripheral suburban nature. Over three-quarters of the City's housing is comprised of single-family units, either attached or detached, while multi-family apartments and condominiums account for nearly one-quarter of the housing stock. The remaining units in the City are in Calabasas Village Mobile Estates. There are 407 housing units in the unincorporated areas of the Plan Area, mainly single-family homes and one multi-family senior housing complex located with the Craftsman's Corner territory.

The business and mixed-use land uses generally are in the eastern and western areas of the Plan Area adjacent to Agoura Road, Calabasas Road, Las Virgenes Road, and in close proximity to US-101. Multifamily land uses generally surround major roadways, while single-family homes tend to be concentrated near hillsides in the center and eastern portions of the Plan Area south of Highway 101, and on the western portion of the Plan Area south of Highway-101 off Las Virgenes Road and Lost Hills Road and north of Highway 101 off of Las Virgenes Road.

2.3.2 Surrounding Land Uses

The Plan Area is generally surrounded by the mostly residential City of Hidden Hills, the Upper Las Virgenes Canyon Open Space Preserve in Ventura County, the Cheseboro/Palo Comado Canyon National Recreation Area to the north; small pockets of residential neighborhoods, Malibu Creek State Park, and the Santa Monica Mountains National Recreation Area to the south; and residential, commercial, and educational uses in the community of Woodland Hills in the City of Los Angeles to the east.

2.4 Project Objectives

The purpose of the General Plan Update is to address the housing and safety needs of the City and to update the 2030 General Plan to meet the requirements of current State law. The proposed Housing Element includes the following goals and objectives:

- Meet State required RHNA for 6th Cycle Housing Element planning period of 2021 – 2029;
- Bring the General Plan into conformance with recently enacted State laws;
- Identify future housing sites with a collective capacity to meet the City's RHNA, including the requisite buffer capacity; and
- Locate Future Housing Sites in Existing Urban Areas, in Close Proximity to Transit and Commercial Services, and to Avoid Placement of New Housing in Open Space Areas.

2.5 Project Characteristics

The General Plan Update would include updates to the Housing, Land Use, Safety, and Circulation elements of the City's 2030 General Plan, and environmental and social justice policies.

2.5.1 Housing Element Update

The Housing Element is one of the State-mandated elements of the General Plan. The current Housing Element was adopted in 2013 and is in effect through 2021. The Housing Element identifies the City's housing conditions and needs, and establishes the goals, objectives, and policies that comprise the City's housing strategy to accommodate projected housing needs, including the provision of adequate housing for low-income households and for special-needs populations (e.g., unhoused people, seniors, single-parent households, large families, and persons with disabilities).

The 2021-2029 Housing Element would bring the element into compliance with State legislation passed since adoption of the 2013-2021 Housing Element and with the current Southern California Association of Governments' (SCAG's) Regional Housing Needs Assessment (RHNA). On March 4, 2021, the SCAG Regional Council adopted the 6th Cycle Final RHNA, which includes a "fair share" allocation for meeting regional housing needs for each community in the SCAG region.

The City completed a public review draft of the 2021-2029 Housing Element in July 2021 and sent it to HCD for review. The draft Housing Element is available on the City's website: <https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update>).

The 2021-2029 Housing Element includes the following components, as required by State law

- An assessment of the City's population, household, and housing stock characteristics, existing and future housing needs by household types, and special needs populations.
- An analysis of resources and constraints related to housing production and preservation, including governmental regulations, infrastructure requirements and market conditions such as land, construction, and labor costs as well as restricted financing availability.
- Identification of the City's quantified objectives for the 6th cycle (2021-2029) RHNA and inventory of sites determined to be suitable for housing.
- Opportunities for Energy Conservation in Residential Development: State housing element law requires cities to identify opportunities for energy conservation in residential development.
- Review of the 2013-2021 Housing Element to identify progress and evaluate the effectiveness of previous policies and programs.
- A Housing Plan to address the City's identified housing needs, including housing goals, policies, and programs to facilitate the 2021 Housing Element Update (6th Cycle).

2.5.2 Regional Housing Needs Assessment and Required Buffer

The Housing Element must address the City's fair share of the regional housing need and specific state statutory requirements and must reflect the vision and priorities of the local community. As of March 2021, SCAG determined a final RHNA Allocation of 354 units for the City, of which 203 must be affordable to lower-income households. The City's final allocation may be subject to minor change by recent State legislation.

HCD requires local jurisdictions to identify enough future housing sites inventory to not only cover the jurisdiction’s 6th Cycle RHNA, but to also provide for an additional buffer capacity above the RHNA. The buffer capacity is required to accommodate realistic production rates of affordable housing units; plus having the buffer can allow for instances when a smaller residential project may have to be considered for a given property. The “No Net Loss” Law (Government Code Section 65863) requires maintenance of sufficient sites to meet the RHNA for all income levels throughout the planning period. The recommendation from HCD is to adopt a housing site inventory with a buffer of at least 20 percent over the allocated RHNA. The RHNA allocation and the 20 percent buffer are detailed in Table 2-1.

Table 2-1 City of Calabasas Regional Housing Needs Allocation

	Income Category (Percent of Los Angeles County Area Median Income)				Total Housing Units
	Very Low (31-50%)	Low (51-80%)	Moderate (81-120%)	Above Moderate (120% or more)	
RHNA Housing units	132	71	70	81	354
With 20 percent buffer	158	85	84	97	425

2.5.3 Meeting the Regional Housing Needs Assessment Objectives

To meet the objectives of the 6th Cycle RHNA allocation and provide sufficient capacity for housing development, the Housing Element specifies sites for residential development, identifies sites to increase permitted residential densities to meet affordability requirements, creates an Affordable Housing Overlay (AHO) Zone, and continues implementation of the Accessory Dwelling Unit (ADU) program, as described below. However, the Housing Element in and of itself does not develop housing – it is a plan. This housing plan would be supported by consistent zoning standards. The Housing Element assumes that not all of the housing would realistically be developed based on previous development history in the City, as housing development is mainly accomplished by the private sector and dependent on factors independent of City control, such as financial resources. However, for the purposes of CEQA analysis, this EIR assesses a higher range of development potential, considered the “worst case scenario,” to fully analyze potential impacts if development occurs at a rate higher than it has historically.

Table 2-2 shows the allowable densities, land use changes, and number of realistic potential units that could be accommodated by the General Plan update at each identified housing site. The net increase presented in this table is the upper end of the permitted density range.¹ The development and redevelopment of sites zoned mixed-use may include commercial uses. The table includes an estimate of commercial space that may be developed (the estimate is based on previous development patterns for mixed-use sites in the City). Each site’s housing units and commercial space is an estimate except for the Raznick site which reflects the details of an entitled project which would redevelop the site.

¹ The maximum density presented in Table 2-2 is higher than the maximum density included in the Housing Element update in order to encompass the actual allowable range of densities.

Table 2-2 General Plan Update Sites: Land Use Changes and Development Assumptions

Site ID	Site Name	Parcel Location	Acreage	Existing Use	General Plan Designation	Zoning Designation	Permitted Dwelling Units/Acre	Density with Affordable Housing Overlay	Potential Net Increase in Dwelling Units	Estimated new or redeveloped commercial square feet
1	Raznick	23480 Park Sorrento	1.32	Office	MU .95	CMU.95	20	N/A	42	2,100
		23480 Park Sorrento	0.61	Office	MU .95	CMU.95	20	N/A		
2	Rancho Pet Kennel	27201 Canwood Street	6.84	Kennel	RM-F (12)	RM (12)	12	N/A	60	
3	Cruzan Parking Lot	Civic Center Way	1.96	Parking Lot	MU .95	CMU .95	20-24	45	88	12,672
4	Old Town Vacant Site	25600 Calabasas Rd	0.96	Vacant Land	MU 1.0	CMU 1.0	20-24	45	43	6,192
5	Las Virgenes Shopping Center	5657 Las Virgenes Rd	0.66	Shopping Center	MU .60	CMU.60	20-24	45	30	5,904 (replacement of existing buildings)
		5657 Las Virgenes Rd	0.24	Center Parking Lot	MU .60	CMU.60	20-24	45	11	
6	Church	4235 Las Virgenes Rd	2.47	Church	RM-F (16)	RM (16)	16	45	111	
7	Downtown Offices	23945 Calabasas Rd	1.34	Office	MU .95	CMU.95	20-24	45	60	8,640
8	Avalon Apartments	3848 Lupine	17	Apartments	RM-F (16)	RM (16)	20-24	N/A	101	
		3909 Ceanothus Pl	14	Apartments	RM-F (16)	RM (16)	20-24	N/A	31	
9	Agoura Road Offices	26540 Agoura Rd	1.30	Office	MU .60	CMU .60	20-24	45	59	18,000
		26520 Agoura Rd	1.47	Office	MU .60	CMU .60	20-24	45	66	

City of Calabasas
Calabasas General Plan Update

Site ID	Site Name	Parcel Location	Acreage	Existing Use	General Plan Designation	Zoning Designation	Permitted Dwelling Units/Acre	Density with Affordable Housing Overlay	Potential Net Increase in Dwelling Units	Estimated new or redeveloped commercial square feet
10	Mureau Office	26050 Mureau Rd	1.59	Office	MU .60	CMU .60	20-24	45	72	10,368
11	Commons Shopping Center	4799 Commons Way	1.65	Shopping Center	MU .95	CMU .95	20-24	40	13	44,393 of new commercial; existing retail space remains
		4776 Commons Way	1.07	Shopping Center	MU .95	CMU .95	20-24	40	9	
		4719 Commons Way	11.57	Shopping Center	MU .95	CMU .95	20-24	40	93	
		4710 Commons Way	9.23	Shopping Center	MU .95	CMU .95	20-24	40	74	
		N/A	0.10	Shopping Center	MU .95	CMU .95	20-24	40	1	
		4798 Commons Way	1.37	Shopping Center	MU .95	CMU .95	20-24	40	11	
12	Craftsman's Corner	5034 Parkway Calabasas	4.86	Commercial	MU .95	CMU .95	20-24	N/A	117	40,584 (replacement of existing buildings)
		N/A	3.83	Vacant	MU .95	CMU .95	20-24	N/A	92	
		5124 Douglas Fir	1.12	Commercial	MU .95	CMU .95	20-24	N/A	27	
ADUs	Citywide							96		
Total								1,305	148,853	

Du = dwelling unit, MU = Mixed Use; CMU = Commercial Mixed Use; RM = Residential, Multi-Family; PD = Planned Development; OSRP = Open Space-Resource Protected; RM-F = Residential- Multiple Family

ADU = Accessory Dwelling Unit

Note: Potential net increase in units are based on calculations for each site. Totals might not add up due to rounding.

Vacant and Underutilized Sites

The Housing Element update identifies vacant and underutilized parcels suitable to meet the RHNA allocation during the 2021-2029 period. Housing sites that are currently zoned for non-residential use or intensified with residential use are identified in the Land Use Element with a corresponding use and density designation and zoned accordingly to meet RHNA allocations by income level. Site selection was conducted based on an analysis of site-specific constraints, including General Plan land use and zoning, access to utilities, location, development potential, density and whether the site is identified in a previous Housing Element. To count toward the RHNA allocation, sites must be in a land use category that meets a minimum residential density standard, have a minimum lot size, and be either vacant or not been developed to the maximum capacity allowed by the zoning category and can provide the potential for more residences on a site.

Permitted Density Changes

When a local jurisdiction cannot demonstrate that there are sufficient vacant or underutilized sites to adequately meet their RHNA allocation, a 'rezoning program' must be put into place. A rezoning program ensures that there are enough sites with sufficient densities to address the housing need identified through the RHNA.

In accordance with HCD's "default density" criteria for suburban jurisdictions such as Calabasas, 20 du/acre is the minimum density threshold for sites to be considered suitable for providing housing affordable to very low and low-income households. The current permitted density in the Commercial Mixed Use (CMU) and Residential Multi-Family (RM) zones is a maximum of 20 du/acre. Therefore, the General Plan Update would adjust the permitted density for the CMU and RM-16/20 zones to a range of 20 to 24 du/acre. This adjustment would comply with HCD's requirement of identifying housing inventory sites that have a minimum density of 20 du/acre to accommodate very low and low-income units.

Affordable Housing Overlay (AHO) Zone

To increase the production of affordable housing, and reduce the total need for additional residential units, the Housing Element update proposes the creation of an AHO Zone². This zone would be applied to property that allows for multi-family housing and provides an incentive to allow for greater density if the property owner provides additional affordable housing, rather than increasing the site density by right. For example, owners of property in the CMU zone would be allowed the base density of 20 dwelling units per acre plus any density bonus required by law for any project that meets the City's inclusionary housing requirement of five to 15 percent of the units dedicated to very low income housing. However, if the property owner proposes a project that includes at least 25 percent of the total units for very low-income units, the AHO Zone would allow an increase in density up to 45 du/acre plus the applicable density bonus allowed by State law. The intent of the AHO Zone to encourage development of more affordable housing by allowing greater density than would otherwise be permitted.

² Past trends in the City indicate that affordable housing production ratios have averaged approximately 10 percent; therefore, without the implementation of the AHO, the sites inventory would have had to include several additional sites to accommodate sufficient low-income housing to meet the 2021-2029 RHNA.

Accessory Dwelling Units (ADUs)

ADUs, also referred to as granny flats and secondary units, provide an affordable housing option and are an important tool to help meet the housing needs in communities. The State enacted legislation in both 2017 and 2019 to further assist and support the development of ADUs, including “by right” approval for one-bedroom units less than 850 square feet and two-bedroom units less than 1,000 square feet. In January 2020, the City Council adopted an ordinance amending the City’s Development Code to comply with the latest State laws governing ADUs and Junior ADUs. The City’s ADU ordinance allows for units up to 1,200 square feet and up to 50 percent of the living area of the primary unit.

Between the years 2014-2020, the City issued a total of 22 ADU building permits. In the first year since adoption of the City’s updated ordinance, the City has seen an increase in ADUs, with seven units approved and another nine units in process. The 2021-2029 Housing Element includes a program for the City to incentivize and promote ADUs, including the creation of architectural prototypes. Based on information from previous years and trends, the City estimates that 96 ADUs will be developed during the 2021-2029 period.

Change in Housing Units from Existing Conditions

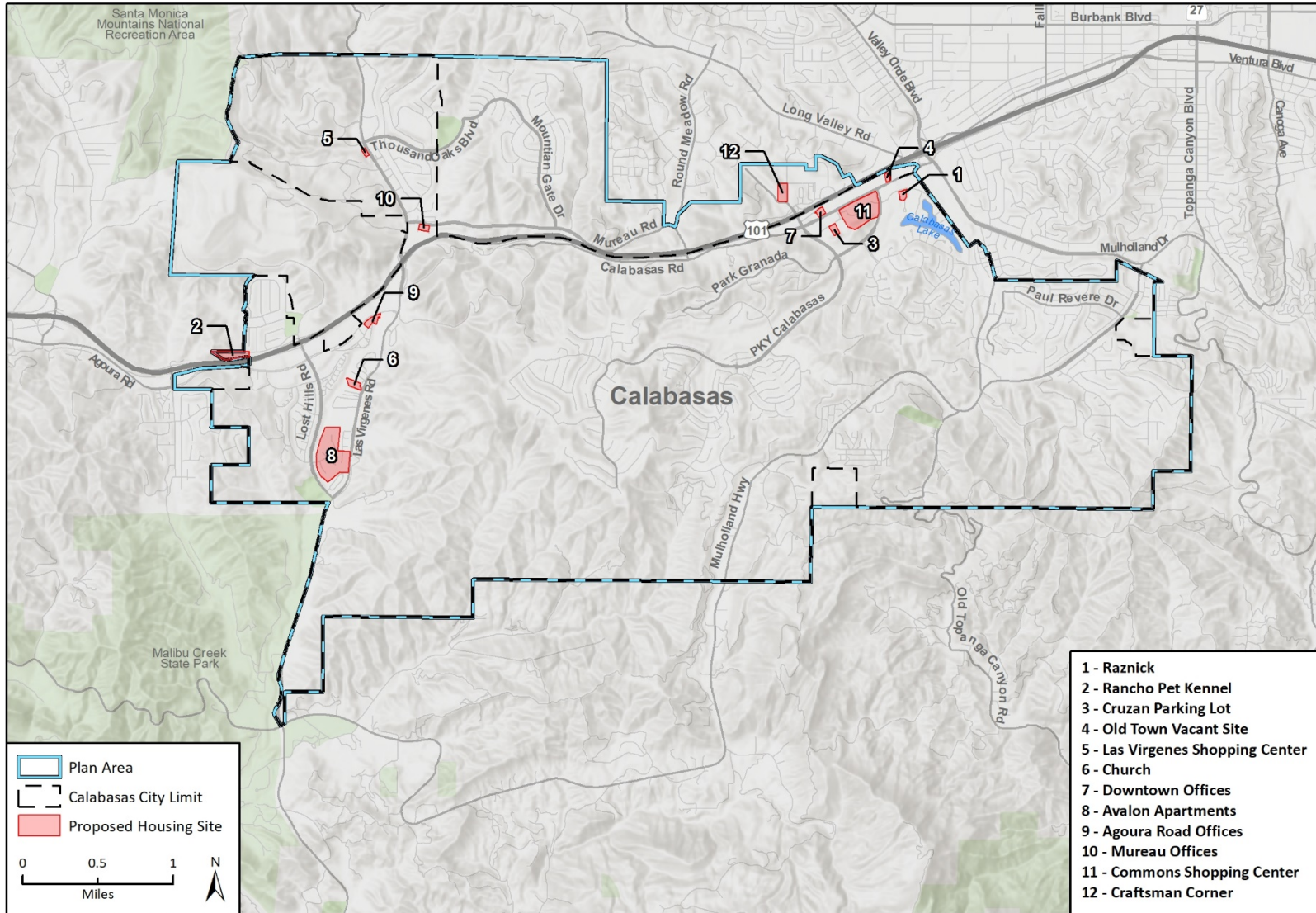
As of January 1, 2020, there were 9,230 housing units in the City and 407 housing units in the unincorporated areas of Plan Area, for a total of 9,637 units in the Plan Area. The General Plan Update would accommodate the development of up to 1,305 net additional units by 2029. If all units are ultimately developed, there would be a total of 10,942 housing units in the Plan Area by 2029.

Geographic Distribution of Inventory of Sites

The sites identified in the Housing Element update are generally located in areas near major transportation corridors, such as Las Virgenes Road, Calabasas Road, and US-101, and existing residential and commercial development. Figure 2-3 shows the locations of the sites identified in Table 2-2.

All sites in the housing sites inventory are in the City’s limits except for Craftsman’s Corner, which is in the unincorporated portion of the Plan Area. Within the 2021-2019 planning period, and more specifically between 2021 and 2023, the City anticipates annexation of Craftsman’s Corner territory; this annexation effort is already under way. Annexation of the Agoura Road offices territory is anticipated to be accomplished at sometime within the planning period. A third annexation possibility would be annexation of the A. E. Wright Middle School. The City is not seeking annexation of lands as part of this project; annexation of lands and adjustments to the sphere of influence (SOI) would occur at a future time. However, implementation of the project may require future approval of annexations to the City. Annexations would be sought as appropriate at such time as developments are proposed for the areas in question. Any annexations would require approval from the Los Angeles County Local Agency Formation Commission (LAFCo).

Figure 2-3 Housing Element Update Sites Inventory Locations



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Sources provided by City of Calabasas 2018, 2021

Fig 3 Housing Sites

2.5.4 Land Use Element Update

The Land Use Element is a guide for the City’s future development. It designates the distribution and general location of land uses, such as residential, retail, industrial, open space, recreation, and public uses. The Land Use Element also addresses the permitted density and intensity of the various land use designations as reflected on the City’s General Plan Land Use Map.

The Land Use Element would include the following updates to the land use table (Table II-1):

- The existing R-MF (20) designation would be modified to an expanded density designation of R-MF (24). This alteration would automatically increase the density allowance for all lands specified within the previous R-MF (20) designation.
- The “Anticipated Maximum Population Intensity” for the existing R-MF (12) and R-MF (16) land use designations would be modified.
- A new affordable Housing Overlay designation would be created to reflect allowed densities identified in the Housing Element.

The Land Use Map in the Land Use Element would be modified to include the new Affordable Housing Overlay land use designation and to change the R-MF (20) to R-MF (24), as shown in Figure 2-4.

2.5.5 Safety Element Update

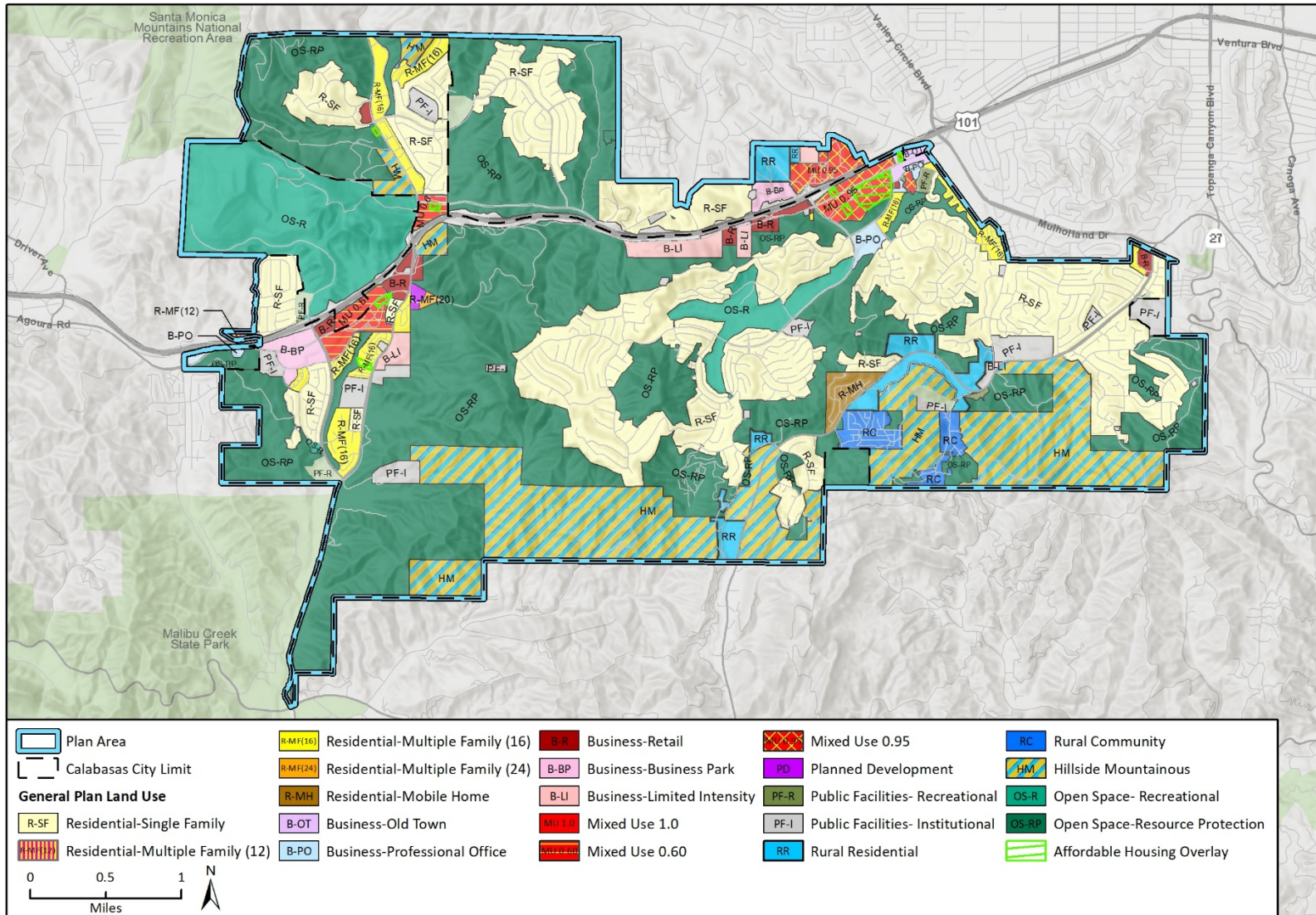
Approved in 2019, Assembly Bill (AB) 747 requires each jurisdiction to review and update as necessary the Safety Element of its General Plan to identify evacuation routes and capacity, safety, and viability under a range of emergency scenarios. This information must be included by January 1, 2022, or upon approval of the next update to the Local Hazard Mitigation Plan. Also approved in 2019, Senate Bill (SB) 99 requires jurisdictions, upon the next revision of the Housing Element on or after January 1, 2020, to review and update the safety element to include information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes. In accordance with Senate Bill 379, safety elements must also include a climate change vulnerability assessment, measures to address vulnerabilities, and comprehensive hazard mitigation and emergency response strategy. The proposed Safety Element Update addresses the requirements of these bills.

Areas of the Safety Element that would be updated include geology and seismicity, stormwater management and flooding, fire hazards, and disaster response. A new section on climate change would be added.

2.5.6 Circulation Element Update

Changes to the Circulation Element would include adding references to adopted VMT thresholds. Level of service is a measure to describe how well roadway intersections and other transportation facilities operate for drivers. Level of service thresholds were previously used as a metric to evaluate environmental impacts of proposed projects. These thresholds would be replaced with vehicle miles traveled for purposes of environmental impact evaluations. Vehicle miles traveled evaluates the number of miles traveled by each vehicle. This shift in standard is mandated by the State as part of Senate Bill 375 in keeping with the State’s goals to reduce greenhouse gas emissions, encourage infill development and improve public health through active transportation (e.g., bicycling and walking).

Figure 2-4 Proposed Land Use Map



2.5.7 Environmental and Social Justice Policies

Update of the Housing, Land Use, Safety, and Circulation elements would include the addition of environmental and social justice policies that promote fair housing and economic opportunities and avoid discrimination for all socio-economic groups, consistent with the Affirmatively Furthering Fair Housing (AFFH) requirements under Housing Element Law.

California State Senate Bill (SB) 1000, signed into law in 2016, states that revisions or adoption of two or more elements of a general plan on or after January 1, 2018 trigger a requirement to “adopt or review the environmental justice Element, or the environmental justice goals, policies, and objectives in other elements.” Per Government Code §65040.12(e), environmental justice is “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” Environmental justice goals, policies, and objectives must aim to reduce health risks to disadvantaged communities (DACs), promote civil engagement, and prioritize the needs of these communities.

Per SB 1000, the California EPA uses CalEnviroScreen, a mapping tool to identify disadvantaged communities throughout the State. CalEnviroScreen uses a variety of statewide indicators to characterize pollution burden (the average of exposures and environmental effects) and population characteristics (the average of sensitive populations and socioeconomic factors). The model scores each of the indicators using percentiles and combines the scores to determine a CalEnviroScreen score for a given census tract relative to others in the state. There are no DACs identified in the Plan Area using CalEnviroScreen.

While not required, the General Plan update incorporates policies suggested under SB 1000 to create economic and fair housing opportunities and avoid discrimination for all socio-economic groups.

2.6 Required Discretionary Actions

With recommendations from the Planning Commission, the City of Calabasas City Council would need to take the following discretionary actions in conjunction with the General Plan Update:

- Certification of the EIR prepared for the General Plan Update
- Adoption of the 2021-2029 Housing Element of the 2030 General Plan
- Adoption of the General Plan Land Use Map and associated text changes to the Land Use Element of the 2030 General Plan to re-designate land uses for certain selected housing sites
- Adoption of amendments to the Safety Element of the 2030 General Plan
- Adoption of amendments to the Circulation Element of the 2030 General Plan

The 2021-2029 Housing Element has been submitted to the HCD for review and comment. The City will seek certification of the Housing Element from the HCD subsequent to the City’s adoption.

3 Environmental Setting

This section describes the current environmental conditions in the Plan Area. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Overview

Calabasas is located in western Los Angeles County, approximately 25 miles northwest of downtown Los Angeles and eight miles east of the Ventura County line. A portion of the City's northern boundary also borders Ventura County. Los Angeles County is topographically diverse, with mountains, valleys, and distinct urban areas, all within relative proximity to the Pacific Ocean. The Mediterranean climate of the region and coastal influence produce moderate temperatures year-round, with rainfall concentrated in the winter months. The region is subject to various natural hazards, including earthquakes, landslides, and wildfires.

Calabasas is located within the planning area of the Southern California Association of Governments (SCAG). SCAG functions as the Metropolitan Planning Organization for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. The region encompasses a population exceeding 19.2 million persons in an area of more than 38,000 square miles (SCAG 2021).

3.2 City Overview

3.2.1 Geographic Setting

The Plan Area (City of Calabasas corporate limits and bordering unincorporated areas considered for future annexation) is located in the foothills of the Santa Monica Mountains National Recreation Area and adjacent to the San Fernando Valley. The Plan Area is bounded to the north and east by the City of Hidden Hills and unincorporated Los Angeles County, to the east by the City of Los Angeles, to the south by unincorporated Los Angeles County (Santa Monica Mountains), and to the west by unincorporated Los Angeles County and the City of Agoura Hills. The Santa Monica Mountains Significant Ecological Area (SEA) is located along the southern and western portions of the Plan Area.

The Plan Area straddles the Calabasas Grade, which separates the San Fernando and Conejo valleys. As such, the community is divided into two distinct areas east and west of the Calabasas Grade. The primary links between the two halves of the City are the Ventura Freeway and Mureau Road.

U.S. 101 generally runs east-west through the Plan Area and is the primary circulation link to points both east and west. A grid system of east-west and north-south roadways, including arterials, collectors, and local streets, provide vehicular access throughout the Plan Area. Major roadways include Mulholland Highway, Calabasas Road, Parkway Calabasas, Mureau Road, Las Virgenes Road, and Lost Hills Road. Mulholland Highway and Las Virgenes Road provide access to the Santa Monica Mountains to the south. Mixed-use, business, mobile home districts, and multifamily land uses generally surround major roadways, while single-family homes tend to be concentrated near hillsides in the center and eastern portion of the Plan Area, south of the Calabasas Landfill, and north of I-101 off Las Virgenes Road and Mountain View Drive.

3.2.2 City Topography, Climate, and Drainage

Calabasas is located in the Santa Monica Mountains. As such, the topography of the City is characterized by rugged, steeply sloped terrain. The elevation of the City ranges from approximately 500 to 2,800 feet above mean sea level, with an average elevation of 796 feet (City of Calabasas 2021).

Calabasas has a Mediterranean climate characterized by warm, dry summers and mild winters. Summer temperatures range from 60 degrees Fahrenheit (°F) to high-90°F. Winter temperatures range from low 40°F to high 60°F. Annual average rainfall is 13.6 inches (City of Calabasas 2021).

Three main creeks flow through Calabasas: Las Virgenes Creek in the Malibu Creek watershed, and Dry Canyon and McCoy Creeks in the Los Angeles River watershed. These three creeks serve to convey storm water flows to the lower watershed during the wet season. Smaller flows associated with rare summer storm runoff, irrigation runoff, industrial/ commercial runoff, and natural seeps and springs, pass through the creeks on the way to Malibu Creek and the Los Angeles River (City of Calabasas 2015).

The City generally falls into an area of minimum flooding as defined by the Federal Emergency Management Agency (FEMA). However, canyon areas along the alignments of the primary drainage courses of Las Virgenes Creek in the western portion of the City and Arroyo Calabasas in the southeastern portion of the City are designated within 100-year flood potential zones (City of Calabasas 2015).

3.3 EIR Baseline

CEQA Guidelines Section 15125 states that an EIR “must include a description of the physical environmental conditions in the vicinity of the General Plan Update, as they exist at the time the notice of preparation [NOP] is published.” Section 15125 states that this approach “normally constitute[s] the baseline physical conditions by which a lead agency determines whether an impact is significant.”

This EIR evaluates impacts against existing conditions, which are generally conditions existing at the time of the release of the NOP (February 2021) but may vary in individual sections due to the availability of data. Comparing future conditions, as would be caused (or partially caused) by the General Plan Update, to current, existing baseline conditions provides relevant information for the public, responsible agencies, and City decision-makers. For some issue areas, this EIR also includes consideration of impacts against a forecast future baseline condition (generally 2029) in addition to the current baseline conditions, controlling for impacts caused by population growth and other factors that would occur whether or not the proposed General Plan Update is approved.

For certain issue areas (including air quality, energy, greenhouse gas emissions/climate change, noise, and transportation/circulation), impacts would occur as a result of population growth, urbanization, and volume of average daily traffic increases in the Plan Area that would occur by 2040, with or without implementation of the General Plan Update. Thus, for these issue areas, a comparison to a future 2029 baseline is provided for informational purposes. However, all impact determinations are based on a comparison to existing 2020/2021 baseline conditions.

On March 4, 2020 the Governor proclaimed a State of Emergency in California as a result of the threat of Coronavirus 2019 (COVID-19). The Los Angeles County Public Health Office issued school closures and the closure of County buildings prior to the Governor’s “Shelter In Place” Executive

Order N-33-20 went into effect on March 16, 2020. The threat of COVID-19, as well as the subsequent State and County proclamations and orders, have resulted in temporary changes to the existing economic and physical conditions in California and Los Angeles County regionally and in the City of Calabasas locally. Temporary changes to existing environmental conditions have included reduced vehicle traffic and associated noise and pollutant emissions, and reduced electricity consumption. In addition, the timing and likelihood of cumulative development and regional buildout assumptions may be affected during or after the threat of COVID-19. The magnitude and duration of the State of Emergency and associated State and County orders, or future orders related to the threat of COVID-19, cannot be ascertained. Accordingly, the effect of COVID-19 on baseline and future environmental conditions effects of COVID-19 is currently speculative. CEQA Guidelines Section 15064(d)(3) states that:

An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable.

Furthermore, CEQA Guidelines Section 15154 states that:

If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.

It would be speculative for the EIR to assume what changes to baseline or cumulative baseline conditions might occur as a result of COVID-19 or the subsequent State and County proclamations and orders. Therefore, this topic is not discussed further in the EIR.

3.4 Cumulative Impact Setting

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines “cumulative impacts” as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects, or a forecast of future development potential. Because the proposed project is a general plan update, cumulative impacts are treated somewhat differently than they would be for a specific development. For general plan amendments, Section 15130 of the state *CEQA Guidelines* provides the following direction relative to cumulative impact analysis:

Impacts should be based on a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.

Because the General Plan Update is essentially a set of guidelines for projects that could occur within the timeframe of the General Plan Update, the General Plan Update itself represents the cumulative development scenario for the reasonably foreseeable future in the Plan Area. Therefore, the analysis presented in this EIR generally represents a cumulative analysis of the Plan Area over the General Plan planning horizon of 2029.

Existing and proposed land uses in the Plan Area include residential, business office, commercial, mixed use, public facilities, recreational and resource-protected open space. The Housing Element included in the General Plan Update would accommodate an additional estimated housing capacity of 1,305 units and 3,537 residents in the Plan Area by 2029, which would result in a total of 10,787 units and 29,233 residents by that year (see Section 4.11, *Population and Housing*, for more details). Employment in the Plan Area is estimated to be slightly less in 2029 than 2021: 21,451 employees in 2021 and 21,383 employees in 2029, as noted in the vehicle miles traveled (VMT) study in Appendix C.

In instances where other cumulative development in neighboring cities, the County, or specific region (e.g., hydrologic region or air basin) could contribute to impacts generated by the General Plan Update, those impacts, as well as the context, are discussed in the cumulative impact discussion that follows the project-specific impacts in each section.

The analysis included in each cumulative impact section analyzes whether, after implementation of mitigation that minimize environmental effects, the residual impacts of the General Plan Update would cause a cumulatively significant impact or would contribute considerably to existing or anticipated cumulatively significant effects. Where the General Plan Update would so contribute, additional mitigation is recommended where feasible.

4 Environmental Impact Analysis

This section discusses the possible environmental effects of the project for the issue areas identified as having the potential to experience significant impacts.

“Significant effect” is defined by State CEQA Guidelines §15382 as:

a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for identified significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the specified environmental impact, as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the applicable threshold level, even after application of reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the applicable threshold level after application of reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. Nonetheless, mitigation measures that could further lessen the environmental effect may be suggested anyway, if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

For each identified significant impact, mitigation measures to reduce the impact are proposed unless mitigation is infeasible. In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The Executive Summary of this EIR summarizes all identified impacts and mitigation measures that apply to the proposed project.

As outlined previously, in Section 3.3, Cumulative Project Setting, Section 15130 of the state CEQA Guidelines provides the following direction relative to cumulative impact analysis:

Impacts should be based on a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or

certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.

By its nature, a general plan considers cumulative impacts insofar as it considers cumulative development that could occur within a city's plan area. Therefore, the analysis of project impacts also constitutes the cumulative analysis and this EIR does not contain a separate analysis of cumulative impacts. In addition to cumulative development in the Plan area, the analysis of traffic and related impacts (such as noise) considers the effects of regional traffic growth.

4.1 Aesthetics

This section evaluates potential aesthetic impacts that could arise from implementation of the General Plan Update, including the 2021-2029 Housing Element along with updated Land Use, Circulation, and Safety Elements. The aesthetics analysis consists of a summary of the existing conditions in the Plan Area, the aesthetics regulatory framework, and a discussion of the potential aesthetic impacts from development on candidate housing sites and surrounding properties. The candidate housing sites were evaluated in this EIR at a programmatic level, based on information available to the City, and where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Project-specific analyses were not conducted as no specific development projects are yet known for any of the candidate housing sites and analysis at the project level would therefore be speculative.

4.1.1 Setting

This section discusses the approach to ascertaining visual quality as it applies to a CEQA analysis of visual resources and describes the existing environmental setting for visual character, scenic vistas, scenic corridors, and light and glare conditions within the Plan Area.

Visual Quality

Any view encompasses a variety of visual elements. Each view is a “snapshot” of a particular location determined by the size, shape, color, texture, and general composition of perceived elements (both natural and built), as well as the relationships between these elements, as seen from a specific key view. The visual quality from a key view is typically defined on a three-part scale, including high, moderate, and low visual quality, as defined in the following:

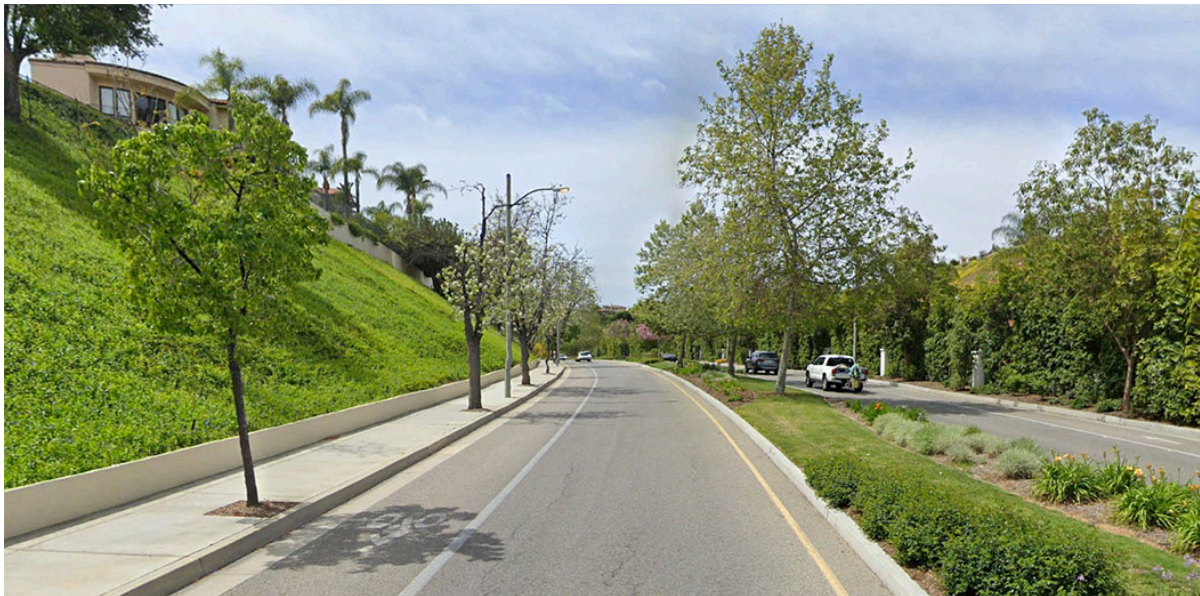
- **High:** Areas with high visual quality may offer varying vertical relief; established natural or planted vegetation with notable form, color, texture, or pattern; water features; or other elements that create a visually unified landscape. Particular views with high visual quality may include those with distinct focal points or patterns of architecture and landscape, enhanced or existing natural scenery, compatibility with the character of the surrounding landscape, and/or a unique visual setting in the surrounding area.
- **Moderate:** Moderate visual quality is generally represented by views that are interesting but not visually exceptional with regard to the built environment, landforms, or other physical characteristics. Such views may consist of dominant types of vegetation, water features, or other elements that visually unify a particular view or landscape; they can also include distinctive architectural features, including retaining walls or sound barriers that have a cohesive design pattern throughout a neighborhood or community.
- **Low:** Low visual quality consists of areas with limited or no distinct architecture, landforms, or changes in topography, sparse or indiscernible vegetation types due to density, absence of water features, monotonous color palettes, or limited visual elements of varying visual interest. Visual quality may be considered to be low if views are varied but visually disconnected, lack perceivable visual patterns, are adjacent to views that devalue the existing scenic quality, or do not generally represent a visual setting that is valued within the surrounding area. Visual clutter from signs that have no cohesive design throughout an area or that visually overpower the area also add to low visual quality

Visual Character

Calabasas is home to expanses of open land, natural hillsides and stream channels, wildlife, and panoramic views. Situated in the northwest Santa Monica Mountains of Los Angeles County, the City's landscape consists of rolling hills and rugged mountainous terrain that frames a few level areas. The natural environment includes oak and chaparral woodlands, riparian areas, and canyons, among which the overall suburban and semi-rural development occurs. Ridgelines feature expanses of natural vegetation and provide a break from the largely built environments of the San Fernando and Conejo valleys to the east and west, respectively. The changes in elevation visible from public roads afford residents and visitors views of expansive vistas throughout the community. The major visual components of the community are described below.

Development patterns in Calabasas since the early twentieth century started with weekend getaways. In the 1920s, a rural residential development style began with the Calabasas Highlands community that reflects the bungalow-style architecture and small, heavily tree-lined streets popular for communities adjacent to Los Angeles like Calabasas and neighboring Topanga. Increasing development over the next decades favored single-family homes, tucked into the hillside landscape in a way that retains the topography and often affords views of the mountains in the distance. Landscaping includes a dense canopy of mature trees, from native oaks to decorative species like palms, jacaranda, and eucalyptus that buffer the homes from view and retain the scenic aspects of developed corridors, such as that pictured in Figure 4.1-1 along Parkway Calabasas. While the developed areas differ from the natural landscape, appearing more groomed and tended, they also integrate with the natural features such that the built environment has a high degree of unity and intactness, and therefore overall high visual quality.

Figure 4.1-1 Hilly Topography along Parkway Calabasas, Looking Northeast with Residential Development and Dense Street Landscaping



Source: Google Earth 2021

Natural areas in the City are protected to maintain their ecological and open space character, which helps to retain their aesthetic value. This is done through the implementation of development design standards during development review, to ensure that new development retains and

enhances visual unity of the built landscape unity with the natural surroundings. Important natural features are described below.

Ridgelines

The ridgelines formed by the Santa Monica Mountains on the horizons of the City are a defining visual aspect in the Plan Area. They form visually prominent features throughout the Plan Area and are important to the sense of place (City of Calabasas General Plan, 2015). Ridgelines are visible in the image in Figure 4.1-2, and form an important context for travelers along the major roadways in Calabasas where they are visible beyond homes and offices built closer to the roadways (Figure 4.1-3). Calabasas Peak is the highest ridge in the City, along the southern border of upper Topanga Canyon. It includes rich riparian areas with heritage oak groves along the base of the ridge. While power lines appear in the foreground in some of these example images, the dramatic landscape overcomes the effect of these industrial components, giving these areas a high degree of intactness and therefore a high visual quality. The locations of ridgelines throughout the Plan Area are illustrated in Figure 4.1-4.

Figure 4.1-2 Ridgeline Visible from Mulholland Highway Looking Northeast



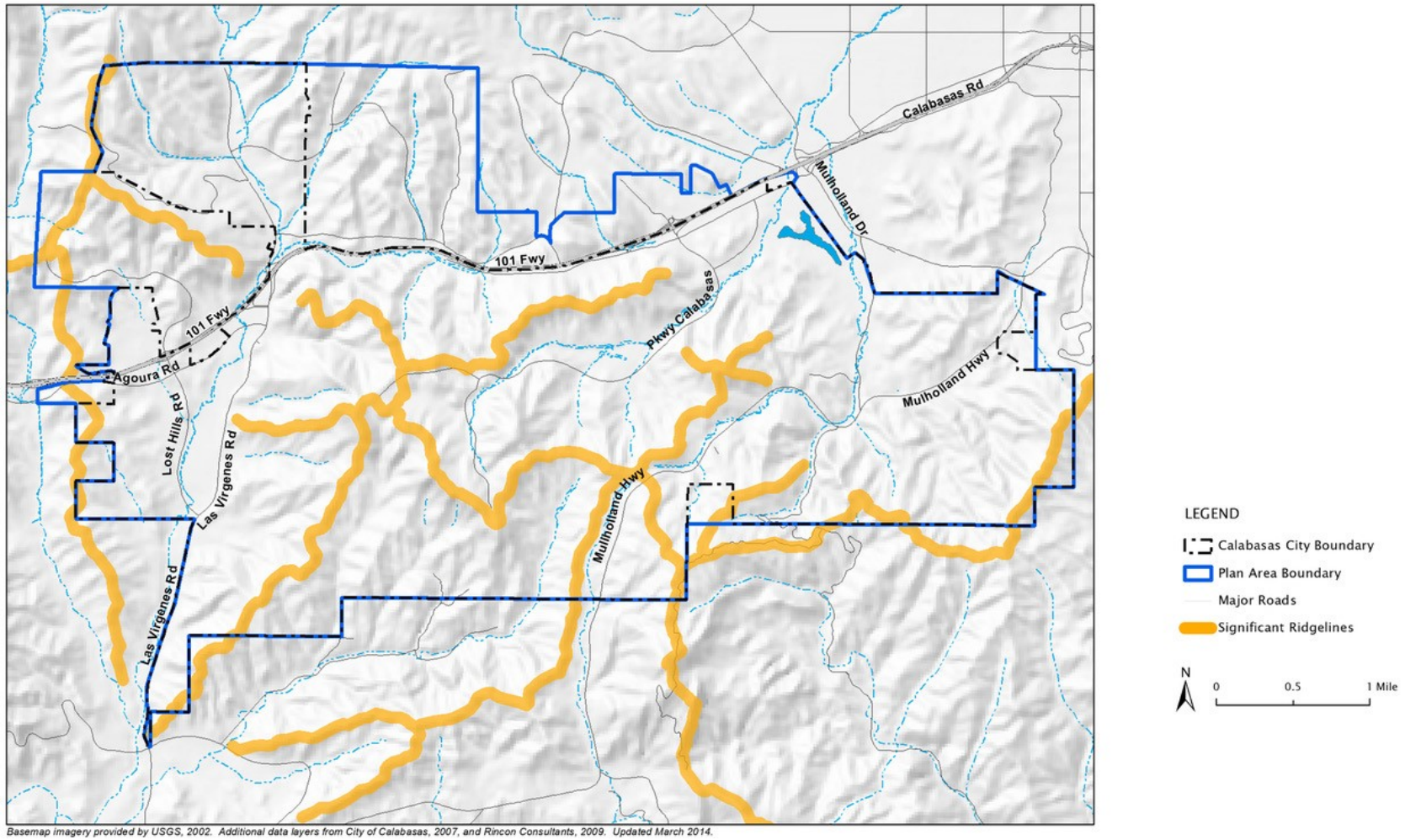
Source: Google Earth 2021

Figure 4.1-3 View of Hillsides and Ridgeline from Las Virgenes Road Looking South and Urban Development to the West



Source: Google Earth 2021

Figure 4.1-4 Ridgelines in Calabasas



Source: City of Calabasas 2015

Hillsides

Elevation in the Plan Area ranges from about 600 to 2,000 feet above sea level, and these changes in elevation form the dominant aspect of scenic character. The hillsides range from gently rolling terrain to steep slopes, most of which are covered in chapparal, coastal sage scrub, and grasslands, with pockets of woodlands and riparian areas. As stated above, homes are built into the hilly landscape in a way that follows the form of the landscape. Rather than sitting atop the hills, houses are built into the natural topography in a manner that minimizes changes to the hillsides and integrates the shapes of the landscape into the roof profiles of development. This is particularly true of newer development, where architecture reflects a Spanish-style influence and the earth-toned rooftops mimic the earth and grassy landscape (Figure 4.1-5).

Figure 4.1-5 Hillside Development along Parkway Calabasas Looking East



Source: Google Earth 2021

Creeks and Canyons

Creeks and canyons traverse the Plan Area and are important visual resources, reflected in the way in which the Plan Area has situated many trails and some recreation areas nearby (City of Calabasas 2007). Calabasas Creek and Malibu Creek and its tributaries are noted resources in the Plan Area. Calabasas Creek has headwaters and tributaries in the Old Topanga and Mulholland scenic corridors. It features rugged hillsides, densely vegetated shores, and a meandering waterway. Malibu Creek and tributaries include headwaters and tributaries in the Las Virgenes Valley. Similarly, Malibu Creek flows through the rugged, dramatic landscape of the Santa Monica Mountains with rugged cliffs and oak and chapparal woodlands.

Commercial, Office, and Residential Development

Calabasas neighborhoods exhibit a wide variety of design characteristics and themes. The major commercial/business and residential neighborhoods of the City are generally characterized below.

Old Town Calabasas and adjacent areas to the west along Calabasas Road up to Parkway Calabasas feature a mix of pedestrian-oriented retail, restaurant, and office uses (Figure 4.1-6). Old Town has a unique western character supported by the Old Town Calabasas Master Plan and Design Guidelines (City of Calabasas 1994). West along Calabasas Road, banks, retail, and other businesses are largely single-story, with Spanish-style red tile roofs and light-colored stucco that reflect the area's history and association with the historic Leonis Adobe near Old Town.

The Commons, an open-air shopping center is situated just east of Parkway Calabasas and is influenced by Mission-style architecture, with muted natural colors and clay tile roofs. The forested hillside behind The Commons makes for a distinctive visual backdrop and contributes to the sense of place. The Calabasas Civic Center is just west of the Commons shopping center, with a Mediterranean Revival architectural style, characterized by arched entry ways, high clerestory windows and a bell tower that reflect a Spanish or Mission-style influence (Figure 4.1-7). Mature trees at the edge of the parking and the hillside behind integrate the built environment with the natural setting and create a high quality, intact view.

On the north side of Calabasas Road, business complexes line the area between the roadway and US-101 to the north. These are two to three stories often with light-colored stucco exteriors, flat roofs, and red tile eaves. Similar to the Civic Center and commercial development, these office complexes feature mature landscaping along the roadway and in parking lots. The consistent design and mature landscaping help to harmonize the development with the natural hillsides that rise above in the distance. Closer to US-101, tall business signs, high voltage power lines, and freeway signage create a level of clutter that disrupts the more unified suburban development to the south and southwest, creating pockets of low and moderate visual quality in an otherwise high-quality corridor (Figure 4.1-8).

On the north side of US-101, in unincorporated Los Angeles County, a mix of older, light industrial and office facilities occur along Ventura Boulevard. These are generally two-story blocks of buildings oriented around parking lots where the hilly terrain is maintained somewhat, and mature trees and bushes are planted throughout. The architectural style adheres to that found south of the freeway with light-colored stucco, red tile and brown shingled roofs, and simple, rectangular forms. The building forms here are more utilitarian compared to the office and retail development on the south side of US-101, and a wider range of architectural styles is found, with the overall theme perhaps best described as being eclectic. The mature landscaping softens the contrast between the built and natural environments, rendering a moderate, visual quality (Figure 4.1-9).

Residential developments and commercial/business parks, situated along Las Virgenes Road on both sides of US-101 and along Agoura Road, many follow similar design guidelines, drawing on Spanish/Mission-style architectural influences reflected in the light-colored stucco, red tile roofs, and limited heights, and including areas with more modern-style architecture, characterized by flat roofs with parapets, and generally modern glass and white stucco exteriors. The development along these corridors also retains the relationship to the landscape, with limited grading and rooflines that vary in height to mimic the shape of the nearby hillside (Figure 4.1-10). Near where Mulholland Highway joins Mulholland Drive, the Gelson's shopping center is surrounded by residential development. The architecture is one to two-story, with a colonnade fronted by arches and a red-tile roof that reflect that architectural theme prevalent in the city. Even though it is a large building fronted by a large parking lot, the curved building footprint, varied roofline that allows views of this hills beyond, and the mature landscaping throughout the site contribute to the moderately high to high visual quality in the neighborhood. While some developments in the city are older, they are

well-maintained and feature mature landscaping that gives these corridors a moderately high to high visual quality relative to the rest of the City.

Figure 4.1-6 Old Town District on Calabasas Road Looking Southeast



Source: Google Earth 2021

Figure 4.1-7 Civic Center Looking South with Hillside Visible on the Horizon



Source: Google Earth 2021

Figure 4.1-8 Freeway and Business Signage at Parkway Calabasas Onramp Looking North



Source: Google Earth 2021

Figure 4.1-9 Light Industrial/Office Complex on Ventura Boulevard (within the Craftsman's Corner territory), Looking West



Source: Google Earth 2021

Figure 4.1-10 Office Complex and Restaurant on Las Virgenes Road, Looking West



Source: Google Earth 2021

Residential neighborhoods in Calabasas vary widely in age and character, ranging from condominium complexes and a mobile home park to very low-density neighborhoods with a distinctly rural character.

The North Mulholland area is low density, single-family homes with distinct residential neighborhoods that are somewhat physically disconnected. Park Moderne has small winding streets with no sidewalks, no streetlights, and many large trees. Some smaller homes have recently been, or are being, remodeled or enlarged. The South Mulholland area features an eclectic range of newer large homes to older, low-density subdivisions. The area has a “country” feeling, with narrow roads, abundant undeveloped lands, hilly topography, and minimal infrastructure. Residential neighborhoods in West Calabasas include a mix of higher-density condominium and apartment complexes and a variety of suburban residential tracts. Like much of the community, West Calabasas neighborhoods are framed by undeveloped hillsides that give the area a distinctive rural character.

Throughout the City, planned development communities are consistent in style with the Spanish/Mission vernacular of the business districts, which include light-colored stucco exteriors, arched entry ways, tile roofs, and mature landscaping. Taken into account along with the high level of care and maintenance, even the older neighborhoods exhibit a moderately high to high visual quality.

2021-2029 Housing Element Update Potential Site Locations

As illustrated in Section 2.0, *Project Description*, potential sites identified in the Housing Element Update occur in the following areas, from northeast to southwest, with brief descriptions following:

1. The Craftsman’s Corner territory, proposed for annexation to the City of Calabasas (currently unincorporated Los Angeles County), north of US-101:
 - a) The northeast side of Parkway Calabasas. This area just north of US-101 is developed with light industrial/office complex near Parkway Calabasas and apartment complexes to the east. The recently constructed senior apartment buildings are in the same Spanish/Mission-

style architecture as other development in Calabasas. They are two to three stories tall, with mature trees and other landscaping. The hillsides to the west feature prominent office/research facilities on the hilltop, with some mature trees and grassy slopes. The other office complexes to the west are multi-story with large parking lots and limited landscaping, nearer Ventura Boulevard.

- b) On the northeast corner of Old Scandia Lane. The site on Old Scandia Road occurs behind a multi-story storage facility and an older, one-story retail and medical offices development. These have no distinctive design characteristics and are only sparsely landscaped with street trees. The site on Douglas Fir Road is currently developed with a car repair facility and backs up to an undeveloped hillside with little vegetation. To the north, a three-story office complex is similarly of no distinctive architectural design and has a few mature trees.
- c) On the northeast side of Douglas Fir Road, near its intersection with Craftsman Road. This area has a distinctively industrial character and does not feature the level of architectural design characteristic of the Civic Center or other newer residential neighborhoods. Nearby hillsides to the west have prominent buildings on top that do not integrate with the topography and therefore create a marked contrast, placing the visual quality at moderately low. The residential development west of the site on Parkway Calabasas does, however, cohere with the City's preference for development that enhances beauty of the natural and built environment, which increases the visual quality at the site north of Parkway Calabasas to moderate.

The north-easternmost edge of the City, on the north side of Calabasas Road. This is an undeveloped lot just south of US-101 two- and three-story office buildings and surface-level parking lots to the south. The area features mature street trees and brick-lined, planted street medians. Mature trees block views of the freeway from the site. A three-story hotel is situated just west of the site. Above-ground power lines parallel Calabasas Road.

The area has a vernacular "Old West" style, the conditions of which are improving through implementation of the Old Town Master Plan. This area is not visible from US-101, which is at-grade in this corridor, although the hotel can be seen above the trees. The area has a moderate visual quality due to older, vernacular architecture and industrial components such as power lines, but as previously stated, is improving with implementation of the master plan.

- 2. The west side of Park Sorrento Road, where it meets the access drive to the Calabasas Tennis and Swim Center; the south side of Calabasas Road and west of Park Granada; the south side of Park Sorrento, east of Parkway Calabasas and south of Calabasas Road; the north side of Calabasas Road, near the east-bound on-ramp to US-101.

This area is developed with office buildings, surface parking, and mature landscaping. It is a mix of older and newer, one and two-story, buildings and the newer mixed-use development has a high-quality architectural design with muted colors, potted plants and landscaping, and outdoor seating areas. Throughout this area, architectural styles cohere with the Spanish/Mission-style influence evidenced elsewhere. The three-story office building on the site near US-101 ramp is visible from the highway as the low fencing and limited trees do not obscure it. The simple rectangular forms with deep set windows and large building on the face of the building afford the structure an industrial character.

From some sites, the roadway and mature trees largely block views of the hillside to the south. Looking southwest from Calabasas Road, a hillside is visible beyond two and three-story development. Overall, the development in this area shares an architectural style and quality

that grants the built environment a sense of unity, although some are older and less integrated with the unified design of the others. The visual quality in this area is moderately high due to consistency in design and the presence of dense, mature vegetation.

3. This area consists of those lands and properties located along both sides of Las Virgenes Road, north of Highway 101, with a northern limit being the Los Angeles County line, and the eastern limit being the incorporated City of Calabasas boundaries.

Sites in this area have a mix of developed areas and open space nearby. Along Las Virgenes Road, commercial development occurs near the roadway, particularly at the intersection with Agoura Road. Hillsides are visible immediately behind the strip-mall development with surface parking lots. Above-ground transmission lines and other equipment that supports electrical and telecommunications infrastructure are visible in every direction, contrasting with the hillside topography. Housing development is screened from the roadway by mature trees, with only the red tile roofs visible for the most part. Small, single-family home neighborhoods are adjacent to undeveloped parcels zoned for development and open space. The architecture is unified as it adheres to the same Spanish/Mission-style as development throughout the City. Although industrial features like power transmission lines disrupt views of the hillsides, the visual quality of the area is high as the dramatic hillsides form an immediate backdrop to the homes, office buildings, and shops along the roadways.

Some of the smaller streets, like Canwood Street, are immediately adjacent to open space visible from US-101, although the identified potential housing sites along these roads are below the freeway grade.

Scenic View Corridors

Four principal scenic corridors are identified in the City's General Plan as being important vantage points for viewing the visual resources in Calabasas. These are Mulholland Highway, Las Virgenes Road, Old Topanga Canyon Road, and US-101 (see Figure 4.1-11). Guidelines that govern development in these corridors is discussed under 4.1.2, Regulatory Environment.

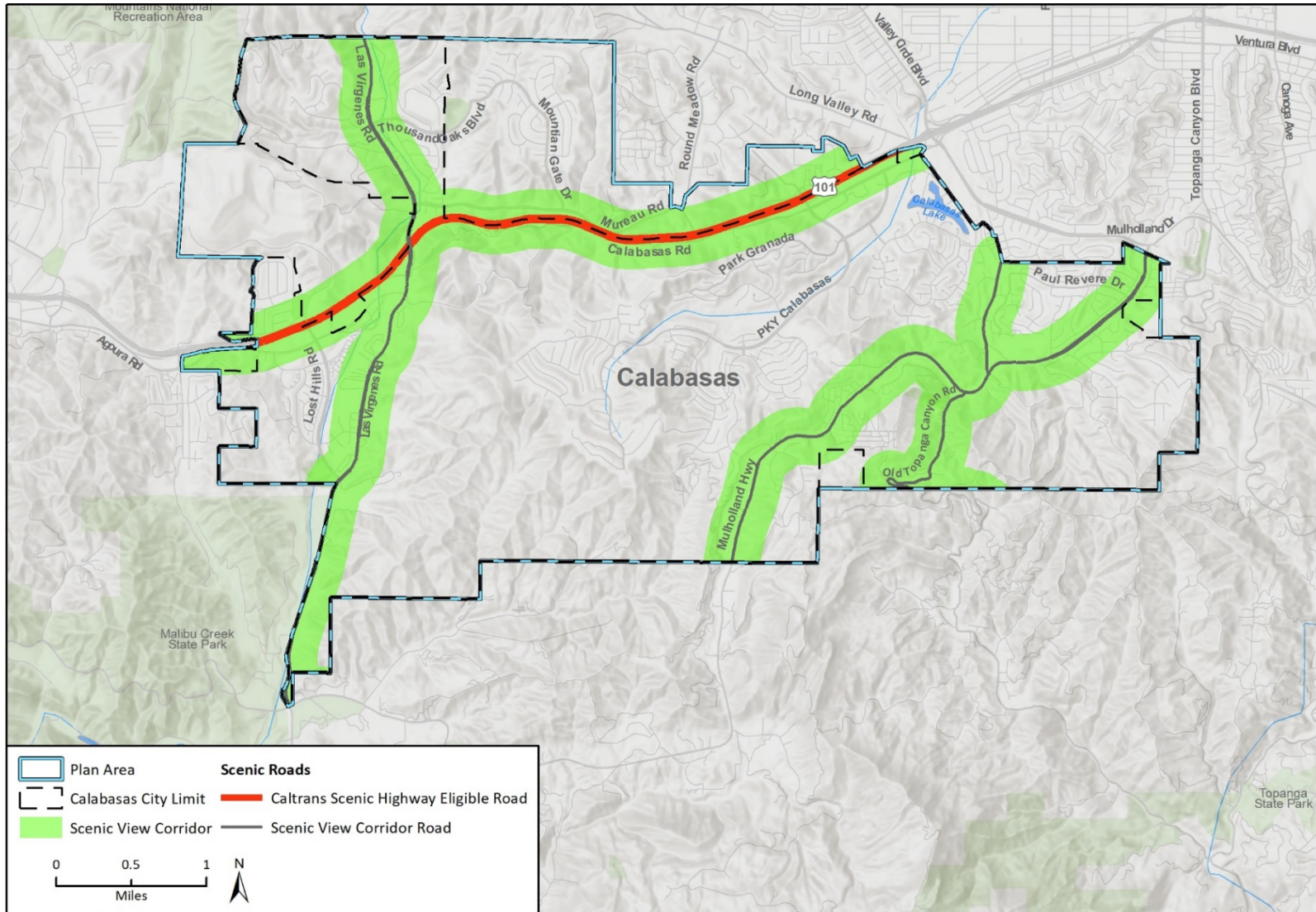
Mulholland Highway

This scenic corridor extends from Mulholland Drive near SR 27 on the northeast side of the City and continues westward through the southeastern quadrant of the City, and then continuing through unincorporated territory to Las Virgenes Road. The roadway bisects the Greater Mulwood residential area of the city for approximately 0.5 mile, after which it traverses steep hillsides, densely vegetated with oak and sycamore trees, grasses, and other vegetation with houses built on large lots. Three different schools are also located along this roadway. The rolling hills are visible covered in wildflowers and dry grasses, depending on the season. The corridor contains diverse topography, including sandstone hills and ridges, granite outcrops, stream and riparian habitat, and open areas with rolling hills and dotted with oaks. Development along this corridor is varied with single-family homes on large lots interspersed with dense natural and landscaped vegetation.

Las Virgenes Road

This scenic corridor is a cross-mountain roadway that provides primary access to the Malibu Creek State Park area and the Pacific coast to the south. Rolling hills, oak woodlands, and wildlife linkages are prominent features along Malibu Creek and its riparian habitat. Though residential development has occurred along Las Virgenes Road over the past years, it has been concentrated in the low-lying

Figure 4.1-11 Scenic Corridors in Calabasas



Imagery provided by Esri and its licensors © 2021.
 Additional Sources Caltrans 2021

Fig 4.1-5 Scenic Corridors

areas; consequently, views of ridgelines, open hillsides, and other natural areas in the distance remain along much of the corridor.

US-101

This scenic corridor is a heavily traveled, high-density area that encompasses much of Old Town Calabasas, Calabasas Road, the Calabasas Grade, and the commercially developed Agoura Road corridor. This corridor is often the first visual impression that many visitors receive. Beautification of the existing corridor and preservation of significant ridgelines, rolling hills, and oak woodlands are of concern here, particularly along the Calabasas Grade. The Calabasas Grade is visible to a high number of people due to its visibility from US-101. Views from the Calabasas Grade are characterized with having large open expanses of rolling hills and valleys with no perceptible development. Both east and west of the grade, existing obstructions along US-101 corridor include freeway-oriented signs and residential and commercial development.

Old Topanga Canyon Road

This scenic corridor extends from the urban residential area north of Mulholland Highway southward to its ascent of the Calabasas Ridge. The roadway continues south beyond the City limits into the coastal zone of Topanga Canyon. Old Topanga Canyon Road also has been designated by the City as a historic resource due to the roadway's long-standing function as an interior route throughout the Santa Monica Mountains. The roadway corridor contains some of the most scenic vistas of the inland valley, including steep canyon walls and oak canopies within riparian settings leading into Dry Canyon at its intersection with Mulholland Highway. As with Mulholland Highway, development along this corridor consists primarily of scattered single-family residences in a largely natural setting.

Light and Glare

Light and glare in the Plan Area are typical of what can be found in both urban and rural environments. Stationary sources of light can be generated from building interiors and exterior sources such as that used for building illumination, security lighting, parking lot lighting, street lighting, and landscape lighting. Other sources of light and glare include vehicle headlights.

The Plan Area boundaries are a mix of open space and developed lands, with approximately 39 percent of Calabasas preserved as developed (parks) and undeveloped open space. Most urban areas include outdoor lighting, with streetlights, lighted signs, safety lights on buildings, and light emanating from interior sources where windows are unshielded. Light pollution is present in and around the Plan Area, particularly near development along US-101 and in commercial districts. Nighttime light is generated by streetlights and the headlights of vehicles moving about the Plan Area.

Other sources of light in the Plan Area include parks with sports fields. Glare can be created by reflective or light-colored exterior building materials and surface paving materials where landscaping does not mitigate shade. Any highly reflective facade materials are of particular concern, as buildings reflect sunlight.

4.1.2 Regulatory Setting

State

California Scenic Highway Program

The California Department of Transportation manages the State Scenic Highway Program. The program was created in 1963 with the goal of protecting the aesthetic significance of scenic highways throughout the state. According to the State Streets and Highways Code (Section 260 through 263), a highway may be designated as scenic based on its scenic quality, how much of the natural landscape can be seen by travelers, and the extent to which development intrudes on the traveler's enjoyment of the view. The California Scenic Highway Program's Scenic Highway System List identifies scenic highways that are either eligible for designation or have already been designated as such. US-101 is a designated scenic highway in Santa Barbara County, north of the Plan Area, to Del Norte County near Crescent City in Northern California. In Los Angeles County, U.S. 101 is eligible for listing from Topanga Canyon Boulevard to SR 46 near Paso Robles (California Department of Transportation 2019). This includes the portion of US-101 that traverses Calabasas (from the Valley Circle Boulevard exit to just east of the Lost Hills Road exit. See Figure 4.1-11).

Local

Calabasas 2030 General Plan

The City has implemented guidelines through the 2030 General Plan that address aesthetic resources. Objectives and policies that apply to aesthetic resources include the following:

Open Space

Objective 1: Maintain a citywide open space system that conserves natural resources, preserves scenic beauty, promotes a healthful atmosphere, provides space for a variety of recreational activities, and protects public safety.

Policy III-2 Limit the permitted intensity of development within lands designated as open space to that which is consistent with the community's environmental values and that will avoid significant impacts to sensitive environmental features, including but not limited to woodlands, riparian areas, wildlife habitats, wildlife movement corridors, and habitat linkages.

Policy III-5 Limit and direct landform modification within areas designated as open space areas to preserve ridgelines and other significant landforms.

Policy III-6 Limit road access into areas designated as open space in order to protect environmental resources and preserve the visual character of designated open space lands.

Policy III-7 Require that development within and adjacent to designated open space areas be screened with native transitional landscaping in order to minimize the prominence of the development and emphasize natural features.

Open Space

Objective 2: Maintain and/or restore significant natural systems and resources associated with hillside environments, including but not limited to, primary ridgelines, sensitive vegetation and wildlife habitats, special geologic features, natural drainage swales and canyons, and steep slopes exceeding 20 percent.

- Policy III-11** Maintain the existing visual character of hillsides, recognizing both the visual importance of hillsides from public view areas and the importance of providing panoramic views from hillsides.
- Policy III-12** Minimize the alteration of existing landforms and maintain the natural topographic characteristics of hillside areas allowing only the minimal disruption required to recognize basic property rights
- Policy III-13** Protect the natural character of hillside areas through land sculpturing (contour grading) that blends graded slopes and terraces with the natural topography.
- Policy III-14** Preserve all significant ridgelines and other significant topographic features such as canyons, knolls, rock outcroppings, and riparian woodlands.

Conservation

Objective 1: Create and sustain an urban forest that enhances the quality of life within Calabasas.

- Policy IV-9** Continue to enforce the City's Oak Tree Ordinance.
- Policy IV-10** Preserve existing mature trees, unless they are detrimental to public health and safety.
- Policy IV-11** Promote the planting of additional trees in urban locations. Plantings should include replacement of trees that are or have been removed and new trees in locations where none are currently present.
- Policy IV-12** Provide adequate resources to maintain the urban forest in a safe and healthy manner.
- Policy IV-13** Expand the inventory of City street trees.

City of Calabasas Municipal Code

Title 17 of the Calabasas Municipal Code (CMC) contains the City's zoning, subdivision, and grading regulations although additional grading requirements are found in CMC section 15.10.030). The Development Code goal is to ensure that new or modified land uses, and development produce an environment of stable, desirable character, harmonious with existing and future development, and that protects the use and enjoyment of neighboring properties, consistent with the General Plan. The Development Code also includes the "Dark Skies" and ridgeline protection ordinances that provide specific lighting standards for various land uses, and regulations pertaining to the development and protection of ridgelines in Calabasas.

All new development is subject to permit review in accordance the stipulations of Title 17, Article III of the CMC (Site Planning and Project Design Standards). Title III ensures new development is harmonious with and protects the use and enjoyment of neighboring properties, including open space, consistent with the General Plan. Sections 17.41.030 and 17.41.040 of the CMC specify the design review process.

Grading activities are regulated by a grading permit process as indicated in CMC Section 15.10.030. Among other requirements, this section of the CMC stipulates the amount of soil that can be disturbed and the degree of grading that can occur within any scenic corridor identified in the General Plan.

Development standards under the Scenic Corridor Overlay Zoning, Scenic Corridor Development Guidelines, and the Freeway Corridor Design Guidelines implement the policies to protect scenic resources as designated in the General Plan. It should be noted that these sets of policies refer to

the previous General Plan Consistency Review Program. The General Plan Consistency Review Program includes policies to address project design features, landscaping, and building form.

SCENIC CORRIDOR DEVELOPMENT GUIDELINES

The Scenic Corridor Development Guidelines provide a set of design parameters applied to development projects to be constructed with 500 feet of the City's four scenic corridors. The Guidelines provide for development that would enhance the visual beauty of designated scenic corridors, and include using medium to dark roof colors, using non-glare materials, avoiding large blank facades, designing and siting structures to minimize visual impacts, and using landscaping to help screen development.

FREEWAY CORRIDOR DESIGN GUIDELINES

These guidelines apply to all proposed development within US-101 Corridor, including the expansion or remodeling of existing commercial, office, and business park developments. These guidelines are contained in Section 17.12.070 of the CMC and encourage development to be designed with a visual sense of entry, include architectural treatment to enhance their appearance, and emphasize pedestrian level activities.

Lighting standards are stipulated by Calabasas Municipal Code Section 17.27.030 (the City's Dark Skies Ordinance), which provides direction on maximum light thresholds to be used in the development of project photometric plans, and which regulates the amount of light a project may generate without affecting night sky visibility.

The City applies the outdoor lighting standards designed to protect the suburban, semi-rural, and rural character of Calabasas from inappropriate levels of night lighting (Calabasas Municipal Code Section 17.27.010). The City encourages lower illumination levels to conserve energy, minimize conflicts with wildlife movement, and enhance the visibility of natural features at night.

Additional outdoor lighting standards are included within Calabasas Municipal Code Section 17.27.030, which requires that new lighting conform to the existing community's lighting character and that new lighting sources be shielded and directed downward to contain light emission on the property and reduce illumination and glare in a manner that minimizes impacts to surrounding properties and public rights-of-way.

SCENIC CORRIDOR OVERLAY ZONING (SC)

The Scenic Corridor overlay zoning district is intended to be applied to major roadways within the city, from which the traveling public may enjoy scenic views of the hill and mountain areas to the north and south of the community, and scenic views of the city itself and surrounding landscape. Development within this zoning is required to comply with the Development Code, and the Scenic Corridor Development Guidelines.

MULHOLLAND HIGHWAY MASTER PLAN

The Mulholland Highway Master Plan, adopted in 1997, not only provides guidance for traffic and circulation infrastructure improvements, but also provides guidance regarding beautification, landscaping, and utility improvements. The goal of the plan is to help restore the original beauty of Mulholland Highway.

LAS VIRGENES GATEWAY MASTER PLAN AND LAS VIRGENES ROAD CORRIDOR DESIGN PLAN

The Las Virgenes Gateway Master Plan and the Las Virgenes Road Corridor Design Plan, both adopted in 1998, are companion documents. The Gateway Master Plan provides direction on the planned development or redevelopment of private properties along the corridor while the Corridor Design Plan focuses on the desired appearance and functionality of the public realm, including the roadway, sidewalks, street lighting and furnishings, and landscaping.

WEST CALABASAS ROAD MASTER PLAN

The West Calabasas Road Master Plan, adopted in 2006, provides design direction on the planned development or redevelopment of private properties along the West Calabasas Road corridor as well as on the desired appearance and functionality of the public realm, including the roadway, sidewalks, street lighting and furnishings, and landscaping.

OLD TOWN MASTER PLAN AND DESIGN GUIDELINES

This master plan was adopted in 1994 in response to residents expressing a desire to retain the historic resource of the historic retail downtown. The Master Plan and Design Guidelines were developed to ensure that a “sense of place” unique to Calabasas where historic buildings could be retained and enhanced to reflect the historic nature of the downtown and reflect the history of Calabasas.

4.1.3 Impact Analysis

Methodology and Significance Thresholds

As addressed by CEQA analysis, aesthetics refers to visual concerns. Aesthetics or visual resources analysis is a process to assess the visible change and anticipated viewer response to that change. The Federal Highway Administration (FHWA), Bureau of Land Management (BLM), and U.S. Forest Service (USFS) have developed methodologies for conducting visual analysis that are used across the industry (FHWA 2015, BLM 1984, USFS 1996). These methods have been synthesized and used for this analysis.

While the conclusions of these assessments may seem entirely subjective, value is measured based on generally accepted measures of quality, viewer sensitivity, and viewer response, supported by consistent levels of agreement in research on visual quality evaluation (BLM 1984, FHWA 2015). Modifications in a landscape that repeat basic elements found in that landscape are said to be in harmony with their surroundings; changes that do not harmonize often look out of place and can be found to form an unpleasant contrast when their effects are not evaluated adequately.

Scenic or visual quality can be described best as the overall impression a viewer retains after driving through, walking through, or flying over an area (BLM 1984). Viewer response is a function of the number of viewers, number of views seen, distance of the viewers from a given key viewpoint, and the viewing duration. Viewer sensitivity reflects the extent of public concern for a particular viewshed. A brief description of these terms and criteria follows.

Viewshed

A viewshed is an area of the landscape visible from a particular location or series of points (e.g., an overlook or a trail, respectively) (FHWA 2015). A viewshed may be divided into viewing distances called foreground, middle ground, and background. Usually, the closer a resource is to the viewer,

the more dominant it appears visually, and thus it has greater importance to the viewer than something farther away. A common set of criteria identifies the foreground as 0.25 to 0.5 mile from the viewer; the middle ground is three to five miles away; and the background extends away to the horizon.

Visual Character

Natural and human-built landscape features both contribute to the visual character of an area or view. Features include geology, water features, plants, wildlife, trails and parks, and architecture and transportation elements (e.g., bridges or city skylines). The way visual character is perceived can vary based on the season, the time of day, the light, and other elements that influence what is visible in a landscape. The basic components used to describe visual character are form, line, color, and texture of landscape features (USFS 1996, FHWA 2015).

Visual Quality

Visual quality is a term that indicates the uniqueness or desirability of a visual resource, within a frame of reference that accounts for the “apparent concern for appearance” by concerned viewers (e.g., residents, visitors, jurisdictions) (USDA 1978). A well-established approach to visual analysis is used to evaluate visual quality, using the concepts of vividness, intactness, and unity (FHWA 2015).

- Vividness describes the memorability of landscape components as they combine in striking patterns.
- Intactness refers to the visual integrity of the natural and human-built.
- Unity indicates the visual coherence and compositional harmony of the landscape as a whole.

Visual Exposure and Sensitivity

Viewer sensitivity is determined based on the visibility of resources in the landscape, the proximity of viewers to the visual resource, the height from which viewers see the resource, and the types of viewers with their associated expectations. Visual sensitivity also depends on the number and type of viewers, along with the frequency and duration of views experienced by these viewers.

Once an adequate description of the visual resource and its quality is developed, including the number and types of views for common uses (e.g., recreational, agriculture), an evaluation can be made as to the impact of the project upon the aesthetic and visual resources in the landscape.

Significance Thresholds

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. The General Plan Update would have a significant impact with respect to aesthetics if it would:

1. Have a substantial adverse effect on a scenic vista.
2. Substantially damage to scenic resources in a designated State scenic highway, including, but not limited to, trees, rock outcroppings, and historic buildings.
3. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings; in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.
4. Create new sources of light or glare that would adversely affect day or nighttime views.

Threshold 1: Would the General Plan Update have a substantial adverse effect on a scenic vista?

Impact AES-1 THE GENERAL PLAN UPDATE WOULD FACILITATE NEW DEVELOPMENT IN CALABASAS, BUT NONE OF THE PROPOSED HOUSING SITES ARE IN AREAS WITH DESIGNATED SCENIC VISTAS. ADHERENCE TO POLICIES INCLUDED IN THE 2030 GENERAL PLAN AND CITY ORDINANCES WOULD REDUCE POTENTIAL IMPACTS TO SCENIC VIEW CORRIDORS TO A LESS THAN SIGNIFICANT LEVEL.

Development facilitated by the General Plan Update could result in increased urbanization along some of the view corridors described in Section 4.1.1, *Setting*. Development and re-development that could be facilitated by the General Plan Update would be visible along arterial roads and from US-101. View corridors that could be affected by new development include US-101, Mulholland Highway, and Las Virgenes Road. Potential impacts to each of these corridors are described below

US-101

Development that could be facilitated by the General Plan Update along US-101 corridor would include the Rancho Pet Kennel site and the Las Virgenes Road/Mureau Road site. Sites located along Las Virgenes Road north and south of Agoura Road, along the southern side of Agoura Road, and south of Calabasas Road, as described above, would not impact views from the US 101 scenic corridor. Most development that could occur on proposed sites along US-101 would be infill redevelopment where existing development is already adjacent. At some sites, development would be new or would increase density over existing conditions along the view corridor.

Development and re-development would be required to comply with 2030 General Plan policies and design guidelines in Title 17 of the Calabasas Municipal Code, which includes standards that apply across zoning districts, including the provision of landscaping, protection of existing vegetation, clustered development to prevent urban sprawl into open spaces, and design guidelines that address size, height, bulk, and location of buildings (CMC Section 17.20.070). Furthermore, buildings with the potential to impact views from the freeway are required to submit project-level viewshed studies to determine visual impacts for that project (Section 17.20.070(6)(h)). Compliance with the Scenic Corridor Design Guidelines and the 2030 General Plan policies listed below would preserve views of ridgelines and other identified scenic resources from the freeway.

- Policy IX-43** Require new development to be designed in a manner consistent with the Scenic Corridor Overlay Zoning requirements and the Scenic Corridor Design Guidelines.
- Policy IX-44** Preserve large areas of natural hillsides and other dominant natural environmental features visible from US-101.
- Policy IX-45** Pursue the elimination of remaining billboards along US-101, amortization of remaining non-conforming pole signs, and an overall reduction of sign clutter.
- Policy IX-46** In collaboration with neighboring jurisdictions, ensure that new development along US-101 does not block views of significant visual features such as designated ridgelines.
- Policy IX-47** Where barrier screening for visual or noise mitigation is necessary, such treatment shall consist of a combination of decorative walls, undulating berms of various heights and innovative use of combined evergreen and deciduous trees.

The visual character of the area on north and south sides of US-101 would be expected to improve generally as the 2030 General Plan design policies and the various development standards are implemented. The possible addition of sound walls along the freeway frontage to lower noise levels

for possible residential uses would not be expected to block views of any identified scenic resources. The Las Virgenes Road/Mureau Road Mixed Use district is at a lower elevation than the freeway, and walls built along sites in this corridor as part of housing development would not be expected to block views of ridgelines or other scenic resources.

Mulholland Highway

Development on sites proposed in the General Plan Update would not occur in the Mulholland Highway Scenic Corridor. This area would not be impacted by projects developed as part of implementation of the General Plan Update.

Las Virgenes Road

Development along Las Virgenes Road associated with implementation of the General Plan Update could occur along both sides of Las Virgenes Road in the lower-lying areas below the ridgelines and associated hillsides. Given that surrounding land uses consist of commercial development and multi-family residences, development that could be accommodated on sites in this corridor would be compatible with the scale of adjacent development to the north, south, and west. Hillsides are visible both in the distance and the immediate background, depending on the location of the site. Development would be subject to the Scenic Corridor Design Standards and the CMC that enforce development standards. Therefore, development of sites in this area would not block or otherwise substantially affect the Las Virgenes Road view corridor.

Old Topanga Road

Development on sites proposed in the General Plan Update would not occur in the Old Topanga Road Scenic Corridor. This area would not be impacted by projects developed as part of implementation of the General Plan Update.

Overall, implementation of 2030 General Plan policies, City design guidelines, and City ordinances that address development in designated scenic corridors would address possible impacts to view corridors; therefore, impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 2: Would the General Plan Update cause substantial damage to scenic resources in a designated State scenic highway, including, but not limited to, trees, rock outcroppings, and historic buildings?

Impact AES-2 NO OFFICIALLY DESIGNATED STATE SCENIC HIGHWAYS EXIST IN CALABASAS. US-101 IS ELIGIBLE FOR DESIGNATION, BUT IMPLEMENTATION OF THE GENERAL PLAN UPDATE WOULD NOT ALTER ANY RESOURCES WITHIN THAT HIGHWAY AND RE-DEVELOPMENT OF SOME AREAS ALONG US-101 WOULD IMPROVE THE VISUAL QUALITY. THERE WOULD BE A LESS THAN SIGNIFICANT IMPACT.

There are no officially designated State scenic highways in the areas where housing sites are proposed under the General Plan Update. As discussed under issue (a), development along US-101, where sites are proposed, would likely improve the visual quality by implementing architecture consistent with adjacent uses, largely in the Spanish/Mission-style, and by increasing landscaping and other aesthetic improvements in compliance with Calabasas City Code Section 17.20 et al.

Therefore, substantial damage to scenic resources in a designated State scenic highway would not occur and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 3: In non-urbanized areas, would implementation of the General Plan Update substantially degrade the existing visual character or quality of public views of the site and its surroundings, or in an urbanized area, would implementation of the General Plan Update conflict with applicable zoning and other regulations governing scenic quality?

Impact AES-3 HOUSING SITES PROPOSED UNDER THE GENERAL PLAN UPDATE ARE IN AREAS THAT ARE URBANIZED OR ADJACENT TO URBANIZED DEVELOPMENT. AN INCREASE IN PERMITTED RESIDENTIAL DENSITIES IS NEEDED TO MEET AFFORDABLE HOUSING REQUIREMENTS BUT THE PROPOSED HOUSING SITES WOULD BE IN DEVELOPED AREAS WHERE AGING STRUCTURES WOULD BE REDEVELOPED. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Projects implemented under the General Plan Update would not occur in non-urbanized areas where the visual quality is high because of limited or no development. Rather, the sites proposed under the General Plan Update are in currently developed areas or in those adjacent to developed areas where new development would not degrade visual character or quality. Furthermore, in some cases, views would improve because new development would replace aging structures with those that more clearly meet the City’s design standards and Development Code, including increased landscaping.

To meet the RHNA allocation, the General Plan Update specifies sites for residential development and identifies sites to be rezoned to increase permitted residential densities to meet affordability requirements. This includes adding an Affordable Housing Overlay (AHO) zone with potential density of 45 du/acre. The State’s “default density” criterion for suburban cities such as Calabasas is 20 dwelling units per acre (du/acre). The City’s maximum development density for Commercial Mixed Use and Residential Multi-Family zones is 16 to 20 du/acre, with a maximum of 20 du/acre. The General Plan Update would facilitate adjusting the permitted density from a range of 16 to 20 du/acre to a range of 20 to 24 du/acre.

Much of the intensification and reuse that would be facilitated under implementation of the General Plan Update would also generally be expected to enhance the visual character of the community. Based on objectives and policies in the General Plan Community Design Element, the City aims to provide neighborhood centers that allow residents and visitors to enjoy time in an inviting environment where they can relax, shop, eat, work, and play.

The 2030 General Plan Community Design Element includes the following objectives and policies intended to enhance the appearance of the community.

Objectives

- Focus new development in and near areas that already contain existing development
- Preserve significant natural features, designated open space, and biological habitats

- Preserve and enhance a pleasant visual experience for residents and visitors, emphasizing prominent and distinctive vistas, view corridors, and natural features
- Create pedestrian access and connectivity opportunities as well as human-scaled gathering places
- Promote high quality design for structures and building sites

Policy IX-1 Through community input and design review, ensure that new development and redevelopment is of high-quality design, is aesthetically pleasing, and contributes to a positive image for the city.

Policy IX-2 Preserve, protect, and enhance landmarks, sites, historic landscapes and districts, and areas of historical, cultural, and urban design significance.

Policy IX-3 Ensure that new development projects become assets to the community through direct contribution to the enhancement of Calabasas' visual environment.

Policy IX-5 Ensure that new development is aesthetically compatible with the area's natural environment and that it contributes to a positive image for the city.

Policy IX-6 Require that new developments preserve views of identified scenic resources from designated corridors.

Policy IX-7 Where applicable, enhance view corridors that are oriented toward existing or proposed community amenities, such as recreation facilities, parks, open space, or natural features.

Policy IX-8 Require that new developments establish architectural and siting design themes that are compatible with the surrounding context, including:

- Prominent design features existing in the immediate area (i.e., trees, landforms, historic landmarks)
- Existing and planned development, buildings and structures
- The natural environment (i.e., hillsides, washes, native vegetation, community landscaping)

Policy IX-9 Require that new developments create pleasing transitions to surrounding development. For example, where applicable:

- The bulk of new structures should be compatible with the area's environment and with adjacent development
- Setbacks from streets and adjacent properties should be in proportion to the structure and the function of the street and shall encourage pedestrian scale and uses (for example, zero setbacks from property lines and street right-of-way are appropriate within Old Town)
- Multi-story structures should be made less imposing by physically stepping the upper stories of the structures back from street level

Policy IX-12 Provide appropriate transitions between different projects and between suburban and rural/semi-rural land uses through the provision of buffer areas, landscaping, and other similar treatments, such as hedges, walls, fences, berms, or landscaped open space.

The General Plan Safety Element includes policies to address geologic impacts that would also address visual impacts associated with hillside grading and development.

Policy VII-5 Discourage development within potential landslide areas and areas with severe soils limitations as the City’s preferred management strategy, and as a higher priority than attempting to implement engineering solutions.

Policy VII-6 Where engineering solutions to slope stability constraints are required, implement landform grading programs so as to recreate a natural hillside appearance.

Development and redevelopment that may occur under the General Plan Update would be governed by these policies and the regulations in the Development Code including the AHO. All these plans and documents work together to protect Calabasas aesthetic resources and are a means to retain the community character, while providing enhancements in certain areas of the City. Impacts would be less than significant with implementation of applicable policies and regulations.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 4: Would implementation of the General Plan Update create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Impact AES-4 NEW DEVELOPMENT FACILITATED BY THE GENERAL PLAN UPDATE COULD ADD NEW SOURCES OF LIGHT AND GLARE. ALL DEVELOPMENT WOULD BE REQUIRED TO COMPLY WITH THE CITY’S LIGHTING REGULATIONS (DARK SKIES ORDINANCE) AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

For purposes of this analysis, light refers to light emissions (brightness) generated by a source of light. Stationary sources of light include exterior parking lot and building security lighting; moving sources of light include the headlights of vehicles driving on roadways near the project site. Streetlights and other security lighting also serve as sources of light in the evening hours.

Glare is defined as focused, intense light emanated directly from a source or indirectly when light reflects from a surface. Daytime glare is caused in large part by sunlight shining on highly reflective surfaces at or above eye level. Reflective surfaces are associated with buildings that have expanses of polished or glass surfaces, light-colored pavement, and the windshields of parked cars.

Development that could occur through implementation of the General Plan Update would increase the ambient nighttime lighting at the proposed sites. Increased lighting could come from exterior lights on buildings, light spilling from streetlights. Increased glare could potentially occur because of reflective building materials, roofing materials, and windows situated so they reflect sunlight.

The City’s Land Use and Development Code regulates lighting by its “Dark Skies Ordinance,” or Section 17.27.020 et seq. These regulations intend to minimize artificial light effects on the night sky and on wildlife, while maintaining appropriate lighting levels in developed areas to ensure safety. The lighting ordinance stipulates that exterior lights must limit light trespass onto adjacent properties and limit glare by shielding and directing light fixtures to achieve these limitations. Exterior lighting within a scenic corridor overlay zoning district must be limited to types and levels necessary for security, but no more. The City’s condition of approval system requires the applicant of any project to submit evidence that the proposed work will comply with the code (City of Calabasas, Development Code Section 17.27.040). This review process considers the light and glare effects on adjacent uses and protects the City from inappropriate levels of night lighting. Architectural and lighting plans are reviewed prior to the issuance of building permits.

The 2030 General Plan also includes policies that promote the reduction of impacts from lighting and establishment of a design guideline manual that would work in addition to the Development Code:

Policy IX-19 Promote lower level lighting/illumination citywide.

Policy IX-22 Pursue development of comprehensive citywide design guidelines that provide clear design direction recognizing the varying areas and uses throughout the community.

Building siting, orientation, and design would follow standards that decrease glare, including shielding west-facing windows, using non-reflective exterior materials, and orienting structures so they do not receive unshielded, direct sunlight during the hottest parts of the day. Finally, increased landscaping required under the Development Code would be “designed as an integral part of the overall site plan design...and not relegated to pieces of the site left over after buildings, parking, and circulation have been laid out (CMC Section 17.26.050(8)). This would ensure that landscaping associated with development under the General Plan Update would alleviate glare that could be generated by parked cars, reflections from windows, and other sources.

Build-out of the General Plan Update would increase light and glare, but adherence to existing and proposed City lighting requirements and restrictions, and to design and landscaping regulations and guidelines, impacts would be reduced to a less than significant level.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.1.4 Cumulative Impacts

Anticipated General Plan Update-related impacts, in conjunction with cumulative development allowed per existing regulations is expected to increase housing development citywide, in an existing developed area; therefore, future housing development facilitated by the project could result in impacts to aesthetics. Potential aesthetic impacts of future housing development on the candidate housing sites facilitated by the project would be site-specific and would require evaluation on a case-by-case basis at the project level in accordance with the project. Each cumulative development project (except by-right pursuant to State Housing law) would require separate discretionary approval and evaluation under CEQA, which would address potential impacts to visual resources and identify necessary mitigation measures, where appropriate. Consequently, future housing development facilitated by the General Plan Update would not result in significant cumulative environmental impacts in conflict with aesthetics requirements for preserving visual character, public views, scenic vistas and resources, or requirements for minimizing and controlling potential light and glare. Therefore, the General Plan Update would not cause a cumulatively considerable impact on aesthetics, and no mitigation is required.

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4.2 Air Quality

This section of the EIR identifies and evaluates issues related to air quality in the context of the General Plan Update. It describes the physical and regulatory setting, the criteria used to evaluate the significance of potential impacts, the methods used to evaluate these impacts, and the results of the impact analysis.

4.2.1 Setting

Climate and Meteorology

The Plan Area is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area in Riverside County. The regional climate in the SCAB is semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality in the SCAB is primarily influenced by meteorology and a wide range of emission sources, such as dense population centers, substantial vehicular traffic, and industry.

The SCAB experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific High-pressure system. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion layer (i.e., the upper layer) until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid- to late afternoons on hot summer days. Winter inversions frequently break by mid-morning.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino counties. In the winter, the greatest pollution problem is the accumulation of carbon monoxide and nitrogen oxides (NO_x) due to low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and brighter sunshine combine to cause a reaction between hydrocarbons and NO_x to form photochemical smog (SCAQMD 2017).

Local climate conditions for the Plan Area are shown in Table 4.2-1. Precipitation and temperature data is sourced from the nearest United States Cooperative Observer Network stations with recent available data, which are the Topanga Patrol Station FC6 located in Topanga approximately 2.9 miles south of the Plan Area and the Thousand Oaks 1 SW station in Thousand Oaks approximately 10.8 miles west of the Plan Area. Wind data is sourced from the nearest Federal Aviation Administration Automated Surface Observing Systems station, which is the Van Nuys Airport station located approximately 8.1 miles east of the Calabasas city limits. As summarized therein, the warmest month of the year is July, and the coldest month of the year is January. The annual average maximum temperature is 74 degrees Fahrenheit (°F), while the annual average minimum temperature is 51°F.

Table 4.2-1 Calabasas Climate Conditions

Temperature Condition	Amount
Average annual rainfall ¹	24.34 inches
Average annual maximum temperature ²	73.7°F
Average annual minimum temperature ²	50.5°F
Warmest month ²	July
Coolest month ²	January
Average annual mean temperature ²	62.1°F
Average wind speed ³	6.2 miles per hour
Predominant wind direction ³	southeast

°F = degrees Fahrenheit

Note: Temperature data is based on the period of record from August 10, 2004 to November 29, 2010. Average annual rainfall is based on the period of record from January 1, 1949 to December 31, 2014. Wind data is based on the period of record from December 31, 1972 to February 24, 2021.

¹ Source: Western Regional Climate Center 2014

² Source: Western Regional Climate Center 2010

³ Source: Iowa State University 2021

Sources of Air Pollution

Air pollutant emissions in the SCAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources consist of legally operated vehicles on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles or when wildfires generate smoke containing particulate matter.

Air Pollutants of Primary Concern

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an

exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),¹ nitrogen oxides (NO_x), particulate matter with diameters of up to ten microns (PM₁₀) and up to 2.5 microns (PM_{2.5}), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between VOC and NO_x. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog). The characteristics, sources and effects of criteria pollutants are discussed in the following subsections. The following subsections describe the characteristics, sources, and health and atmospheric effects of air pollutants of primary concern.

Ozone

Ozone is produced by a photochemical reaction (triggered by sunlight) between NO_x and VOC. VOC are composed of non-methane hydrocarbons (with some specific exclusions), and NO_x is composed of different chemical combinations of nitrogen and oxygen, mainly nitric oxide and nitrogen dioxide. NO_x are formed during the combustion of fuels, while VOC are formed during combustion and evaporation of organic solvents. As a highly reactive molecule, ozone readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high VOC and NO_x levels along with abundant sunshine are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant. In addition, because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans, including changes in breathing patterns, reduction of breathing capacity, increased susceptibility to infections, inflammation of lung tissue, and some immunological changes (SCAQMD 2005; U.S. EPA 2021a). Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

Carbon monoxide is a localized pollutant that is found in high concentrations only near its source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is the incomplete combustion of petroleum fuels by automobile traffic. Therefore, elevated concentrations are usually found only near areas of high traffic volumes. Other sources of carbon monoxide include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces during the winter. The health effects of carbon monoxide are related to its affinity for hemoglobin in the blood. Carbon monoxide causes a number of health problems, including aggravation of some heart diseases (e.g., angina), reduced tolerance for exercise, impaired mental function, and impaired fetal development. At high levels of exposure, carbon monoxide reduces the amount of oxygen in the blood, leading to mortality (SCAQMD 2005; U.S. EPA 2021a). Carbon monoxide tends to dissipate rapidly into the atmosphere; consequently, violations of the NAAQS and/or CAAQS for carbon monoxide are generally associated with localized carbon monoxide “hotspots” that can occur at major roadway intersections during heavy peak-hour traffic conditions.

¹ CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term VOC is used in this EIR.

Nitrogen Dioxide

Nitrogen dioxide is a by-product of fuel combustion; the primary sources are motor vehicles and industrial boilers and furnaces. The principal form of NO_x produced by combustion is nitric oxide, but nitric oxide reacts rapidly with the oxygen in the air to form nitrogen dioxide, creating the mixture of nitric oxide and nitrogen dioxide commonly called NO_x. Nitrogen dioxide is an acute irritant that can aggravate respiratory illnesses and symptoms, particularly in sensitive groups (SCAQMD 1993 and 2005; U.S. EPA 2021a). A relationship between nitrogen dioxide and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light, gives a reddish-brown cast to the atmosphere, and reduces visibility (SCAQMD 1993 and 2005; U.S. EPA 2021a). It can also contribute to the formation of PM₁₀ and acid rain.

Sulfur Dioxide

Sulfur dioxide is included in a group of highly reactive gases known as “oxides of sulfur.” The largest sources of sulfur dioxide emissions are from fossil fuel combustion at power plants (73 percent) and other industrial facilities (20 percent). Smaller sources of sulfur dioxide emissions include industrial processes such as extracting metal from ore and the burning of fuels with a high sulfur content by locomotives, large ships, and off-road equipment. Sulfur dioxide is linked to a number of adverse effects on the respiratory system, including aggravation of respiratory diseases, such as asthma and emphysema, and reduced lung function (SCAQMD 2005; U.S. EPA 2021a).

Particulate Matter

Suspended atmospheric PM₁₀ and PM_{2.5} is comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. Both PM₁₀ and PM_{2.5} are directly emitted into the atmosphere as by-products of fuel combustion and wind erosion of soil and unpaved roads. Particulate matter is also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with PM₁₀ and PM_{2.5} can be very different. PM₁₀ is generally associated with dust mobilized by wind and vehicles while PM_{2.5} is generally associated with combustion processes as well as formation in the atmosphere as a secondary pollutant through chemical reactions. Due to its small size, PM_{2.5} is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems (CARB 2020a). More than half of PM_{2.5} that is inhaled into the lungs remains there. These materials can damage health by interfering with the body’s mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance (South Coast Air Quality Management District 2005). Suspended particulates can also reduce lung function, aggravate respiratory and cardiovascular diseases, increase mortality rates, and reduce lung function growth in children (SCAQMD 2005; U.S. EPA 2021a).

Lead

Lead is a metal found naturally in the environment, as well as in manufacturing products. The major sources of lead emissions historically have been mobile and industrial sources. However, as a result of the U.S. EPA’s regulatory efforts to remove lead from gasoline, atmospheric lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least in part as a result of national emissions

standards for hazardous air pollutants (U.S. EPA 2013). As a result of phasing out leaded gasoline, metal processing currently remains the primary source of lead emissions. The highest level of lead in the air is generally found near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. The health impacts of lead include behavioral and hearing disabilities in children and nervous system impairment (SCAQMD 2005; U.S. EPA 2021a).

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about 1/70th the diameter of a human hair) and thus is a subset of PM_{2.5}. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs (CARB 2020b). Particulate matter emitted from diesel engines contributes more than 70 percent of the air emission cancer risk associated with the on-road heavy-duty sector within the SCAB (SCAQMD 2017).

TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

Valley Fever

San Joaquin Valley Fever (Valley Fever; formally known as Coccidioidomycosis) is an infectious disease caused by the fungus *Coccidioides immitis*. Valley Fever is a disease of concern in arid and semiarid areas of the western United States, including in the dry, inland regions of southern California. Infection is caused by inhalation of *Coccidioides immitis* spores that become airborne when dry, dusty soil or dirt is disturbed by natural processes such as wind or earthquakes, or by human induced ground-disturbing activities such as construction, farming, or other activities (Ventura County Air Pollution Control District 2003). Groups at higher risk of contracting Valley Fever include people who participate in outdoor activities or are employed in jobs that involve close contact with soil and dust (such as landscaping, construction, and archaeology) as well as people who live or work in areas near ongoing ground-disturbing activities (such as construction or excavation sites) (California Department of Public Health 2021). The incidence rate of Valley Fever in Los Angeles County has risen in recent years from 3.3 cases per 100,000 people in 2013 to 11.3 cases per 100,000 people in 2019. However, the incidence rate in Los Angeles County remains below the statewide average of 22.5 cases per 100,000 people in 2019 as well as below the incidence rate of areas heavily affected by Valley Fever such as Kern County (367.5 cases per 100,000 people in 2019) and Kings County (140.5 cases per 100,000 people in 2019) (California Department of Public Health 2020). Approximately 60 percent of people who are infected with Valley Fever show no symptoms; however, approximately 5 to 10 percent of infected persons develop serious or long-term lung problems (Center for Disease Control 2020; Lauer, et al. 2020).

4.2.2 Regulatory Setting

Federal and State

Federal and California Clean Air Acts

The federal Clean Air Act (CAA) governs air quality in the United States and is administered by the U.S. EPA at the federal level. Air quality in California is also governed by regulations under the California CAA, which is administered by CARB at the state level. At the regional and local levels, local air districts such as the SCAQMD typically administer the federal and California CAA. As part of implementing the federal and California CAA, the U.S. EPA and CARB have established ambient air quality standards (AAQS) for major pollutants at thresholds intended to protect public health. An air quality standard is defined as “the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harming public health” (CARB 2019a). Table 4.2-2 summarizes the CAAQS and the NAAQS. The CAAQS are more restrictive than the NAAQS for several pollutants, including the one-hour standard for carbon monoxide, the 24-hour standard for sulfur dioxide, and the 24-hour standard for PM₁₀.

California is divided geographically into 15 air basins (of which the SCAB is one) for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. Depending on whether the standards are met or exceeded, the local air basin is classified as in “attainment” or “non-attainment.” Once a nonattainment area has achieved the air quality standards for a particular pollutant, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. Areas that have been redesignated to attainment are called maintenance areas. Some areas are unclassified, which means insufficient monitoring data are available; unclassified areas are considered to be in attainment.

Table 4.2-2 presents the attainment status of the SCAB for each of the CAAQS and NAAQS. As shown therein, the SCAB is designated nonattainment for the NAAQS for ozone, PM_{2.5}, and lead (in the Los Angeles County portion only) as well as the CAAQS for ozone, PM₁₀, and PM_{2.5}.

In accordance with Section 109(b) of the federal Clean Air Act, the national ambient air quality standards (NAAQS) established at the federal level are designed to be protective of public health with an adequate margin of safety. The NAAQS were designed to include an adequate margin of safety to be protective of those segments of the public most susceptible to respiratory distress, such as children under the age of 14, the elderly (over the age of 65), persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases (U.S. EPA 2016). To derive these standards, the U.S. EPA reviews data from integrated science assessments and risk/exposure assessments to determine the ambient pollutant concentrations at which human health impacts occur, then reduces these concentrations to establish a margin of safety (U.S. EPA 2018). As a result, human health impacts caused by the air pollutants discussed above may affect people when ambient air pollutant concentrations are at or above the concentrations established by the NAAQS. The closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant (Brief for San Joaquin Valley Unified Air Pollution Control District 2018). Accordingly, ambient air pollutant concentrations below the NAAQS are considered to be protective of human health (CARB 2019a). The NAAQS and the underlying science that forms the basis of the

Table 4.2-2 Ambient Air Quality Standards and Basin Attainment Status

Pollutant	Averaging Time	California Ambient Air Quality Standards		National Ambient Air Quality Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8-Hour	0.070 ppm	N	0.070 ppm	N
	1-Hour	0.09 ppm	N	–	–
Carbon Monoxide	8-Hour	9.0 ppm	A	9 ppm	A
	1-Hour	20 ppm	A	35 ppm	A
Nitrogen Dioxide	1-Hour	0.18 ppm	A	0.100 ppm	U/A
	Annual Arithmetic Mean	0.030 ppm	A	0.053 ppm	A
Sulfur Dioxide	24-Hour	0.04 ppm	A	0.14 ppm	U/A ¹
	1-Hour	0.25 ppm	A	0.075 ppm	U/A
	Annual Arithmetic Mean	–	–	0.030 ppm	U/A
Particulate Matter – Small (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	N	–	–
	24-Hour	50 µg/m ³	N	150 µg/m ³	A
Particulate Matter - Fine (PM _{2.5})	Annual Arithmetic Mean	12 µg/m ³	N	12 µg/m ³	N
	24-Hour	–	–	35 µg/m ³	N
Sulfates	24-Hour	25 µg/m ³	A	–	–
Lead	Rolling 3-Month Average	–	–	0.15 µg/m ³	N ²
	30-Day Average	1.5 µg/m ³	A	–	–
Hydrogen Sulfide ³	1-Hour	0.03 ppm (42 µg/m ³)	A	–	–
Vinyl Chloride (Chloroethene) ³	24-Hour	0.010 ppm (26 µg/m ³)	A	–	–
Visibility Reducing Particles ³	8-Hour (10:00 to 18:00 PST)	–	No information available	–	–

A = attainment; N = nonattainment; U = unclassified; ppm=parts per million; µg/m³=micrograms per cubic meter; PST = Pacific Standard Time

¹ Designation pending.

² Partial Nonattainment designation – Los Angeles County portion of the SCAB only for near-source monitors. Expect re-designation to attainment based on current monitoring data.

³ The project does not include substantial sources of hydrogen sulfide, vinyl chloride, or visibility reducing particles. Ambient air quality standards for these pollutants is provided for informational purposes only; however, these pollutants are not evaluated for the purposes of CEQA.

Source: SCAQMD 2016 and CARB 2021a

NAAQS are reviewed every five years to determine whether updates are necessary to continue protecting public health with an adequate margin of safety (CARB 2019a).

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the U.S. EPA and the National Highway Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The Part One Rule revokes California’s authority to set its own GHG emissions standards and zero-emission vehicle mandates in California. On April 30, 2020, the U.S. E.PA and the National Highway Safety Administration published Part Two of the SAFE Vehicles Rule, which revised corporate average fuel economy and carbon dioxide emissions standards for passenger cars and trucks of model years 2021-2026 such that the standards increase by approximately 1.5 percent each year through model year 2026 as compared to the approximately five percent annual increase required under the 2012 standards (National Highway Traffic Safety Administration 2020). To account for the effects of the SAFE Vehicles Rule, CARB released off-model adjustment factors to adjust criteria air pollutant emissions outputs from the EMFAC model.

Construction Equipment Fuel Efficiency Standard

The USEPA sets emission standards for construction equipment. The first federal standards (Tier 1) were adopted in 1994 for all off-road engines over 50 horsepower (hp) and were phased in by 2000. A new standard was adopted in 1998 that introduced Tier 1 for all equipment below 50 hp and established the Tier 2 and Tier 3 standards. The Tier 2 and Tier 3 standards were phased in by 2008 for all equipment. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements, which are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068 (originally adopted in 69 Federal Register 38958 [June 29, 2004], and most recently updated in 2014 [79 Federal Register 46356]). Emissions requirements for new off-road Tier 4 vehicles were completely phased in by the end of 2015.

California Building Standards Code

The California Code of Regulations (CCR) Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. In addition to many other things, the California Building Standards Code’s energy-efficiency and green building standards address air quality concerns and are outlined below. The 2019 California Buildings Standards Code (the most recent iteration of the code) was adopted by reference in Calabasas Municipal Code Chapter 15.04. These standards are updated every three years.

PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS/ENERGY CODE

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California’s energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The 2019 Title 24 standards are the applicable building energy efficiency standards for the project because they became effective on January 1, 2020.

PART 11 – CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The 2019 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers (Tiers I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- 20 percent reduction in indoor water use relative to specified baseline levels;²
- 65 percent construction/demolition waste diverted from landfills;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards;
- Dedicated circuitry to facilitate installation of electric vehicle (EV) charging stations in newly constructed attached garages for single-family and duplex dwellings; and
- Designation of at least ten percent of parking spaces for multi-family residential developments as electric vehicle charging spaces capable of supporting future electric vehicle supply equipment.

The voluntary standards require:

- **Tier I:** stricter energy efficiency requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste with third-party verification, 10 percent recycled content for building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof; and
- **Tier II:** stricter energy efficiency requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste with third-party verification, 15 percent recycled content for building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar reflective roof.

Local

2016 Air Quality Management Plan

Under state law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. Each iteration of the SCAQMD's Air Quality Management Plan (AQMP) is an update of the previous plan and has a 20-year horizon. The latest AQMP, the 2016 AQMP, was adopted on March 3, 2017. It incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP, including the approval of the new federal eight-hour ozone standard of 0.070 ppm that was finalized in 2015. The Final 2016 AQMP addresses several state and federal planning requirements and incorporates new

² Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

scientific information, primarily in the form of updated emissions inventories, ambient measurements, and meteorological air quality models. The Southern California Association of Governments' (SCAG) projections for socio-economic data (e.g., population, housing, and employment by industry) and transportation activities from the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) are integrated into the 2016 AQMP. The 2016 AQMP builds upon the approaches taken in the 2012 AQMP for the attainment of federal PM and ozone standards and highlights the significant amount of reductions to be achieved. It emphasizes the need for interagency planning to identify additional strategies to achieve reductions within the timeframes allowed under the federal CAA, especially in the area of mobile sources. The 2016 AQMP also includes a discussion of emerging issues and opportunities, such as fugitive toxic particulate emissions, zero-emission mobile source control strategies, and the interacting dynamics among climate, energy, and air pollution. The 2016 AQMP also demonstrates strategies for attainment of the new federal eight-hour ozone standard and vehicle miles travelled emissions offsets, pursuant to recent USEPA requirements (SCAQMD 2017). The SCAQMD is currently preparing the next AQMP iteration, which will be the 2022 AQMP.

South Coast Air Quality Management District Rules and Regulations

To implement the AQMP, the SCAQMD develops and implements rules and regulations for emissions that may be generated by various uses and activities. The rules and regulations detail pollution-reduction measures that must be implemented during construction and operation of projects. Rules and regulations relevant to the project include the following:

Rule 401 (Visible Emissions): This rule prohibits the discharge of visible air pollutant emissions from various sources as determined by shade and opacity criteria based on the Ringelmann Chart.

Rule 402 (Nuisance): This rule prohibits the discharge of quantities of air contaminants or other material that causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.

Rule 403 (Fugitive Dust Control): This rule includes various requirements to prevent, reduce, and mitigate the amount of particulate matter entrained in the ambient air from man-made fugitive dust sources.

Rule 1113 (Architectural Coatings): This rule establishes VOC content limits for a variety of architectural coatings, including 50 grams per liter for flat and non-flat coatings.

City of Calabasas General Plan

The current Calabasas General Plan, adopted in 2008, and amended by way of the 5th RHNA cycle Housing Element in 2015, lists several air quality policies in Section IV.C (Air Quality) of its Conservation Element that supplement those of the SCAQMD. The following policies are applicable to the General Plan Update (City of Calabasas 2015):

Policy IV-14 Minimize reliance on single occupant vehicle travel and reduce the number of vehicles on City streets during peak travel hours by maintaining transportation demand management programs in commercial and business park developments consistent with the South Coast Air Quality Management Plan.

- Policy IV-15** Minimize the need for vehicular travel through incorporation of transit and other transportation alternatives such as walking and bicycling into the design of new commercial, office, and business park developments.
- Policy IV-16** Consistent with the City's Bicycle Master Plan, promote a system of bicycle routes within Calabasas that provide recreational opportunities and represent viable routes for travel between home and school or work.
- Policy IV-17** Ensure that construction activity within Calabasas complies with applicable South Coast Air Quality Management District rules and policies.
- Policy IV-18** Minimize emissions of air pollutants, including greenhouse gases, generated by electricity and natural gas consumption through implementation of the energy conservation policies listed in subchapter IV.F and the solid waste recycling policies listed in subchapter IV.G.
- Policy IV-20** Require applicants for projects containing sensitive receptors (such as residences, schools, day care centers, and medical facilities) on sites within 500 feet of the Ventura Freeway to demonstrate that health risks relating to diesel particulates would not exceed SCAQMD health risk standards prior to project approval.

Current Air Quality

As discussed in Section 4.2.1(d), *Regulatory Setting*, the SCAB is designated nonattainment for the NAAQS for ozone, PM_{2.5}, and lead (in the Los Angeles County portion only) as well as the CAAQS for ozone, PM₁₀, and PM_{2.5}. The SCAQMD operates a network of air quality monitoring stations throughout the SCAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the NAAQS and CAAQS. According to the *SCAQMD CEQA Air Quality Handbook*, environmental documents should contain a summary of the most current air quality data to characterize the site-specific air quality setting (SCAQMD 1993). The *SCAQMD CEQA Air Quality Handbook* note that the data must be derived from the nearest SCAQMD monitoring station located in the same Source Receptor Area (SRA) as the project. However, if there is no monitoring station located in the SRA, then information should be sourced from the nearest upwind station. The General Plan Update covers the city of Calabasas, which falls under SRA 6 (West San Fernando Valley). The SCAQMD does not have a monitoring station in Calabasas. Therefore, per guidance in the *SCAQMD CEQA Air Quality Handbook*, the nearest monitoring station in SRA 6 with available data should be used. This approach is usual, customary, and appropriate for jurisdictions in the SCAQMD region that do not have monitoring stations located within their boundaries. The closest monitoring station in SRA 6 is located in Reseda in the San Fernando Valley approximately 6 miles northeast of the Calabasas city limits. However, SO₂, PM₁₀, and lead data are not available from the Reseda monitoring station; therefore, data for these pollutants have been taken from the next closest available monitoring station, the Los Angeles-Westchester Parkway monitoring station, located approximately 16 miles southeast of the Calabasas city limits.³

³ The use of ambient air quality from the Reseda and Los Angeles-Westchester Parkway monitoring stations allows for a conservative estimate of the project's air quality impacts. Ambient air quality at the Reseda and Los Angeles-Westchester Parkway monitoring stations is likely worse than ambient air quality at the project site due to a greater intensity of urban development which results in a greater intensity of ongoing construction activities, greater mobile source vehicle and aircraft emissions, and greater area source and energy use emissions from buildings. As a result, the ambient air quality data used in this EIR assumes a worst-case scenario by assuming that ambient air quality is worse than it is in reality. Therefore, this EIR uses an overstated baseline, which results in a conservative estimation of air quality impacts.

Table 4.2-3 summarizes the representative annual air quality data for all criteria pollutants for the local airshed from the nearest monitoring stations with available data for 2018 through 2020. As shown therein, daily exceedances of the worst-hour ozone CAAQS occurred on 14 days in 2018 and 2019 and at least two days in 2020. Daily exceedances of the worst-hour ozone NAAQS occurred on four days in 2020. Daily exceedances of the eight-hour ozone CAAQS and NAAQS occurred on 49 days in 2018, 34 days in 2019, and 62 days in 2020. Daily exceedances of the CAAQS for PM₁₀ occurred on six days in 2019 and one day in 2020, and daily exceedances of the NAAQS for PM_{2.5} occurred on one day in 2018 and nine days in 2020. The CAAQS or NAAQS for carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead were not exceeded at these monitoring stations in the last three years.

Sensitive Receptors

The NAAQS and CAAQS were established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress as a result of poor air quality, such as children under 14, persons over 65, persons engaged in strenuous work or exercise, and people with pre-existing cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, long-term health care facilities, rehabilitation centers, convalescent centers, hospitals, retirement homes, and schools, playgrounds, and childcare centers (SCAQMD 2005). Sensitive receptors are located throughout and in the vicinity of the Plan Area and include the following:

- Residences
- Hillcrest Adolescent Treatment Center (in Agoura Hills)
- Belmont Village Senior Living Calabasas (a retirement home), Silverado Calabasas Memory Care Community (a retirement home), Villa Mulholland II Assisted Living Facility for the Elderly
- Schools, including Montessori of Calabasas, Calabasas Klubhouse Preschool, Children’s Corner Play Center, Montessori of Malibu Canyon, Bay Laurel Elementary School, A.E. Wright Middle School, Viewpoint School, Round Meadow Elementary School, Lupin Hill Elementary School, Chaparral Elementary School, Calabasas High School, Alice C. Stelle Middle School, Louisville High School, Muse School (Prime Campus and Middle/High Campus), Mesivta of Greater Los Angeles, Ilan Ramon Day School, and Universal Beats Preschool
- Parks including Creekside Park, Juan Bautista de Anza Park, Grape Arbor Park, Gates Canyon Park, Wild Walnut Park, Calabasas Tennis and Swim Center, Calabasas Hill Park, Zev Yaroslavsky Las Virgenes Highlands Park, Calabasas Bark Park, Freedom Park, Calabasas Creek Park, Calabasas Park, Summit Valley Edmund D. Edelman Park, Malibu Creek State Park, and the Santa Monica Mountains National Recreation Area

Odors

the SCAQMD’s *CEQA Air Quality Handbook* (1993) identifies multiple land uses that may cause odors including, but not limited to agricultural uses, wastewater treatment plants, chemical and food processing plants, composting, refineries, landfills, dairies, and fiberglass molding. There is one potential major odor sources in the Plan Area: the Calabasas Landfill located immediately north of the Calabasas city limits near the Saratoga Ranch neighborhood. The nearest potential major odor source outside the Plan Area is the Tapia Water Reclamation Plant (a wastewater treatment facility) located approximately 1.7 miles south of the Plan Area.

Table 4.2-3 Annual Ambient Air Quality Data

Pollutant	2018	2019	2020
Ozone (ppm), Worst 1-Hour ¹	0.12	0.12	0.14
Number of days above CAAQS (>0.09 ppm)	14	14	≥2 ²
Number of days above NAAQS (>0.12 ppm)	0	0	4
Ozone (ppm), Worst 8-Hour Average ¹	0.101	0.094	0.115
Number of days above CAAQS (>0.070 ppm)	49	34	62
Number of days above NAAQS (>0.070 ppm)	49	34	62
Carbon Monoxide (ppm), Highest 8-Hour Average ¹	2.1	2.2	1.7
Number of days above CAAQS or NAAQS (>9.0 ppm)	0	0	0
Nitrogen Dioxide (ppm), Worst 1-Hour ¹	0.057	0.064	0.050
Number of days above CAAQS (>0.180 ppm)	0	0	0
Number of days above NAAQS (>0.100 ppm)	0	0	0
Sulfur Dioxide (ppm), Worst Hour ³	0.01	0.01	0.01
Number of days above CAAQS (>0.25 ppm)	0	0	0
Number of days above NAAQS (>0.075 ppm)	0	0	0
Particulate Matter ≤10 microns (µg/m ³), Worst 24 Hours ³	45	62	55
Number of days above CAAQS (>50 µg/m ³)	0	6 ⁴	1 ⁴
Number of days above NAAQS (>150 µg/m ³)	0	0	0
Particulate Matter ≤2.5 microns (µg/m ³), Worst 24 Hours ¹	39	30	74
Number of days above NAAQS (>35 µg/m ³)	1	0	9 ⁵
Lead (µg/m ³), 3-Month Average ³	0.00	0.00	0.01
Number of days above NAAQS (>0.15 µg/m ³)	0	0	0

ppm = parts per million; µg/m³ = micrograms per cubic meter; CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard

Note: The ambient air quality data presented in this table is intended to be representative of existing conditions and is not a comprehensive summary of all monitoring efforts for all the CAAQS and NAAQS. Additional ambient air quality data can be accessed at <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>.

¹ Data from CARB and the U.S. EPA at the nearest monitoring station with available data at 18330 Gault Street in Reseda (approximately 5.7 miles northeast of the Calabasas city limits).

² Insufficient data is currently available to determine the total number of days the worst-hour ozone CAAQS was exceeded in 2020. Based on available U.S. EPA data, the worst-hour ozone CAAQS was exceeded on at least two days in 2020.

³ Data from the U.S. EPA at the nearest monitoring station with available data at 7201 West Westchester Parkway in Los Angeles (approximately 15.7 miles southeast of the Calabasas city limits).

⁴ Based on available periodic monitoring data, which only recorded values for 59 days of 2019 and 40 days of 2020.

⁵ Based on available daily monitoring data, which only recorded values for 347 days of 2020 and does not include measurements from April 27, 2020 through May 8, 2020 or from May 15, 2020 through May 21, 2020.

Source: CARB 2021b and U.S. EPA 2021b

4.2.3 Impact Analysis

Methodology and Significance Thresholds

At this time, projects facilitated by the General Plan Update do not have sufficient detail (e.g., construction schedule, amount of soil export, specific buildout parameters) to allow for project-level analysis given the programmatic nature of the plan and thus it would be speculative to analyze project-level impacts for comparison with SCAQMD's project-level significance thresholds outlined under *Significance Thresholds*. Therefore, a more qualitative approach to characterizing air quality impacts has been employed for this analysis. In addition, the impact of the General Plan Update on VMT and population growth is used to quantitatively evaluate the General Plan Update's consistency with the 2016 AQMP.

Significance Thresholds

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. The General Plan Update would have a significant impact with respect to air quality if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;
3. Expose sensitive receptors to substantial pollutant concentrations; or
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

SCAQMD Thresholds

As stated in the CEQA Guidelines, the significance criteria established by the regional air quality management district or air pollution control district may be relied upon to make significance determinations. The SCAQMD has adopted guidelines for quantifying and determining the significance of air quality emissions in its *SCAQMD CEQA Air Quality Handbook* and supplemental updates (SCAQMD 1993, 2008, and 2019).

REGIONAL SIGNIFICANCE THRESHOLDS

The SCAQMD recommends the use of quantitative regional significance thresholds to evaluate emissions generated by temporary construction activities and long-term project operation in the SCAB, which are shown in Table 4.2-4. Project-level significance thresholds established by local air districts set the level at which a project would cause or have a cumulatively considerable contribution to an exceedance of a federal or state ambient air quality standard. Therefore, if a project's air pollutant emissions exceed the significance thresholds, the project could cause or contribute to the human health impacts described under Section 4.2.1(c), *Air Pollutants of Primary Concern*. For example, SCAQMD has set its operational significance threshold for VOCs based in part on the significance level for stationary sources of emissions established by Section 182(e) of the federal Clean Air Act. SCAQMD developed its other significance thresholds "based on scientific and factual data that is contained in the federal and state Clean Air Acts" (SCAQMD 1993).

Table 4.2-4 SCAQMD Regional Significance Thresholds

Construction Thresholds	Operational Thresholds
75 pounds per day of VOC	55 pounds per day of VOC
100 pounds per day of NO _x	55 pounds per day of NO _x
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of SO _x	150 pounds per day of SO _x
150 pounds per day of PM ₁₀	150 pounds per day of PM ₁₀
55 pounds per day of PM _{2.5}	55 pounds per day of PM _{2.5}

VOC = volatile organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter measuring 10 microns or less in diameter; PM_{2.5} = particulate matter measuring 2.5 microns or less in diameter

Source: SCAQMD 2019

LOCALIZED SIGNIFICANCE THRESHOLDS

In addition to the regional thresholds discussed above, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board’s Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook (1993)*. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_x, carbon monoxide, PM₁₀, and PM_{2.5}. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. LSTs only apply to emissions in a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008a). As such, LSTs are typically applied only to construction emissions because the majority of operational emissions are associated with project-generated vehicle trips. The LSTs for construction activities are based on the results of air dispersion modeling that calculated NO_x and CO exhaust emissions from construction equipment and fugitive dust emissions from ground disturbance for construction sites that measure one acre or less, between one to two acres, or between two and five acres in size (SCAQMD 2008).

The Plan Area is located in SRA 6 (West San Fernando Valley) and is approximately 16.8 square miles (or 10,752 acres) in size. However, the majority of the sites evaluated in the housing inventory are five acres or less in size. Furthermore, given realistic construction practices, the active area of ground disturbance and/or heavy equipment usage during construction at any one site would not be expected to exceed five acres of the construction site at once. Therefore, it is appropriate to use the LSTs for construction sites up to five acres in size for this analysis (SCAQMD 2008). This provides a conservative evaluation of project impacts because the LSTs for these sizes of construction sites provide more stringent thresholds for construction emissions as compared to the analysis of emissions over a larger area. LSTs are provided for receptors at a range of distances -- from 82 to 1,640 feet (25 to 500 meters) -- from the project site boundary. As described in *Sensitive Receptors*, sensitive receptors are located throughout the Plan Area and therefore could be adjacent to sites evaluating in the housing inventory. Therefore, for this analysis, it is conservatively assumed that the nearest receptor is located at the shortest LST distance of 82 feet. LSTs for active construction sites in SRA 6 ranging in size from one to five acres for a receptor at 82 feet are shown in Table 4.2-5.

Table 4.2-5 SCAQMD LSTs for Construction in SRA 6 for a Receptor at 82 Feet (pounds per day)

Pollutant	Active One-acre Construction Site	Active Two-acre Construction Site	Active Five-acre Construction Site
Gradual conversion of NO _x to NO ₂	103	147	221
CO	426	644	1,158
PM ₁₀	4	6	11
PM _{2.5}	3	4	6

LST = Localized Significance Threshold; SRA = Source Receptor Area; NO_x = nitrogen oxides; NO₂ = nitrogen dioxide; CO = carbon monoxide; PM₁₀ = particulate matter measuring 10 microns in diameter or less; PM_{2.5} = particulate matter measuring 2.5 microns in diameter or less

Source: SCAQMD 2009

TOXIC AIR CONTAMINANTS

The USEPA considers those pollutants that could cause cancer risks between one in 10,000 (1.0×10^{-4}) and one in one million (1.0×10^{-6}) for risk management. Proposition 65 (California Health and Safety Code Section 25249.6), enacted in 1986, prohibits a person in the course of doing business from knowingly and intentionally exposing any individual to a chemical that has been listed as known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning. For a chemical that is listed as a carcinogen, the “no significant risk” level under Proposition 65 is defined as the level that is calculated to result in not more than one excess case of cancer in 100,000 individuals (1.0×10^{-5}). The SCAQMD recommends the use of this risk level (also reportable as 10 in one million) as the significance threshold for TACs (SCAQMD 2019). The SCAQMD also recommends that the non-carcinogenic hazards of TACs should not exceed a hazard index (the summation of the hazard quotients for all chemicals to which an individual would be exposed) of 1.0 for either chronic or acute effects (SCAQMD 2019).

Valley Fever

The SCAQMD does not have published guidance for evaluating impacts related to Valley Fever. Therefore, this analysis utilizes guidance from the Ventura County Air Pollution Control District (the air district with jurisdiction over Ventura County, immediately adjacent to the Plan Area), which recommends consideration of the following factors that may indicate a project’s potential to result in impacts related to Valley Fever (Ventura County Air Pollution Control District 2003):

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches)
- Presence of dry, alkaline, sandy soils
- Ground-disturbing activities in virgin, undisturbed, non-urban areas
- Activities occurring in windy areas
- Presence of archaeological resources probable or known to exist in the area (e.g., Native American midden sites)⁴

⁴ The presence of archaeological resources can indicate that soils have been historically undisturbed and therefore have higher potential to contain *Coccidioides immitis* spores.

- Special events (e.g., fairs, concerts) and motorized activities (e.g., motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass)
- Exposure of non-native population (e.g., out-of-area construction workers)

Threshold 1: Would the General Plan Update conflict with or obstruct implementation of the applicable air quality plan?

Threshold 2: Would the General Plan Update result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Impact AQ-1 THE GENERAL PLAN UPDATE WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE 2016 AQMP. IN ADDITION, OPERATION OF REASONABLY FORESEEABLE DEVELOPMENT FACILITATED BY THE GENERAL PLAN UPDATE WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE IN OF ANY CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS IN NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed under Section 4.2.1(d), *Regulatory Setting*, criteria pollutants include ozone, carbon monoxide, nitrogen dioxide, PM₁₀, PM_{2.5}, sulfur dioxide, and lead. The SCAB is a non-attainment area for the federal standards for ozone and PM_{2.5} and the state standards for ozone, PM₁₀, and PM_{2.5}. The Los Angeles County portion of the SCAB is also designated non-attainment for lead (SCAQMD 2016). The SCAB is designated unclassifiable or in attainment for all other federal and state standards.

Updates to the Safety Element as well as the addition of environmental and social justice policies would not result in additional development in the Plan Area that would generate long-term emissions of criteria air pollutants. Therefore, no impact related to consistency with the 2016 AQMP or long-term criteria air pollutant emissions would occur.

Operation of the residential developments facilitated by the General Plan Update would generate criteria air pollutant emissions associated with area sources (e.g., fireplaces, architectural coatings, consumer products, and landscaping equipment), energy sources (i.e., use of natural gas for space and water heating and cooking), and mobile sources (i.e., vehicle trips to and from the project sites). Emissions associated with reasonably foreseeable development, depending on project type and size, could exceed project-specific thresholds established by the SCAQMD, as shown in Table 4.2-4 in Section 4.2.2(a), *Methodology and Significance Thresholds*. However, the City's General Plan includes policies to programmatically address long-term increases in air pollutant emissions, such as Policies IV-14 through IV-18, which encourage implementation of transportation demand management programs, incorporation of transportation alternatives into new developments, and implementation of energy conservation policies. In addition, as discussed further below under *Consistency with AQMP Control Measures*, the proposed housing sites and policies in the updated Housing Element would serve to minimize VMT associated with reasonably foreseeable development. Therefore, the following analysis focuses on the consistency of the General Plan Update with the growth and emissions forecasts upon which the AQMP is based and with applicable AQMP control measures.

Consistency with AQMP Growth Forecasts

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. The 2016 AQMP,

the most recent AQMP adopted by the SCAQMD, incorporates local general plans and the SCAG 2016-2040 RTP/SCS socioeconomic forecast projections of regional population, housing and employment growth.⁵ The SCAG socioeconomic forecast projections are based on local general plans adopted at the time of preparation of the forecasts.

The development of 1,305 residential units would cause a direct increase in the population of Calabasas. As discussed in Section 4.11, *Population and Housing*, the General Plan Update would result in the addition of approximately 3,537 persons to the population of the Plan Area by 2029, assuming full buildout. SCAG forecasts the population of Calabasas will reach approximately 24,500 residents by 2040 (SCAG 2016). Therefore, the City's cumulative plus General Plan Update population forecast of approximately 27,865 residents by 2029 would exceed SCAG's forecast 2040 population of 24,500 residents for Calabasas.^{6, 7}

Given the above discussion, population growth associated with the General Plan Update would exceed SCAG population growth forecasts, and the General Plan Update would therefore be inconsistent with the underlying assumptions of the emissions forecasts contained in the AQMP. However, although the General Plan Update would facilitate development beyond what is forecast in the 2016 AQMP, it would bring the forecasts for the City's General Plan and the AQMP into consistency because the new population forecast based on the City's General Plan Update will be incorporated into SCAQMD's 2022 AQMP as will other new population forecasts for each city in the region. Therefore, General Plan Update impacts related to consistency with emissions forecasts in the AQMP would be less than significant.

Consistency with AQMP Control Measures

Consistency with the 2016 AQMP is also a function of consistency with applicable AQMP control measures. The AQMP includes specific control measures to reduce air pollutant emissions in order to meet Federal and State air quality standards. One of the most important methods the AQMP relies on to achieve its goals is the use of Transportation Control Measures (TCM). TCMs are defined in the 2016 AQMP as "measures for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions." The TCMs included in the 2016 AQMP are described in SCAG's Final 2016 RTP/SCS.⁸ One committed TCM is identified in the RTP/SCS for Calabasas involved the redesign of the intersection at the Parkway Calabasas on-/off-ramp for US-101 to widen Calabasas Road from Mureau Road to the Parkway Calabasas off-ramp and provide bike lanes and sidewalks. This project was initiated in 2015 and completed in 2016, and the General Plan Update would not result in changes to these transportation improvements. No other committed TCMs are identified in this RTP/SCS as occurring in Calabasas (SCAQMD 2017).

⁵ On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). However, the 2016 AQMP was adopted prior to this date and relies on the demographic and growth forecasts of the 2016-2040 RTP/SCS; therefore, these forecasts are utilized in the analysis of the project's consistency with the AQMP.

⁶ The population growth analysis provides a conservative estimate of project impacts because housing site #12 (Craftsman's Corner) is currently located outside City limits in unincorporated Los Angeles County, and population growth on this site would be accounted for in SCAG's population growth forecast for unincorporated Los Angeles County rather than the forecast for Calabasas.

⁷ It is noted that although SCAG has projected local growth in the 2016-2040 RTP/SCS, which forms the basis of the emissions forecasts of the SCAQMD 2016 AQMP, SCAG has also allocated to Calabasas its local share of the State-mandated RHNA, which creates additional local growth beyond that previously forecast.

⁸ On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). However, the 2016 AQMP was adopted prior to this date and relies on the TCMs of the 2016-2040 RTP/SCS; therefore, these TCMs are utilized in the analysis of the project's consistency with the AQMP.

The following policies in the Housing and Circulation Elements would help reduce air pollutant emissions through transportation and land use design factors that would promote VMT reductions:

HOUSING ELEMENT POLICIES

- Policy V-8** Provide site opportunities for development of housing that respond to the diverse housing needs of Calabasas residents and workforce in terms of density, location and cost.
- Policy V-9** Provide opportunities for multi-family housing and mixed-use development consistent with the City's regional housing needs requirement (RHNA), as mandated by the State.
- Policy V-11** Facilitate the creation of accessory dwelling units in all residential districts as a means of dispersing small, affordable units throughout the community.
- Policy V-13** Support the provision of affordable housing to employees in Calabasas through the Commercial/Industrial Development Impact Fee Program.

CIRCULATION ELEMENT POLICIES

- Policy VI-1** Reducing VMT will help reduce adverse impacts to air quality and may also reduce adverse impacts to other sensitive environmental features and improve residents' quality of life.
- Policy VI-2** Limit the intensity and VMT generation of new development in the City to that which would not compromise attainment and/or maintenance of VMT reduction targets.
- Policy VI-3** Where (1) existing or (2) projected VMT at General Plan buildout prevent a project from complying with Policy VI-2 or would otherwise conflict with policies in other elements of this General Plan, limit development to the basic development intensity identified in Table II-1 of the Land Use Element.

By promoting intensification and reuse of already developed lands, development of residential land uses in close proximity to existing commercial areas, and development of lands adjacent to existing urban development, the General Plan Update would help reduce reliance on the automobile and increase use of alternative transportation modes. Furthermore, as discussed in Section 4.13, *Transportation*, daily home-based VMT per capita associated with reasonably foreseeable development under the General Plan Update would be approximately 18 percent lower the baseline home-based VMT for existing development in Calabasas because the proposed housing sites and Housing Element policies would promote re-use and infill development that would result in lower daily VMT and associated air pollutant emissions. In addition, updates to the Circulation Element to remove level of service standards, institute VMT standards for evaluating new development projects, and incorporate VMT reduction policies would serve to reduce VMT and associated air pollutant emissions in the Plan Area, which would be consistent with one of the overarching purposes of the AQMP to reduce mobile source emissions. Furthermore, the increase in affordable housing units would provide housing opportunities in proximity to jobs for those employed in the City that meet these household income categories. Because the City is jobs-rich and the majority of those employed in the City commute from other jurisdictions, affordable housing units would provide opportunities for a better balance of jobs and housing that reduces regional VMT and

associated impacts related to air pollutant emissions. Therefore, the General Plan Update would be consistent with the AQMP control measures.

Summary

In summary, the General Plan Update would be consistent with the 2016 AQMP because the General Plan Update would bring the forecasts for the City's General Plan and the AQMP into consistency because the new population forecast based on the City's General Plan Update will be incorporated into SCAQMD's 2022 AQMP and because the General Plan Update would be consistent with applicable AQMP control measures. Therefore, impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 2: Would the General Plan Update result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Impact AQ-2 CONSTRUCTION ACTIVITIES FACILITATED BY THE PROJECT WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE IN OF ANY CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS IN NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed under Section 4.2.2, *Regulatory Setting*, criteria pollutants include ozone, carbon monoxide, nitrogen dioxide, PM₁₀, PM_{2.5}, sulfur dioxide, and lead. The SCAB is a non-attainment area for the federal standards for ozone and PM_{2.5} and the state standards for ozone, PM₁₀, and PM_{2.5}. The Los Angeles County portion of the SCAB is also designated non-attainment for lead (SCAQMD 2016). The SCAB is designated unclassifiable or in attainment for all other federal and state standards.

Updates to the Safety and Circulation Elements as well as the addition of environmental and social justice policies would not result in construction activities in the Plan Area that would generate air pollutant emissions. Therefore, no impact related to temporary criteria air pollutant emissions during construction activities would occur.

Construction activities facilitated by the General Plan Update would generate temporary air pollutant emissions associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction equipment and construction vehicles in addition to VOC emissions that would be released during the paving phase and the drying phase of architectural coatings. The extent of daily emissions, particularly NO_x emissions, generated by construction equipment, would depend on the equipment used and the hours of operation for each project. The extent of PM_{2.5} and PM₁₀ emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials off site is necessary. The extent of VOC emissions would primarily depend on the square footage of buildings being painted and asphalt surfaces being paved each day. As discussed in Section 4.2.3, *Methodology and Significance Thresholds*, the SCAQMD has not established plan-level significance thresholds for construction air pollutant emissions. At this time, projects facilitated by the General Plan Update do not have sufficient detail (e.g., construction schedule, amount of soil export, specific buildout parameters) to allow for project-level analysis given the programmatic nature of the plan and thus it would be

speculative to analyze project-level impacts. Therefore, a more qualitative approach to characterizing construction-related air emissions has been employed for this analysis.

Construction activities would occur at the 12 housing sites identified in Section 2, *Project Description*, which are located in urbanized portions of the Plan Area such as US-101, Agoura Road, and Las Virgenes Road corridors. Reasonably foreseeable development would be subject to compliance with applicable SCAQMD rules, including Rule 401 (Visible Emissions), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), and Rule 1113 (Architectural Coatings). Specifically, Rule 403 requires the use of best available control measures for all construction activities to reduce fugitive dust emissions. The major construction elements addressed by Rule 403 include earth moving, disturbed surface areas, unpaved roads, open storage piles, demolition, and other various construction activities. Rule 403 compliance by individual property owners, developers, and/or contractors would reduce temporary construction-related air pollutant emissions of fugitive dust. In addition, Rule 1113 limits the VOC content of architectural coatings to minimize VOC emissions from the off-gassing of exterior and interior paints. Furthermore, Policy IV-17 of the 2030 General Plan Conservation Element aims to reduce air quality impacts associated with construction activities:

Policy IV-17 Ensure that construction activity within Calabasas complies with applicable South Coast Air Quality Management District rules and policies.

Compliance with SCAQMD rules and 2030 General Plan Policy IV-17 would reduce the overall level of air quality impacts associated with construction activities under the General Plan Update. Furthermore, reasonably foreseeable development facilitated by the General Plan Update would be required to implement additional mitigation if project-specific analysis identifies the potential to exceed the SCAQMD's regional thresholds and LSTs for construction activities, as shown in Table 4.2-4 and Table 4.2-5 in Section 4.2.2(a), *Methodology and Significance Thresholds*. Therefore, impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 3: Would the General Plan Update expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 THE GENERAL PLAN UPDATE WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL CONCENTRATIONS OF CARBON MONOXIDE, TACs, OR COCCIDIOIDES IMMITIS SPORES THAT CAUSE VALLEY FEVER. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Updates to the Safety and Circulation Elements as well as the addition of environmental and social justice policies would not result in additional development that would contribute to carbon monoxide hotspots or generate TAC emissions. In addition, updates to the Circulation Element to remove level of service standards and incorporate VMT reduction policies would serve to reduce VMT and associated air pollutant emissions in the Plan Area, which would improve local air quality conditions as they relate to carbon monoxide hotspots. Therefore, no impact related to the exposure of sensitive receptors to substantial concentrations of carbon monoxide or TACs would occur.

Carbon Monoxide Hotspots

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above the NAAQS and CAAQS for carbon monoxide. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local carbon monoxide concentration exceeds the federal one-hour standard of 35.0 parts per million (ppm) or the federal and state eight-hour standard of 9.0 ppm (CARB 2016).

The SCAQMD conducted a detailed carbon monoxide analysis for the SCAB during the preparation of the 2003 AQMP. The locations selected for microscale modeling in the 2003 AQMP included high average daily traffic (ADT) intersections in the SCAB that would be expected to experience the highest carbon monoxide concentrations. The highest carbon monoxide concentration observed was at the intersection of Wilshire Boulevard and Veteran Avenue on the west side of Los Angeles near Interstate 405 (I-405), which had an ADT of approximately 100,000 vehicles per day. The one-hour concentration of carbon monoxide at this intersection was 4.6 ppm, which is well below the one-hour NAAQS of 35 ppm and the one-hour CAAQS of 20 ppm. Moreover, the SCAB has been in attainment of the carbon monoxide NAAQS and CAAQS since 2007 (SCAQMD 2016). As shown in Table 4.2-3 in Section 4.2.1, *Current Air Quality*, the maximum 8-hour average CO value at the Reseda monitoring station (the nearest monitoring station with available data) in 2019 was 1.7 ppm, which is well below the State and federal 8-hour carbon monoxide standard of 9.0 ppm (U.S. EPA 2021b). Based on the low background level of carbon monoxide in the project area, ever-improving vehicle emissions standards for new cars in accordance with state and federal regulations, and the low level of operational carbon monoxide emissions anticipated for reasonably foreseeable development facilitated by the General Plan Update, the General Plan Update would not create new hotspots or contribute substantially to existing hotspots. Therefore, the General Plan Update would not expose sensitive receptors to substantial concentrations of carbon monoxide, and impacts would be less than significant.

Toxic Air Contaminants

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The following subsections discuss the project's potential to result in impacts related to TAC emissions during construction and operation.

CONSTRUCTION

Construction-related activities would result in temporary project-generated emissions of DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2020b) and is therefore the focus of this analysis. At this time, projects facilitated by the General Plan Update do not have sufficient detail (e.g., construction schedule, amount of soil export, specific buildout parameters) to allow for project-level analysis given the programmatic nature of the plan and thus it would be speculative to analyze project-level impacts. Therefore, a more qualitative approach to characterizing construction-related air emissions has been employed for this analysis.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of housing units facilitated by the General Plan Update would occur over timeframes

ranging generally from one to five years. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., one to five years) is approximately 3 to 17 percent of the total exposure period used for 30-year health risk calculations. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (Bay Area Air Quality Management District 2017).

The maximum PM₁₀ and PM_{2.5} emissions would occur during demolition, site preparation and grading activities, which would only occur for a portion of the overall estimated timeframe of one to five years for construction of housing units facilitated by the General Plan Update. These activities would typically last for approximately two weeks to two years, depending on the extent of grading and excavation required (e.g., projects with subterranean parking structures or geological constraints require additional grading as compared to those without). PM emissions would decrease for the remaining construction period because construction activities such as building construction and architectural coating would require less intensive construction equipment. While the maximum DPM emissions associated with demolition, site preparation, and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent between 0.1 to 7 percent of the total 30-year exposure period for health risk calculation. Additionally, SCAQMD CEQA guidance does not require preparation of a health risk assessment for short-term construction emissions. Moreover, the proposed housing sites are spread throughout the Plan Area such that people affected by construction-related TAC emissions generated at one housing site would not be affected by construction-related TAC emissions generated at another housing site should construction activities occur simultaneously.

Furthermore, reasonably foreseeably development facilitated by the General Plan Update would be required to implement additional mitigation if project-specific analysis identifies the potential for construction-related TAC emissions to exceed the SCAQMD's thresholds for TACs as outlined in Section 4.2.2(a), *Methodology and Significance Thresholds*. Therefore, construction-related impacts associated with TAC emissions would be less than significant.

OPERATION

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). SCAQMD adopted similar recommendations in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* (2005). Together, CARB and SCAQMD guidelines recommend siting distances both for the development of sensitive land uses in proximity to TAC sources and for the addition of new TAC sources in proximity to existing sensitive land uses. Residential land uses are not considered land uses that generate

substantial TAC emissions based on review of the air toxic sources listed in SCAQMD's and CARB's guidelines. It is expected that quantities of hazardous TACs generated on-site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the types of proposed residential land uses would be below thresholds warranting further study under the California Accidental Release Program. Because the General Plan Update would not include substantial TAC sources and is consistent with CARB and SCAQMD guidelines, it would not result in the exposure of off-site sensitive receptors to significant amounts of carcinogenic or toxic air contaminants. Impacts would be less than significant.

Valley Fever

CONSTRUCTION

Construction activities, including site preparation and grading, associated with reasonably foreseeable development under the General Plan Update would have the potential to release *Coccidioides immitis* spores. Substantial increases in the number of reported cases of Valley Fever tend to occur only after major ground-disturbing events, such as the 1994 Northridge earthquake (Ventura County Air Pollution Control District 2003). Construction activities associated with reasonably foreseeable development would not result in a comparable major ground disturbance, and because of compliance with SCAQMD Rule 403 (Fugitive Dust), construction activities facilitated by the General Plan Update would not release a large number of spores. Furthermore, as discussed under *Methodology and Significance Thresholds*, the Ventura County Air Pollution Control District (the air district with jurisdiction in Ventura County, immediately adjacent to the Plan Area), recommends consideration of the following factors that may indicate the project's potential to result in significant impacts related to Valley Fever:

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches)
- Dry, alkaline, sandy soils
- Virgin, undisturbed, non-urban areas
- Windy areas
- Archaeological resources probable or known to exist in the area (Native American midden sites)⁹
- Special events (fairs, concerts) and motorized activities (motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass)
- Non-native population (i.e., out-of-area construction workers)

Reasonably foreseeable development of the housing sites included in the General Plan Update would occur primarily as redevelopment of currently urbanized sites with development of undisturbed, vacant land only proposed for two sites – the 0.96-acre Old Town Vacant Site (housing site #4) and a 3.83-acre portion of Craftsman's Corner (housing site #12). As discussed in Section 4.4, *Cultural Resources*, the Old Town Vacant Site is directly adjacent to a known area of cultural resource sensitivity, and the vacant portion of the Craftsman's Corner site has the potential to have cultural resource sensitivity because it is undeveloped. However, construction activities at these two sites would be required to comply with the fugitive dust control standards of SCAQMD Rule 403. Furthermore, due to the relatively small size of these two potential housing projects, it is anticipated that construction workers would be from the local or regional area and would therefore have previous exposure to and immunity from Valley Fever. The population of the Plan Area also

⁹ The presence of archaeological resources can indicate that soils have been historically undisturbed and therefore have higher potential to contain *Coccidioides immitis* spores.

has been and will continue to be exposed to Valley Fever from agricultural and construction activities occurring throughout the region. Therefore, construction activities associated with the General Plan Update would not result in a substantial increase in entrained fungal spores that cause Valley Fever above existing background levels, and construction impacts related to Valley Fever would be less than significant.

OPERATION

Upon completion of construction, reasonably foreseeable development under the General Plan Update would not require substantial ground disturbance on undisturbed land in close proximity to sensitive receptors that could mobilize *Coccidioides immitis* spores. Therefore, no impacts related to Valley Fever would occur during operation.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 4: Would the General Plan Update result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?
--

Impact AQ-4 THE GENERAL PLAN UPDATE WOULD NOT GENERATE ODORS ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE DURING CONSTRUCTION OR OPERATION. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Updates to the Safety and Circulation Elements as well as the addition of environmental and social justice policies would not result in new sources of temporary or long-term air emissions, including those leading to odors, in the Plan Area. Therefore, no impact related to other emissions, such as those leading to odors, would occur.

The construction of housing units facilitated by the General Plan Update would generate oil and diesel fuel odors during construction from equipment use as well as odors related to asphalt paving. The odors would be limited to the construction period for each housing site and would be intermittent and temporary. Furthermore, these odors would dissipate rapidly with distance from in-use construction equipment, and the proposed housing sites are spread throughout the Plan Area such that the minor number of people affected by construction-related odors generated at one housing site would not be affected by construction-related odors generated at another housing site should construction activities occur simultaneously. With respect to operation, the SCAQMD's *CEQA Air Quality Handbook* (1993) identifies land uses associated with odor complaints to be agricultural uses, wastewater treatment plants, chemical and food processing plants, composting, refineries, landfills, dairies, and fiberglass molding. Residential uses are not identified on this list. In addition, individual projects would be required to comply with SCAQMD Rule 402 during both construction and operation, which prohibits the discharge of air contaminants that would cause injury, detriment, nuisance, or annoyance to the public. Therefore, the General Plan Update would not generate other emissions, such as those leading to odors, adversely affecting a substantial number of people, and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.2.4 Cumulative Impacts

The geographic scope for the cumulative air quality impact analysis is the jurisdictional area of the SCAQMD. Because the SCAQMD is designated non-attainment for the federal standards for ozone and PM_{2.5} and the state standards for ozone, PM₁₀, and PM_{2.5} and Los Angeles County is designated non-attainment for the federal lead standard, there are existing significant cumulative air quality impacts related to these pollutants. SCAQMD's approach to determining cumulative air quality impacts for criteria air pollutants is to first determine whether the proposed project would result in a significant project-level impact to regional air quality based on SCAQMD significance thresholds. If the project would not generate emissions exceeding SCAQMD thresholds, then the lead agency needs to consider the additive effects of related projects only if the proposed project is part of an ongoing regulatory program, such as a market program for reducing air pollution, or is contemplated in a Program EIR, and the related projects are located within approximately one mile of the project site. If there are related projects within the vicinity (one-mile radius) of the project site that are part of an ongoing regulatory program or are contemplated in a Program EIR, then the additive effect of the related projects should be considered. The General Plan Update is not part of an ongoing regulatory program and was not contemplated in a Program EIR, although it is itself a Program EIR. The SCAQMD therefore recommends that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality. As discussed under Impact AQ-1, the General Plan Update would be consistent with the AQMP and long-term operational emissions would not result in significant air quality impacts. As discussed under Impact AQ-2, construction-related emissions would not result in significant air quality impacts. As discussed under impact AQ-3, localized emissions of carbon monoxide and TACs would not result in significant air quality impacts. Therefore, in accordance with SCAQMD guidance on determining cumulative impacts, the General Plan Update's contribution to cumulative regional long-term air quality impacts would not be cumulatively considerable.

The General Plan Update is not located in close proximity to existing or planned projects that would generate odorous emissions affecting a substantial number of people. In addition, SCAQMD Rule 402, which prohibits the discharge of air contaminants that would cause injury, detriment, nuisance, or annoyance to the public, would minimize the potential for nuisance odors. Therefore, no cumulative odor impact would occur.

4.3 Biological Resources

This section assesses potential for projects under the General Plan Update to directly or indirectly impact biological resources known to occur in the area. The following analysis is based on biological resource databases and information on biological resources described in literature, such as, but not limited to, the City of Calabasas 2030 General Plan Final Environmental Impact Report (EIR) (City of Calabasas, 2008).

4.3.1 Setting

The Plan Area is the City of Calabasas and unincorporated areas that the City has identified in its land use map (Figure II-1 in the Calabasas 2030 General Plan), within the boundaries of Los Angeles County, California. The Plan Area is in the foothills of the Santa Monica Mountains National Recreation Area and adjacent to San Fernando Valley. Nearby natural open space areas include Cheseboro and Palo Comado Canyon and Upper Las Virgenes Canyon Open Space Preserve to the north; Summit Valley Edmund D. Edelman Park to the east; and Topanga State Park and Malibu Creek State Park to the south.

About 37 percent of the Plan Area's land area is designated as open space, reflecting the community's desire to maintain its relatively low-density character, to preserve both scenic views and biological resources, and to conserve natural resources. The topography of the Plan Area varies from gradual to rugged, steeply sloped terrain, with elevations ranging from approximately 600 to 2,000 feet above mean sea level. Three main creeks flow through Calabasas: Las Virgenes Creek in the Malibu Creek watershed and Dry Canyon and McCoy Creeks in the Los Angeles River watershed. These three creeks convey stormwater flows to the lower watershed streams during the wet season. During dryer periods, smaller flows associated with rare summer storm runoff, irrigation runoff, industrial/commercial runoff, and natural seeps and springs, pass through the creeks on the way to Malibu Creek and the Los Angeles River.

Calabasas has a Mediterranean climate characterized by warm, dry summers and mild winters. Daytime summer temperatures in the area average from the high 70s to mid-90s. Nighttime low temperatures during the summer are typically in the high 50s to low 60s, while the winter high temperature tends to be in the 60s. Winter low temperatures are typically in the 40s. Average annual rainfall ranges from about 14 to 16 inches. Historically, nearly all rainfall occurs between October and April.

Vegetation Communities and Land Cover Types

The drainages described above, canyons, and hillsides within the Plan Area contain a variety of habitat types (refer to Figure 4.3-2 in the 2030 General Plan EIR [City of Calabasas 2008]). The major sensitive ecological areas within the Plan Area include the undisturbed hillsides, most notably the hillsides in the west that are south of US-101 between Las Virgenes Road and The Oaks community area. Other areas with sensitive biological resources include the areas north of the Calabasas landfill along with areas in the rural southern portion of the Plan Area. The following subsections describe important vegetation communities in and around the Plan Area (City of Calabasas 2008, National Park Service [NPS] 2015, NPS 2019a, and NPS 2021b).

Riparian Woodlands and Scrubs

Many types of riparian habitats are present within the Plan Area, including southern coast live oak riparian forest, valley foothill riparian, riparian woodlands, riparian scrubs, and riparian seeps and springs. These habitats have high value for wildlife as they provide water, thermal cover, migration corridors, and diverse nesting and feeding opportunities. Riparian vegetation communities in and near the Plan Area include southern sycamore alder riparian woodland and southern coast live oak riparian forest (California Department of Fish and Wildlife [CDFW] 2021).

Riparian woodland is used as a general term for woody plant communities found along streams and drainage channels, such as Las Virgenes Creek, Dry Canyon Creek, and McCoy Creek. Physical characteristics of these riparian corridors include moist to saturated soils and water table levels near or at the surface during part of the year. Typical species include woody plants such as alder (*Alnus* sp.), willows (*Salix* sp.), cottonwoods (*Populus* sp.), and California sycamore (*Platanus racemosa*). Herbaceous plants may include cattails (*Typha* sp.) and currants (*Ribes* sp.).

Riparian scrub is similar to riparian woodland, except that the dominant species are scrub species rather than trees. This habitat is characterized by low growing shrubs and scrubby trees such as sandbar willow and scrub oak. Taller tree species, such as coast live oak (*Quercus agrifolia*) and red willow (*Salix laevigata*) are not common or dominant in this habitat. The physical characteristics such as soils and hydrological conditions of these areas are similar, although riparian scrub can tolerate slightly drier conditions than riparian woodlands. Dominant species in this habitat include mulefat (*Baccharis salicifolia*), short-statured willow trees such as sandbar willow (*Salix exigua*), and young or emergent cottonwoods and willows.

Valley foothill riparian habitat can be found in valleys bordered by sloping alluvial fans, slightly dissected terraces, lower foothills, and coastal plains. Dominant species commonly found in valley foothill riparian habitats include cottonwood, California sycamore, and valley oak (*Quercus lobata*), while understory species may include poison oak (*Toxicodendron diversilobum*), California blackberry (*Rubus ursinus*), and willows. Downed trees and fallen limbs make this vegetation type generally impenetrable to people but valuable for many species of wildlife. The growing season is seven to eleven months.

Other riparian areas include alkaline seeps, springs, and other areas that have water at or near the surface. These areas form where the water table is high, but aboveground flow is so little that no significant channel or channelization forms. These areas tend to be small and generally support small herbaceous species that are water dependent, such as some species of monkeyflower (*Diplacus aurantiacus*), cattails, and hedge-nettle (*Stachys* sp.). These areas may also occasionally support larger, woodier plants such as mulefat.

Woodlands

Three types of woodlands are present in and around the Plan Area: coastal oak woodland, valley oak woodland, and California walnut woodland.

Coastal oak woodland is highly variable but is generally characterized by a relatively open canopy, with trees concentrated near but not necessarily confined to a stream course or riparian areas. Oak woodlands can occur on hillsides along a deeply incised drainage, but they are generally found on gentle to moderately steep slopes with moist, deep soils. Oak woodland communities are found on north slopes and in shaded ravines or canyon bottoms and are characterized by coast live oak, hollyleaf cherry (*Prunus ilicifolia*), California bay laurel (*Umbellularia californica*), coffeeberry (*Rhamnus californica*), and poison oak. Coast live oak is more tolerant to salt-laden fog than other

oaks and thus can be found near the ocean. This community is often found on the well-drained soils of coastal plains and protected bluffs. Groves are formed across valleys and along streams and intermittent watercourses. Live oaks, as their name suggests, are evergreen.

Valley oak woodland is a more open habitat than coastal oak woodland, and forms more of a savannah with a grassy understory than a closed woodland. Valley oak stands with little or no grazing tend to develop a partial shrub layer of bird-disseminated species such as poison oak, toyon (*Heteromeles arbutifolia*), and coffeeberry. Valley oak is usually the only tree species present, with an understory of grass species such as wild oats (*Avena fatua*) and brome grasses (*Bromus* sp.). Physical characteristics are deep, well-drained alluvial soils, usually in valley bottoms.

Walnut woodland exhibits characteristics similar to oak woodland, with the exception that walnut is the dominant species. In the Santa Monica Mountains, the California walnut (*Juglans californica*) is dominant, with an understory of toyon, holly-leaved cherry, coffee berry, chamise (*Adenostoma fasciculatum*), and ceanothus (*Ceanothus* sp.).

Woodlands provide roosting and nesting sites for many birds, particularly raptors. Red-tailed and red-shouldered hawks are found in these community. Woodlands also provide habitat for several species of woodpeckers, warblers, and flycatchers. Sage-scrub inhabiting amphibians, reptiles, and mammals are also found here.

Chaparral

Chaparral, which is the dominant vegetation community in the Santa Monica Mountains, is characterized by deep-rooted, drought and fire-adapted evergreen shrubs growing on coarsely textured soils with limited water holding capacity. Unlike other plant communities, chaparral is often comprised of a nearly impenetrable vegetative wall of stiff stems and leathery leaves which can be formed by the 4- to 12-foot-high plants. Underneath, the ground is devoid of herbaceous vegetation, except for an occasional clip of foothill needlegrass (*Nassella lepida*) or a cluster of wildflowers.

Mixed chaparral is found throughout the Santa Monica Mountains and in undisturbed areas within the City on moist, north facing slopes. It contains a number of woody vines and large shrubs, including scrub oak (*Quercus berberidifolia*), greenbark or spiny ceanothus (*Ceanothus spinosus*), mountain mahogany (*Cercocarpus betuloides*), toyon, hollyleaf redberry (*Rhamnus ilicifolia*), sugarbush (*Rhus ovata*) and manzanita (*Arctostaphylos* spp.). Ceanothus chaparral primarily occurs on stable slopes and on ridges. On some slopes, bigpod ceanothus (*Ceanothus megacarpus*) makes up over 50 percent of the vegetative cover. In other areas, buckbrush ceanothus (*Ceanothus cuneatus*), hoary-leaved ceanothus (*Ceanothus crassifolius*), or greenbark ceanothus may dominate. In addition to ceanothus, the following species may also be present: chamise, black sage (*Salvia mellifera*), and hollyleaf redberry, among other shrubs.

Coastal Sage Scrub

Coastal sage scrub generally occurs on dry slopes in lower elevations than chaparral. It is composed of subshrubs or shrubs that are deciduous and not as stiffly branched as chaparral plants. In the Santa Monica Mountains, the coastal sage scrub has a dense canopy, with little herbaceous ground cover (City of Calabasas 2008). Characteristic plants include purple sage (*Salvia leucophylla*), California sagebrush (*Artemisia californica*), coast goldenbush (*Isocoma menziesii*), coastal buckwheat (*Eriogonum cinereum*), laurel sumac (*Malosma laurina*), and lemonade berry (*Rhus integrifolia*).

Grasslands

Grasslands form on deep soils, usually on level terrain. The soil moisture can range from moist to almost saturated. Although the Plan Area contains valley needlegrass grassland, most of the native grasslands in the Santa Monica Mountains have been replaced by annual nonnative grasslands over time.

Valley needlegrass grassland, a perennial grassland typically dominated by purple needle grass (*Nassella pulchra*), is likely found in the Plan Area. The range of this native habitat is shrinking around California as disturbance from development causes annual grasses to replace them.

Annual grasslands are typically an introduced plant community containing primarily annual weedy species such as wild oats, black mustard, and brome grasses. Other species include herbaceous wildflowers such as baby blue eyes, lupines, owl's clover, and blue dicks.

General Wildlife

The acreage and quality of wildlife habitat varies across the Plan Area. Portions of the Plan Area that are in or near the Santa Monica Mountains National Recreation Area (SMMNRA) may contain a wide variety of wildlife species. Areas adjacent to the SMMNRA likely contain species that are more adapted to the wildland-urban interface, such as large mammals, whereas urban areas are more likely to contain species acclimated to urban conditions.

The following species are expected to occur within or adjacent to the Plan Area:

Fish and Amphibians

A variety of amphibian species reside in and adjacent to the SMMNRA, and within and adjacent to the Plan Area. They inhabit a variety of habitats, including grasslands, chaparral, and riparian areas. Amphibians observed in the SMMNRA include the black-bellied slender salamander (*Batrachoseps nigriventris*), Pacific slender salamander (*Batrachoseps pacificus*), ensatina (*Ensatina eschscholtzii*), California newt (*Taricha torosa*), arboreal salamander (*Aneides lugubris*), western toad (*Bufo boreas*), Pacific treefrog (*Hyla regilla*), California treefrog (*Hyla cadaverina*), California red-legged frog (*Rana aurora*), and bullfrog (*Rana catesbeiana*). The Santa Monica Mountains SEA also has habitat for several fish species such as the arroyo chub (*Gila orcuttii*), steelhead trout (*Oncorhynchus mykiss*), and the Pacific lamprey (*Lampetra tridentata*) (NPS 2019a).

Reptiles

Reptiles observed in the SMMNRA include southwestern pond turtle (*Actinemys pallida*), red-eared slider (*Trachemys scripta*), California legless lizard (*Anniella pulchra*), southern alligator lizard (*Elgaria multicarinata*), coast horned lizard (*Phrynosoma coronatum*), western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), western skink (*Eumeces skiltonianus*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*), western yellowbelly racer (*Coluber constrictor*), western ringneck snake (*Diadophis punctatus*), night snake (*Hypsiglena torquata*), California kingsnake (*Lampropeltis getula*), mountain kingsnake (*Lampropeltis zonata*), coachwhip / red racer (*Masticophis flagellum*), California whipsnake / striped racer (*Masticophis lateralis*), gopher snake (*Pituophis catenifer*), coast patch-nosed snake (*Salvadora hexalepis*), California blackhead snake (*Tantilla planiceps*), two-striped garter snake (*Thamnophis hammondi*), California lyre snake (*Trimorphodon biscutatus*), western blind snake (*Leptotyphlops humilis*), and southern Pacific rattlesnake (*Crotalus viridis*) (NPS 2019a).

Birds

More than 380 species of birds – nearly half the North American total – can be seen year-round in the SMMNRA, including shorebirds, songbirds, woodpeckers, and raptors. More than 250 species have been recorded at Malibu Lagoon, approximately 5.8 miles south of the City of Calabasas. Resident bird species within the Plan Area include dozens of passerine and raptor species, such as, but not limited to, Costa’s hummingbird (*Calypte costae*), California towhee (*Melospiza crissalis*), wren-tit (*Chaemafia fasciata*), Bewick’s wren (*Thryomanes bewickii*), mourning dove (*Zenaidura macroura*), California thrasher (*Toxostoma redivivum*), greater roadrunner (*Geococcyx californianus*), acorn woodpecker (*Melanerpes formicivorus*), California quail (*Callipepla californica*), red-tailed hawk (*Buteo jamaicensis*), and Cooper’s hawk (*Accipiter cooperii*) (NPS 2015b).

Mammals

Over 45 mammal species can be found in the Santa Monica Mountains. Many of the larger mammals, such as mountain lions (*Puma concolor*), bobcats (*Lynx rufus*), coyotes (*Canis latrans*), and gray foxes (*Urocyon cinereoargenteus*) are found in the wildland-urban interface within the SMMNRA. Some species of small mammals such as squirrels, gophers, mice, rats, rabbits, and insectivores such as bats, shrews, and moles are found within the City in urban environments. Also observed in the region are red fox (*Vulpes vulpes*), mule deer (*Odocoileus hemionus*), black-tailed jack rabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), brush rabbit (*Sylvilagus bachmani*), raccoon (*Procyon lotor*), ringtail (*Bassariscus astutus*), brush rabbit (*Sylvilagus bachmani*), striped skunk (*Mephitis mephitis*), spotted skunk (*Spilogale putorius*), long-tailed weasel (*Mustela frenata*), badger (*Taxidea taxus*), Virginia opossum (*Didelphis virginiana*), desert shrew (*Notiosorex crawfordi*), ornate shrew (*Sorex ornatus*), broad-footed mole (*Scapanus latimanus*), western gray squirrel (*Sciurus griseus*), fox squirrel (*Sciurus niger*), California ground squirrel (*Spermophilus beecheyi*), Merriam's chipmunk (*Tamias merriami*), and Botta's pocket gopher (*Thomomys bottae*).

Mice, rats, and vole species include Pacific kangaroo rat (*Dipodomys agilis*), California pocket mouse (*Chaetodipus californicus*), California vole (*Microtus californicus*), dusky-footed woodrat (*Neotoma fuscipes*), desert woodrat (*Neotoma lepida*), big-eared woodrat (*Neotoma macrotis*), brush mouse (*Peromyscus boylii*), California mouse (*Peromyscus californicus*), cactus mouse (*Peromyscus eremicus*), deer mouse (*Peromyscus maniculatus*), pinon mouse (*Peromyscus truei*), western harvest mouse (*Reithrodontomys megalotis*), house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and black rat (*Rattus rattus*).

Bat species include pallid Bat (*Antrozous pallidus*), big brown bat (*Eptesicus fuscus*), hoary bat (*Lasiurus cinereus*), California myotis (*Myotis californicus*), Yuma myotis (*Myotis yumanensis*), western pipistrelle (*Pipistrellus hesperus*), western mastiff bat (*Eumops perotis*), and Mexican free-tailed bat (*Tadarida brasiliensis*) (NPS 2021b).

Special-Status Species

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the United States Fish and Wildlife Service (USFWS) under the Federal Endangered Species Act (FESA); those considered “Species of Concern” by the USFWS; those listed or candidates for listing as Rare, Threatened, or Endangered by the CDFW under the California Endangered Species Act (CESA); animals designated as “Fully Protected” by the California Fish and Game Code (CFGC); animals listed as “Species of Special Concern” (SSC) by the CDFW; CDFW Special Plants, specifically those with California Rare Plant Ranks (CRPR) of 1B, 2, 3, and 4 in

the CNPS’s Inventory of Rare and Endangered Vascular Plants of California (CNPS 2021); and birds identified as sensitive or watch list species by the Los Angeles County Sensitive Bird Species Working Group (2009).

Table 4.3-1 contains a list of the special-status species from the California Natural Diversity Database (CNDDDB) and California Native Plant Society (CNPS) Inventory of Rare Plants that have been recorded in the *Calabasas, California* 7.5-minute USGS quadrangle and the surrounding eight quadrangles (*Simi, Santa Susana, Oat Mountain, Thousand Oaks, Canoga Park, Point Dume, Malibu Beach, and Topanga*). The CNDDDB includes all taxa that are listed by the CESA, as well as most federally listed taxa that occur in California. Additionally, the CNDDDB includes elements that are considered rare by experts, but that have not undergone the rigorous steps necessary to become officially listed through CESA. Many of the listed observations are historic (i.e., found in habitat that is no longer present). Therefore, while it is likely that several of these species are found in the City’s open space areas and undeveloped vegetated hillsides at the wildland-urban interface, most of the species on this list would have low potential to occur on, and adjacent to, reasonably foreseeable housing sites and are not expected to be present due to the lack of suitable habitat or other factors (e.g., urban development, nighttime noise and light, domestic animals). The species presented in Table 4.3-1 have a moderate to high potential to occur within the Plan Area and surrounding region.

The following databases were consulted:

- USFWS Critical Habitat Portal (USFWS 2021a)
- USFWS Environmental Conservation Online System (ECOS): Information, Planning and Conservation System (USFWS 2021b)
- California Natural Diversity Database (CNDDDB) (CDFW 2021)
- CNPS Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2021)

Table 4.3-1 Special-Status Species with Potential to Occur in and Near the Plan Area

Scientific Name	Status	Habitat Requirements
Common Name		
Plants and Lichens		
<i>Asplenium vespertinum</i> western spleenwort	None/None G4/S4 4.2	Chaparral, Cismontane woodland, Coastal scrub. rocky. 180-1000 m. perennial rhizomatous herb. Blooms Feb-Jun
<i>Astragalus brauntonii</i> Braunton's milk-vetch	FE/None G2/S2 1B.1	Perennial herb. Blooms January to August. Closed-cone coniferous forest, chaparral, coast scrub, valley and foothill grassland. Recent burns or disturbed areas; in saline, somewhat alkaline soils high in Ca, Mg, with some K. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 200-650 m (655-2130 ft)
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i> Ventura marsh milk-vetch	FE/SE G2T1/S1 1B.1	Coastal dunes, Coastal scrub, Marshes and swamps (edges, coastal salt or brackish). 1-35 m. perennial herb. Blooms (Jun) Aug-Oct
<i>Astragalus tener</i> var. <i>titi</i> coastal dunes milk-vetch	FE/SE G2T1/S1 1B.1	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie (mesic). often vernal mesic areas. 1-50 m. annual herb. Blooms Mar-May
<i>Atriplex coulteri</i> Coulter's saltbush	None/None G3/S1S2 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland. alkaline or clay. 3-460 m. perennial herb. Blooms Mar-Oct

Scientific Name Common Name	Status	Habitat Requirements
<i>Atriplex pacifica</i> South Coast saltscale	None/None G4/S2 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas. 0-140 m. annual herb. Blooms Mar-Oct
<i>Atriplex parishii</i> Parish's brittle-scale	None/None G1G2/S1 1B.1	Chenopod scrub, Playas, Vernal pools. alkaline. 25-1900 m. annual herb. Blooms Jun-Oct
<i>Atriplex serenana</i> var. <i>davisonii</i> Davidson's saltscale	None/None G5T1/S1 1B.2	Annual herb. Blooms April to October. Coastal bluff scrub, coastal scrub. Alkaline soil. 3-250 m (10-820 ft)
<i>Baccharis malibuensis</i> Malibu baccharis	None/None G1/S1 1B.1	Perennial deciduous shrub. Blooms August. Coastal scrub, chaparral, cismontane woodland. In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. 150-260 m (490-855 ft)
<i>Calandrinia breweri</i> Brewer's calandrinia	None/None G4/S4 4.2	Chaparral, Coastal scrub. sandy or loamy, disturbed sites and burns. 10-1220 m. annual herb. Blooms (Jan)Mar-Jun
<i>Calochortus catalinae</i> Catalina mariposa lily	None/None G3G4/S3S4 4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. 15-700 m. perennial bulbiferous herb. Blooms (Feb) Mar-Jun
<i>Calochortus clavatus</i> var. <i>clavatus</i> club-haired mariposa lily	None/None G4T3/S3 4.3	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. usually serpentinite, clay, rocky. 75-1300 m. perennial bulbiferous herb. Blooms (Mar) May-Jun
<i>Calochortus clavatus</i> var. <i>gracilis</i> slender mariposa lily	None/None G4T2T3/S2 S3 1B.2	Perennial bulbiferous herb. Blooms March to June. Chaparral, coastal scrub. Shaded foothill canyons; often on grassy slopes within other habitat. 420-760 m (1380-2495 ft)
<i>Calochortus fimbriatus</i> late-flowered mariposa lily	None/None G3/S3 1B.3	Chaparral, Cismontane woodland, Riparian woodland. often serpentinite. 275-1905 m. perennial bulbiferous herb. Blooms Jun-Aug
<i>Calochortus plummerae</i> Plummer's mariposa lily	None/None G4/S4 4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland. granitic, rocky. 100-1700 m. perennial bulbiferous herb. Blooms May-Jul
<i>Calystegia peirsonii</i> Peirson's morning-glory	None/None G4/S4 4.2	Chaparral, Chenopod scrub, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland. 30-1500 m. perennial rhizomatous herb. Blooms Apr-Jun
<i>Camissoniopsis lewisii</i> Lewis' evening-primrose	None/None G4/S4 3	Coastal bluff scrub, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland. sandy or clay. 0-300 m. annual herb. Blooms Mar-May (Jun)
<i>Cercocarpus betuloides</i> var. <i>blancheae</i> island mountain-mahogany	None/None G5T4/S4 4.3	Closed-cone coniferous forest, Chaparral. 30-600 m. perennial evergreen shrub. Blooms Feb-May
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> salt marsh bird's-beak	FE/SE G4?T1/S1 1B.2	Occurs in coastal dunes and coastal salt marshes and swamps. This species blooms between May and October, and typically occurs at elevations ranging from 0-30 m
<i>Chorizanthe parryi</i> var. <i>fernandina</i> San Fernando Valley spineflower	FC/SE G2T1/S1 1B.1	Annual herb. Blooms April to July. Found in washes and sandy areas (alluvial scrub), in the hills and on mesas. Poorly developed soils, mostly in loam or silty clay loam. 3-1035 m (10-3395 ft)

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<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	None/None G3T2/S2 1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. sandy or rocky, openings. 275-1220 m. annual herb. Blooms Apr-Jun
<i>Convolvulus simulans</i> small-flowered morning-glory	None/None G4/S4 4.2	Chaparral (openings), Coastal scrub, Valley and foothill grassland. clay, serpentinite seeps. 30-740 m. annual herb. Blooms Mar-Jul
<i>Deinandra minthornii</i> Santa Susana tarplant	None/SR G2/S2 1B.2	Perennial deciduous shrub. Blooms July to November. Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. 280-760 m (1920-2495 ft)
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i> dune larkspur	None/None G4T2/S2 1B.2	Chaparral (maritime), Coastal dunes. 0-200 m. perennial herb. Blooms Apr-Jun
<i>Delphinium parryi</i> ssp. <i>purpureum</i> Mt. Pinos larkspur	None/None G4T4/S4 4.3	Chaparral, Mojavean desert scrub, Pinyon and juniper woodland. 1000-2600 m. perennial herb. Blooms May-Jun
<i>Dithyrea maritima</i> beach spectaclepod	None/ST G1/S1 1B.1	Occurs in coastal dunes and sandy substrates within coastal scrub sand dunes and other sandy soils near the seashore. This species blooms between March and May, and typically occurs at elevations ranging from 3-50 m
<i>Dodecahema leptoceras</i> slender-horned spineflower	FE/SE G1/S1 1B.1	Chaparral, Cismontane woodland, Coastal scrub (alluvial fan). sandy. 200-760 m. annual herb. Blooms Apr-Jun
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	None/None G3T2/S2 1B.1	Occurs in rocky, often clay or serpentinite substrates within coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland. This species blooms between April and June, and typically occurs at elevations ranging from 5-450 m
<i>Dudleya cymosa</i> ssp. <i>agourensis</i> Agoura Hills dudleya	FT/None G5T1/S1 1B.2	Perennial herb. Blooms May to June. Chaparral, cismontane woodland. Rocky, volcanic breccia. 200-500 m (655-1640 ft)
<i>Dudleya cymosa</i> ssp. <i>marcescens</i> marcescent dudleya	FT/SR G5T2/S2 1B.2	Perennial herb. Blooms April to July. Chaparral. On sheer rock surfaces and rocky volcanic cliffs. 150-520 m (490-1705 ft)
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> Santa Monica dudleya	FT/None G5T1/S1 1B.1	Perennial herb. Blooms March to June. Chaparral, coastal scrub. In canyons on sedimentary conglomerates; primarily north-facing slopes. 210-500 m (690-1640 ft)
<i>Dudleya multicaulis</i> many-stemmed dudleya	None/None G2/S2 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland. often clay. 15-790 m. perennial herb. Blooms Apr-Jul
<i>Dudleya parva</i> Conejo dudleya	FT/None G1/S1 1B.2	Coastal scrub, Valley and foothill grassland. rocky or gravelly, clay or volcanic. 60-450 m. perennial herb. Blooms May-Jun
<i>Eriogonum crocatum</i> conejo buckwheat	None/SR G1/S1 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland. Conejo volcanic outcrops, rocky. 50-580 m. perennial herb. Blooms Apr-Jul
<i>Erodium macrophyllum</i> round-leaved fillaree	None/None G2/S2 1B.1	Annual herb. Blooms March-May. Found on clay soils in cismontane woodland and valley and foothill grassland. Known elevations range from 15-1200 m (50-3,935 ft)

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<i>Harpagonella palmeri</i> Palmer's grapplinghook	None/None G4/S3 4.2	Chaparral, Coastal scrub, Valley and foothill grassland. Clay; open grassy areas within shrubland. 20-955 m. annual herb. Blooms Mar-May
<i>Hordeum intercedens</i> vernal barley	None/None G3G4/S3S4 3.2	Coastal dunes, Coastal scrub, Valley and foothill grassland (saline flats and depressions), Vernal pools. 5-1000 m. annual herb. Blooms Mar-Jun
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	None/None G4T1/S1 1B.1	Perennial herb. Blooms February to September. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 70-810 m (230-2655 ft)
<i>Isocoma menziesii</i> var. <i>decumbens</i> decumbent goldenbush	None/None G3G5T2T3/ S2 1B.2	Perennial shrub. Blooms April to November. Coastal scrub. Sandy soils; often in disturbed sites. 10-910 m (30-2985 ft)
<i>Juglans californica</i> Southern California black walnut	None/None G4/S4 4.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland. alluvial. 50-900 m. perennial deciduous tree. Blooms Mar-Aug
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	None/None G4T2/S2 1B.1	Annual herb. Blooms February to June. Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1400 m (3-4595 ft)
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> ocellated Humboldt lily	None/None G4T4?/S4? 4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland. openings. 30-1800 m. perennial bulbiferous herb. Blooms Mar-Jul (Aug)
<i>Lupinus paynei</i> Payne's bush lupine	None/None G1Q/S1 1B.1	Coastal scrub, Riparian scrub, Valley and foothill grassland. Sandy. 220-420 m. perennial shrub. Blooms Mar-Apr (May-Jul)
<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i> white-veined monardella	None/None G4T3/S3 1B.3	Perennial herb. Blooms April to December. Chaparral, cismontane woodland. Dry slopes. 50-1525 m (165-5005 ft)
<i>Navarretia ojaiensis</i> Ojai navarretia	None/None G2/S2 1B.1	Annual herb. Blooms May to July. Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. Typically occurs on clay soils. 275-620 m (900-2035 ft)
<i>Nolina cismontana</i> chaparral nolina	None/None G3/S3 1B.2	Chaparral, Coastal scrub. sandstone or gabbro. 140-1275 m. perennial evergreen shrub. Blooms (Mar)May-Jul
<i>Orcuttia californica</i> California Orcutt grass	FE/SE G1/S1 1B.1	Vernal pools. 15-660 m. annual herb. Blooms Apr-Aug
<i>Pentachaeta lyonii</i> Lyon's pentachaeta	FE/SE G1/S1 1B.1	Annual herb. Blooms March to August. Chaparral, valley and foothill grassland, coastal scrub. Edges of clearing in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. 30-630 m (100-2065 ft)
<i>Phacelia hubbyi</i> Hubby's phacelia	None/None G4/S4 4.2	Chaparral, Coastal scrub, Valley and foothill grassland. gravelly, rocky, talus. 0-1000 m. annual herb. Blooms Apr-Jul
<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i> south coast branching phacelia	None/None G5?T3Q/S3 3.2	Chaparral, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt). sandy, sometimes rocky. 5-300 m. perennial herb. Blooms Mar-Aug

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<i>Quercus dumosa</i> Nuttall's scrub oak	None/None G3/S3 1B.1	Closed-cone coniferous forest, Chaparral, Coastal scrub. sandy, clay loam. 15-400 m. perennial evergreen shrub. Blooms Feb-Apr (May-Aug)
<i>Senecio aphanactis</i> chaparral ragwort	None/None G3/S2 2B.2	Chaparral, Cismontane woodland, Coastal scrub. sometimes alkaline. 15-800 m. annual herb. Blooms Jan-Apr (May)
<i>Sidalcea neomexicana</i> salt spring checkerbloom	None/None G4/S2 2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas. alkaline, mesic. 15-1530 m. perennial herb. Blooms Mar-Jun
<i>Spermolepis lateriflora</i> western bristly scaleseed	None/None G5/SH 2A	Sonoran desert scrub. Rocky or sandy. 365-670 m. annual herb. Blooms Mar-Apr
<i>Suaeda californica</i> California seablite	FE/None G1/S1 1B.1	Perennial evergreen shrub. Blooms July-October. Found on the margins of coastal salt marshes and swamps. Known elevations range from 0-160 m (0-525 ft)
<i>Thelypteris puberula</i> var. <i>sonorensis</i> Sonoran maiden fern	None/None G5T3/S2 2B.2	Meadows and seeps (seeps and streams). 50-610 m. perennial rhizomatous herb. Blooms Jan-Sep
<i>Tortula californica</i> California screw-moss	None/None G2G3/S2S3 1B.2	Chenopod scrub, Valley and foothill grassland. sandy, soil. 10-1460 m. moss. Blooms
Invertebrates		
<i>Aglaothorax longipennis</i> Santa Monica shieldback katydid	None/None G1G2/S1S2	Occur nocturnally in chaparral and canyon stream bottom vegetation, in the Santa Monica Mountains of Southern California. Inhabit introduced iceplant and native chaparral plants.
<i>Atractelmis wawona</i> Wawona riffle beetle	None/None G3/S1S2	Aquatic; found in riffles of rapid, small to medium clear mountain streams; 2000-5000 ft. Strong preference for inhabiting submerged aquatic mosses.
<i>Bombus crotchii</i> Crotch bumble bee	None/SCE G3G4/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .
<i>Cicindela hirticollis gravida</i> sandy beach tiger beetle	None/None G5T2/S2	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.
<i>Coelus globosus</i> globose dune beetle	None/None G1G2/S1S2	Inhabitant of coastal sand dune habitat; erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.
<i>Danaus plexippus</i> pop. 1 monarch - California overwintering population	None/None G4T2T3/ S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.
<i>Euphydryas editha quino</i> quino checkerspot butterfly	FE/None G5T1T2/S1 S2	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Hills and mesas near the coast. Need high densities of food plants <i>Plantago erecta</i> , <i>P. insularis</i> , and <i>Orthocarpus purpurescens</i> .
<i>Gonidea angulata</i> western ridged mussel	None/None G3/S1S2	Primarily creeks and rivers and less often lakes. Originally in most of state, now extirpated from Central and Southern California.

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<i>Socalchemmis gertschi</i> Gertsch's socialchemmis spider	None/None G1/S1	Known from only two localities in Los Angeles County: Brentwood (type locality) and Topanga Canyon.
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	FE/None G1G2/S1S2	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.
<i>Trimerotropis occidentiloides</i> Santa Monica grasshopper	None/None G1G2/S1S2	Known only from the Santa Monica Mountains. Found on bare hillsides and along dirt trails in chaparral.
Fish		
<i>Eucyclogobius newberryi</i> tidewater goby	FE/None G3/S3	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.
<i>Gila orcuttii</i> arroyo chub	None/None G2/S2 SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.
<i>Oncorhynchus mykiss irideus</i> pop. 10 steelhead - southern California DPS	FE/None G5T1Q/S1	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.
Amphibians		
<i>Anaxyrus californicus</i> arroyo toad	FE/None G2G3/S2S3 SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.
<i>Rana draytonii</i> California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.
<i>Spea hammondi</i> western spadefoot	None/None G3/S3 SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.
<i>Taricha torosa</i> Coast Range newt	None/None G4/S4 SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs and slow-moving streams.
Reptiles		
<i>Anniella spp.</i> California legless lizard	None/None G3G4/S3S4 SSC	Contra Costa County south to San Diego, within a variety of open habitats. This element represents California records of <i>Anniella</i> not yet assigned to new species within the <i>Anniella pulchra</i> complex. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.
<i>Anniella stebbinsi</i> Southern California legless lizard	None/None G3/S3 SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.

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<i>Arizona elegans occidentalis</i> California glossy snake	None/None G5T2/S2 SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	None/None G5T5/S3 SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	None/None G5T2T3/S2	Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous veg.
<i>Emys marmorata</i> western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.
<i>Lampropeltis zonata</i> California mountain kingsnake (San Diego population)	None/None G4G5/S1S2 SSC	Restricted to the San Gabriel and San Jacinto Mountains of southern California. Inhabits a variety of habitats, including valley-foothill hardwood, coniferous, chaparral, riparian, and wet meadows.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.
<i>Thamnophis hammondi</i> two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.
Birds		
<i>Accipiter cooperii</i> Cooper's hawk	None/None G5/S4 WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.
<i>Agelaius tricolor</i> tricolored blackbird	None/ST G2G3/S1S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	None/None G5T3/S3 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.
<i>Aquila chrysaetos</i> golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
<i>Artemisospiza belli</i> Bell's sage sparrow	None/None G5T2T3/S3 WL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yards apart.
<i>Athene cunicularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.

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<i>Baeolophus inornatus</i> oak titmouse	None/None G5/S3 SA	Oak woodlands. Cavity nester.
<i>Buteo swainsoni</i> Swainson's hawk	None/ST G5/S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.
<i>Elanus leucurus</i> white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.
<i>Falco peregrinus anatum</i> American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.
<i>Picoides nuttallii</i> Nuttall's woodpecker	None/None G5/SNR SA	Oak forest and woodlands. Requires standing snag or hollow tree for nest cavity.
<i>Polioptila californica</i> coastal California gnatcatcher	FT/None G4G5T2Q/ S2 SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.
<i>Riparia</i> bank swallow	None/ST G5/S2	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.
<i>Selasphorus sasin</i> Allen's hummingbird	None/None G5/SNR SA	Breeds in coastal lowlands of the upper Sonoran and transition life zones. Prefers coastal sage scrub, soft chaparral, ravines and canyons, broken coastal forests, oak woodlands and riparian-lined waterways.
<i>Vireo bellii pusillus</i> least Bell's vireo	FE/SE G5T2/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.
Mammals		
<i>Antrozous pallidus</i> pallid bat	None/None G5/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.
<i>Euderma maculatum</i> spotted bat	None/None G4/S3 SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Typically forages in open terrain; over water and along washes. Feeds almost entirely on moths. Roosts in rock crevices in cliffs or caves. Occasionally roosts in buildings.
<i>Eumops perotis californicus</i> western mastiff bat	None/None G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.

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<i>Lasiurus blossevillii</i> western red bat	None/None G5/S3 SSC	Roosts in trees in forests and woodlands of varying elevations. Forages in grasslands, shrublands, open woodlands and forests, and agriculture. Typically found in riparian habitats, does not occur in deserts.
<i>Lasiurus cinereus</i> hoary bat	None/None G5/S4	Typically roosts in trees in deciduous and coniferous forests and woodlands but occasionally roosts in rocks crevices. Forages in open areas, typically along riparian corridors or over water. Diet primarily consists of moths.
<i>Macrotus californicus</i> California leaf-nosed bat	None/None G4/S3 SSC	Occurs in desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub and palm oasis habitats. Needs rocky, rugged terrain with abandoned mines or caves for roosting.
<i>Myotis ciliolabrum</i> western small-footed myotis	None/None G5/S3	Occurs in a wide range of arid and semiarid habitats including woodlands, open forests, riparian zones, and desert shrub. Roosts in rock crevices in caves, tunnels, and mines, also found beneath loose bark and in buildings. Forages for insects over water sources.
<i>Myotis yumanensis</i> Yuma myotis	None/None G5/S4	Occurs in a variety of lowland and upland habitats including desert scrub, riparian, and woodlands and forests. Distribution is closely tied to bodies of water. Roosts in a variety of areas including caves, cliffs, mines, crevices in live trees, and buildings and other man-made structures.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	None/None G5T3T4/S3 S4 SSC	Occurs in scrub habitats of southern California from San Luis Obispo County to San Diego County.
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.

Regional Vicinity refers to within an approximately 555 square mile search area surrounding the site.

Listing and Special-Status Species Information

Status (Federal/State)

- FE = Federal Endangered
- FT = Federal Threatened
- FD = Federal Delisted
- FC = Federal Candidate
- SE = State Endangered
- ST = State Threatened
- SCE = State Candidate Endangered
- SR = State Rare
- SD = State Delisted
- SSC = CDFW Species of Special Concern
- FP = CDFW Fully Protected
- WL = CDFW Watch List

CRPR (CNPS California Rare Plant Rank)

- 1B = Rare, Threatened, or Endangered in California and elsewhere
- 2A = Presumed extirpated in California, but common elsewhere
- 2B = Rare, Threatened, or Endangered in California, but more common elsewhere
- 3 = Need more information (Review List)
- 4 = Limited Distribution (Watch List)

CRPR Threat Code Extension

- .1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
- .2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
- .3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses

- G1 or S1 Critically Imperiled Globally or Subnationally (state)
- G2 or S2 Imperiled Globally or Subnationally (state)
- G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4/5 or S4/5 Apparently secure, common and abundant

Additional notations may be provided as follows

- T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
- Q – Questionable taxonomy that may reduce conservation priority
- ? – Inexact numeric rank

As listed in Table 4.3-1, special-status species with potential to occur in or around the Plan Area include 114 species of plants, 22 species of invertebrates, three species of fish, four species of amphibians, 18 species of reptiles, 30 species of birds, and 20 species of mammals.

Sensitive Natural Communities

Plant communities are considered sensitive if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW maintains a list of sensitive natural communities (CDFW 2019). Sensitive habitats listed by in the CNDDDB as having occurred in the regional vicinity of the Plan Area include:

- California walnut woodland;
- Cismontane alkali marsh;
- Southern California coastal lagoon;
- Southern California steelhead stream;
- Southern coast live oak riparian forest;
- Southern coastal salt marsh;
- Southern cottonwood willow riparian forest;
- Southern mixed riparian forest;
- Southern riparian scrub;
- Southern sycamore alder riparian woodland;
- Southern willow scrub;
- Valley needlegrass grassland; and
- Valley oak woodland.

Reasonably foreseeable development within the Plan Area is anticipated to occur on sites that are either redevelopment sites or infill vacant properties that are substantially disturbed; nevertheless, some of these occurrences are located in natural areas that may be selected for future housing development. The nomenclature used to characterize and describe the plant communities in the Plan Area are derived from *A Manual of California Vegetation, Second Edition* ([MCVII]; Sawyer, Keeler-Wolf, and Evens 2009). Where no equivalent community is described in MCVII, this report defers to the description provided in *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986).

California Walnut Groves G3/S3.2

Southern California black walnut (*Juglans californica*) stands occur in association with annual grassland, mesic chaparral, coastal sage scrub, oak woodland, and riparian vegetation in the Plan Area. Moisture requirements appear to be similar to those of coast live oak; the densest forests tend to be equally dominated by these two trees. In this alliance, Southern California black walnut is dominant or co-dominant in the tree canopy with white alder (*Alnus rhombifolia*), California ash (*Fraxinus dipetala*), toyon (*Heteromeles arbutifolia*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), elder (*Sambucus nigra*), and California bay (*Umbellularia californica*). This community is typically found in riparian corridors, but most stands cover all hillslopes.

Alkali Heath Marsh G4/S3

Stands occur in seasonally moist or intermittently flooded, clayey, saline soils in association with salt marsh and other halophytic vegetation types. Alkali heath (*Frankenia salina*) is dominant or co-dominant in the herbaceous and subshrub layers with Pacific bentgrass (*Agrostis avenacea*), Parish's pickleweed (*Arthrocnemum subterminale*), saltbush (*Atriplex spp.*), saltwort (*Batis maritima*), alkali weed (*Cressa truxillensis*), desert saltgrass (*Distichlis spicata*), wall barley (*Hordeum murinum*), goldfields (*Lasthenia spp.*), pepperweed (*Lepidium spp.*), western marsh rosemary (*Limonium californicum*), shoregrass (*Monanthochloe littoralis*), glasswort (*Sarcocornia pacifica*), and woody seablite (*Suaeda taxifolia*). This community is found in coastal salt marshes, brackish marshes, alkali meadows, and alkali playas where soils are saline, sandy, and/or clayey.

Coast Live Oak Woodland and Forest G5/S4

Coast live oak (*Quercus agrifolia*) stands are extensive in the Plan Area and can be found in canyon bottoms, slopes, and flats where soils are deep, sandy or loamy, with high organic matter. Stands of this extensive alliance include upland savannas, woodlands, and forests. Coast live oak is dominant or co-dominant in the upland tree canopy with bigleaf maple (*Acer macrophyllum*), Pacific madrone (*Arbutus menziesii*), California black walnut (*Juglans californica*), blue oak (*Quercus douglasii*), Engelmann oak (*Quercus engelmannii*), California black oak (*Quercus kelloggii*), valley oak, and California bay.

Fremont Cottonwood Forest and Woodland G4/S3.2

This community is found on floodplains along low-gradient rivers, perennial or seasonally intermittent streams, springs, lower canyons in desert mountains, alluvial fans, and in valleys with a dependable subsurface water supply. Fremont cottonwood (*Populus fremontii*) is dominant or co-dominant in the tree canopy with boxelder maple (*Acer negundo*), desert baccharis (*Baccharis sergilides*), Oregon ash (*Fraxinus latifolia*), Arizona ash (*Fraxinus velutina*), northern California walnut (*Juglans hindsii*), California sycamore (*Platanus racemosa*), coast live oak, narrow leaved willow (*Salix exigua*), Goodding's black willow (*Salix gooddingii*), red willow, arroyo willow, shining willow (*Salix lucida*), and yellow willow (*Salix lutea*).

Southern Mixed Riparian Forest G2/S2.1

This is a tall, dense, winter-deciduous, broadleaved riparian forest. The tree canopy usually is fairly well closed and moderately to densely stocked with several species including boxelder maple, northern California walnut, sycamore, Fremont cottonwood (*Populus fremontii*), San Joaquin willow (*Salix gooddingii variabilis*), red willow, and Pacific willow (*Salix lasiandra*). Understories consist of these-taxa plus shade-tolerant shrubs like buttonbush (*Cephalanthus occidentalis*) and Oregon ask. Several lianas are conspicuous in both tree and shrub canopies. Relatively fine-textured alluvium somewhat back from active river channels. These sites experience overbank flooding (with abundant alluvial deposition and groundwater recharge) but not too severe physical battering or erosion. Intergrades closer to the river with Great Valley Cottonwood Riparian Forest (61410) where disturbance is both more frequent and more severe; intergrades farther away from the river with Great Valley Oak Riparian Forest (61430) where such disturbance is less.

Southern Riparian Scrub G3/S3.2

A depauperate, tall, herbaceous riparian scrub strongly dominated by seep willow (*Baccharis viminea*). This early seral community is maintained by frequent flooding. Absent this, most stands

would succeed to cottonwood- or sycamore-dominated riparian forests or woodlands. Intermittent stream channels with fairly coarse substrate and moderate depth to the water table. Frequently occurs as a patchy understory in light gaps in Sycamore Alluvial Woodland (62100), especially under heavy grazing.

California Sycamore Woodlands G3/S3

This vegetation community is found in gullies, intermittent streams, springs, seeps, stream banks, and terraces adjacent to floodplains that are subject to high-intensity flooding within the Plan Area. California sycamore and/or coast live oak is dominant or co-dominant in the tree canopy in these riparian habitats with white alder, California black walnut, Fremont's cottonwood, valley oak, narrow leaved willow, Goodding's black willow, red willow, arroyo willow, yellow willow, Peruvian pepper tree (*Schinus molle*), and California bay.

Sandbar Willow Thickets G5/S4.2

The alliance is widespread and common throughout California, especially along seasonally or temporarily flowing streams and at seeps. It often forms dense clonal stands, though great variation exists regionally in shrub and understory composition. Narrow leaved willow is dominant or co-dominant in the shrub canopy with brooms (*Baccharis* spp.), California brickellbush (*Brickellia californica*), California rose (*Rosa californica*), Himalayan blackberry (*Rubus armeniacus*), Pacific blackberry (*Rubus ursinus*), arroyo willow, and dusky willow (*Salix melanopsis*). Emergent trees of many different species may be present at low cover. This vegetation community may occur on temporarily flood floodplains, depositions along rivers and streams, and at springs within the Plan Area.

Needle Grass- Melic Grass Grassland G3/S3

This herbaceous alliance can occur on at all topographic locations and includes a collection of native grasses that occur in the Plan Area. Typically, the alliance is further refined by species composition to an Association. Dominant grasses include nodding needle grass (*Stipa cernua*), foothill needle grass (*Stipa lepida*), and/or purple needle grass (*Stipa pulchra*) is dominant or characteristically present in the herbaceous layer with other perennial grasses and herbs. Some areas may contain California melic (*Melica californica*).

Purple needlegrass stands commonly exist in deep and clay-rich soils, but they also occur in sterile serpentine soils in the Plan Area. Nodding needlegrass (*S. cernua*) sometimes occurs in the same area as *S. pulchra*, especially in southern California, but they do not typically mix. Nodding needlegrass stands appear more commonly in the transition between coastal/valley grasslands and inland/desert steppes. Foothill needle grass (*S. lepida*) is found mainly in coastal central and southern California. In the Plan Area, foothill needle grass is a common understory herb in stands of California sagebrush and purple sage alliances on dry fine-textured soils. In some areas of the Santa Monica Mountains, small (< 1 hectare) glades dominated by this species occur with a diverse mixture of native plants. These tend to occur in areas of deeper soil on upper slopes or shoulders of hills surrounded by stands of coastal scrub alliances. In other areas, stands can occur on rocky, clay soils derived from serpentine, and they are usually rich in other native perennials.

This vegetation community can be found on soils with high clay content, loamy, sandy, or silty derived from mudstone, sandstone, or serpentine substrates.

Valley Oak Woodland and Forest G3/S3

Valley Oak (*Quercus lobata*) is dominant or co-dominant in the tree canopy with boxelder maple, white alder, northern California walnut, California sycamore, Fremont’s cottonwood, coast live oak, Goodding’s black willow, and arroyo willow. Shrubs and lianas may include California pipevine (*Aristolochia californica*) or California wild grape (*Vitis californica*). This vegetation community is found in valley bottoms, lower slopes, and valleys within the Plan Area where soils are alluvial or residual.

Wetlands, Streams, and Riparian Habitats

In accordance with Section 1602 of the CFGC, the CDFW has jurisdiction over lakes and streambeds (including adjacent riparian resources). CDFW regulates wetland areas that are part of a river, stream, or lake, but also temporary wetland features such as vernal pools. Under Section 404 of the Clean Water Act (CWA), the United States Army Corps of Engineers (USACE) has authority to regulate activities that discharge dredge or fill material into wetlands or other “waters of the United States” through issuance of a Section 404 Permit. Finally, the Los Angeles Regional Water Quality Control Board (RWQCB) has jurisdiction over “waters of the state” pursuant to the Porter-Cologne Water Quality Control Act and has the responsibility for review of the project water quality certification per Section 401 of the federal CWA.

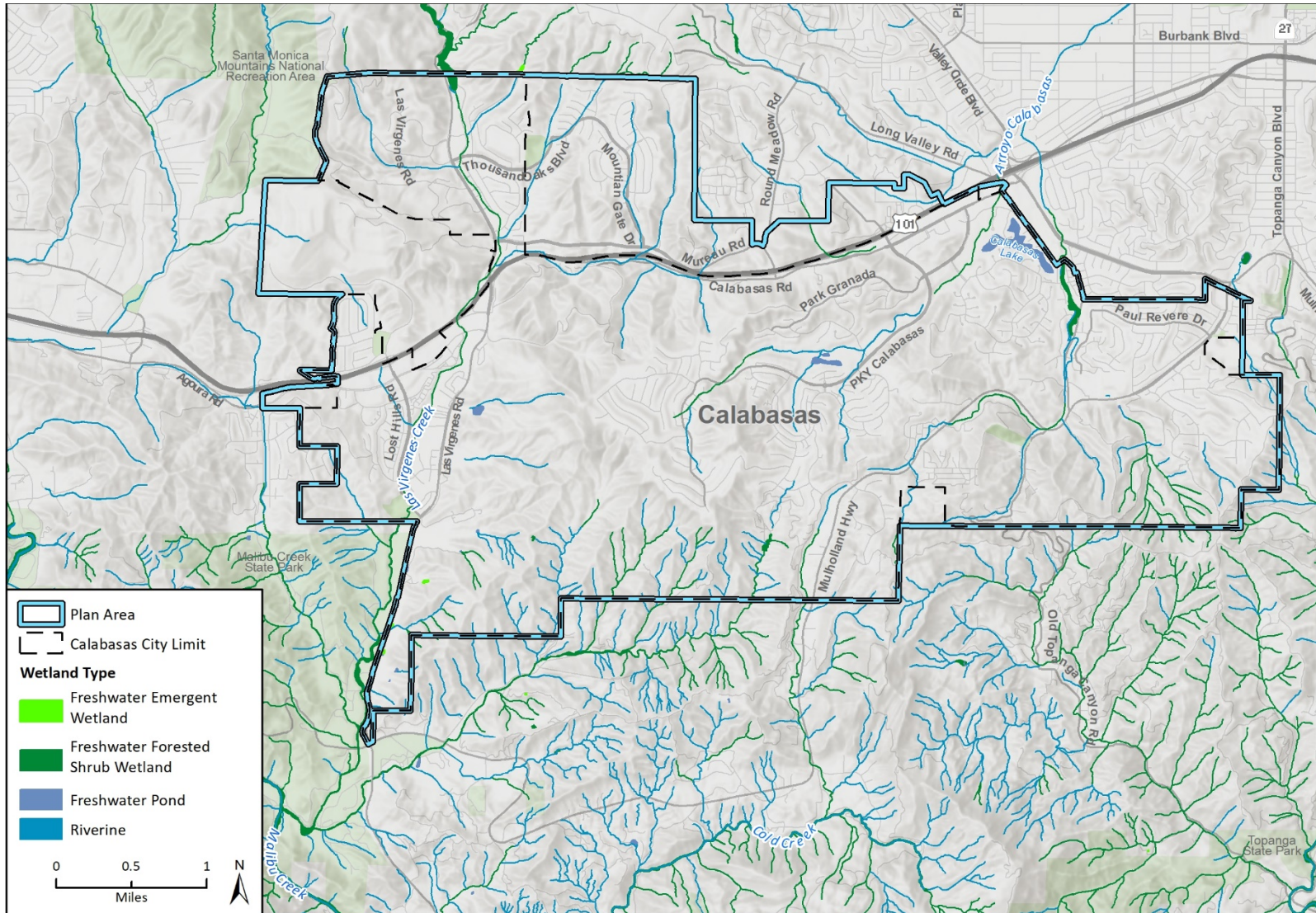
The National Wetlands Inventory illustrates several wetlands and non-wetland waters that occur within the City (Figure 4.3-1) (USFWS 2021b). Both Las Virgenes Creek and Malibu Creek are Relatively Permanent Waters (RPWs) that maintain a direct hydrologic surface connection to the Pacific Ocean, a traditional navigable water (TNW).

Significant Ecological Areas

The City is not obligated to abide by the County’s Significant Ecological Area (SEA) policies and standards because the SEA requirements do not apply within city boundaries. Nevertheless, in the urban context of Calabasas, SEAs support valuable habitat for plants and animals, and are often integral to the preservation of rare, threatened, or endangered species and the conservation of biological diversity.

The Santa Monica Mountains SEA is located within the Santa Monica Mountains in mostly unincorporated areas of Los Angeles County. The County depicts SEAs within incorporated cities to show the extent of biological resources within an ecological system. The Santa Monica Mountains SEA depicts an ecological system that encompasses portions of the following cities: Malibu, Los Angeles, Calabasas, Agoura Hills, Hidden Hills, and Westlake Village, illustrated in Figure 4.3-2. The proposed Los Angeles County SEA Map included in the Los Angeles County 2035 General Plan Update was approved at public hearing of the Board of Supervisors on March 24, 2015. The SEA policies and standards are adopted by Los Angeles County, not by the City of Calabasas. Thus, the County has no land use jurisdiction within cities, and the SEA designation and County’s SEA regulations do not apply within city boundaries. The City’s General Plan and environmental

Figure 4.3-1 National Wetlands Inventory



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 Sources provided by City of Calabasas, 2018; United States Fish and Wildlife Service 2020.

Fig X NW1 Map

preservation programs are unrelated to the County and it is up to each individual city to decide how to conserve the natural resources within its boundaries. Therefore, the City is not obligated to abide by the County's SEA policies and standards.

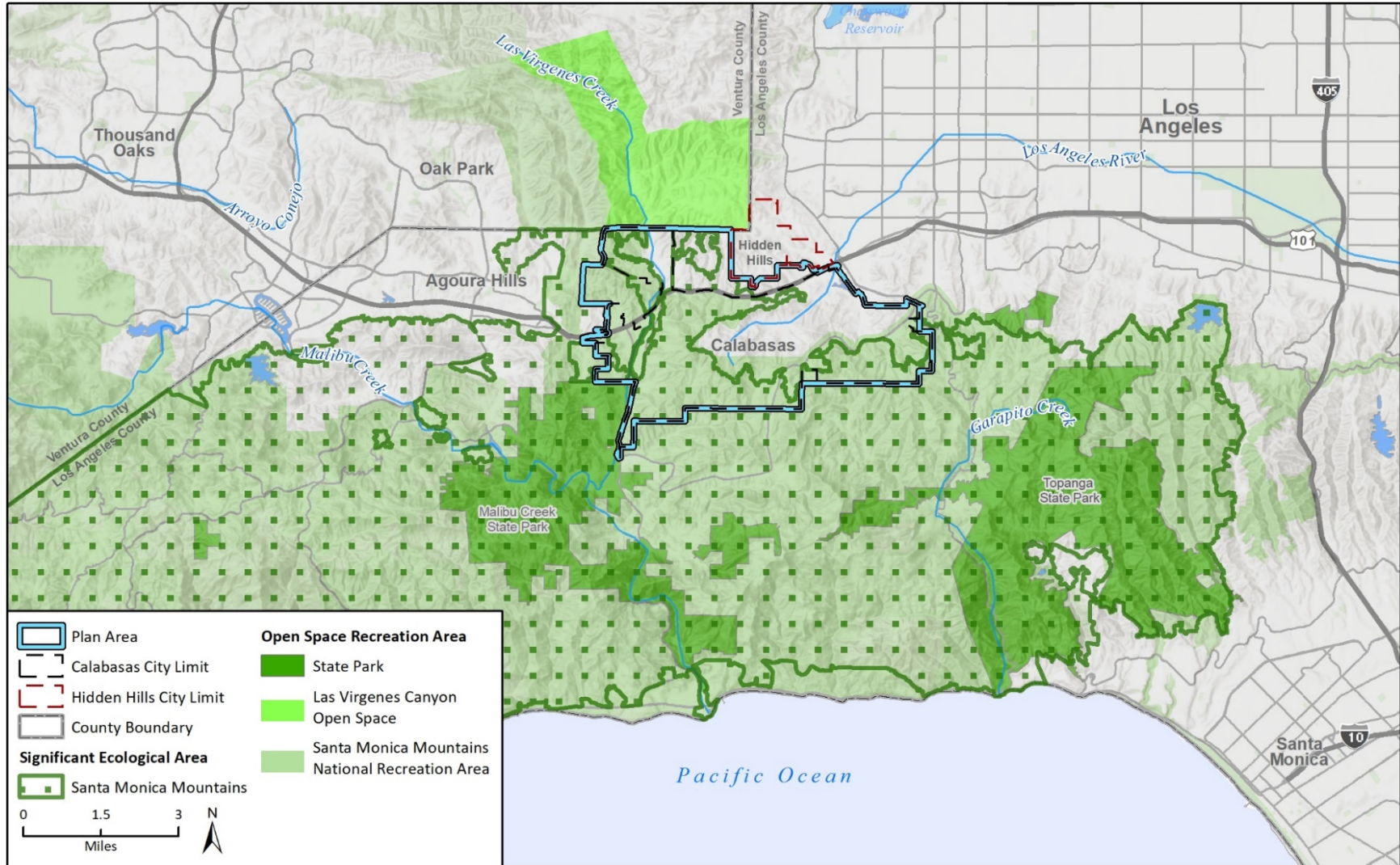
Many of the federal lands under the jurisdiction of the NPS are included in the SEA designation. Multiple State parklands, notably Malibu Creek State Park and Topanga State Park, are included in the Santa Monica Mountains SEA. The SEA includes nearly all of the canyons and ridges within unincorporated areas and State Parks from the Ventura-Los Angeles County line, east to Sullivan Canyon, which is near the communities of Pacific Palisades and Brentwood to the south, and Encino to the north. From south to north, the SEA extends from the Pacific Ocean shoreline or urban-wildland interface of Malibu, through the unincorporated area of the Santa Monica Mountains proper, to the northern edge of the SEA extending along the undeveloped southern edge of the San Fernando Valley or irregularly along the Ventura-Los Angeles County line (Figure 4.3-2).

South and east of the Calabasas Country Club, the Santa Monica Mountains SEA boundary extends northeast and contours along the upper slopes of McCoy Canyon to include a finger of SEA on the southern ridge of McCoy Canyon, which is part of State Park land. Within the west side of Calabasas and extending northward along the western boundary of the City of Hidden Hills, the boundary crosses US-101 along the western edge of development in Hidden Hills north to the County line. The undeveloped portion of Gates Canyon within the Simi Hills and its watershed is included north to the Ventura-Los Angeles County line, excluding a ridgetop island and developed portions of the City of Calabasas. A portion of the SEA situated between the cities of Agoura Hills and Calabasas extends north of US-101 along a tributary of Las Virgenes Creek (Figure 4.3-2).

The majority of the Santa Monica Mountains SEA consists of undisturbed open space with scattered rural residential communities and a few high-density residential developments. Open space within the SEA is mostly vegetated with dense stands of chaparral. Other types of vegetation, such as woodlands and grasslands, occur in smaller portions scattered throughout the SEA on moist or north facing slopes and canyon bottoms. Lesser amounts of coastal sage scrub are also present, primarily on lower elevation, dry south-facing slopes, ridgelines, or as early successional communities in previously disturbed areas.

Wildlife within the Santa Monica Mountains SEA is generally diverse and abundant due to large acreages of natural open space and diversity of habitat types. While a few wildlife species are entirely dependent on a single vegetative community, the entire mosaic of all the vegetation communities within the SEA and adjoining areas constitute a functional ecosystem for a variety of wildlife species, both within the SEA and as part of the regional ecosystem. The analysis of invertebrates is severely limited due to the lack of data; the SEA, however, undoubtedly supports healthy populations of a diverse assortment of invertebrate species. Amphibian populations are plentiful in the southernmost regions of the SEA due to the high moisture content provided by coastal conditions as well as the large number of drainages and year-round water supplies; however, the more inland location of the City of Calabasas has a drier, Mediterranean climate (i.e., lacks coastal influence). The Santa Monica Mountains SEA is also likely to support a variety of amphibians within the moister woodland areas and canyon bottoms. Many habitat characteristics essential to reptiles are present within the SEA. These include rock outcroppings that allow for high visibility and small mammal burrows for cover and escape from predators and extreme weather. These characteristics, as well as the variety of habitat types present, are likely to support a wide variety of reptilian species. The scrubland, woodland, riparian, and grassland habitats in the SEA provide foraging and cover habitat for year-round residents, seasonal residents, and migrating songbirds.

Figure 4.3-2 Santa Monica Mountain Significant Ecological Area



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 Sources provided by National Park Service; 2021, California Department of Parks and Recreation, 2021; Los Angeles County Department of Regional Planning, 2019; City of Calabasas 2018

Bio-1 Santa Monica Mountains Significant Ecological Area

The Santa Monica Mountains SEA encompasses many year-round water sources located throughout the SEA and abundant raptor foraging, perching, and nesting habitat along the northern slopes of the Santa Monica Mountains. The southern edge of the SEA, along the Pacific coast, is part of the Pacific Flyway. The combination of these resources, as well as the confluence of many community types provides high diversity of bird species. Mammal populations within the SEA are diverse and reflect the large size of the SEA and great variation in topography and community types (County of Los Angeles 2012).

Wildlife Corridors

Wildlife corridors usually connect one large habitat area with another, and while there is no pre-defined size limit or corridor width for such areas, they most often are on the scale of mountain ranges, valleys, or clearly-defined ecological situations (i.e., vernal pools). Habitat linkages differ somewhat from wildlife corridors in that they may be identified by the presence of certain resources rather than by areas of linear movement. They may serve as corridors for species, which move from site to site as individuals, but for low-mobility organisms (such as plants, flightless arthropods, amphibians, reptiles, and chaparral birds) they may maintain genetic diversity between larger habitat areas by permitting long-term genetic exchange over a broad area. For these species, population-wide directional movement may be incremental and via a network of overlapping home ranges on a year-to-year basis. Over many thousands of years, these species have been able to cross vast areas of otherwise unsuitable habitat. For species such as lizards, salamanders, and birds, habitat linkages physically connect separate units of similar habitat value by providing buffer zones or areas of marginal contact.

Linkage zones may extend for many miles between primary habitat areas, and their adequacy for supporting genetic flow often depends upon the combined presence of specific resources, sufficient width (to buffer against adjacent disturbances), and sufficient shelter or cover. Certain specific resources (such as rock outcroppings, vernal pools, or oak trees) may be needed at particular intervals to ensure that slower-moving species are able to traverse the linkage zone. For highly mobile or flying organisms, habitat linkages may consist of a series of discontinuous patches of suitable resources, spaced sufficiently close together to permit movement along a route in a short period of time. The “landscape linkage” concept includes habitat linkages intended to serve this purpose.

Natural movement corridors and habitat linkages have been the focus of numerous studies intended to better understand relationships between animal populations, open space reserves, and natural movement patterns. The California Essential Habitat Connectivity Project (Spencer et al. 2010) was commissioned by the California Department of Transportation (Caltrans) and CDFW to study the functional network of connected wildlands in California as these corridors are essential to the continued support of California’s diverse natural communities in the face of human development and climate change. The report examines large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for ecological connectivity between them (Essential Connectivity Areas).

A literature search of the South Coast Wildlands (2008) California Essential Habitat Connectivity Project (Spencer et al. 2010) found that the Plan Area is located in the Santa Monica Mountains Natural Landscape Block. On a regional level, this corridor links together the Simi Hills to the northwest and Santa Monica Mountains to the south, and on even a larger scale, it links together the Santa Monica Mountains to the Los Padres and Angeles National Forests.

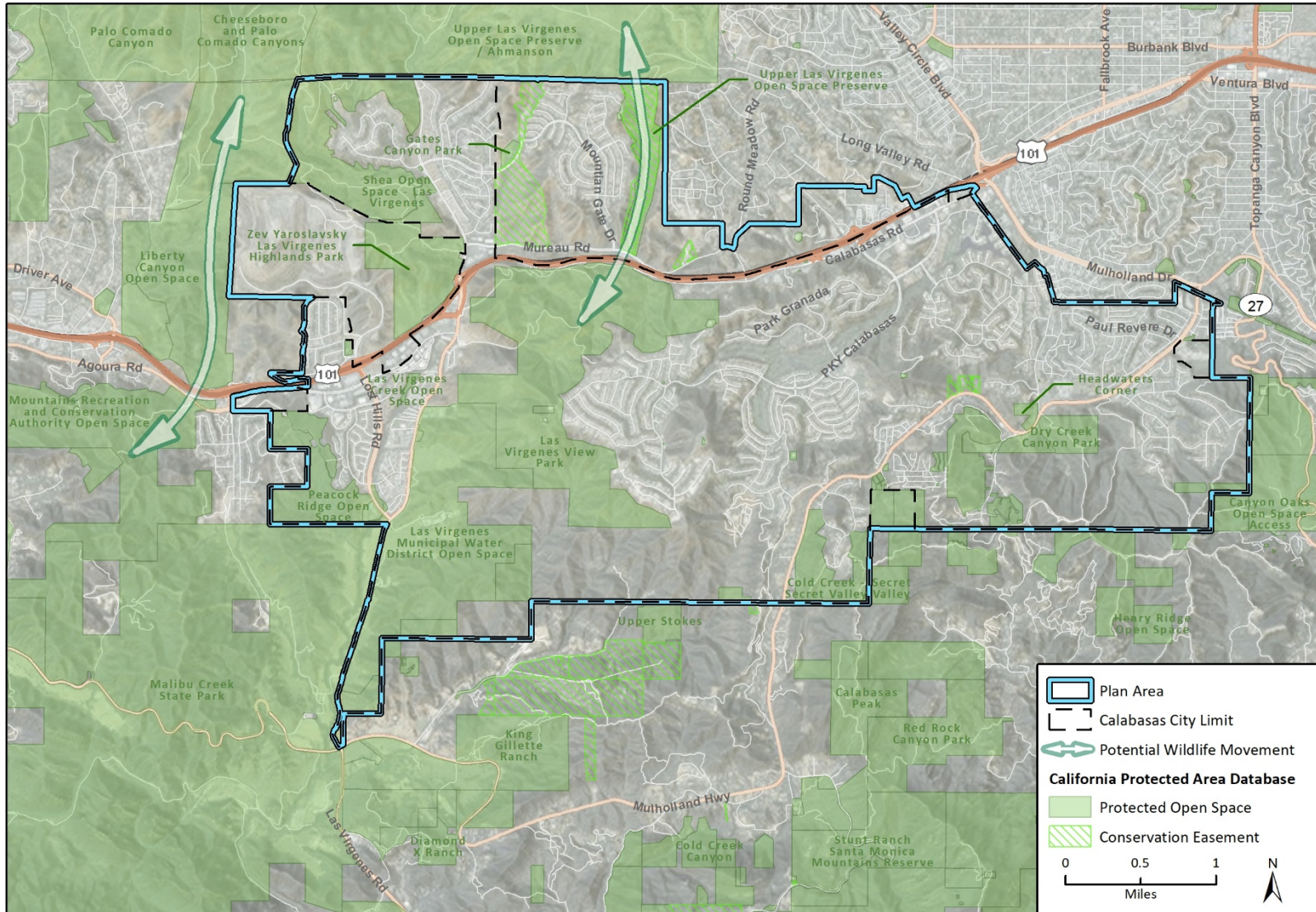
The City lies between the Santa Monica Mountains and the Simi Hills, and contains linkages connecting the Santa Monica Mountains, Simi Hills, Santa Susana Mountains, Los Padres National Forest, and the Angeles National Forest. Calabasas is juxtaposed between various habitat linkages that are important for maintaining suitable habitat and home range sizes for populations of many terrestrial wildlife species (Figure 4.3-3). The main wildlife corridor in the Plan Area runs north to south between Las Virgenes Road and The Oaks residential development. This corridor provides wildlife with linkages from the Malibu Creek State Park to the south with undeveloped portions of the Simi Hills to the north. Other important corridors include the current designation by the County of Los Angeles as a SEA. This area bisects the north/south linkage discussed above and extends from north of the Calabasas landfill east along the south side of the Ventura Freeway and along The Oaks residential Area (City of Calabasas 2008).

In general, roads are a major barrier to wildlife movement, particularly small animals, with the effect of a road dependent on its design, width, traffic volume, and speed. Roads frequently force animals into specified small-scale “choke-points” where passage may occur, such as via culvert systems under major freeways. The US-101/Los Virgenes Road interchange and the urban development in the vicinity of Los Virgenes Road and on either side of US-101 restricts wildlife movement, as does the US-101 highway itself between the Las Virgenes area and the highway interchange at parkway Calabasas.

Designated Critical Habitat

When a species is proposed for listing as endangered or threatened under the Endangered Species Act, the USFWS must consider whether there are areas of habitat believed to be essential to the species' conservation. Those areas may be proposed for designation as critical habitat. The USFWS' Critical Habitat Portal (available at <http://criticalhabitat.fws.gov/crithab/>) provides online service for information regarding threatened and endangered species final Critical Habitat designation across the U.S. According to the CNDDDB and the Critical Habitat Portal, three critical habitats are mapped within a five-mile radius (78.5 square miles) of the Plan Area for the following species: Braunton's milk vetch and Lyon's pentachaeta, and California red-legged frog. No critical habitat is mapped in the Plan Area (Figure 4.3-4).

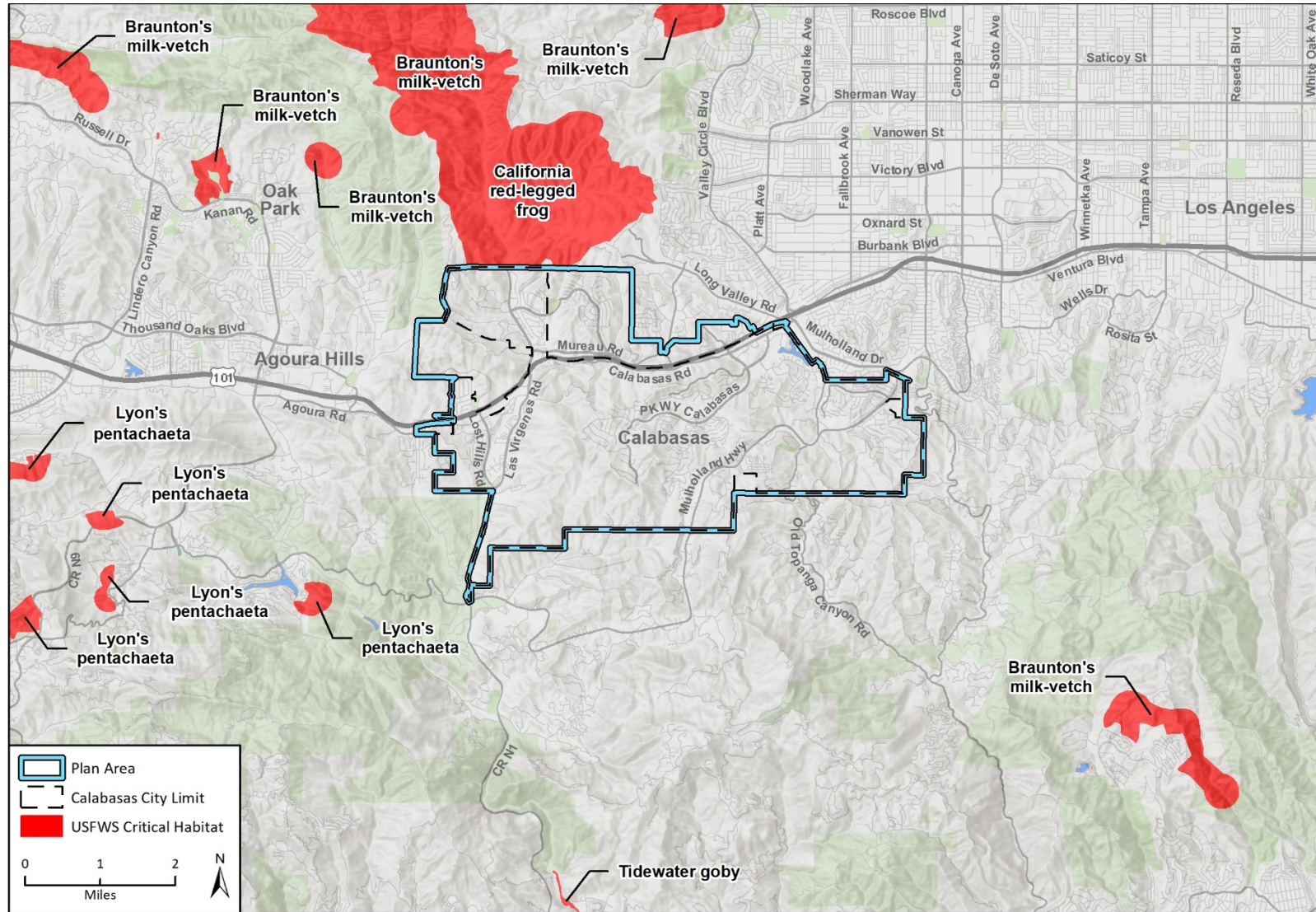
Figure 4.3-3 Wildlife Corridors



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 Sources provided by City of Calabasas, 2018; Los Angeles County Department of Regional Planning 2019; California Protected Area Database 2021.

Fig X CPAD Corridors

Figure 4.3-4 Critical Habitat



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 Sources provided by City of Calabasas, 2018; United States Fish and Wildlife Service 2021.

Fig X Critical Habitat

4.3.2 Regulatory Framework

Federal

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) and subsequent amendments provide for the conservation of endangered and threatened species, and the ecosystems upon which they depend.

FESA is intended to prevent the unlawful “take” of listed fish, wildlife, and plant species. Section 9(a)(1)(B) specifically states take of species listed as threatened or endangered is unlawful. Take is defined as any action that would harass, harm, pursue, hunt, wound, shoot, kill, trap, capture, or collect any threatened or endangered species.

Section 10 of the FESA allows the United States Fish and Wildlife Service (USFWS) to issue incidental take permits if take of a listed species may occur during otherwise lawful activities. Section 10(a)(1)(B) requires a Habitat Conservation Plan for an incidental take permit on non-federal lands. Section 7 of the FESA requires federal agencies to aid in the conservation of listed species, and to ensure that the activities of federal agencies will not jeopardize the continued existence of listed species or adversely modify designated critical habitat. The USFWS and the National Oceanic and Atmospheric Administration (NOAA) are responsible for administration of the FESA and have regulatory authority over federally listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds, and prohibits the removal of nests occupied by migratory birds. The USFWS administers the MBTA.

United States Army Corps of Engineers Jurisdiction

The USACE, under provisions of Section 404 of the CWA and USACE implementing regulations, has jurisdiction over the placement of dredged or fill material into “waters of the United States.” Congress enacted the CWA “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” In practice, the boundaries of certain waters subject to USACE jurisdiction under Section 404 have not been fully defined. Previous regulations codified in 1986 defined “waters of the United States” as traditional navigable waters, interstate waters, all other waters that could affect interstate or foreign commerce, impoundments of waters of the United States, tributaries, the territorial seas, and adjacent wetlands.

On April 21, 2020, the USACE and U.S. Environmental Protection Agency (USEPA) published the Navigable Waters Protection Rule to define “Waters of the United States.” This rule, effective on June 22, 2020, defines four categories of jurisdictional waters, documents certain types of waters that are excluded from jurisdiction, and clarifies some regulatory terms. Under the Navigable Waters Protection Rule, “waters of the United States” include:

1. Territorial seas and traditional navigable waters;
2. Perennial and intermittent tributaries that contribute surface flow to those waters;
3. Certain Lakes and ponds, and impoundments of jurisdictional waters, and;
4. Wetlands adjacent to jurisdictional waters.

Tributaries are defined as “a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to the territorial seas or traditional navigable waters in a typical year either directly or through one or more tributaries, jurisdictional lakes, ponds, and impoundments of jurisdictional waters, or adjacent wetlands.” The tributary category also includes a ditch that “either relocates a tributary, is constructed in a tributary, or is constructed in an adjacent wetland as long as the ditch is perennial or intermittent and contributes surface water flow to a traditional navigable water or territorial sea in a typical year.”

Adjacent wetlands are defined as wetlands that:

1. Abut, meaning to touch at least at one point or side of, a defined Water of the U.S.;
2. Are inundated by flooding from a defined Water of the U.S. in a typical year;
3. Are physically separated from a defined Water of the U.S. by a natural berm, bank, dune, or similar natural features or by artificial dike, barrier or similar artificial structures as long as direct hydrological surface connection to defined Waters of the U.S. are allowed; or,
4. Are impounded of Waters of the U.S. in a typical year through a culvert, flood or tide gate, pump or similar artificial structure.

The Navigable Waters Protection Rule states that the following areas not considered to be jurisdictional waters even where they otherwise meet the definitions described above:

1. Groundwater, including groundwater drained through subsurface drainage systems;
2. Ephemeral features that flow only in direct response to precipitation including ephemeral streams, swales, gullies, rills and pools;
3. Diffuse stormwater runoff and directional sheet flow over uplands;
4. Ditches that are not defined Waters of the U.S. and not constructed in adjacent wetlands subject to certain limitations;
5. Prior converted cropland;
6. Artificially irrigated areas that would revert to upland if artificial irrigation ceases;
7. Artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
8. Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
9. Stormwater control features constructed or excavated in uplands or in non-jurisdictional water to convey, treat, infiltrate, or stormwater run-off;
10. Groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and,
11. Waste treatment systems.

USACE jurisdictional limits are typically identified by the Ordinary High Water Mark (OHWM) or the landward edge of adjacent wetlands (where present). The OHWM is the “line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area” (33 CFR 328.3).

The USACE defines wetlands as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3). The USACE’s delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

State

California Endangered Species Act

The CDFW is responsible for administration of CESA. For projects that may affect both a State and federal listed species, compliance with the FESA will satisfy the CESA, provided the CDFW determines that the federal incidental take authorization is consistent with the CESA.

Take is defined in CFGC Section 86 as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The CESA allows for take incidental to otherwise lawful activities under CFGC Section 2081. Project proponents wishing to obtain incidental take permits are able to do so through a permitting process outlined in California Code of Regulations (CCR) Section 783. Additionally, some sensitive mammals and birds are protected by the state as Fully Protected Mammals or Fully Protected Birds, as described in the CFGC, Sections 4700 and 3511, respectively.

Projects that may result in a take of a California listed species require a take permit under the CESA. The federal and State acts lend protection to species considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or den locations, communal roosts, and other essential habitat. Unlike the FESA, the CESA prohibits the take of not just listed endangered or threatened species, but also candidate species (species petitioned for listing).

The CESA defines an endangered species as:

...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

A threatened species is defined as:

...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.

Candidate species are defined as:

...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species. Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species by stating:

...no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.

Nesting Bird Protection – California Fish and Game Code

According to CFGC Section 3503 it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird [except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*)]. Sections 3503 and 3513 prohibit the taking of specific birds, their nests, eggs, or any portion thereof during the nesting season. Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the federal MBTA, prohibiting the take or possession of any migratory nongame bird.

California Native Plant Protection Act

The California Native Plant Protection Act (NPPA) was enacted in 1977 and allows the California Fish and Wildlife Commission to designate plants as rare or endangered. Currently, 64 species, subspecies, and varieties of plants are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA permitting procedures (CFG Code Section 2081) would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference between regulations and protocols for plants listed under CESA and those listed under the NPPA.

Los Angeles Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and the local Los Angeles RWQCB assert jurisdiction, on behalf of USEPA, over waters of the U.S. pursuant to Section 401 of the CWA. In addition, where Federal jurisdiction is not asserted (for example, due to a lack of connectivity to a Relatively Permanent Waters [RPW] and Traditional Navigable Waters [TNW]), RWQCB assert jurisdiction over "waters of the State" pursuant to Section 13263 of Porter-Cologne, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. In this event, the SWRCB may issue general Waste Discharge Requirements (WDRs) regarding discharges to "isolated" waters of the State if limiting criteria are not exceeded (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the USACE to be Outside of Federal Jurisdiction) or project-specific WDRs.

Santa Monica Mountains Conservancy Act

The Santa Monica Mountains Conservancy Act (Public Resources Code Sections 33000 - 33215) was enacted in 1979 by AB 1312. The act established the Santa Monica Mountains Conservancy. The conservancy's mission is to strategically buy back, preserve, protect, restore, and enhance treasured pieces of Southern California to form an interlinking system of urban, rural and river parks, open space, trails, and wildlife habitats that are easily accessible to the general public. The conservancy aims to preserve, protect, and enhance the open spaces in the mountains within Los Angeles and Ventura counties with a guiding principle of maintaining a network of cross-freeway habitat linkages and wildlife corridors that keep the mountain ranges biologically inter-connected and provide enough habitat to support larger mammals.

California Department of Fish and Wildlife

STREAM AND RIPARIAN HABITAT

Pursuant to CFGC Section 1600, CDFW has authority over all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state, and requires any person, state or local governmental agency, or public utility to notify the CDFW before beginning any activity that would “substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake” that supports fish or wildlife resources.

A stream is defined as a “body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (California Code of Regulations, Title 14 Section 1.72). A Lake or Streambed Alteration Agreement may be required for any proposed project that would result in an adverse impact to a river, stream, or lake. CDFW jurisdiction typically extends to the top of the bank and out to the outer edge of adjacent riparian vegetation if present. However, CDFW can take jurisdiction over a body of flowing water and the landform that conveys it, including water sources and adjoining landscape elements that are byproducts of and affected by interactions with flowing water without regard to size, duration, or the timing of flow (Brady and Vyverberg 2013).

SPECIAL-STATUS SPECIES PROTECTION

Special-status wildlife species are those species included on the CDFW “Special Animals” list (CDFW 2020). “Special Animal” is a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status. The CDFW considers the taxa on this list to be those of greatest conservation need. The species on this list generally fall into one or more of the following categories:

- Officially listed or proposed for listing under the CESA and/or FESA
- State or Federal candidate for possible listing
- Taxa that meet the criteria for listing, even if not currently included on any list, as described in
- CEQA Guidelines Section 15380
- Taxa considered by the Department to be a Species of Special Concern
- Taxa that are biologically rare, very restricted in distribution, declining throughout their range, or have a critical vulnerable stage in their life cycle that warrants monitoring

- Populations in California that may be on the periphery of a taxon's range but are threatened with extirpation in California

Local

Calabasas 2030 General Plan

The City's 2030 General Plan Conservation Element outlines policies adopted by the City for riparian areas and wildlife movement corridors.

The General Plan also adopted Los Angeles County General Plan Conservation/Open Space Element SEAs. SEAs are not "preserves;" however, land-intensive development in SEAs must undergo an additional environmental review. The Plan Area is located within portions of the Santa Monica Mountains SEA.

The Conservation Element of the 2030 General Plan includes the following policies aimed at the protection of sensitive and protected species and habitat from the impacts of future development:

- Policy IV-1** Maintain an up-to-date inventory and map of sensitive, threatened, and endangered flora and fauna within Calabasas, as well as sensitive biological habitat areas and habitat linkages.
- Policy IV-2** Ensure that new developments, including roads, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats. Specifically, the following are unacceptable biological impacts:
 - Net loss of wetlands or riparian vegetation
 - Measurable reduction in species diversity
 - Loss of breeding and roosting areas, foraging areas, habitat linkages, or food sources that will result in a measurable reduction in the reproductive capacity of biotic resources
- Policy IV-3** Require new developments on properties that include sensitive biotic habitats to cluster development in the least sensitive portions of the property and preserve and/or restore the most sensitive resources.
- Policy IV-4** As feasible and without creating public safety concerns, restore riparian corridors to a natural or quasi-natural condition.
- Policy IV-5** Maintain buffers between natural riparian areas and development in order to avoid disturbance of riparian habitat and wildlife movement.
- Policy IV-6** Require separation of construction activities from sensitive biological resources through the use of buffers, setbacks, and temporary protective fencing.
- Policy IV-7** Regulate construction activities to eliminate potentially destructive practices that adversely affect environmentally sensitive areas.
- Policy IV-8** Maintain strategic alliances with federal and state agencies involved in the Santa Monica Mountains National Recreation Area to ensure the ongoing management of areas that are preserved because of their biological significance.
- Policy IV-9** Continue to enforce the City's Oak Tree Ordinance.

- Policy IV-10** Preserve existing mature trees, unless they are detrimental to public health and safety.
- Policy IV-11** Promote the planting of additional trees in urban locations. Plantings should include replacement of trees that are, or have been, removed and new trees in locations where none are currently present.
- Policy IV-12** Provide adequate resources to maintain the urban forest in a safe and healthy manner.
- Policy IV-13** Expand the inventory of City street trees.
- Policy IV-25** Protect natural drainage courses within Calabasas and maintain appropriate setbacks from riparian habitats.
- Policy IV-26** Continue undertaking the activities necessary to fulfill the City’s responsibilities as a co-permittee under the Federal Clean Water Act, including implementation of the Los Angeles County Standard Urban Stormwater Mitigation Plan. Continue to monitor emerging technologies and techniques for minimizing water quality impacts from municipal runoff, and update the SUSMP as new Best Management Practices are established.
- Policy IV-27** Require runoff mitigation plans as part of the application and development review process that illustrate the Best Management Practices (BMPs) to be employed to prevent pollutants from running off the project site into area waterways. BMPs may include, but are not limited to, the use of biofiltration techniques and/or provision of subsurface filtering

Calabasas Municipal Code

The Calabasas Municipal Code (CMC) contains several provisions to regulate noise:

CMC Chapters 15.10.010 and 15.10.050. The City’s Grading Ordinances require a biological survey for grading proposed within 50 feet of a parcel designated Open Space-Development Restricted (OS-DR) or that has a conservation easement. Additionally, all grading permit applications shall be subject to environmental review to the extent required by CEQA, and any applicable City Environmental Quality Act Local Implementation Guidelines. Grading permits shall not be considered exempt pursuant to 14 CCR § 15304 (relating to certain grading on slopes of less than 10 percent) if grading will occur within 100 feet of a watercourse, wetland, or environmentally sensitive habitat.

The approval of a grading permit application and issuance of a grading permit by the City Engineer for ministerial projects requires the completion of any permits required by State or federal agencies (including but not limited to streambed alteration permits from the CDFW, 404 permits for grading within wetlands and certain watercourses from the U.S. Army Corps of Engineers), or are required by conditions of approval to be obtained before grading work is started. Approval of permits for discretionary projects requires findings that the proposed grading will not result in any erosion, stream sediment, or other adverse off-site effects or hazards to life or property.

CMC Chapter 17.20.100. Requires fencing to be wildlife-friendly (with some exceptions) on properties in the RR, HM, and OS zoning districts located adjacent to or partially or wholly within sensitive biological resource areas, Los Angeles County significant ecological areas,

wildlife linkage and corridors or ecological areas and corridors as mapped on Figures IV-1 and VI-2 in the General Plan.

CMC Chapter 17.20.160. Sets forth the policy to limit project-related noise to no greater than a 60 dBA CNEL (Community Noise Equivalent Level) within known wildlife nesting or migration areas, as well as within natural open space areas, as necessary to maintain tranquil open space and viable wildlife habitats and mobility.

CMC Chapter 17.27.010. Applies the outdoor lighting standards designed to protect the suburban, semi-rural, and rural character of Calabasas from inappropriate levels of night lighting. The City encourages lower illumination levels to minimize conflicts with wildlife movement.

CMC Chapter 17.32.010. The City of Calabasas Oak Tree Ordinance sets forth the policy of the City to require the preservation of all healthy oak trees unless reasonable and conforming use of the property justifies the removal, cutting, pruning, and/or encroachment into the Protected Zone of an oak tree. The City's Oak Tree Protection and Preservation Policy and guidelines were established to recognize oak trees as significant and valuable aesthetic and ecological resources. The Oak Tree Ordinance requires completion of an Oak Tree Report by a certified arborist for projects involving impacts to oak trees. Additionally, a valid oak tree permit must be issued prior to oak tree or scrub oak habitat alterations within the city.

Los Angeles County Santa Monica Mountains North Area Plan

The Santa Monica Mountains North Area Plan (North Area Plan) is a component of the Los Angeles County General Plan. The goal of the North Area Plan is to maximize preservation of the area's natural environment, recognize the opportunities and constraints that the land imposes, accommodation new uses that minimize impacts on the natural environment, ensure that new development is compatible with an enhances the quality of existing communities, and provide for a wide range of public and private recreational opportunities (Los Angeles County 2019). The North Area Plan assigns a Habitat Sensitivity Ranking System in order to direct development to the most appropriate areas while preserving sensitive resources (Aspen Environmental Group 2018).

County of Los Angeles Significant Ecological Area (SEA) Ordinance

The County of Los Angeles SEA Ordinance (Section 22.14.190) implements the goals and policies of the County of Los Angeles General Plan by establishing permitting requirements, design standards, and review processes for development within SEAs. The goal of the SEA Ordinance is to guide development to the least impactful areas on a property in order to avoid adverse impacts to biological resources. The level of SEA assessment is dependent on the area of disturbance, sensitivity of biological resources impacted, and consistency with development standards. The Plan Area is in the Santa Monica Mountains SEA, although the County's SEA program regulations do not apply to projects within incorporated cities.

4.3.3 Impact Analysis

Methodology and Significance Thresholds

Chapter 1, Section 21001 of CEQA states that it is the policy of the state of California to: "Prevent the elimination of fish and wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities." Environmental impacts relative to biological

resources may be assessed using impact significance criteria encompassing the CEQA Guidelines and federal, State, and local plans, regulations, and ordinances. Impacts to flora and fauna may be determined to be significant even if they do not directly affect rare, threatened, or endangered species.

The General Plan Update would have a significant biological resource impact if any of the following determinations would be made:

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

The analysis of biological resource impacts within this EIR was based on review of applicable biological resource databases, plans and policies, as described previously in the *Regulatory Setting* section of this EIR, as well as review of aerial photography (including but not limited to Google Earth Pro 2021) and online resource databases such as the CNDDDB and CNPS Inventory of Rare Plants.

The impact analysis considers the direct and indirect impacts to biological resources, which could include the direct take of a species or the removal or disturbance of habitats from future development or more indirect delayed or secondary effects from future development, such as fragmentation, pollination interruption, plant and wildlife dispersal interruption, increased risk of fire, and increased invasion of non-native animals and plants that out-compete native species (refer to discussion under Impact BIO-1, below).

For purposes of this analysis, “special status species” include:

- Plants and wildlife species listed as rare, threatened, or endangered under the FESA or the CESA;
- Species that are candidates for listing under federal or State law;
- Species designated by the USFWS as proposed or candidates for listing and/or species designated as Species of Special Concern by CDFW;
- Species protected by MBTA;
- Species identified as rare, threatened, or endangered by CNPS; and

- Any other species that may be considered endangered or rare pursuant to CEQA Guidelines Section 15380(b).

Impacts to riparian habitat or other sensitive natural communities are described under Impact BIO-2 and BIO-3, below. For the purpose of this analysis, “sensitive natural communities” are considered to be habitats or natural communities that are unique, of relatively limited distribution in the region, and/or of particularly high value for wildlife. Sensitive habitats include specific natural communities defined by CDFW, as well as wetlands and riparian communities, which are considered special status natural communities due to their limited distribution in California. SEAs support sensitive natural communities.

Potential for wildlife movement corridors, as identified and described above, to occur within, or be crossed by, reasonably foreseeable development under the General Plan Update. In addition to a review of City plans and policies, and SEA mapping completed by the County, studies to better understand relationships between animal populations, open space reserves, and natural movement patterns in Los Angeles County were reviewed as part of the analysis. These studies include, but are not limited to:

- Protected Areas for Wildlife and Wildlife Movement Pathways, Final Report (ESA 2021)
- South Coast Missing Linkages Project: A Linkage Design for the Santa Monica Mountains Sierra Madre Connection (Penrod, K. et. al., 2006)
- California Essential Connectivity Project: A Strategy for Conserving a Connected California (Spencer et al., February 2010)

Impacts to wildlife movement and nursery sites are discussed under Impact BIO-4.

Threshold 1: Would the General Plan Update have a substantial adverse effect, either directly or indirectly, or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact BIO-1 THE PLAN AREA IS LARGELY URBANIZED, AND THE GENERAL PLAN UPDATE WOULD PRIORITIZE DEVELOPMENT ON INFILL SITES THAT HAVE BEEN PREVIOUSLY DEVELOPED AND/OR DISTURBED. NEVERTHELESS, REASONABLY FORESEEABLE DEVELOPMENT RESULTING FROM THE GENERAL PLAN UPDATE COULD POTENTIALLY ADVERSELY IMPACT SPECIAL-STATUS SPECIES OR THEIR HABITAT. LOCAL SPECIAL-STATUS SPECIES AND NESTING BIRDS ARE EXPECTED TO OCCUR WITHIN THE PLAN AREA DURING POTENTIAL CONSTRUCTION PERIODS AND MAY POTENTIALLY BE AFFECTED BY CONSTRUCTION ACTIVITY. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH INCORPORATION OF MITIGATION MEASURES MM BIO-1 THROUGH MM BIO-5.

Special-Status Species and Sensitive Natural Communities

As listed in Table 4.3-1, special-status species with potential to occur in or around the Plan Area include 114 species of plants, 22 species of invertebrates, three species of fish, four species of amphibians, 18 species of reptiles, 30 species of birds, and 20 species of mammals. No critical habitat for threatened or endangered species exists in the Plan Area. There are 13 sensitive natural communities listed by in the CNDDDB as having occurred in the regional vicinity of the Plan Area.

The General Plan Update would accommodate the incremental development of new housing units plus redeveloped and developed commercial space. It is reasonable to assume that some development would occur within or adjacent to natural areas that support special-status species, which has the potential to adversely affect special-status species or their habitats. During project construction, vegetation clearing, and excavation could remove habitat or directly impact individuals (e.g., mortality).

Mixed-use and multifamily housing under the General Plan Update would mostly be located in urban areas and be constructed as infill development or redevelopment, which would avoid most areas of sensitive habitat that occur in undeveloped areas, and would therefore avoid direct impacts to most special-status species. However, larger developments could result in significant impacts to protected trees and/or nesting birds due to demolition of the existing structures and grading of the sites (more information on impacts to nesting birds and raptors below).

Additionally, Accessory Dwelling Units (ADUs) would be accommodated under the General Plan Update, which could be attached ADUs (created through a building addition or conversion of existing floor area) and detached ADUs of various scales. The development of an ADU would be less likely than other development types to involve the ground-disturbing activities that would impact special-status species and nesting birds, because these developments are typically limited to areas currently developed or disturbed (i.e., urban). Nevertheless, ADUs sited in undeveloped, or less developed, portions of the Plan Area (e.g., hillside and rural areas) would have the potential to affect biological resources, including direct impacts.

Sensitive natural communities have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. Housing development accommodated under the General Plan Update that is sited adjacent to or abutting these sensitive communities could result in direct and indirect impacts to those resources. Vegetation clearing and excavation could remove habitat or result in impacts on runoff and/or water quality, potentially affecting habitat. In addition to direct construction-related impacts, fuel management, and maintenance of defensible space, particularly in Very High Fire Hazard Severity Zones (VHFHSZ) is required by Chapter 49 of the California Fire Code.

Policies IV-2 through 10, and IV-25 of the 2030 General Plan would reduce direct impacts to sensitive species during construction. However, because the General Plan contains such a wide array of policies (pertaining to all aspects of urban development, transportation management, housing, public safety, conservation, etc.), the General Plan also stipulates that City decision makers will be required to determine the relative priorities of the values upon which the policies or implementation actions are based, and to act based on that determination (Calabasas 2030 General Plan, pages XIII-15 – XIII-16).

Additionally, the City's grading permit approval process (Municipal Code 15.10.010 and 15.10.050) requires a biological survey for grading proposed within 50 feet of a parcel designated protected open space or that has a conservation easement, and permits would not be exempt from review if grading would occur within 100 feet of a watercourse, wetland, or environmentally sensitive habitat. However, impacts to special-status species and sensitive natural communities still have potential to occur; therefore, the General Plan Update could result in a potentially significant impact to special-status species.

Nesting and Migratory Birds

Nesting birds and raptors have the potential to nest on buildings, in culverts, in shrubs and trees, in rocky outcrops, and on bare ground throughout the Plan Area. The nests of most native birds and raptors are federally- and State-protected. Vegetation within and surrounding the Plan Area has the potential to provide refuge cover from predators, perching sites and favorable conditions for avian nesting that could be affected by projects developed under the General Plan Update. Potential impacts to nesting birds could occur if nests are located on a project site and/or in the immediate vicinity during construction activities. Direct impacts from construction activities may include ground disturbance and removal of trees, which could contain bird nests. These impacts could lead to individual mortality or harassment that might reduce nesting success. Policies included in the 2030 General Plan, such as Policy VI-2, would reduce impacts to nesting birds, but there is still potential for direct impacts to occur to roosting areas. Therefore, the General Plan Update could result in potentially significant impacts to nesting birds.

Migratory birds, including most birds that nest in the areas subject to housing development under the General Plan Update, are protected by the federal MBTA, which forbids most forms of harm to birds, including to their active nests. In addition, CFGC Section 3503 makes it unlawful to destroy nests or eggs of any bird, except as otherwise provided by code or regulation. Where vegetation, and especially trees, are removed as part of General Plan Update under any of the various housing types, there is the potential for violations under the MBTA and Section 3503 of the CFGC, which are considered significant. Compliance with existing laws and regulations (e.g., MBTA and CFGC), would reduce potential impacts to nesting birds to a less than significant level.

Bats

Numerous bat species are known to roost in trees and structures within the Plan Area. Bats are considered non-game mammals and are afforded protection by State law from take and/or harassment (CFGC 4150). Some bat species are also candidate or special-status species afforded protection by FESA and/or CESA. Project construction and related activities, including, but not limited to, ground disturbance, vegetation removal, and any activities leading to increased noise levels may have direct and/or indirect impacts on bats and their roosts. Policies of the 2030 General Plan, including Policies IV-2, IV-6, and IV-7, would reduce potential direct and indirect impacts to bats and roosting areas. However, impacts to special-status species still have potential to occur; therefore, the General Plan Update could result in a potentially significant impact to special-status species.

Water Quality

Excavation, ground clearing, equipment and materials storage, access routes, and other activities could result in impacts on runoff and/or water quality, potentially affecting aquatic habitat. Discharges or runoff from operation of individual projects that may be developed under the General Plan Update may carry pollutants, while runoff from construction may carry excessive silt, petroleum, or other chemical contaminants. Such runoff can affect water quality which in turn can affect habitat quality and the species using the waters. However, as discussed in Section 4.8, *Hydrology and Water Quality*, best management practices (BMPs) would be used to avoid and minimize indirect impacts on water quality during construction and operation of projects developed under the General Plan Update.

All construction projects would be required to comply with various regulatory requirements related to storm water runoff during construction and operation to minimize the potential for pollutants to

enter receiving waters. All projects would be required to comply with applicable State building code requirements, as well as State and federal agency regulations, as well as the provisions of the Statewide General Construction Activity Stormwater Permit.

Future development built under the General Plan Update greater than one acre in size would be subject to the SWRCB Construction General Permit and would be required to develop a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must include erosion and sediment control BMPs that would meet or exceed measures required by the Construction General Permit. Implementation of the required SWPPP would reduce the potential for eroded soil and any contaminants attached to that soil to contaminate a waterbody following a storm event.

The City of Calabasas is a permittee under the Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, issued by the Los Angeles Regional Water Quality Control Board (LARWQCB) (Order No. R4-2012-0175), which also serves as a NPDES permit under the Federal Clean Water Act (NPDES No. CAS004001), as well as Waste Discharge Requirements under California law (the "Municipal NPDES permit"). Specific project development would be required to adhere to all requirements under the Los Angeles County MS4 permit. Future developments under the General Plan Update would employ low-impact development (LID) techniques and stormwater control measures as outlined under Chapter 8.28.160 of the Calabasas Municipal Code. The City's LID control measures aim to conserve natural areas, protect slopes and channels, provide storm drain system stenciling and signage, divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability, and direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability. Furthermore, reasonably foreseeable development under the General Plan Update would be required to comply with Chapter 15.11.080 *Storm Drainage and Runoff*, Chapter 15.11.090 *Dust Prevention and Control*, and Chapter 15.11.100 *Erosion and Sediment Control* of the Calabasas Municipal Code.

Compliance with the regulations, permit requirements, and BMPs would prevent or minimize impacts related to water quality and ensure that construction and operation of all future development under the General Plan Update would result in a less than significant impact to the degradation of aquatic habitat and species.

Noise

Future projects and their construction could increase the noise in adjacent habitat areas. During operation, additional human activity and noise from vehicles and other machinery, such as generators, could increase the noise level in adjacent habitat. During construction, equipment noise would temporarily increase noise levels in adjacent areas. Increased noise could discourage use by wildlife that are not urban-tolerant and/or has the potential to disrupt foraging, nesting, roosting, and/or denning activities for a variety of wildlife species. This impact would be minimal for construction located in urban locations of the Plan Area where ambient noise presently exists, and wildlife is expected to be urban-tolerant. However, noise impacts could adversely affect wildlife if located adjacent to undeveloped open space. Policies IV-6 and IV-7 of the 2030 General Plan policies would reduce potential noise impacts to wildlife species. Additionally, Municipal Code 17.20.160 would limit project-related noise to no greater than a 60 dBA CNEL within known wildlife nesting or migration areas. Therefore, noise impacts to protected or candidate status species would be less than significant.

Dust

Excavation, ground clearing, and access routes could also result in air quality impacts (dust, exhaust) that could affect adjacent habitats. Disturbed soils could result in the accumulation of dust on the surface of the leaves of trees, shrubs, and herbs in adjacent open space areas. Such dust can affect the respiratory function of the plants when dust accumulation is excessive. However, as discussed in Section 4.2, *Air Quality*, development under the General Plan Update would have to comply with SCAQMD District Rule 403, which requires dust suppression measures including watering, application of environmentally safe soil stabilization materials, and/or roll compaction to prevent the creation of dust. Therefore, impacts from dust would be less than significant.

Night Lighting

The Study Area is currently characterized by a moderate to high level of nighttime illumination, depending on location, that allows for safe and secure nighttime operation of campus facilities and events and on-campus residential life. Depending upon location, night lighting of new facilities, roads, or pathways or during project construction could result in an indirect impact on the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife adjacent to the lighted areas.

As discussed in Section 4.1, *Aesthetics*, development that could occur through implementation of the General Plan Update would increase the ambient nighttime lighting at the proposed sites. Increased lighting could come from exterior lights on buildings, light spilling from streetlights. The City's Land Use Development Code regulates lighting by its "Dark Skies Ordinance," or Section 17.27.020 et seq. These regulations intend to minimize artificial light effects on wildlife while also maintaining appropriate lighting levels in developed areas to ensure safety. The lighting ordinance stipulates that exterior lights must limit light trespass onto adjacent properties and limit glare by shielding and directing light fixtures to achieve these limitations. Exterior lighting within a scenic corridor overlay zoning district may be of types and levels necessary for security, but no more. The City's condition of approval system requires the applicant of any project to submit evidence that the proposed work will comply with the code (City of Calabasas, Development Code Section 17.27.040). This review process would reduce potential impacts from night lighting to less than significant.

Mitigation Measures

The following mitigation measures (MM) would be required to address potential impacts to special-status species and habitat.

For any projects that require vegetation removal, ground disturbance of unpaved areas, parking or staging of equipment or material on unpaved areas, access routes on unpaved areas, or any rehabilitation or construction staging within 300 feet of unpaved areas (except for landscaped developed areas) that contain or have the potential to support special-status species, sensitive natural communities, or suitable habitat to support special-status species, the following measure shall apply:

MM BIO-1 Pre-Construction Biological Resources Reconnaissance Survey and Reporting

For all future housing sites that are either completely vacant or majority of the site is vacant/undeveloped, prior to the issuance of a grading permit, a qualified biologist shall be retained

by the project applicant to conduct a biological resources reconnaissance of the site. The biological resources assessment shall characterize the biological resources present on the project site and determine the presence or absence of sensitive species.

If the biologist determines that special-status species may occur, focused surveys for special-status plants shall be completed in accordance with *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW, March 20, 2018) and *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (USFWS, September 23, 1996). If it determined that the project site has suitable habitat for special-status wildlife, focused surveys shall be conducted to determined presence/absence including species-specific surveys in accordance with CDFW or USFWS protocols for State or federally listed species, respectively, that may occur.

The report shall identify 1) approximate population size and distribution of any sensitive plant or animal species, 2) any sensitive habitats or sensitive natural communities (such as wetlands or riparian areas), and 3) any potential impacts of proposed project on wildlife corridors. Off-site areas that may be directly or indirectly affected by the individual project shall also be surveyed. The report shall include site location, literature sources, methodology, timing of surveys, vegetation map, site photographs, and descriptions of on-site biological resources (e.g., observed and detected species, as well as an analysis of those species with the potential to occur on-site). The biological resources assessment report and surveys shall be conducted by a qualified biologist, and any special status species surveys shall be conducted according to standard methods of surveying for the species as appropriate.

If sensitive species and/or habitat are absent from the individual project site and from adjacent lands potentially affected by the individual project, a written report substantiating such shall be submitted to the City Planning Division prior to issuance of a grading permit, and the project may proceed without any further biological investigation.

If it is determined that a special-status species may be impacted by a project, consultation with USFWS and/or CDFW shall occur prior to issuance of a development permit from the City to determine measures to address impacts such as avoidance, minimization, restoration, or compensation.

If the biologist determines that wildlife movement corridors are present on any portion of a project site, consultation with the appropriate agency (USFWS and/or CDFW) shall occur prior to issuance of a development permit from the City to determine measures to address impacts such as avoidance, minimization, restoration, or compensation. The analyses shall also describe project impacts to wildlife movement, considering the existing and post-project opportunities present to wildlife to safely enter and exit the applicable location(s) on the project site.

MM BIO-2 Pre-Construction Bird Surveys, Avoidance, and Notification

Construction activities initiated during the bird nesting season (February 1 – August 31) involving removal of vegetation or other nesting bird habitat, including abandoned structures and other man-made features, a pre-construction nesting bird survey shall be conducted no more than three days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot and shall include a 500-foot buffer around the construction site. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities (i.e., qualified biologist). If nests are found, an avoidance buffer shall be determined by a qualified biologist dependent upon

the species, the proposed work activity, and existing disturbances associated with land uses outside of the site, which shall be demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to demarcate the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within the buffer until the biologist has confirmed that breeding/ nesting is completed, and the young have fledged the nest.

Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A report summarizing the pre-construction survey(s) shall be prepared by a qualified biologist and shall be submitted to the City prior to the commencement of construction activities.

Proposed project site plans shall include a statement acknowledging compliance with the federal MBTA and CFGC that includes avoidance of active bird nests and identification of Best Management Practices to avoid impacts to active nests, including checking for nests prior to construction activities during February 1 to August 31 and what to do if an active nest is found so that the nest is not inadvertently impacted during grading or construction activities.

MM BIO-3 Pre-Construction Bat Surveys

To avoid the direct loss of bats that could result from removal of trees and/or structures that are confirmed to support a maternity bat roost (e.g., in cavities, under loose bark or in structures such as bridges and abandoned buildings), tree removal or structure demolition shall be scheduled between October 1 and February 28, outside of the maternity roosting season. If trees and/or structures must be removed during the maternity season (March 1 to September 30), a qualified bat specialist shall conduct a focused survey to identify those trees and/or structures proposed for disturbance that could provide hibernacula (i.e., a place in which an animal seeks refuge) or nursery colony roosting habitat for bats.

Each tree and/or structure identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist prior to tree disturbance to determine the presence or absence of roosting bats. If it is determined that a bat roost may be present, a Bat Avoidance Plan shall be prepared and approved by CDFW prior to issuance of a development permit from the City. The Plan shall identify bat survey methods and materials and methods to exclude or prevent bats from using the roost without directly impacting any bats.

MM BIO-4 Worker Environmental Awareness Program and Construction Monitoring

On specific properties and in situations where potentially significant biological resource impacts have been confirmed to be likely by a consulting biologist, a qualified biologist shall be assigned for monitoring and reporting purposes. This person shall also conduct a Worker Environmental Awareness Program (WEAP) for all personnel working at the site. The WEAP shall focus on conditions and protocols necessary to avoid and minimize potential impacts to biological resources.

Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a WEAP training, conducted by a qualified biologist, to aid workers in recognizing special status biological resources potentially occurring in the project area. This training will include information about the special-status species with potential to occur in the project area. The specifics of this program shall include identification of special-status species and habitats, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. A fact sheet conveying this

information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer documenting they have attended the WEAP and understand the information presented to them. The crew foreman shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special-status species and sensitive natural communities.

MM BIO-5 Restoration Plans

For all future housing sites that are either completely vacant or majority of the site is vacant/undeveloped, prior to the issuance of a grading permit, the applicant shall prepare and submit a Restoration Plan, which shall mitigate for impacts to riparian vegetation and/or CDFW sensitive natural communities at a 2:1 ratio for permanent impacts and a 1:1 ratio for temporary impacts, or as otherwise approved by CDFW and the City.

The Restoration Plan shall describe methods to mitigate for impacts to riparian vegetation and/or CDFW sensitive natural communities via an acceptable mitigation approach that involves one or a combination of the on-site or off-site restoration or enhancement of degraded in-kind habitats. If on-site or off-site restoration is not feasible as determined by the City and CDFW, payment into an in-lieu fee program approved by the City and CDFW or payment into a CDFW-approved mitigation bank is allowed.

If on-site or off-site restoration would occur, a Restoration Plan shall be developed by a qualified biologist, restoration ecologist, or resource specialist and submitted to and approved by the City and CDFW prior to issuance of a development permit for the project. In broad terms, the Restoration Plan shall at a minimum include:

- Description of the project/impact and mitigation sites;
- Specific objectives;
- Success criteria;
- Performance standards;
- Plant palette;
- Implementation plan;
- Maintenance activities;
- Monitoring and reporting plan;
- Adaptive management strategies;
- Responsible parties; and
- Contingency measures.

Success criteria shall at a minimum be evaluated based on appropriate survival rates and percent cover of planted native species, as well as eradication and control of invasive species within the restoration area.

The target species and native plant palette, as well as the specific methods for evaluating whether the project has been successful at meeting the above-mentioned success criteria shall be determined by the qualified biologist, restoration ecologist, or resource specialist and included in the Restoration Plan.

The Restoration Plan shall be implemented over a five-year period and shall incorporate an iterative process of annual monitoring and evaluation of progress and allow for adjustments to the program, as necessary, to achieve desired outcomes and meet success criteria. Annual reports discussing the implementation, monitoring, and management of the Restoration Plan shall be submitted to City and the CDFW. Five years after project start, a final report shall be submitted to the City and the CDFW, which shall at a minimum discuss the implementation, monitoring and management of the mitigation project over the five-year period, and indicate whether the Restoration Plan has met the established success criteria. The annual reports and the final report shall include as-built plans submitted as an appendix to the report. Restoration will be considered successful after the success criteria have been met for a period of at least two years without any maintenance or remediation activities other than invasive species control. The project shall be extended if the success criteria have not been met at the end of the five-year period to the satisfaction of the City and the CDFW.

Significance After Mitigation

Implementation of Mitigation Measures MM BIO-1 through MM BIO-5 would reduce potential impacts to special-status, locally important species, and nesting birds to less than significant levels.

Threshold 2:	Would the General Plan Update have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?
Threshold 3:	Would the General Plan Update have a substantial adverse effect on State or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact BIO-2 REASONABLY FORESEEABLE DEVELOPMENT RESULTING FROM THE GENERAL PLAN UPDATE COULD POTENTIALLY ADVERSELY IMPACT RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITIES DURING PROJECT CONSTRUCTION. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH INCORPORATION OF MITIGATION MEASURES MM BIO-1, MM BIO-4, AND MM BIO-5.

Impact BIO-3 REASONABLY FORESEEABLE DEVELOPMENT RESULTING FROM THE GENERAL PLAN UPDATE COULD POTENTIALLY ADVERSELY IMPACT STATE OR FEDERALLY PROTECTED WETLANDS DEFINED BY SECTION 404 OF THE CLEAN WATER ACT. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH INCORPORATION OF MITIGATION MEASURES MM BIO-1, MM BIO-4, AND MM BIO-5

As stated in 4.3.1 *Setting*, the CNDDDB query (CDFW 2021), riparian habitats have been recorded in and around the Plan Area. According to the National Wetlands Inventory database (see Figure 4.3-1), Las Virgenes Creek in the western portion of the Plan Area is a Freshwater Forested/Shrub Wetland. Las Virgenes Creek, as well as the other tributaries and drainages throughout the Plan Area, would be potentially subject to USACE, CDFW, and RWQCB jurisdiction.

Reasonably foreseeable development under the General Plan Update generally would not result in the direct modification of wetlands or jurisdictional waters given the prioritization of new housing development on infill sites in urbanized areas of the Plan Area. Proposed sites included in the General Plan Update that could be adjacent to freshwater forested shrub wetland or riverine habitat include the Raznick site and sites near Las Virgenes Road north and south of US-101 such as Agoura Road offices, Mureau offices, and Las Virgenes Shopping Center. If future development or utilities

work would occur near wetland features, detailed wetland delineations would be needed to determine the extent of any jurisdictional wetlands and other waters at specific locations and each agency is responsible for making a final determination on the extent of jurisdictional waters for a particular site.

Any proposed development in areas identified as jurisdictional waters and/or wetlands, streambed/banks, or riparian vegetation would be subject to the permit requirements of the USACE, RWQCB, and CDFW, pursuant to Section 404 of CWA and the Porter-Cologne Water Quality Control Act. Actual jurisdictional areas are determined by the State and federal authorities at the time that permits are requested.

Reasonably foreseeable development within or adjacent to sensitive habitats, could result in potential direct and impacts through removal of vegetation, filling of wetland habitat, compaction of soils, and/or indirectly through dust and vegetation thinning. Policies IV-2 through 10, and IV-25 of the 2030 General Plan would reduce direct impacts to riparian habitat. Again, the City decision makers will be required to determine the relative priorities of the values upon which the policies or implementation actions are based, and to act based on that determination (Calabasas 2030 General Plan, pages XIII-15 – XIII-16).

Additionally, the City's grading permit approval process (Municipal Code 15.10.010 and 15.10.050) requires a biological survey for grading proposed within 50 feet of a parcel designated protected open space or that has a conservation easement, and permits would not be exempt from review if grading would occur within 100 feet of a watercourse, wetland, or environmentally sensitive habitat. The approval of a grading permit application and issuance of a grading permit by the City Engineer for ministerial projects requires the completion of any permits required by State or federal agencies (including but not limited to streambed alteration permits from the CDFW and permits for grading within wetlands and certain watercourses from the USACE), or are required by conditions of approval to be obtained before grading work is started. Approval of permits for discretionary projects requires findings that the proposed grading will not result in erosion, stream sediment, or other adverse off-site effects or hazards to life or property.

Implementation of the required SWPPP during project construction would reduce the potential for eroded soil and any contaminants attached to that soil to contaminate a waterbody following a storm event. Future developments under the General Plan Update would employ LID techniques and stormwater control measures as outlined in the Calabasas Municipal Code to prevent, capture, and treat stormwater pollution.

As discussed in Impact BIO-1, the City identifies oak trees as a protected species. The City's Oak Tree Protection and Preservation Policy and guidelines were established to recognize oak trees as significant and valuable aesthetic and ecological resources. The Oak Tree Ordinance requires completion of an Oak Tree Report by a certified arborist for projects involving impacts to oak trees. Additionally, a valid oak tree permit must be issued prior to an oak tree or scrub oak habitat alterations within the city. Therefore, direct impacts from development under the General Plan Update to oak trees would be less than significant.

Adherence to the permit requirements of the USACE, RWQCB, and CDFW, pursuant to Section 404 of CWA and the Porter-Cologne Water Quality Control Act, would reduce impacts to wetlands to a less than significant level. Adherence to existing City policies would reduce impacts to riparian habitat and other sensitive natural communities, but impacts would still have potential to occur; therefore, the General Plan Update would result in a potentially significant impact.

Mitigation Measures

Mitigation Measures MM BIO-1, MM BIO-4, and MM BIO-5 would address potential impacts to riparian habitat and sensitive natural communities.

Significance After Mitigation

Mitigation Measures MM BIO-1, MM BIO-4, and MM BIO-5 would reduce impacts to a less than significant level.

Threshold 4: Would the General Plan Update interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact BIO-4 REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD RESULT IN POTENTIALLY SIGNIFICANT IMPACTS TO WILDLIFE MOVEMENT OR NURSERY SITES. MITIGATION MEASURES MM BIO-1 THROUGH MM BIO-5 WOULD REDUCE IMPACTS TO A LESS THAN SIGNIFICANT LEVEL.

As discussed in Impact BIO-1, the General Plan Update would accommodate the incremental development of new housing units plus redeveloped and developed commercial space. Reasonably foreseeable development at all of the proposed sites, except for the Rancho Pet Kennel site and the Las Virgenes Road shopping center site, would occur within or adjacent to natural areas that may support migratory wildlife corridors. Development activities have the potential to directly (e.g., cutting of trees or other vegetation, or removal of man-made structures containing an active bird nest or denning wildlife) or indirectly (e.g., if activities sufficiently harassed birds to cause nest abandonment) and has the potential to interfere substantially with the movement of native resident wildlife species or with established native resident or migratory wildlife. However, development facilitated by the 2030 General Plan would largely avoid impacts to wildlife movement corridors by emphasizing intensification/reuse of existing urbanized areas. General Plan policies require preservation of wildlife corridors and support acquisition of additional lands near wildlife corridors for open space.

Projects sited within or adjacent to these areas, however, have the potential to generate adverse edge effects that could significantly reduce the use of surrounding habitats by wildlife for movement through the area. Edge effects refer to changes in the biological and physical changes that occur at an ecosystem boundary due to disturbance. The primary potential effect of such projects being impacts from domestic animals, increased human presence, night lighting, and urban noises (e.g., vehicular travel).

As outlined in Section 4.3.2, the Conservation Element of the 2030 General Plan includes policies that protect biological resources and habitat connectivity. Those policies, in combination with policies and regulations of other jurisdictions (e.g., CDFW), can be effectively applied to future development projects to reduce the impacts of urbanization on habitat and wildlife, conserve and enhance the ecological health and functions of sensitive habitat and wildlife corridors.¹ Therefore, these updates would result in less than significant impacts to the movement of any native resident or migratory fish or wildlife species or nursery sites.

¹ Compliance with General Plan policies is determined on a case-by-case basis and the City decision makers determine the relative priorities of the values upon which the policies or implementation actions are based, and to act based on that determination. (Calabasas 2030 General Plan, pages XIII-15 – XIII-16).

Mitigation Measures

Mitigation Measures MM BIO-1 through MM BIO-5 would address potential impacts to wildlife movement and wildlife nursery sites.

Significance After Mitigation

Mitigation Measures MM BIO-1 through MM BIO-5 would reduce impacts to a less than significant level.

Threshold 5:	Would the General Plan Update conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
Threshold 6:	Would the General Plan Update conflict with the provision of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans?

Impact BIO-5 THE GENERAL PLAN UPDATE WOULD NOT CONFLICT WITH ANY LOCAL POLICIES PROTECTING BIOLOGICAL RESOURCES OR CONFLICT WITH AN ADOPTED HABITAT CONSERVATION PLAN. THEREFORE, THE GENERAL PLAN UPDATE WOULD HAVE A LESS THAN SIGNIFICANT IMPACT ON ADOPTED PLANS GOVERNING BIOLOGICAL RESOURCES AND THERE WOULD BE NO IMPACT.

Future development under the Housing Element Update would aim to comply with existing policies under the Conservation Element to maintain green space, and develop and implement procedures to protect sensitive species from potential direct and indirect impacts associated with foreseeable development. Nothing in the Housing Element Update would affect existing Protected Tree Ordinance or other adopted plans and policies governing biological resource.

City of Calabasas Oak Tree Ordinance and Oak Tree Preservation and Protection Guidelines

Development accommodated under the General Plan Update may occur in areas that are known and/or expected to have protected tree species. The City's Oak Tree Ordinance and Oak Tree Preservation and Protection Guidelines (Municipal Code Title 17, Article III, Chapter 17.32) requires permits for the removal, pruning, cutting, and/or encroachment into the protected zone of healthy oak trees. Native oak tree species would be protected in accordance with the City's Oak Tree Ordinance and Oak Tree Preservation and Protection Guidelines. The General Plan Update does not include any components that would preclude implementation of or alter these policies or procedures. Thus, implementation of the General Plan Update would not conflict with any local policies or ordinances protecting biological resources, including protected trees. Therefore, impacts related to local policies or ordinances protecting biological resources would be less than significant.

The City identifies oak trees as a protected species. The City's Oak Tree Protection and Preservation Policy and guidelines were established to recognize oak trees as significant and valuable aesthetic and ecological resources. The Oak Tree Ordinance requires completion of an Oak Tree Report by a certified arborist for projects involving impacts to oak trees. Additionally, a valid oak tree permit must be issued prior to an oak tree or scrub oak habitat alterations within the city. Therefore, direct impacts from development under the General Plan Update to oak trees would be less than significant.

Santa Monica Mountains Significant Ecological Area

The Plan Area is located in the Santa Monica Mountains SEA. The SEA Program, through goals and policies of the County's General Plan and the SEA ordinance (Title 22 zoning regulations) guide development within SEAs. The County's SEA program regulations do not apply to projects within incorporated cities. As discussed in Section 4.9, *Land Use and Planning*, the City's annexation of lands outside its existing limits, including the Craftsman's Corner site, is not a part of the General Plan Update. Once this site is under the City's jurisdiction, reasonably foreseeable development in the Craftsman's Corner site would be required to comply with all City policies and ordinances. Therefore, the General Plan Update would not conflict with the County's General Plan and the SEA ordinance.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.3.4 Cumulative Impacts

Section 15130 of the *CEQA Guidelines* provides guidance on the discussion of cumulative impacts. Two conditions apply to determine the cumulative effect of a project: first, the overall effect on biological resources caused by existing and known or forecasted projects must be considered significant under the significance thresholds discussed above; and second, the project must have a "cumulatively considerable" contribution to that effect. The following are considered with respect to analyzing cumulative impacts to biological resources:

- The cumulative contribution of other approved and proposed projects to fragmentation of open space in the project vicinity;
- The loss of sensitive habitats and species;
- The contribution of the project to urban expansion into natural areas; and
- Isolation of open space in the vicinity by proposed/future projects.

The geographic area to analyze cumulatively considerable biological resource impacts includes the Santa Monica Mountains SEA, which is an ecological system that encompasses portions of the following cities: Malibu, Los Angeles, Calabasas, Agoura Hills, Hidden Hills, and Westlake Village, illustrated in Figure 4.3-2. The General Plan Update would be implemented over eight years; therefore, the cumulative impact analyses for the various biological resources are limited to the identification of the types of impacts that may occur. Most future development and redevelopment under the General Plan Update would be infill in existing urban areas; however, ADUs may be located in rural areas.

Special-Status Species, Sensitive Habitats, and Wetlands

The General Plan Update's contribution to cumulative impacts to special-status species and sensitive habitats is considered cumulatively considerable without mitigation. As development occurs in the lesser or undeveloped portions of the City, habitat for biological resources will continue to be converted to urban development. It is understood that mobile species (e.g., most reptiles, mammals, and birds) may survive this development by moving to other areas, but less mobile species (i.e., species reliant on a certain type of habitat) would not. Conversion of natural habitat could reduce the availability of habitat for special-status species and the natural areas remaining could become isolated and not support biological resources beyond their carrying

capacity. Buildout of the General Plan Update may result in the increase of urban buildout and contribute to the loss of habitat for special-status species, as well as common species. However, implementation of Mitigation Measures BIO-1 through BIO-5 would reduce direct and indirect impacts to wildlife and sensitive vegetation and habitat to less than significant.

If a future project under the General Plan Update would result in removal of sensitive vegetation, then compensatory mitigation may be required depending on the amount of vegetation impacted, which would ensure no net loss of habitat following implementation of the project. As described in Impact BIO-3, impacts to sensitive habitats (i.e., jurisdictional wetlands, riparian vegetation, and aquatic habitat) under the General Plan Update would be cumulatively considerable without mitigation. Implementation of BIO-5, however, would reduce these cumulative impacts through identification, avoidance, and project-specific permitting requirements through appropriate regulatory agencies (e.g., Section 404 permit, Section 401 certification, CFGC Section 1602 authorization). Mitigation for wetlands would be coordinated with the appropriate regulatory agencies on a project-by-project basis to ensure no net loss of functions and values, and the General Plan Update would not result in a cumulatively considerable impact to sensitive habitats and wetlands.

As discussed in Impact BIO-1, the Migratory Bird Treaty Act (MBTA) protects migratory avian species, including sensitive species. Individual project compliance of any project in the Santa Monica Mountains SEA would be required to comply with the MBTA and CFGC, which would ensure that cumulative impacts to migratory birds would not be significant.

City Protected Trees

The City's Oak Tree Ordinance and Oak Tree Preservation and Protection Guidelines (Municipal Code Title 17, Article III, Chapter 17.32) provides protection for oak tree species citywide, as previously discussed. All reasonably foreseeable development in the City, including development under the General Plan, would be subject to these existing ordinances and regulations. Compliance with the Oak Tree Ordinance and Oak Tree Preservation and Protection Guidelines would ensure that there would be no net loss of protected trees citywide. In addition, the City's goal is to preserve existing tree canopy and reasonably foreseeable development under the General Plan Update would be required to avoid and mitigate for impacts to tree canopy. Based on this information, the incremental effect of reasonably foreseeable development under the General Plan Update would not be cumulatively considerable, and cumulative impacts related to the Oak Tree Ordinance and Oak Tree Preservation and Protection Guidelines would be less than significant.

Wildlife Movement

As discussed under Impact BIO-4, development under the General Plan Update could affect wildlife movement and nursery sites, and the General Plan Update contribution to impacts to wildlife corridors and nursery sites may be cumulatively considerable. However, implementation of Mitigation Measures MM BIO-1 through MM BIO-5 would reduce direct and indirect cumulative impacts to wildlife movement and nursery to less than significant.

4.4 Cultural Resources and Tribal Cultural Resources

This section analyzes the potential impacts of the General Plan Update on cultural resources. Impacts to both prehistoric archaeological resources, historic-period resources, and Tribal cultural resources are addressed. This analysis is based in part upon the Cultural Resource Overview and Management Plan for the City of Calabasas General Plan EIR (Wlodarski and Conrad 2007) prepared by the Historic Environmental Archaeological Research Team (HEART) and is available for review at the City of Calabasas Planning Division Public Counter, located at 100 Civic Center Way, Calabasas, California, 91302.

4.4.1 Setting

Cultural resources include prehistoric resources, historic-period resources, and Tribal cultural resources. Prehistoric resources represent the remains of human occupation prior to European settlement. Historic-period resources represent remains after European settlement and may be part of a “built environment,” including man-made structures used for habitation, work, recreation, education and religious worship, and may also be represented by houses, factories, office buildings, schools, churches, museums, hospitals, bridges and other structural remains. Tribal cultural resources include ethnographic elements pertaining to Native American issues and values.

4.4.2 Regulatory Setting

This section includes a discussion of the applicable federal, state, and local laws, ordinances, regulations, and standards governing cultural resources.

California Environmental Quality Act

CEQA requires that a lead agency determine whether a project could have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1), unique archaeological resources (PRC Section 21083.2 [g]), and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

PRC Section 5024.1 requires an evaluation of historic-period resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the state’s historic-period resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, as enumerated according to CEQA and quoted below.

15064.5(a)(3) [...] Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (PRC, § 5024.1, Title 14 California Code of Regulations, Section 4852) including the following:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage

- (2) Is associated with the lives of persons important in our past
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- (4) Has yielded, or may be likely to yield, information important in prehistory or history

15064.5(a)(4) The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC sections 5020.1(j) or 5024.1.

15064.5(b) A project with an effect that may cause a substantial adverse change in the significance of an historic resource is a project that may have a significant effect on the environment.

In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and [c]).

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it does one or more of the following:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (State CEQA Guidelines Section 15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion or eligibility for inclusion in the CRHR (State CEQA Guidelines Section 15064.5[b][2][A]).

Codes Governing Human Remains

The disposition of human remains is governed by Health and Safety Code Section 7050.5 and PRC Sections 5097.94 and 5097.98 and falls within the jurisdiction of the NAHC. If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours.

The NAHC, pursuant to PRC Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment of the remains and associated grave goods.

Assembly Bill 52

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, “tribal cultural resources.” Assembly Bill 52 establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources.

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and meets either of the following criteria:

- a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k)
- b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

AB 52 also establishes a formal consultation process for California Native American Tribes regarding those resources. The formal consultation process must be completed before a CEQA document can be released if a California Native American Tribe traditionally and culturally affiliated with the geographic area of the proposed project requests consultation from the lead agency (PRC Section 21080.3.1). California Native American Tribes to be included in the process are those that have requested notice of any proposed projects within the jurisdiction of the lead agency.

Senate Bill 18

Enacted on March 1, 2005, Senate Bill 18 (SB 18) (California Government Code Section 65352.3 and 65352.4) requires cities and counties to notify and consult with California Native American tribal groups and individuals regarding proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places (sacred sites), prior to adopting or amending a general plan or designating land as open space. Tribal groups or individuals have 90 days to request consultation following the initial contact.

Senate Bill 35 and Assembly Bill 168

Individual projects defined by the General Plan Update may qualify for the ministerial approval process as defined by Senate Bill 35 (SB 35), codified in Government Code Section 65913.41 enacted on September 29, 2017, which expedites and facilitates construction of affordable housing. If so, they are also subject to Assembly Bill 168 (AB 168), an act to amend Sections 65400, 65913.4, and 65941.1 of SB 35, enacted in January 2021. AB 168 requires a pre-consultation process with Native

American Tribes to identify and protect Tribal cultural resources prior to the submission of an SB 35 permit for a housing development project.

City of Calabasas Criteria

City of Calabasas Municipal Code

The City of Calabasas Municipal Code, Chapter 17.36, Historic Preservation (City of Calabasas 2021), establishes procedures for identifying, designating, and preserving historic landmarks or points of interest. Any eligible historic resource may be designated an historic landmark by the City Council pursuant to Section 17.36.060 if it meets the criteria for listing in the National Register of Historic Places (NRHP) or the California Register of Historic Places or:

- Is associated with events that have made a significant contribution to the broad patterns of Calabasas' history;
- Is associated with the lives of persons important to Calabasas' history;
- Embodies the distinctive characteristics of a type, period, region or method of construction; represents the work of a master; or possesses high artistic values; or,
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Under Section 17.36.070 of the Calabasas Municipal Code, a Phase I archaeological assessment is required for any property listed or located within a cultural resource sensitivity area. If significant archaeological resources are found to be present, the Code stipulates treatment methods for the resources.

The City Council may designate any eligible historic resource as a historic district pursuant to Section 17.36.060 if it meets the criteria for listing in the National Register of Historic Places or the California Register of Historical Resources or:

- (a) is a contiguous area possessing a concentration of eligible historic resources or thematically related grouping of structures which contribute to each other and are unified by plan, style, or physical development; and (b) embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic value;
- Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of a park landscape, site design, or community plan.
- Is associated with, or the contributing resources are unified by, events that have made a significant contribution to the broad patterns of Calabasas' history; or
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Potential landmarks or historic districts are first considered by the Historic Preservation Commission at a noticed public hearing and with the property owner's permission. The Historic Preservation Commission decides whether to approve any nomination and forward it to the City Council with a recommendation for historic designation.

The City has adopted the Mills Act, a state law that grants local governments the authority to directly implement a historic preservation program to encourage the preservation and restoration

of designated Historic Landmarks. In exchange for property tax relief, property owners agree to maintain and preserve the exterior of their properties according to the Secretary of the Interior's Standards for the Treatment of Historical Properties guidelines.

City of Calabasas 2030 General Plan Policies

The Cultural Resources Element of the 2030 General Plan includes specific policies intended to ensure that potential impacts to archaeological resources are addressed in conjunction with development of individual sites within the Plan Area. These policies include:

- Policy XI-1** Ensure proper treatment of archaeological resources before development occurs at a site where such resources are present.
- Policy XI-2** Preserve significant archeological and paleontological resources in-situ, when feasible. When avoidance of impacts is not possible, require data recovery mitigation for all significant resources. All forms of excavation in deposits of Native American origin shall be coordinated and monitored by representatives of the Chumash nation.
- Policy XI-3** Ensure proper treatment of historic resources before development occurs at a site where such resources are present, through enforcement of the City's Historic Preservation Ordinance.
- Policy XI-4** Emphasize preservation and adaptive reuse as the preferred approach to the management of historic properties. Where preservation or adaptive reuse are not possible, require that new development reflect the character and historic/cultural references of the original features in their site context. Finally, facilitate the relocation of historic features if the preferred preservation in place is not possible.

Cultural Resources Setting

Prehistoric Context

During the latter half of the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes in all or portions of southern California (c.f., Moratto 1984; Jones and Klar 2007). Wallace (1955, 1978) devised a prehistoric chronology for the southern California coastal region based on early studies and focused on data synthesis associated with four distinct horizons: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although initially lacking the chronological precision of absolute dates (Moratto 1984), Wallace's (1955) synthesis has been modified and improved using thousands of radiocarbon dates obtained from southern California sites by researchers in recent decades (Koerper and Drover 1983; Koerper et al. 2002; Byrd and Raab 2007). The prehistoric chronological sequence for southern California presented below is a composite based on Wallace (1955, 1978) as well as later studies, including Koerper and Drover (1983).

EARLY MAN HORIZON (10,000 – 6000 BCE)

Numerous pre-8000 Before Common Era (BCE) sites have been identified along the mainland coast and Channel Islands of southern California (c.f., Moratto 1984; Erlandson 1991; Rick et al. 2001; Johnson et al. 2002; Jones and Klar 2007). The Arlington Springs site on Santa Rosa Island produced human femurs dated to approximately 13,000 years ago (Johnson et al. 2002; Arnold et al. 2004). On San Miguel Island, human occupation at Daisy Cave (CA-SMI-261) has been dated to nearly

13,000 years ago and included basketry greater than 12,000 years old, the earliest recorded on the Pacific Coast (Arnold et al. 2004).

Although few Clovis- or Folsom-style fluted points have been found in southern California (e.g., Erlandson et al. 1987; Dillon 2002), Early Man Horizon sites are generally associated with a greater emphasis on hunting than later horizons. Recent data indicate the Early Man economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources in coastal areas (e.g., Jones et al. 2002) and on inland Pleistocene lakeshores (Moratto 1984). A warm and dry 3,000-year period called the Altithermal began around 6000 BCE. The conditions of the Altithermal are likely responsible for the change in human subsistence patterns during this period, including a greater emphasis on plant foods and small game.

MILLINGSTONE HORIZON (6000 –3000 BCE)

Wallace (1955:219) defined the Milling Stone Horizon as “marked by extensive use of milling stones and mullers, a general lack of well-made projectile points and burials with rock cairns.” The dominance of such artifact types indicates a subsistence strategy oriented around collecting plant foods and small animals. A broad spectrum of food resources was consumed, including small and large terrestrial mammals, sea mammals, birds, shellfish, and other littoral and estuarine species, near-shore fishes, and seeds and other plant products (Kennett 2005). Variability in artifact collections over time and space indicates Milling Stone Horizon subsistence strategies adapted to environmental conditions (Jones 1996; Byrd and Raab 2007). Lithic artifacts associated with Milling Stone Horizon sites are dominated by locally available tool stone and, in addition to ground stone tools such as manos and metates, chopping, scraping, and cutting tools are very common. The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon and increased dramatically in later periods (Wallace 1955, 1978; Jones 1996).

Two types of artifacts considered diagnostic of the Milling Stone period are the cogged stone and discoidal, most of which have been found at sites dating between 4000 and 1000 BCE (Moratto 1984), though possibly as far back as 5500 BCE (Couch et al. 2009). The cogged stone is a ground stone object with gear-like teeth on the perimeter and is produced from a variety of materials. The function of cogged stones is unknown, though ritualistic or ceremonial uses have been postulated (Eberhart 1961). Similar to cogged stones, discoidals are found in the archaeological record subsequent to the introduction of the cogged stone. Cogged stones and discoidals were often purposefully buried, or “cached.” Cogged stones have been collected in Los Angeles County, although their distribution appears to center on the Santa Ana River basin (Eberhart 1961).

INTERMEDIATE HORIZON (3000 BCE – CE 500)

Wallace’s Intermediate Horizon dates from approximately 3000 BCE – Common Era (CE) 500 and is characterized by a shift toward a hunting and maritime-based subsistence strategy, as well as greater use of plant foods. During the Intermediate Horizon, a noticeable trend occurred towards a greater adaptation to local resources including a broad variety of fish, land mammals, and sea mammals along the coast. Tool kits for hunting, fishing, and processing food and materials reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. This change in milling stone technology is believed to signal a transition from the processing and consumption of hard seed resources to the

increased reliance on acorns (Jones 1996). Mortuary practices during the Intermediate typically included fully flexed burials oriented toward the west (Wallace 1955).

LATE PREHISTORIC HORIZON (CE 500 – HISTORIC CONTACT)

During Wallace's (1955, 1978) Late Prehistoric Horizon, the diversity of exploited plant food resources and land and sea mammal hunting increased even further than during the Intermediate Horizon. More classes of artifacts were observed during this period and high-quality exotic lithic materials were used for small, finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphalt for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955). This change in material culture, burial practices, and subsistence focus coincides with the westward migration of Uto-Aztecan language speakers from the Great Basin region to present day Los Angeles, Orange, and western Riverside counties (Sutton 2008; Potter and White 2009). This tradition manifested in the Los Angeles Basin and adjacent areas as the Angeles Pattern of the Del Rey Tradition, which ultimately led to the ethnographic Gabrieleño (Sutton 2008:36).

Ethnographic and Historical Background

Ethnography

At Spanish Contact, the Calabasas area was occupied by the Chumash, a diverse population living in settlements along the California coast from Malibu Creek to the southeast, Estero Bay in the north, and as far as Tejon Pass, Lake Casitas, and the Cuyama River inland. The islands of San Miguel, Santa Rosa, and Santa Cruz are in Chumash ancestral territory as well.

Following the 1542 Cabrillo voyage, many small Chumash settlements were abandoned and some of the largest historic-period towns were founded during incursions by the Spanish. This change in population distribution is attributed to growth in importance of trade centers and the development of more integrated political confederations. The Chumash economic system enabled them to make efficient use of diverse environments in their territory. Acorns and seeds were traded between the islands and mainland, and interior populations who lacked marine resources traded with coastal populations for fish and other marine resources.

The Spanish viewed the Chumash as unique among California Tribes due to their knowledge of the sea, canoe building expertise, ceremonial organization, their interest in acquiring and displaying possessions, and extensive trade networks. The protohistoric Chumash maintained the most complex bead money system documented in the world. The major inland village of Ta'lopop was established just to the southwest of Calabasas along Las Virgenes Creek. Information obtained since the 1870s suggests that the Chumash were divided into political provinces, with each containing a major capital. Numerous place names exist in the region, including the following:

- Huwam: Village at Rancho El Escorpion, west end of the San Fernando Valley
- Kaspat kaslo'w: "nest of the eagle" – mountain west of San Fernando Valley
- Kats'ikinhin: "pine tree" – village on Las Virgenes Creek, inland from Malibu
- Ta'lopop – a village on Las Virgenes Creek

Historic Period

The post-contact history of California is generally divided into three-time spans: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each of these periods is briefly described below.

SPANISH PERIOD (1769 – 1822)

From Spanish contact (voyages of Cabrillo in 1542 and Vizcaino in 1602), through the Mexican and American Periods, land use patterns changed little in the areas surrounding Calabasas. The Portola-Crespi Expedition of 1769 passed through Calabasas, while returning to San Diego. Juan Bautista de Anza (1773-1775/1776) helped establish the Franciscan missions and Spanish settlements in the region and opened the door to future development. A branch of the El Camino Real passed through Calabasas, a route that was frequently traveled by Native Americans, soldiers, explorers, and civilians alike. Today, the Ventura Freeway (U.S. Highway 101) follows the former alignment of the El Camino Real. Additionally, Malibu Canyon was both a major Native American trade corridor to the Pacific Ocean and route used by early settlers to access Stokes, Piuma, Liberty, and other canyons.

MEXICAN PERIOD (1822 – 1848)

During the Mexican Period, large land grants dominated the region. Prior to this time, the Spanish Crown permitted settlement and allotted certain land concessions, but the deed remained in their possession. These Spanish entitlements were permits that allowed people to graze the land. One concession under the Spanish rule and District of Santa Barbara was made in the vicinity of Calabasas and granted under the name of *El Paraje de Las Virgenes*. It was not until the Mexican Period, however, that the basic tenets of the Land Grant system and ultimately the land use-settlement pattern for the area changed. The project area was sandwiched between Rancho Las Virgenes on the north and Rancho Topanga Malibu Sequit to the south.

AMERICAN PERIOD (1848 – PRESENT)

By the 1840s-50s, cattlemen, shepherders, squatters, and ranch owners were acquiring portions of former Mexican land grants in the region. Legendary landowners such as Miguel Leonis, the co-owner (along with his wife Espiritu) of Rancho El Escorpion, Domingo Carrillo and Nemisio Dominguez of Rancho Las Virgenes, and Matthew Keller of Rancho Topanga Malibu Sequit owned much of the property in and around Calabasas. Just to the west, Don Pedro Alacantara Sepulveda built an adobe (which still stands, and is under the jurisdiction of the State Park system) for his wife Maria Magdalena Soledad Dominguez circa 1853.

Calabasas

After the Mexican American War and statehood, land use and ownership patterns evolved slowly. Leonis remained a major local ranch owner, and he enlarged and remodeled his Monterey-style house. The Leonis Adobe remains the most enduring historic example of this period of Calabasas history and serves as an anchor for Old Town Calabasas.

After the turn of the century, several select spots in the Calabasas area developed into weekend respites from the city. Crater Camp in Monte Nido was opened in 1914 as a year-round picnic ground. The Calabasas Highlands community was subdivided in the 1920s and reflects a development style that links Calabasas to its neighbor Topanga with respect to architectural styles and parcel patterns.

Unreliable water sources constrained larger-scale subdivision and development in Calabasas through the first half of the 20th Century. The founding of the Las Virgenes Municipal Water District in 1958 provided a consistent water supply and coincided with the state's investment in the freeway system. These two structural events led to a sustained development boom as the rapidly urbanizing San Fernando Valley pushed westward along the Ventura Freeway corridor. In 1969, Warner Ranch was purchased and subdivided, ushering in the master planned Calabasas Park area. The upgrading of U.S. Highway 101 to a full freeway occurred in the 1960s and developers began subdividing communities in proximity to freeway interchanges at Valley Circle/Mulholland Drive, Parkway Calabasas, Las Virgenes Road, and Lost Hills Road.

Residents were not the only newcomers to Calabasas. Corporations also began moving into Calabasas, particularly in the 1980s. Lockheed Corporation moved from its historic Burbank "skunkworks" location to a new corporate headquarters in Calabasas Park in the early 1980s. The building was later occupied by Countrywide Financial. Other corporations set up headquarters along the Agoura Road corridor between Las Virgenes and Lost Hills Road.

After cityhood, a concerted effort was made to better regulate development and a number of regional landscaping and urban design projects were initiated. Notable among these are streetscape improvements in Old Town Calabasas and Mulholland Highway, and the restoration of Las Virgenes Creek in the Ventura Freeway corridor.

Archeological and Historical Resources

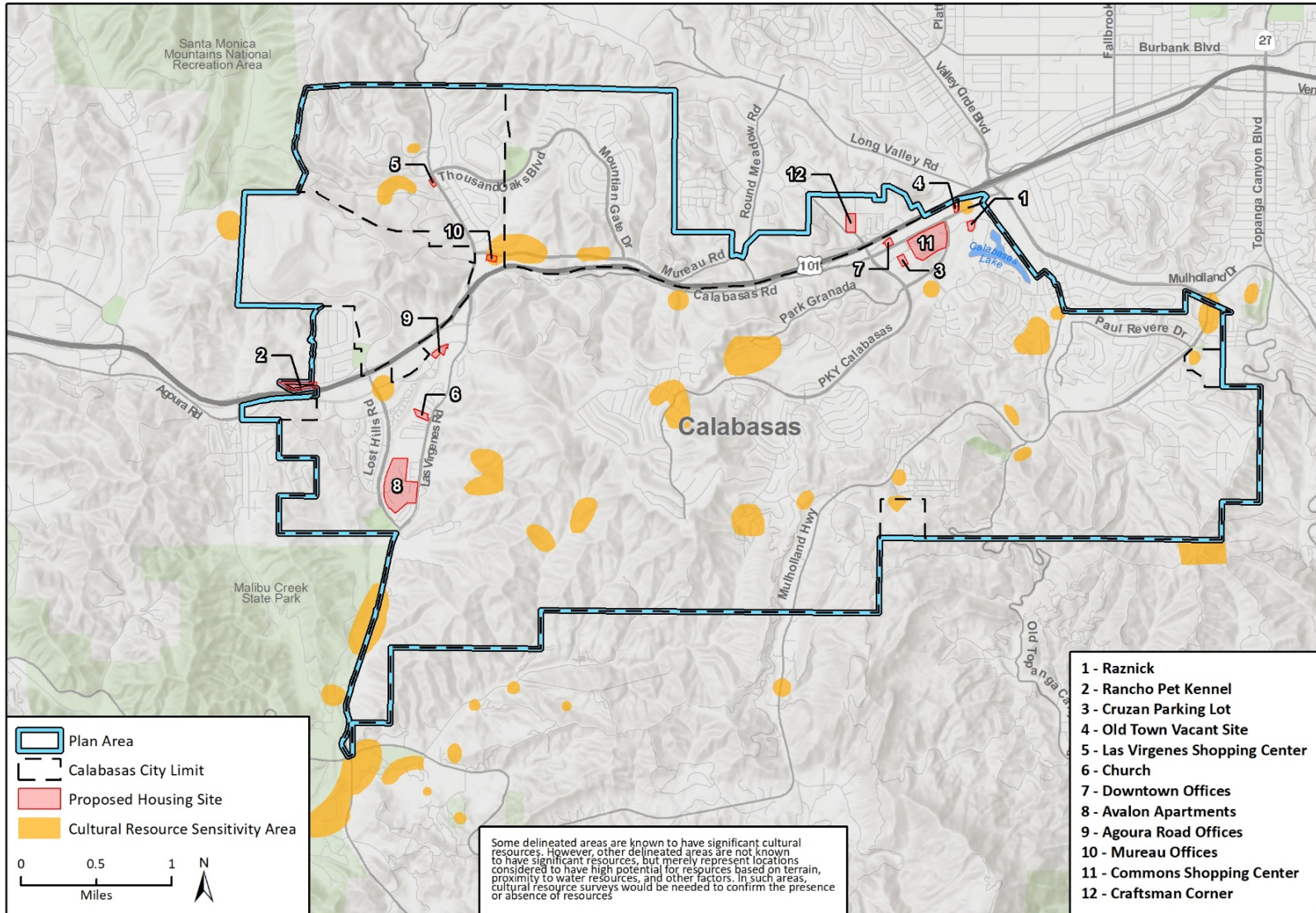
Much of the Calabasas Plan Area and its neighboring areas consist of land at the base of hills, ridgelines, at the mouths of canyons and along creeks, rivers, and other watercourses. According to the Cultural Resource Overview and Management Plan (Wlodarski and Conrad 2007), there are 116 documented archaeological resources in the general vicinity of the city,¹ attesting to the rich prehistoric and historic-period heritage described above. In addition, the Cultural Resource Overview and Management Plan indicates that 125 archaeological studies have been conducted in the Calabasas vicinity since 1965, and an estimated 60% of the Plan Area Boundary has been surveyed.

Of these 116 identified archaeological resources, approximately 80% are classified as "prehistoric" and 20% are classified as "historic-era" (Wlodarski and Conrad 2007). Prehistoric archaeological resources in the vicinity of Calabasas include rock shelters, food processing stations, stone tools and debris, milling, sites, fire pits. Historic-period archaeological resources include stone foundations, wood ranch houses, foundations, rock pits, suspension bridges, and retaining walls (see Figure 4.4-1 for the generalized areas of prehistoric and historic-period cultural resource sensitivity).

The most notable historic landmark in the Calabasas Plan Area (though outside the city) is the Leonis Adobe (Los Angeles Historical Cultural Monument Number One). Leonis Adobe is a Monterey-Style brick adobe built in 1844. The house was occupied by Miguel Leonis, once considered the "King of Calabasas", and his wife Espiritu Chijulla. Currently, the house serves as a museum and is restored to the way that it is believed to have appeared during Leonis' occupancy (Leonis Adobe Museum). Leonis Adobe was listed on the National Register of Historic Places in 1975.

¹ The Cultural Resource Overview and Management Plan considered a larger area than the General Plan Area so some identified resources are outside the Plan Area boundary.

Figure 4.4-1 Locations of Proposed Housing Sites and Cultural Resource Sensitivity Areas



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 Sources provided by City of Calabasas, 2018

Fig. X Cultural Resource Sensitivity Areas

The Masson Homestead House, established circa 1897 and located at the intersection of Old Topanga Canyon Road and Mulholland Highway, is another notable resource in Calabasas. Although this building has not been formally listed at the national, state, or local level, it is generally acknowledged as an integral part of the gateway to the Santa Monica Mountains National Recreation Area.

4.4.3 Impact Analysis

This section describes how the General Plan Update inventory was accessed, what the potential impacts to cultural resources are for this project, and the mitigation measures required to bring those impacts to a less than significant threshold.

Review of Culturally Sensitive Areas

The City of Calabasas Cultural Resource Overview and Management Plan (Wlodarski and Conrad 2007) identified a number of areas of cultural resource sensitivity in the Calabasas area. Because the General Plan Update seeks to avoid development in areas of potential archaeological resource sensitivity, the project inventory was analyzed to determine if any of the properties are in known culturally sensitive areas (see Figure 4.4-1).

Review Results

The analysis identified a single property, the Mureau Offices (APN # 2052043015), located in a known area of cultural resource sensitivity. This property is fully developed and possesses no known record of historic-period use. The analysis also identified a single property, the Old Town Vacant Lot (APN # 2068002023), located directly adjacent to an area of known cultural resource sensitivity. This property is an undeveloped gravel lot that does possess a record of historic-period use. Aerial imagery suggests the property is highly disturbed. No other properties in the General Plan Update are located in or adjacent to known areas of cultural resource sensitivity. However, that does not preclude those properties from potentially containing cultural or Tribal resources. Therefore, an additional Cultural Resource Site Type analysis was conducted to identify the types of cultural resources that may be present on all General Plan Update properties.

Cultural Resource Site Types and Inventory

All sites listed in the inventory for the General Plan Update were reviewed for their current property status and their developmental history using information from the Los Angeles County Office of the Assessor and historic aerial imagery (Historic Aerials 2021). This review was conducted as a programmatic approach for large-scale city planning. This analysis generates expectations about the types of cultural resources that may be present on the General Plan Update properties. Furthermore, it informs on potential impacts to cultural resources and the mitigation measures necessary to reduce those impacts to less than significant levels.

Each property was identified as a particular site type based on their development status, zoning, and historical use (Table 4.4-1). Site types are based on three categories: their current developmental status (previously developed versus undeveloped), their current zoning status (commercial versus residential), or their record of historic use, i.e. does the property contain evidence of historic period use, (Less Than 50 Years Old versus Greater Than 50 Years Old). Site types include:

▪ **Previously Developed – Commercial – Less than 50 Years Old**

This site type represents a current commercially developed property that does not contain any record of previous historic-period use or occupation. Such sites are unlikely to contain significant cultural resources. Twelve of the 23 analyzed parcels for the General Plan Update fall under this site type.

▪ **Previously Developed – Commercial – Greater than 50 Years Old**

This site type represents a current commercially developed property that contains historic-period buildings or structures (>50 years old), or once possessed such resources, which are no longer present. In addition to possible historic-period buildings and structures, these sites may contain other historic-period cultural resources and features. Five of the 23 analyzed parcels for the General Plan Update fall under this site type.

▪ **Undeveloped – Commercial – Less than 50 Years Old**

This site type represents an undeveloped property zoned for commercial use that does not contain any record of previous historic-period use or occupation. These sites may contain undocumented prehistoric and/or historic-period cultural resources, especially in buried contexts. One of the 23 analyzed parcels for the General Plan Update fall under this site type.

▪ **Undeveloped – Commercial – Greater than 50 Years Old**

This site type represents an undeveloped property zoned for commercial use that does contain a record of previous historic-period use or occupation. These sites may contain undocumented prehistoric and/or historic-period cultural resources, especially in buried contexts. One of the 23 analyzed parcels for the General Plan Update fall under this site type.

▪ **Previously Developed – Residential – Less than 50 Years Old**

This site type represents a current residentially developed property that does not contain any record of previous historic-period use or occupation. Such sites are unlikely to contain significant cultural resources. Two of the 23 analyzed parcels for the General Plan Update fall under this site type.

▪ **Previously Developed – Residential – Greater than 50 Years Old**

This site type represents a current residentially developed property that contains historic-period buildings or structures (>50 years old) or once possessed such resources that are no longer present. In addition to possible historic-period buildings and structures, these sites may contain other historic-period cultural resources and features. One of the 23 analyzed parcels for the General Plan Update fall under this site type.

▪ **Undeveloped – Residential – Less than 50 Years Old**

This site type represents an undeveloped property zoned for residential use that does not contain any record of previous historic-period use or occupation. These sites may contain undocumented prehistoric and/or historic-period cultural resources, especially in buried contexts. One of the 23 analyzed parcels for the General Plan Update fall under this site type.

▪ **Undeveloped – Residential – Greater than 50 Years Old**

This site type represents an undeveloped property zoned for residential use that contains a record of previous historic-period use or occupation. These sites may contain undocumented prehistoric and/or historic-period cultural resources, especially in buried contexts. There are no parcels for the General Plan Update that fall under this site type.

Table 4.4-1 Site Type Inventory for the General Plan Update.

Site Name	Assessor Parcel Number	Address	Site Type and Institutional Use
Raznick	2068005012	23480 Park Sorrento	Previously Developed-Commercial- Less than 50 Years Old
	2068005011	23480 Park Sorrento	Undeveloped-Commercial- Less than 50 Years Old
Rancho Pet Kennel	2052013036	27201 Canwood Street	Previously Developed-Residential- Greater than 50 Years Old
Cruzan Parking Lot	2068003034	Civic Center Way	Previously Developed-Commercial- Less than 50 Years Old
Old Town Vacant Site	2068002023	25600 Calabasas Rd	Undeveloped-Commercial- Greater than 50 Years Old: Directly adjacent to a known area of cultural resource sensitivity
Las Virgenes Shopping Center	2052005034	5657 Las Virgenes Rd	Previously Developed-Commercial- Greater than 50 Years Old
	2052005035	5657 Las Virgenes Rd	Previously Developed-Commercial- Greater than 50 Years Old
Church	2064003141	4235 Las Virgenes Rd	Previously Developed-Commercial- Greater than 50 Years Old
Downtown Offices	2068002029	23945 Calabasas Rd	Previously Developed-Commercial- Less than 50 Years Old
Avalon Apartments	2063034037	3848 Lupine	Previously Developed-Residential- Less than 50 Years Old
	2063034038	3909 Ceanothus Pl	Previously Developed-Residential- Less than 50 Years Old
Agoura Road Offices	2064020007	26540 Agoura Rd	Previously Developed-Commercial- Less than 50 Years Old
	2064020023	26520 Agoura Rd	Previously Developed-Commercial- Less than 50 Years Old
Mureau Office	2052043015	26050 Mureau Rd	Previously Developed-Commercial- Less than 50 Years Old: Located in a known area of cultural resource sensitivity
Commons Shopping Center	2068003020	4799 Commons Way	Previously Developed-Commercial- Less than 50 Years Old
	2068003023	4776 Commons Way	Previously Developed-Commercial- Less than 50 Years Old
	2068003021	4719 Commons Way	Previously Developed-Commercial- Less than 50 Years Old
	2068003022	4710 Commons Way	Previously Developed-Commercial- Less than 50 Years Old
	2068003028	N/A	Previously Developed-Commercial- Less than 50 Years Old
	2068003024	4798 Commons Way	Previously Developed-Commercial- Less than 50 Years Old

Site Name	Assessor Parcel Number	Address	Site Type and Institutional Use
Craftsman’s Corner	2049021053	5034 Parkway Calabasas	Previously Developed-Commercial- Greater than 50 Years Old
	2049022040	N/A	Undeveloped-Residential- Less than 50 Years Old
	2049019028	5124 Douglas Fir	Previously Developed-Commercial- Greater than 50 Years Old

Significance Thresholds

The review below describes potential cultural and Tribal resource impacts related to the General Plan Update and the mitigation measures required to reduce those impacts to less than significant levels.

Threshold 1: Would the General Plan Update cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact CUL-1 DEVELOPMENT FACILITATED BY THE GENERAL PLAN UPDATE COULD ADVERSELY AFFECT IDENTIFIED AND PREVIOUSLY UNIDENTIFIED ARCHAEOLOGICAL CULTURAL RESOURCES. THIS IS CONSIDERED A POTENTIALLY SIGNIFICANT IMPACT. MITIGATION MEASURES MM CUL-1(A) THROUGH MM CUL-1(E) WOULD REDUCE IMPACTS TO ARCHAEOLOGICAL RESOURCES TO LESS THAN SIGNIFICANT.

All archeological resources are subject to Policy XI-2 of the Cultural Resources Element of the 2030 General Plan. It aims to preserve, when feasible, significant archeological resources in-situ and requires all forms of excavation in deposits of Native American origin to be coordinated and monitored by representatives of the Chumash nation.

A previous cultural resource analysis identified more than 100 archaeological (both historic-period and prehistoric) resource sites in the Calabasas area (Wlodarski and Conrad 2007). While only two General Plan Update properties (APN # 2052043015 and 2068002023) are located in or adjacent to known cultural resource sensitive areas, the potential to encounter additional, unidentified resources on General Plan Update properties is considered moderate given the density of cultural resources in the Calabasas area. Because the General Plan Update could potentially facilitate development in areas of cultural resource sensitivity, the possible impact to archaeological resources is considered potentially significant.

Sites identified as “Older than 50 Years Old,” “Undeveloped,” or in, or adjacent to, areas of known cultural resource sensitivity may contain previously unidentified cultural resources (see Table 4.4-1). Undeveloped properties have a higher probability of containing previously unidentified archaeological resources on the surface and in buried contexts given the probable lack of previous ground-disturbing activities on those properties. However, ground-disturbance into undisturbed soils on any General Plan Update property could contain previously unidentified archaeological resources in buried contexts. Properties identified as an “Older than 50 Years Old” site type may contain historic-period resources (i.e., artifacts, buildings, structures) because those properties possess historic-period buildings and/or evidence of past historic-period use (e.g., farmland, demolished buildings, old roads).

Table 4.4-2 lists the properties in the General Plan Update inventory that have potential impacts to identified or previously unidentified archaeological cultural resources and thus require mitigation to reduce impacts. This is considered a potentially significant impact and mitigation is necessary.

Table 4.4-2 General Plan Update Properties that are Undeveloped or are within, or adjacent to, Known Areas of Cultural Resource Sensitivity

Site Name	Assessor Parcel Number	Address	Site Type
Raznick	2068005011	23480 Park Sorrento	Undeveloped-Commercial- Less than 50 Years Old
Old Town Vacant Site	2068002023	25600 Calabasas Rd	Undeveloped-Commercial- Greater than 50 Years Old: Directly adjacent to a known area of cultural resource sensitivity
Craftsman’s Corner	2049022040	N/A	Undeveloped-Residential- Less than 50 Years Old
Mureau Office	2052043015	26050 Mureau Rd	Previously Developed-Commercial- Less than 50 Years Old: Located in a known area of cultural resource sensitivity.

Mitigation Measures

The following mitigation measures would address potential impacts to previously unidentified cultural resources. Mitigation measure CUL-1(a) requires a cultural resources record search on all properties identified as “Older than 50 Years Old,” “Undeveloped,” or in, or adjacent to, areas of known cultural resource sensitivity (see Table 4.4-2 and Table 4.4-3). A record search will identify if any previous cultural resources studies were conducted on the property and if known cultural resources are present. Mitigation measure CUL-1(b) consists of a cultural resources field survey that will determine if any previously unidentified cultural resources are present on the surface that could be impacted by construction activities. Mitigation measure CUL-1(b) will be required on all properties listed in Table 4.4-2 unless the record search (under CUL-1(a)) reveals that a recent archaeological assessment has been conducted on those properties. Excluding the Old Town Vacant Lot (APN #2068002023), all sites identified as “Greater than 50 Years Old” (see Table 4.4-1) are fully developed and will not require MM CUL-1(b) unless deemed necessary following implementation of MM CUL-2(a).

Mitigation measures MM CUL-1(c), MM CUL-1(d), and MM CUL-1(e) are required for any General Plan Update project that requires ground-disturbance into previously undisturbed soils. Mitigation measure CUL-1(c) ensures that construction workers are provided with the proper training to help identify and protect any cultural resources discovered during construction activities. Mitigation measure CUL-1(d) requires archaeological and Native American monitors (if requested during consultation) to monitor and inspect all ground-disturbing activities into undisturbed soils to prevent significant impacts to cultural resources that may be uncovered during construction. Finally, MM CUL-1(e) requires construction activities to be halted and a qualified archaeologist be consulted if cultural resources are discovered during ground-disturbing activities. The archaeologist will assess the find and develop a mitigation plan, if necessary, that could include additional work such as data recovery excavation and Tribal consultation.

MM CUL-1(a) Cultural Resource Record Search

As a condition of approval, prior to issuance of construction permits, a cultural resource record search from the South Central Coastal Information Center (SCCIC) at California State University, Fullerton shall be conducted and submitted to the City for all properties identified as “Older than 50 Years Old,” “Undeveloped,” or in, or adjacent to, areas of known cultural resource sensitivity. A record search is required to identify all previous cultural resources work and previously recorded cultural resources within a 0.5-mile radius of the project site.

MM CUL-1(b) Cultural Resource Survey

As a condition of approval, prior to issuance of construction permits, a cultural resource survey shall be conducted and submitted to the City, if deemed necessary by the results of the cultural resources record search (in accordance with MM CUL-1(a)), by a qualified archaeologist prior to any planned development projects for undeveloped properties or properties in, or adjacent to, areas of known cultural resource sensitivity. This ensures that no previously unidentified cultural or Tribal cultural resources are present on the surface of a property that can be impacted by development.

MM CUL-1(c) Training for Unanticipated Discovery of Archaeological Resources

Prior to beginning construction activities, a qualified archaeologist shall be retained to conduct a Worker's Environmental Awareness Program (WEAP) training on archaeological sensitivity for all construction personnel prior to the commencement of any ground-disturbing activities. The training shall be conducted by an archaeologist who meets or exceeds the Secretary of Interior's Professional Qualification Standards for archaeology. Archaeological sensitivity training will include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.

MM CUL-1(d) Archaeological and Native Monitors

During initial ground disturbing activities related to the proposed project, both a qualified archaeologist and a locally affiliated Native American monitor shall monitor construction activities within the project site. Initial ground disturbance is defined as disturbance within previously undisturbed native soils. If, during initial ground disturbance, the qualified archaeologist determines that the construction activities have little or no potential to impact cultural resources (e.g., excavations are within previously disturbed, non-native soils, or within soil formation not expected to yield cultural resources deposits), the qualified archaeologist may recommend, in consultation with the Native American monitor, that monitoring be reduced or eliminated.

MM CUL-1(e) Stop Work Orders

If cultural resources are encountered during ground-disturbing activities, whether or not a monitor is present, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology (National Park Service 1983) should be contacted immediately to evaluate the find. If the discovery proves to be eligible for listing in the CRHR, the qualified archaeologist will develop a mitigation plan that may include additional work such as data recovery excavation. Native American consultation may also be warranted to avoid or minimize impacts/adverse effects.

Significance After Mitigation

Mitigation measures MM CUL-1(a), MM CUL-1(b), MM CUL-1(c), MM CUL-1(d), and MM CUL-1(e) and General Plan policy XI-2 would reduce impacts to archaeological resources to a less than significant level.

Threshold 2: Would the General Plan Update cause a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5?

Impact CUL-2 EXISTING HISTORIC-PERIOD RESOURCES WITHIN THE PLAN AREA ARE LOCATED IN AREAS UNLIKELY TO ACCOMMODATE FUTURE DEVELOPMENT. HOWEVER, DEVELOPMENT UNDER THE GENERAL PLAN UPDATE COULD POTENTIALLY FACILITATE DEVELOPMENT ON PROPERTIES CONTAINING HISTORIC-PERIOD BUILDINGS AND STRUCTURES. MITIGATION MEASURES MM CUL-1(A) AND MM CUL-2(A) THROUGH MM CUL-2(C) WOULD REDUCE IMPACTS TO HISTORICAL RESOURCES TO LESS THAN SIGNIFICANT.

While no previously known historic-period resource, building and/or structure will be impacted by the planned development, the six General Plan Update properties identified as “Greater than 50 Years Old” may contain previously unidentified historic-period resources. Historic-period resources include all buildings and/or structures that are older than 50 years old at the commencement of projects (i.e., 1971 as of 2021). Table 4.4-3 lists all General Plan Update properties that contain historic-period buildings and/or structures. Development proposals for these properties have not been developed and finalized as part of the General Plan Update. The disposition of the buildings on these properties has not been determined at this time.

Five of the six “Greater than 50 years Old” General Plan Update properties currently contain historic-period buildings and/or structures (see Table 4.4-3). These buildings/structures may qualify as historical resources under CEQA; however, simply because they are historic-period in age does not automatically confer significance under CEQA. In order for the properties listed in Table 4.4-3 to be considered as historical resources, they would need to qualify under Section 21084.1 of the Public Resources Code; at this time the status of these buildings as such has not been determined. Historical significance could be derived from association with important events or persons of the past or notable and important architectural qualities. These properties would require implementation of mitigation measure MM CUL-1(a) and MM CUL-2(a) prior to the start of development. Mitigation measures CUL-2(a) calls for a qualified historian or architectural historian to record and evaluate these buildings/structures for historical significance prior to any alteration or impact to those properties in order to determine whether any qualify as historical resources pursuant to CEQA. Typically, historical resources may include buildings, structures and objects over 50 years of age. However, guidance from the State of California OHP recommends a threshold of 45 years for the evaluation of potential historical resources because it is recognized that there is often “a five year lag between resource identification and the date that planning decisions are made” (OHP 1995).

Additionally, these properties are subject to General Plan policies XI-3 and XI-4. Policy XI-3 requires the proper treatment of historic resources prior to development through the enforcement of the City’s Historic Preservation Ordinance. Policy XI-4 calls for a preservation and adaptive reuse approach to the management of historic properties. It also calls for new development to reflect the historic character of the original historic resource or facilitate the relocation of the historic resource if preservation or reuse is not feasible. These general plan policies are consistent with mitigation measure CUL-2(b), which would require that any rehabilitation, relocation, or alteration to historical resources would be implemented, to the extent possible, in accordance with the Secretary of the Interior’s Standards for the Treatments of Historic Properties (Standards). In the event that compliance with the Standards is not possible, documentation of the historical resource would be required per MM CUL-2(c). The Las Virgenes Shopping Center parcel (APN # 2052005035) is a historic-period parking lot and would not require the implementation of MM CUL-2(a) through MM CUL-2(c).

Implementation of these mitigation measures and 2030 General Plan policies XI-3 and XI-4 would reduce potential impacts to historic-period resources that may result from structural alterations or changes in setting to a less than significant level.

Table 4.4-3 List of General Plan Update Properties with Buildings or Structures Greater Than 50 Years Old

Site Name	Assessor Parcel No.	Address	Site Type
Rancho Pet Kennel	2052013036	27201 Canwood Street	Previously Developed-Residential- Greater than 50 Years Old: Contains Historic-period Building(s)
Las Virgenes Shopping Center	2052005034	5657 Las Virgenes Rd	Previously Developed-Commercial- Greater than 50 Years Old: Contains Historic-period Building(s)
	2052005035	5657 Las Virgenes Rd	Previously Developed-Commercial- Greater than 50 Years Old: Contains Historic-period Parking Lot- Mitigation not required.
Church	2064003141	4235 Las Virgenes Rd	Previously Developed-Commercial- Greater than 50 Years Old: Contains Historic-period Building(s)
Craftsman’s Corner	2049021053	5034 Parkway Calabasas	Previously Developed-Commercial- Greater than 50 Years Old: Contains Historic-period Building(s)
	2049019028	5124 Douglas Fir	Previously Developed-Commercial- Greater than 50 Years Old: Contains Historic-period Building(s)

Notes: This table only references properties with buildings greater than 50 years old. These properties have not been evaluated for their historic significance. Historic significance is not implied by inclusion in this table. Development proposals for these properties have not been developed and finalized as part of the General Plan Update. The disposition of the buildings on these properties has not been determined at this time.

Mitigation Measures

The following mitigation measures would address potential impacts to historic-period resources.

MM CUL-2(a) Historic-Period Resources Evaluation

As a condition of approval and prior to issuance of construction permits, a historical resources evaluation shall be prepared and submitted to the City by the project applicant for future projects involving a property which includes buildings, structures, objects, sites, landscape/site plans, or other features that are 45 years of age or older. The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior’s Professional Qualifications Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify any potential historical resources within the project sites. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report will be submitted to City for review and approval prior to project approval.

MM CUL-2(b) Rehabilitation or Relocation of Historical Resources

If historical resources are identified within the project area of a proposed development, efforts shall be made to the greatest extent possible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Standards. In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR § 15126.4(b)(1)). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence prior to mitigation implementation.

MM CUL-2(c) Historic American Buildings Survey Documentation

If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, the resource shall be documented in the form of a Historic American Buildings Survey (HABS)-Like report. The report shall generally follow the Secretary of the Interior's Standards for Architectural and Engineering Documentation, HABS Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the PQS and submitted to the City prior to issuance of any permits for demolition or alteration of the historical resource.

Significance After Mitigation

Implementation of mitigation measures MM CUL-1(a) above, MM CUL-2(a) through MM CUL-2(c), and General Plan policies XI-3 and XI-4 would reduce potential impacts to historic-period resources to a less than significant level.

Threshold 3: Would the General Plan Update disturb any human remains, including those interred outside of formal cemeteries?

Impact CUL-3 GROUND-DISTURBING ACTIVITIES ASSOCIATED WITH DEVELOPMENT UNDER THE GENERAL PLAN UPDATE COULD RESULT IN DAMAGE TO OR DESTRUCTION OF HUMAN BURIALS. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH ADHERENCE TO THE STATE OF CALIFORNIA HEALTH AND SAFETY CODE SECTION 7050.5.

Human burials outside of formal cemeteries can occur in prehistoric archeological contexts. While no known burial sites have been identified in the project area (Wlodarski and Conrad 2007), excavations during construction activities could have the potential to disturb these resources, which include Native American burial sites. Although it is unlikely that human remains are present, all General Plan Update properties have at least the *possibility* of containing previously unidentified human remains.

Furthermore, Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in Section 5097 of the California PRC. The California Health and Safety Code (Sections 7050.5, 7051, and 7054) has specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains, and protect them from disturbance, vandalism, or destruction. They also include established procedures to be implemented if Native American skeletal remains are discovered. PRC Section 5097.98 also

addresses the disposition of Native American burials, protects such remains, and established the NAHC to resolve any related disputes.

All development projects are subject to State of California Health and Safety Code Section 7050.5 that states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The county coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the coroner must notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 24 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Adherence to these laws and mitigation measures CUL-1(c), CUL-1(d), and CUL-1(e) ensures that any unanticipated discovery of human remains is treated properly and respectfully and that impacts to those remains would be reduced to less than significant. State laws require consultation with the NAHC and MLD so that Native American remains are treated properly according to Tribal customs. Therefore, potential impacts to Native American remains would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Tribal Cultural Resources

Threshold 4: Would the General Plan Update cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

- a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?

Impact CUL-4 DEVELOPMENT FACILITATED BY THE GENERAL PLAN UPDATE COULD ADVERSELY AFFECT IMPACT TRIBAL CULTURAL RESOURCES. MITIGATION MEASURES MM CUL-1(A), MM CUL-1(B), MM CUL-1(C), MM CUL-1(D), AND MM CUL-1(E) WOULD REDUCE IMPACTS TO TRIBAL CULTURAL RESOURCES TO A LESS THAN SIGNIFICANT LEVEL.

Ground-disturbing activities on any site associated with General Plan Update could expose previously unidentified subsurface Tribal cultural resources. Furthermore, any undeveloped site or site located in or adjacent to an area of known cultural resource sensitivity in General Plan Update inventory (see Table 4.4-1) may possess previously unidentified Tribal cultural resources on the

surface. Given the highly developed nature of most sites associated with the General Plan Update, the likelihood of encountering intact Tribal cultural resources is low to moderate.

As part of the Tribal cultural resource identification process under AB 52, the City of Calabasas sent letters via certified mail to 15 Native American Tribes that requested to be informed through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with these Tribes. The City received a reply from the Fernandeano Tataviam Band of Mission Indians. To date, the City has not received any additional responses for consultation under AB 52 or SB 18.

This impact analysis is part of a high-level, programmatic planning document. Adherence to the requirements of AB 52 or AB 168 would require Tribal consultation with local California Native American Tribes prior to implementation of any project activities subject to CEQA. In compliance with AB 52 or AB 168, a determination of whether project-specific substantial adverse effects on Tribal cultural resources would occur, along with identification of appropriate project-specific avoidance, minimization, or mitigation measures would be required. Due to the programmatic nature of the proposed General Plan Update, it is not possible to fully determine impacts, however no Tribal cultural resources were identified during consultation and no resources eligible for the California Register of Historical Resources or local register were identified as having the potential to be impacted by the proposed program. Any future project implementation would require project-specific Tribal cultural resource identification and consultation, and the appropriate avoidance, minimization, or mitigation would be incorporated.

Mitigation Measures

Implementation of mitigation measures MM CUL-1(a), MM CUL-1(b), MM CUL-1(c), MM CUL-1(d), and MM CUL-1(e) would address potential impacts to Tribal cultural resources.

Significance After Mitigation

Mitigation measures MM CUL-1(a), MM CUL-1(b), MM CUL-1(c), MM CUL-1(d), and MM CUL-1(e) would reduce impacts to Tribal cultural resources to a less than significant level.

4.4.4 Cumulative Impacts

The cumulative setting for cultural and Tribal cultural resource impacts is the Plan Area. Cumulative development under the General Plan Update could possibly disturb areas that may contain prehistoric and historic-period cultural resources and Tribal cultural resources. While there is the potential for significant cumulative impacts to prehistoric and historic-period cultural resources and Tribal cultural resources, it is anticipated that potential impacts associated with individual development projects would be subject to City policies and local and State regulations regarding the protection of such resources. With compliance to existing policies and regulations, mitigation measures, future development under the General Plan Update would be required to avoid or mitigate the loss of these resources. The impacts of the General Plan Update would be reduced to a level of less than significant with the standard conditions of approval and mitigation measures MM CUL-1(a), MM CUL-1(b), MM CUL-1(c), MM CUL-1(d), and MM CUL-1(e), MM CUL-2(a), MM CUL-2(b), and MM CUL-2(c) described above. Therefore, significant cumulative resource impacts would not occur.

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4.5 Geology and Soils

This section analyzes potential impacts related to geology and soils. Specific issues addressed include seismic hazards, underlying soil characteristics, slope stability, and erosion. Data used to prepare this section was obtained from the existing City of Calabasas General Plan, the United States Geological Survey, California Geological Survey, California Department of Conservation, and Southern California Earthquake Data Center. The candidate housing sites were evaluated in this EIR at a programmatic level, based on information available to the City, where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Project-specific analysis was not conducted as those projects are not yet known and analysis would be speculative.

4.5.1 Setting

Geologic Setting

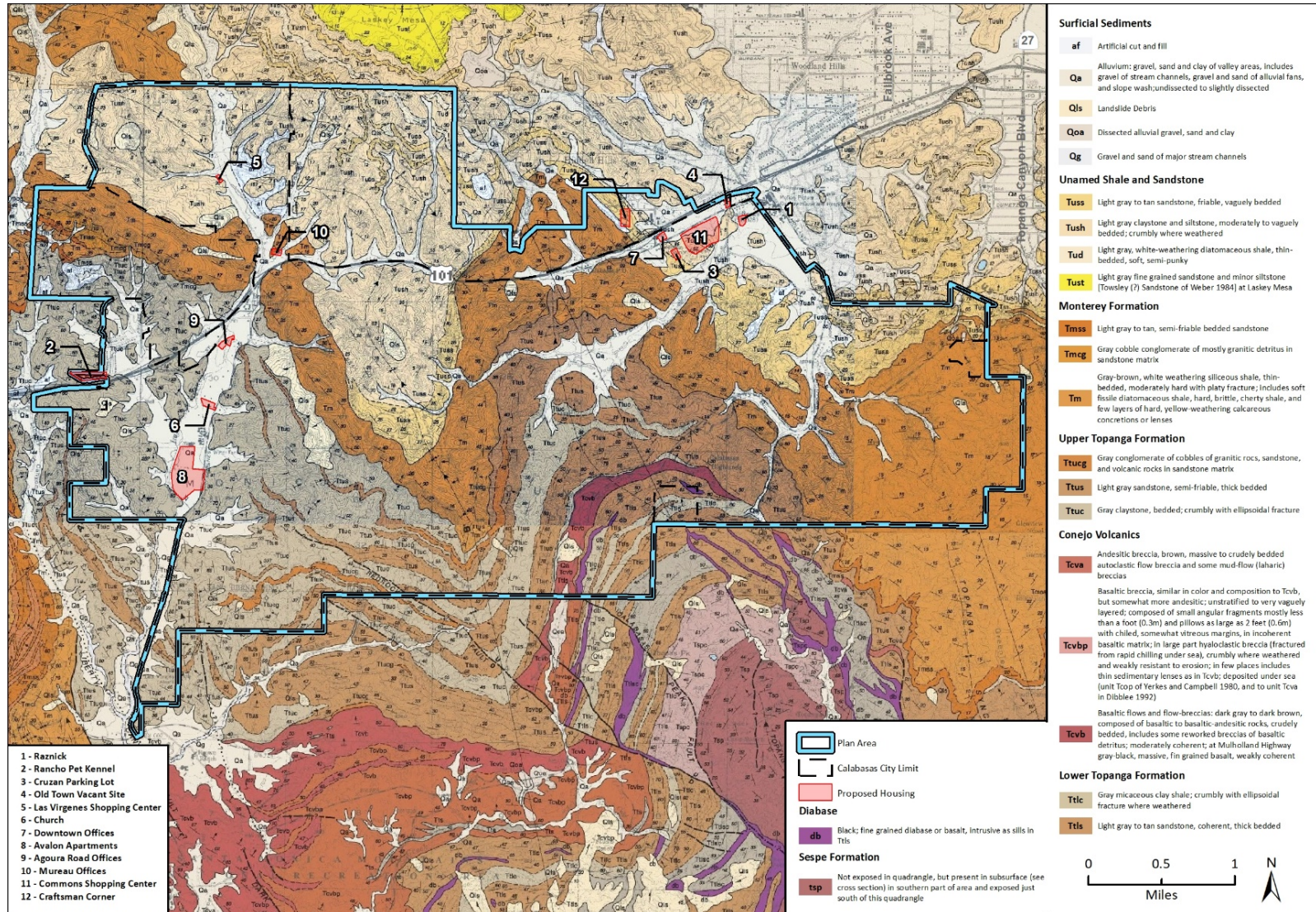
The Plan Area is located in the western part of the Transverse Ranges geomorphic province. The Transverse Ranges consist of generally east-west trending mountains and valleys, which contrast with the overall north-northwest structural trend elsewhere in the state. The valleys and mountains of the Transverse Ranges are typically bounded by a series of east-west trending, generally north dipping reverse faults with left-lateral, oblique movement. The unique canyons and arroyos that characterize the Plan Area include Cold Canyon, McCoy Canyon, Crummer Canyon, Gates Canyon, Las Virgenes Canyon, Stokes Canyon, Malibu Canyon, and Dark Canyon. The Plan Area also contains several significant ridgelines as identified in Figure III-4 in the City's 2030 General Plan. Drainage is generally to the south toward Las Virgenes Creek, Malibu Creek and eventually the Pacific Ocean. Additionally, drainage in the eastern portion of Calabasas, specifically near the Old Town Calabasas and the Civic Center, is generally to the southeast toward the Los Angeles River, and eventually the Pacific Ocean.

The Plan Area is mapped at a scale of 1:24,000 by Dibblee and Ehrenspeck (1992) and includes seven mapped geologic units (each with multiple members) at ground surface: Surficial sediments (Holocene) (Qa, Qls, Qg, af), Miocene shale and sandstone (Tuss, Tush, Tud), Miocene Monterey Formation (Tmss, Tmcg, Tm), upper Miocene Topanga Formation (Ttucg, Ttus, Ttuc), lower Miocene Topanga Formation (Ttlc, Ttls), Miocene Conejo Volcanics (Tcva, Tcvbp, Tcvb), and Miocene Diabase (db,). Figure 4.5-1 depicts the geologic features of the Plan Area as delineated by the California Department of Conservation (DOC).

Quaternary Surficial Sediments

The surficial sediments within the Plan Area consist of Quaternary young (Holocene) alluvium (Qa), Quaternary young (Holocene) stream channel deposits, Quaternary young (Holocene) landslide debris (Qls), and artificial fill associated with prior development (af). Holocene alluvial, stream channel, and landslide deposits consists of gravel, sand, and clays from features such as valleys, stream channels, alluvial fans, and slope washes. Holocene sedimentary deposits within the Plan Area (i.e., Qa, Qls, Qg) are typically too young (i.e., less than 5,000 years old) to preserve paleontological resources. However, exposures of older deposits/formations throughout the Plan Area and the stratigraphic setting in the vicinity are indicative that Quaternary old (Pleistocene) alluvial deposits (i.e., Qoa), consisting of dissected, weakly-indurated, reddish-brown silty clay and sandy clay with angular to subangular rock fragments, underlie the Holocene units mapped at the surface, at shallow to moderate depths (Dibblee and Ehrenspeck 1992). Quaternary old sedimentary

Figure 4.5-1 Mapped Geologic Units



deposits (e.g., Qc, Qt) have a well-documented record of abundant and diverse vertebrate fauna throughout California, including Los Angeles County. Fossil specimens of whale, sea lion, horse, ground sloth, bison, camel, mammoth, dog, pocket gopher, turtle, ray, bony fish, shark, and bird have been reported (Agenbroad 2003; Jefferson 2010; Merriam 1911; Paleobiology Database 2021; Savage et al. 1954; Tomiya et al. 2011; Winters 1954; University of California Museum of Paleontology [UCMP] 2021).

Unnamed (Miocene) Shale and Sandstone

The Unnamed shale and sandstone unit forms an unconformity with the surficial sediments and is mostly comprised of marine sedimentary rocks formed during the Miocene. The sediments are light gray, with some variation, and range from clay-sized to sand-sized grains. According to the Dibblee and Ehrenspeck geologic map, the largest stratigraphic unit is a light gray claystone and siltstone (Tush) (1992), which contains moderate to vague bedding and is friable when weathered. Sandstone (Tuss) makes up most of the surface exposure within the Plan Area. It is light gray to tan and contains vague bedding. The shale (Tud) in this unit is light gray, white-weathering, thin bedded, soft, and friable. Its diatomaceous composition is evidence for the marine origin of this unit. A review of the museum records maintained in the UCMP and Paleobiology online collections databases did not result in records of vertebrate fossil localities from these Miocene sedimentary deposits in Los Angeles County (Paleobiology Database 2021; UCMP 2021). However, the lithology and age of these sediments indicate that this geologic unit may be included with other fossiliferous marine sedimentary deposits of Miocene age, such as the geologic formations discussed below (Dibblee and Ehrenspeck 1992; Yerkes and Campbell 2005).

Monterey Formation

The Monterey Formation is a widespread geologic formation distributed from north of San Francisco to south of Los Angeles. The formation is of marine origin, contains an unusually high amount of silica, and is rich with microfossils (Bramlette 1946). Within the Plan Area, most of the Monterey Formation's surface exposure is a gray-brown, white weathering siliceous shale (Tm).

It thinly bedded, moderately hard with platy fractures. It is also made up of a soft fissile diatomaceous shale and a hard-cherty shale. It also contains a few layers of hard, yellow-weathering calcareous concretions or lenses. A light gray to tan, semi-friable bedded sandstone (Tmss) and a gray cobble conglomerate (Tmcg) make up a small portion of the Monterey surface exposure. The local Monterey Formation dates to the middle and late Miocene. Numerous vertebrate localities have been documented from the Monterey Formation, which yielded specimens of large sea turtles, whale, dolphins, sea lions, shark bones and teeth, sea cows, desmostylians, fish, birds, and many other fauna (Bramlette 1946; Paleobiology Database 2021; UCMP 2021).

Topanga Group and Conejo Volcanics

The Topanga Group was formed during the Miocene and is split into three units (Yerkes and Campbell 1979). The corresponding units from the Dibblee (1992) map are the upper Topanga Formation (Ttucg, Ttus, Ttuc), Conejo Volcanics (Tcva, Tcvbp, Tcvb), and the lower Topanga Formation (Ttlc, Ttls). An intrusive sill of diabase or basalt (db) may also exist between the lower Topanga Formation and the Conejo Volcanics.

The upper Miocene Topanga Formation is representative of a marine transgressive environment with gray claystone (Ttuc), Light gray sandstone (Ttus), and gray conglomerates (Ttucg). The Conejo

Volcanics formed from extrusive volcanic flows and some volcanoclastics. Within the Plan Area there are three units. The andesitic breccia-conglomerates (Tcvab) is composed of subangular to sub-rounded cobbles and boulders of light pinkish gray color with a detrital matrix. The andesitic breccia (Tcva) unit is comprised of brown, massive to crudely bedded autoclastic flow breccia and some mudflow breccia. The basaltic flow and breccia unit (Tcvb) is dark gray to dark brown, composed of basaltic-to basaltic-andesitic rocks, crudely bedded, and includes some reworked breccia of basaltic detritus. The lower Miocene Topanga Formation is the oldest formation exposed at the surface of the Plan Area. Generally, it contains marine transgressive clastic rocks from the early and middle Miocene. The two contained in the formation are light gray to tan sandstone (Ttls) and Gray Micaceous clay shale. Several vertebrate fossils have been reported from the upper and lower Topanga Formation, including specimens of horse (*Parapliohippus carrizoensis*), whale, sea lion, shark, and fish (Koch et al. 2004; Paleobiology Database 2021; UCMP 2021). However, high-heat and high-pressure conditions in which the Conejo Volcanics formed are not suitable for life or fossilization.

Seismic Setting

Faults generally produce damage in two ways: surface rupture and seismically induced ground shaking. Surface rupture is limited to areas very near the fault, while ground shaking can affect a wide area. The level of impact resulting from any seismic activity will depend on factors such as distance from epicenter, earthquake magnitude, and characteristics of soils and subsurface geology.

The U.S. Geological Survey defines active faults as those that have had surface displacement within Holocene time (about the last 11,000 years). Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts. Potentially active faults are ones that have had surface displacement during the last 1.6 million years. Inactive faults have not had surface displacement in the last 1.6 million years.

No active faults have been mapped in the Plan Area; however, the City lies in a seismically active region that is prone to earthquakes. According to the Southern California Earthquake Data Center Map (SCEDC), there are nine active faults and four potentially active faults within 25 miles of the Plan Area (see Table 4.5-1). The range of maximum probable magnitudes for earthquakes emanating from these faults ranges from 6.4 to 7.3. These regional faults as well as the San Andreas Fault (40 miles away) are all capable of affecting the Plan Area.

Table 4.5-1 Partial List of Nearby Regional Faults

Fault Name	Source Type	Distance Between Site and Surface Projection of Earthquake Rupture (Miles)	Estimated Maximum Peak Ground Accelerations (g)	Estimated Maximum Earthquake (M_w)
Malibu Coast	B	5.8	0.459	6.7
Anacapa-Dume	B	8.1	0.477	7.3
Santa Monica	B	8.4	0.334	6.6
Palos Verdes	B	12.2	0.227	7.1
Northridge (E. Oak Ridge)	B	13.0	0.273	6.9
Hollywood	B	14.3	0.183	6.4
Simi-Santa Rosa	B	14.7	0.214	6.7
Santa Susana	B	15.2	0.194	6.6
Sierra Madre	B	15.5	0.181	6.9
Newport-Inglewood (L.A. Basin)	B	17.4	0.129	6.9
Sierra Madre (San Fernando)	B	17.6	0.158	6.7
Oak Ridge (Onshore)	B	18.0	0.175	6.9
Verdugo	B	18.3	0.151	6.7
Holser	B	19.3	0.126	6.5
San Gabriel	B	21.4	0.112	7.0
Compton Thrust	B	21.6	0.138	6.8
San Cayetano	B	23.1	0.128	6.8
Sierra Madre	B	24	0.140	7.0
Raymond	B	24.7	0.098	6.5
Elysian Park Thrust	B	25	0.106	6.7

Source: EQFAULT, Ver. 3.0

The San Andreas Fault Zone is the dominant active fault in California. It is located approximately 40 miles northeast of the Plan Area. It is the primary surface boundary between the Pacific and the North American plate. There have been numerous historic earthquakes along the San Andreas fault. The San Andreas fault is generally understood to be capable of producing a moment magnitude 8.0 earthquake (SCEDC 2013).

Although there are no known faults in the Plan Area, the aforementioned fault systems could cause property damage, possibly resulting in injury and loss of life in the event of a major earthquake due to ground motion. Seismically induced ground-shaking could be experienced in the Plan Area due to seismic activity along other faults in Southern California, depending upon the location of the earthquake epicenter and the character and duration of the seismic event. Specific effects of a seismic event on the Plan Area would depend upon characteristics of the underlying soil and rock, as well as the building materials and techniques used in construction. Secondary effects of ground-shaking can lead to other seismic hazards, such as tsunamis, seiches, landslides, liquefaction, lateral spreading, and lurching.

Seismic Hazards

Although main seismic hazards include the direct impacts related to ground-shaking or surface rupture of a fault, other hazards associated with seismically induced ground-shaking include earthquake-triggered landslides and tsunamis. Additionally, liquefaction, lateral spreading, and lurching are hazards that could result from seismic activity. Liquefaction and landslide zones are shown in the Plan Area are shown in Figure 4.5-2. Other seismic hazards include tsunamis and seiches, which are associated with ocean surges and inland water bodies, respectively, and neither of these hazards would affect the Plan Area.

Liquefaction

Liquefaction is defined as the sudden loss of soil strength due to a rapid increase in soil pore water pressures resulting from seismic ground shaking. Liquefaction potential is dependent on such factors as soil type, depth to groundwater, degree of seismic shaking, and the relative density of the soil. During ground shaking, the alluvial grains are packed into a tighter configuration. Pore water is squeezed from between the grains, increasing the pore pressure. As the pore pressure increases, the load bearing strength of the material decreases. When liquefaction of the soil occurs, buildings and other objects on the ground surface may tilt or sink, and lightweight buried structures (such as pipelines) may float toward the ground surface. Liquefied soil may be unable to support its own weight or that of structures, which could result in loss of foundation bearing or differential settlement. As a result, structures built on this material can sink into the alluvium, buried structures may rise to the surface or materials on sloped surfaces may run downhill. Liquefaction may also result in cracks in the ground surface followed by the emergence of a sand-water mixture. Other effects of liquefaction include lateral spread, flow failures, ground oscillations, and loss of bearing strength (DOC 2021). According to the *City of Calabasas Geotechnical Guidelines*, and depicted in Figure 4.5-2, the following areas in the City are considered potentially hazardous for liquefaction: Old Topanga Canyon, South Las Virgenes Road, and Calabasas Road (City of Calabasas 2010).

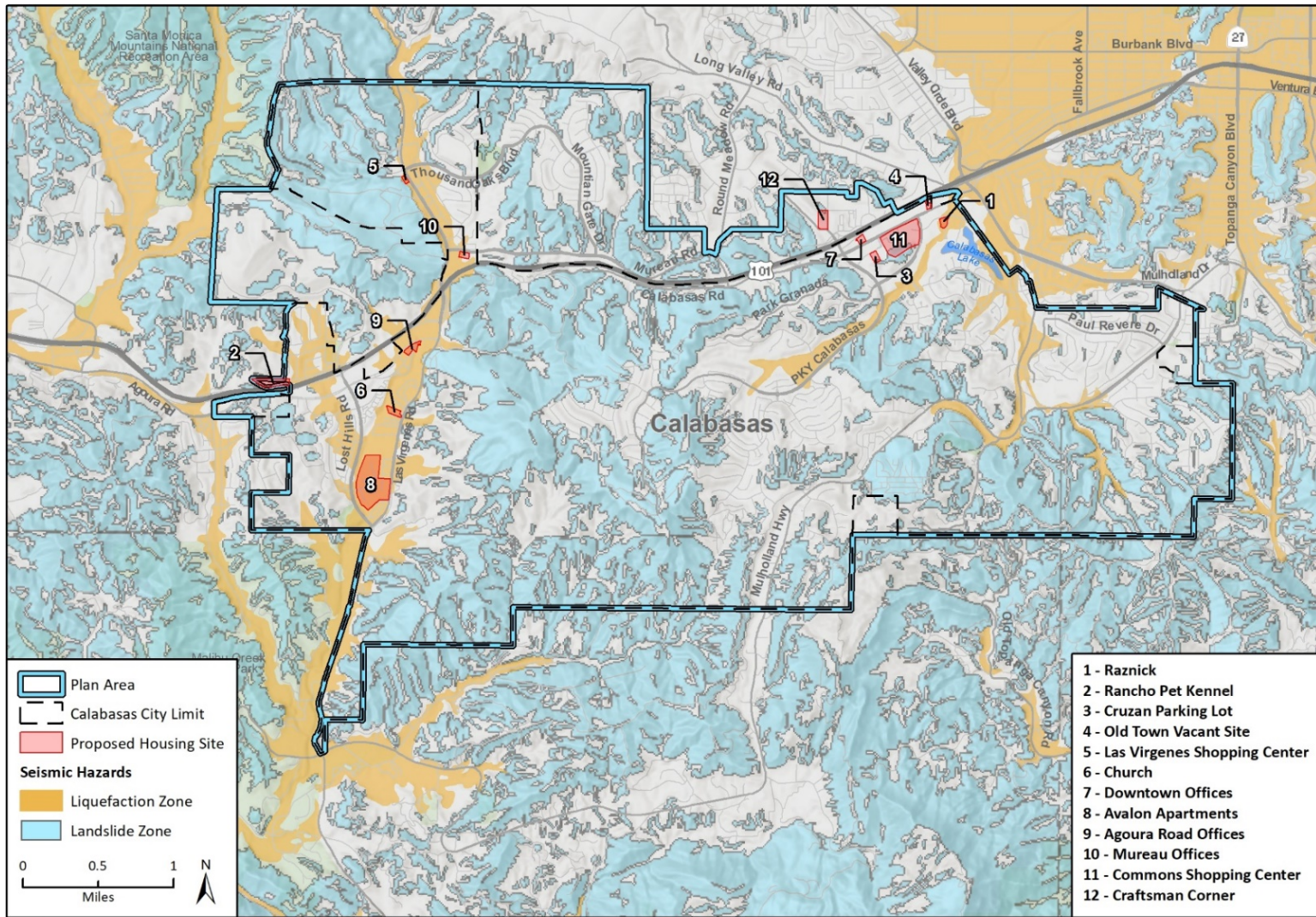
Lateral Spreading

Lateral spreading, closely related to liquefaction, occurs when a subsurface layer liquefies and gravitational and inertial forces cause the layer, and the overlying non-liquefied material, to move in a downslope direction. The potential for lateral spreading is highest in areas underlain by soft, saturated materials, especially where bordered by sloping banks or inclined planes to an adjacent open face bank or slope. According to the *City of Calabasas Geotechnical Guidelines*, two areas in the City are considered potentially hazardous for lateral spreading: South Las Virgenes Road and Calabasas Road (City of Calabasas 2010).

Lurching

Ground-lurching is the horizontal movement of soil, sediments, or fill located on relatively steep embankments or scarps as a result of seismic activity, forming irregular ground surface cracks. Like lateral spreading, the potential for lurching is highest in areas underlain by soft, saturated materials, especially where bordered by steep banks or adjacent hard ground. According to the *City of Calabasas Geotechnical Guidelines*, the following areas in the City are considered potentially hazardous for ground lurching: Calabasas Highlands, Old Topanga Canyon, Northwest Las Virgenes Road, and South Las Virgenes Road (City of Calabasas 2010).

Figure 4.5-2 Seismic Hazards



Basemap provided by Esri and its licensors © 2021.
 Sources provided by City of Calabasas, 2018; California Department of Conservation 2021

Fig X Landslide and Liquefaction Hazard Areas

Soil Related Hazards

Soil related hazards include expansive soils, subsidence, and settlement. These types of hazards, and the areas within the Plan Area that have the potential for such failure, are discussed below.

Expansive Soils

During periods of water saturation, soils with high clay content tend to expand. Conversely, during dry periods, the soils tend to shrink. The amount of volume change depends upon the soil swell potential (amount of expansive clay in the soil), availability of water to the soil, and soil confining pressure. Swelling occurs when the soils containing clay become wet due to excessive water from poor surface drainage, over irrigation of lawns and planters, and sprinkler or plumbing leaks. These volume changes with moisture content can cause cracking of structures built on expansive soils. In addition, swelling clay soils can cause distress to lightly loaded structures, walks, drains, and patio slabs. Moderate to highly expansive soils are encountered throughout Calabasas. According to the *City of Calabasas Geotechnical Guidelines*, the following areas in the City are considered potentially hazardous for expansive soils: Calabasas Highlands, Old Topanga Canyon, Northwest Las Virgenes Road, South Las Virgenes Road, and Calabasas Road (City of Calabasas 2010).

Subsidence

Subsidence is the lowering of ground surface. It often occurs as a result of withdrawal of fluids such as water, oil, and gas from the subsurface. When fluids are removed from the subsurface, the overburden weight, which the water had previously helped support through buoyant forces, is transferred to the soil structure. Subsidence typically occurs over a long period of time and results in a number of structural impacts. Facilities most affected by subsidence are long, surface infrastructure facilities such as canals, sewers, and pipelines.

The extraction of groundwater from an aquifer beneath an alluvial valley can result in subsidence or settlement of the alluvial soils. The factors that influence the potential occurrence and severity of alluvial soil settlement due to groundwater withdrawal include: degrees of groundwater confinement; thickness of aquifer systems; individual and total thickness of fine-grained beds; and compressibility of the fine-grained layers. No known areas of subsidence are in the Plan Area (United States Geological Survey 2021).

Settlement

The possible effects of liquefaction would likely include seismically-induced settlement and lateral spreading. Seismically induced settlement of non-liquefied soil is the settlement that can occur in dry, sandy soils as a result of a seismic shock. Liquefaction hazard areas in the Plan Area are depicted in Figure 4.5-2 (DOC 2021).

Geological Hazards

Slope Stability and Landslides

Landslide movements are interpreted from the geomorphic expression of the landslide deposit and source area, and are categorized as falls, topples, spreads, slides, or flows. Falls are masses of soil or rock that dislodge from steep slopes and free-fall, bounce, or roll downslope (DOC 2019). Landslides result when the driving forces that act on a slope (i.e., the weight of the slope material, and the weight of objects placed on it) are greater than the slope's natural resisting forces (i.e., the shear

strength of the slope material). Slope instability may result from natural processes, such as the erosion of the toe of a slope by a stream, or by ground shaking caused by an earthquake. Slopes can also be modified artificially by grading, or by the addition of water or structures to a slope. Development on a slope can increase the frequency and extent of potential slope stability hazards. If designed properly, development on a slope can also reduce the frequency and extent of slope stability. Steep, unstable slopes in weak soil/bedrock units that have a record of previous slope failure typically characterize areas susceptible to landslides. Numerous factors affect the stability of the slope, including: slope height and steepness, type of materials, material strength, structural geologic relationships, groundwater level, and level of seismic shaking. Many of the Calabasas hillside areas have been mapped as seismically-induced landslide hazard areas (DOC 2021). According to the *City of Calabasas Geotechnical Guidelines*, and depicted in Figure 4.5-2, the following areas in the City are considered potentially hazardous for landslides: Calabasas Highlands, Old Topanga Canyon, and Northwest Las Virgenes Road. Calabasas Highlands and Old Topanga Canyon are also susceptible to rockfall (City of Calabasas 2010).

Erosive Soils

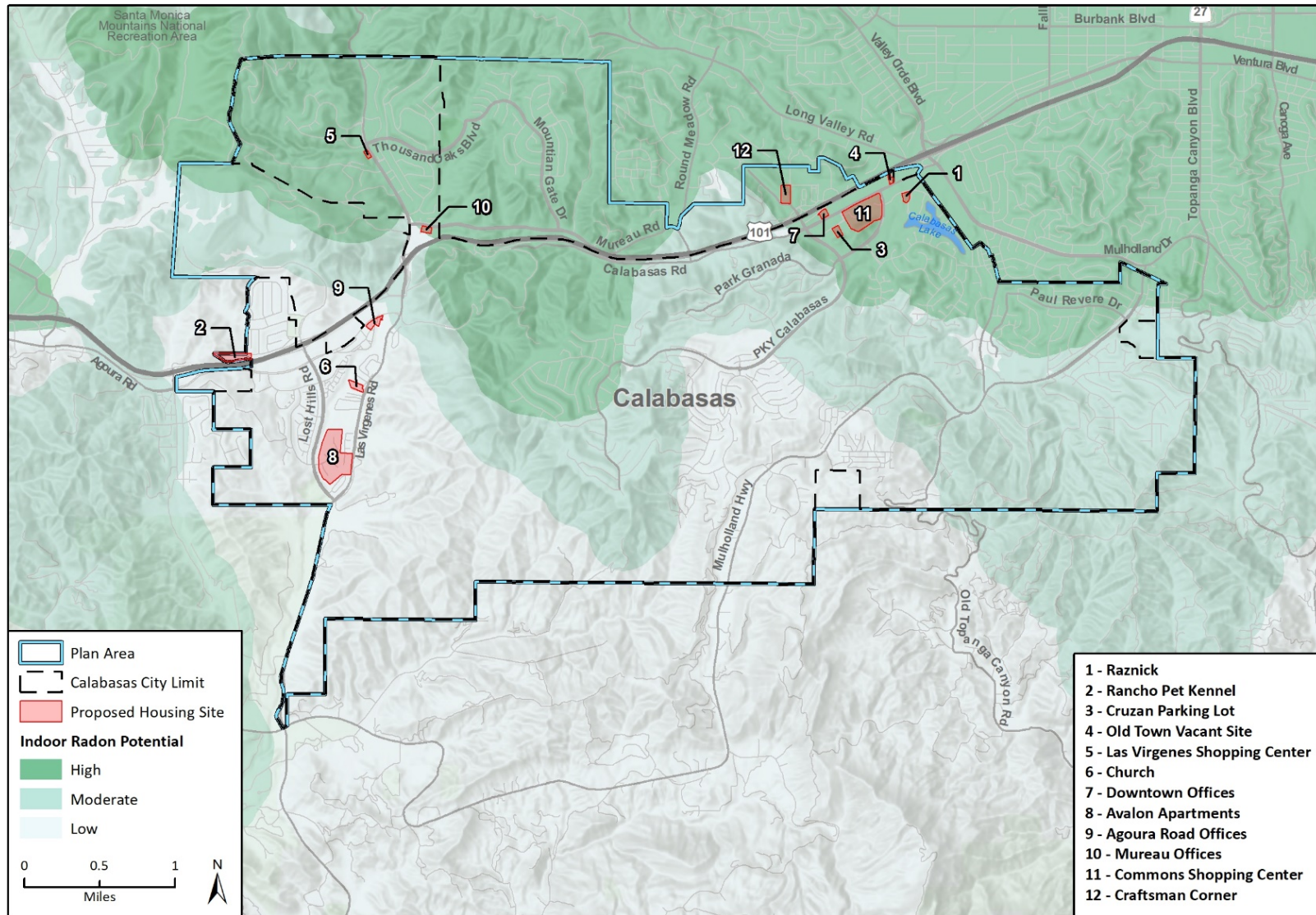
Soil erosion is the removal of soil by water and wind. The rate of erosion is estimated from four soil properties: texture, organic matter content, soil structure, and permeability data. Other factors that influence erosion potential include the amount of rainfall and wind, the length and steepness of the slope, and the amount and type of vegetative cover. The topographical terrain of the City features hillside terrain and numerous valleys. Erosive soil potential is present throughout the hillside portions of the Plan Area.

Radon Gas

As discussed in the City's 2030 General Plan Safety Element, radon is a cancer-causing natural radioactive gas that is invisible, odorless, and tasteless. Radon forms from the radioactive decay of small amounts of uranium naturally present in the rocks and soil. It can affect indoor air quality, particularly in mountainous areas. Radon gas from natural sources can accumulate in buildings and is a leading cause of non-smoking lung cancer deaths. The California Geological Survey has developed a radon potential zone map for southern Los Angeles County. The map, shown on Figure 4.5-3, is based on the relative radon potentials of different geologic units (City of Calabasas 2008).

Geologic unit radon potentials have been developed using short-term indoor-radon measurement data, provided by the Department of Health Services (DHS) Radon Program and airborne radiometric data from the National Uranium Resource Evaluation Project conducted in the 1970s and early 1980s. The DHS indoor-radon data from Southern Los Angeles County ranges from less than 0.3 picocuries per liter (pCi/L) to 159.6 pCi/L (California Geological Survey 2005a). The radon level at which the U.S. Environmental Protection Agency (EPA) recommends considering remedial actions for radon reduction in residences is 4.0 pCi/L. Calabasas is reported to have a moderate potential for radon levels to exceed 4.0 pCi/L (California Geological Survey 2005b).

Figure 4.5-3 Radon Gas Zone



Basemap provided by Esri and its licensors © 2021.
 Sources provided by City of Calabasas 2018, 2021; California Department of Conservation 2016.

Fig 4.5-2 Radon Gas Zone

Paleontological Resources

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in “soil” but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on a number of factors. Although it is not possible to determine whether a fossil will occur in any specific location, it is possible to evaluate the potential for geologic units to contain scientifically significant paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction of a development project.

4.5.2 Regulatory Setting

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was passed into law following the destructive February 9, 1971 Mw 6.6 San Fernando earthquake. The Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. Generally, siting of structures for human occupancy must be set back from the fault by approximately 50 feet. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

California Penal Code Section 622.5

California Penal Code Section 622.5 provides the following: “Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor.”

California Public Resources Code Section 5097.5

California Public Resources Code Section 5097.5 provides protection for paleontological resources on public lands, where Section 5097.5(a) states, in part, that:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

California Building Code

The California Building Code (CBC) is contained in the California Code of Regulations, Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, which by law is responsible for coordinating all building standards. The CBC incorporates by reference the federal Uniform Building Code with necessary California amendments. The CBC is the regulatory tool that includes building code standards to address geologic and seismic hazards. Approximately one-third of the text in the CBC has been tailored for California earthquake conditions. Calabasas, along with all of Southern California, is in Seismic Zone 4, the area of greatest risk and subject the strictest building standards.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 was passed into law following the destructive October 17, 1989 Mw 6.9 Loma Prieta earthquake. The Act directs the California Geological Survey (CGS) to delineate Seismic Hazard Zones. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Act requires that site-specific the preparation of geotechnical investigations, including mitigation measures based on site-specific conditions, prior to permitting most urban development projects in seismic hazard zones.

Local

City of Calabasas Safety Element

The City of Calabasas General Plan Safety Element aims to minimize the potential for loss of life, physical injury, property damage, and social disruption resulting from seismic ground shaking and other geologic events and minimize the potential for physical injury and potential loss of life resulting from radon gas exposure. The Safety Element contains the following policies to meet those objectives.

- Policy VII-1** Incorporate adequate mitigation measures into proposed development projects to achieve an acceptable level of risk from potential seismic hazards resulting from ground motion or fault rupture. Figure VII-1 depicts regional faults that could create severe ground shaking in Calabasas.
- Policy VII- 2** Emphasize prevention of physical and economic loss associated with earthquakes and other geologic disasters through early identification of potentially hazardous conditions prior to project approval.
- Policy VII- 3** Facilitate rapid physical and economic recovery following an earthquake, geologic disaster or wildland fire through early investigation of the event and implementation of effective new standards for design of structures.
- Policy VII-4** Incorporate the analysis and mitigation of seismic risks into the analysis and design of water supply infrastructure.
- Policy VII-5** Discourage development within potential landslide areas and areas with severe soils limitations as the City’s preferred management strategy, and as a higher priority than attempting to implement engineering solutions.

- Policy VII-6** Where engineering solutions to slope stability constraints are required, implement landform grading programs so as to recreate a natural hillside appearance.
- Policy VII-8** Prior to approval of development projects within the liquefaction or landslide hazard zones depicted on Figure VII-2 or other areas identified by the City Engineer as having significant liquefaction or landslide hazards, require applicants to prepare site-specific liquefaction and/or landslide studies and mitigation. Such studies shall be subject to review and approval by the City Engineer.
- Policy VII-26** Promote community education regarding potential hazards associated with radon exposure.
- Policy VII-27** Require radon testing for new development within areas with moderate or high potential for indoor radon levels exceeding USEPA recommended limits.

City of Calabasas Cultural Resources Element

The City of Calabasas General Plan Cultural Resources Element aims to protect and interpret paleontological resources located within the City. The Cultural Resources Element contains the following policy to meet those objectives.

- Policy XI-2** Preserve significant archeological and paleontological resources in-situ, when feasible. When avoidance of impacts is not possible, require data recovery mitigation for all significant resources.

4.5.3 Impact Analysis

Methodology and Significance Thresholds

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. The General Plan Update would have a significant impact with respect to geology and soils if it would:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.
 - b. Strong seismic ground shaking.
 - c. Seismic-related ground failure, including liquefaction.
 - d. Landslides.
2. Result in substantial soil erosion or the loss of topsoil.
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The study area for both geological and paleontological resources is defined as the entirety of the Plan Area. This is an appropriate geographic extent of analysis because the General Plan Update likewise applies to the entirety of the Plan Area and impacts to paleontological resources are site-specific. The methodology for analyzing impacts of the General Plan Update to geological and paleontological resources involved conducting desktop research and analysis and developing a thorough characterization of the existing conditions which comprise the general geologic setting and paleontological sensitivity within the Plan Area and surrounding region. The activities of the General Plan Update were then compared to the existing conditions for geological and paleontological resources. The analysis of impacts focuses on project construction and the location of potential sites because geological and paleontological resources would only be impacted during construction-related ground disturbing activities.

Paleontological sensitivity refers to the potential for a geologic unit to produce scientifically significant fossils. Direct impacts to paleontological resources occur when earthwork activities, such as grading or trenching, cut into the geologic deposits within which fossils are buried and physically destroy the fossils. Since fossils are the remains of prehistoric animal and plant life, they are considered nonrenewable. Such impacts have the potential to be significant and, under the CEQA Guidelines, may require mitigation. Sensitivity is determined by rock type, history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey.

The discovery of a vertebrate fossil locality is of greater significance than that of an invertebrate fossil locality, especially if it contains a microvertebrate assemblage. The recognition of new vertebrate fossil locations could provide important information on the geographical range of the taxa, their radiometric age, evolutionary characteristics, depositional environment, and other important scientific research questions. Vertebrate fossils are almost always significant because they occur more rarely than invertebrates or plants. Thus, geological units having the potential to contain vertebrate fossils are considered the most sensitive.

The SVP outlines in its Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources guidelines for categorizing paleontological sensitivity of geologic units within a project area (SVP 2010). SVP describes sedimentary rock units as having a high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrates or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. Significant paleontological resources are fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, diagnostically or stratigraphically, taxonomically, or regionally (SVP 2010).

High Potential (Sensitivity)

Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological

resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than recent, including deposits associated with nests or middens, and areas that may contain new vertebrate deposits, traces, or trackways are also classified as significant. Full-time monitoring is typically recommended during any project-related ground disturbance in geologic units with high sensitivity.

Low Potential (Sensitivity)

Sedimentary rock units that are potentially fossiliferous but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic (processes affecting an organism following death, burial, and removal from the ground), phylogenetic species (evolutionary relationships among organisms), and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations.

Undetermined Potential (Sensitivity)

Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.

No Potential

Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources. For geologic units with no sensitivity, a paleontological monitor is not required.

Project Impacts and Mitigation Measures

- Threshold 1a:** Would the General Plan Update directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?
- Threshold 1b:** Would the General Plan Update directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?
- Threshold 1c:** Would the General Plan Update directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?
- Threshold 1d:** Would the General Plan Update directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Impact GEO-1 FUTURE SEISMIC EVENTS COULD PRODUCE GROUND SHAKING IN THE PLAN AREA THAT DAMAGE STRUCTURES AND/OR CREATE ADVERSE HEALTH AND SAFETY EFFECTS. ALTHOUGH REASONABLY FORESEEABLE DEVELOPMENT ACCOMMODATED BY THE GENERAL PLAN UPDATE WOULD POTENTIALLY BE EXPOSED TO SUCH HAZARDS, THE RISK OF SUBSTANTIAL ADVERSE SEISMIC HAZARDS WOULD BE REDUCED TO A LESS THAN SIGNIFICANT LEVEL THROUGH ADHERENCE TO EXISTING 2030 GENERAL PLAN POLICIES, CALABASAS MUNICIPAL CODE, AND STATE REGULATIONS.

Ground shaking is typically reduced to ground motion components of wave velocity and acceleration. The velocity, acceleration, and predominant period of a site are dependent upon the distance to the fault, the magnitude and failure mechanics of the earthquake, and the nature of the bedrock, alluvium, and soil through which shock waves must travel. Generally, shock waves attenuate with distance from the focus of the earthquake. In addition, based on the information presented in the setting above, there are no active faults in the Plan Area. Therefore, the potential for surface rupture is low and reasonably foreseeable development under the General Plan Update would not exacerbate the potential for surface rupture. Nothing can ensure that structures do not fail under seismic stress. However, proper engineering, including compliance with the CBC with City of Calabasas amendments, the City of Calabasas Municipal Code and the policies described below, would minimize the risk to life and property.

The existing Safety Element of the 2030 General Plan includes the policies mentioned in the *Regulatory Setting* that are intended to minimize the risks associated with seismic related hazards. Updates to the Safety Element included in the General Plan Update would not reduce the efficacy of those policies. Therefore, new development under the General Plan Update would not exacerbate ground shaking or potential for surface rupture, resulting in a less than significant impact. Furthermore, Calabasas is characterized by hillside terrain and valleys. Slope instability hazards are present throughout the hillside portions of the Plan Area. As shown on Figure 4.5-2, areas of the City are within the landslide zones identified by the U.S. Geological Survey (USGS) and the DOC, Division of Mines and Geology (1998). Any development within identified landslide hazard zones would have the potential for landslide-related damage. The slope instability may result in landslides, slumps, mudslides, or debris flows that can cause substantial damage and disruption to buildings and infrastructure.

Impacts from these types of soil hazards would be reduced to less than significant levels by the standard development review process for individual projects. Standard building and grading procedures would mitigate most soil hazards. Geotechnical engineering of any landslide areas would be necessary to ensure that slopes would not become destabilized during grading activities. Onsite soil investigations would identify local hazard conditions, which are then mitigated through implementation of appropriate engineering designs and construction techniques and through proper site improvements.

The City of Calabasas Public Works Department has established geologic and geotechnical standards to assist in the preparation of geologic and geotechnical studies. These standards also include specific guidelines for the process and analysis to be performed for each site by the geology and geotechnical consultant. All geotechnical reports are reviewed to ensure that the policies and standards of the geology and geotechnical guidelines as well as customary industry practices have been met. The review process also ensures that the geotechnical report and associated plans provide suitable project-specific mitigation measures consistent with the General Plan policies and applicable codes.

Development located in landslide areas with landslide or liquefaction potential would be subject to standard building procedures to review potential development at the project-specific level. The City's review process would ensure that appropriate recommendations and mitigation measures are implemented. Therefore, development that could occur in these areas under the General Plan Update would not exacerbate risks associated with landslide or liquefaction potential and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 2: Would the General Plan Update result in substantial soil erosion or the loss of topsoil?
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Impact GEO-2 REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE COULD RESULT IN EROSION OF TOPSOIL DURING TEMPORARY CONSTRUCTION ACTIVITIES. ALL CONSTRUCTION WOULD BE SUBJECT TO SWRCB'S CONSTRUCTION REQUIREMENTS AND PROJECTS INVOLVING MORE THAN ONE ACRE OF GROUND DISTURBANCE WOULD BE REQUIRED TO PREPARE A SWPPP. ADDITIONALLY, MOST OF THE PROPOSED HOUSING SITES WOULD PRIMARILY BE LOCATED ON FLAT TOPOGRAPHY. GIVEN THESE CONDITIONS, AND WITH ADHERENCE TO EXISTING REGULATIONS, SUBSTANTIAL SOIL EROSION OF TOPSOIL IS NOT ANTICIPATED TO OCCUR AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction activities associated with the reasonably foreseeable development under the General Plan Update would require ground-disturbing activities, such as grading and excavation, which could result in erosion and loss of topsoil, particularly if soils are exposed to wind or stormwater during construction. However, new development in the City would be required to comply with the SWRCB's General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). Additionally, all future development that would result in more than one acre of ground disturbance would be required to prepare a SWPPP. The SWPPP would include site-specific BMPs that would be implemented to prevent erosion and stormwater runoff and would include applicable monitoring programs to be implemented as necessary (see Section 4.8, *Hydrology and Water Quality*, for additional discussion related to stormwater runoff).

The City's process for best management practice (BMP) selection generally coincides with four standard elements, sediment control, erosion control, site management, and materials and waste management. There are both structural BMPs and construction BMPs required by the City for mitigation of long-term and temporary water quality impacts, respectively. Structural BMPs, are those measures such as mechanical filtration, separators, vegetative swales, and biofilters that reduce or eliminate long term impacts to water quality. The City emphasizes the use of natural treatment measures that are not dependent upon periodic inspection and maintenance (i.e., catch basin and other filtration measures, mechanical separators, etc.) and the City has developed quantitative standards for natural treatment BMPs that mitigate specific pollutants of concern with specific types of vegetation and vegetative geometry. Discretionary development projects would implement 'natural' water quality mitigation measures utilizing vegetative swales, diversion into landscape areas, and other similar flow based BMPs consistent with the current provisions of the Municipal Code. Maintenance covenants are required for Standard Urban Stormwater Mitigation Plan BMPs to help ensure that post-construction BMPs remain effective in the long term.

Compliance with the regulations would reduce the risk of soil erosion from construction activities such that there would be minimal change in risk compared to current conditions with existing development and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

- Threshold 3:** Would the General Plan Update be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
- Threshold 4:** Would the General Plan Update be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact GEO-3 FUTURE SEISMIC EVENTS COULD RESULT IN LIQUEFACTION AND LATERAL SPREADING OF SOILS IN PORTIONS OF THE PLAN AREA. DEVELOPMENT IN THESE AREAS COULD BE SUBJECT TO LIQUEFACTION HAZARDS. COMPLIANCE WITH THE CBC WOULD REDUCE LIQUEFACTION HAZARDS. FURTHERMORE, POLICY VII-8 IN THE EXISTING SAFETY ELEMENT WOULD APPLY TO ANY RESIDENTIAL PROJECTS FACILITATED BY THE GENERAL PLAN UPDATE IN HAZARD ZONES FOR LIQUEFACTION OR LATERAL SPREADING OF SOILS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As identified in the Calabasas 2030 General Plan Safety Element, liquefaction hazard potential zones are located in portions of the Plan Area (see Figure 4.5-2). The General Plan Update could accommodate additional or expanded development within some of these areas. In particular, areas in the vicinity of Las Virgenes Creek, including portions of the Las Virgenes 1 and 2 sites, are within an identified liquefaction hazard zone. These areas could potentially accommodate future residential and non-residential development/redevelopment that could be subject to liquefaction and lateral spreading (DOC 2015).

The unconsolidated alluvium and shallow groundwater conditions in the areas specified above are conducive to seismically-induced liquefaction and lateral spreading. Furthermore, new development would not exacerbate hazards related to seismically induced liquefaction and lateral spreading. Further analysis about liquefaction is discussed under impact GEO-1.

The existing Safety Element includes Policy VII-2, Policy VII-5, and Policy VII-8, which are specifically intended to identify potentially hazardous geologic conditions and avoid development in these areas. Updates to the Safety Element included in the General Plan Update would not reduce the efficacy of those policies. The existing and updated Safety Element include policies that address liquefaction and lateral spreading hazards. The CBC includes specific requirements to address liquefaction hazards at the project-specific level. Therefore, impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 5: Would the General Plan Update have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact GEO-4 THE GENERAL PLAN UPDATE WOULD EMPHASIZE DEVELOPMENT IN URBAN INFILL SITES THAT WOULD BE SERVED BY EXISTING SANITATION INFRASTRUCTURE. NEW DEVELOPMENT UNDER THE GENERAL PLAN UPDATE IS NOT ANTICIPATED TO INCLUDE THE USE OF SEPTIC SYSTEMS. THEREFORE, IMPACTS RELATED TO THE USE OF SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS WOULD BE LESS THAN SIGNIFICANT.

The General Plan Update would emphasize the development in urban sites that would be served by existing sanitation infrastructure. New development under the General Plan Update is not anticipated to include the use of septic systems. Therefore, there would be a less than significant impact related to the use of septic tanks or alternative wastewater disposal systems.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 6: Would the General Plan Update directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact GEO-5 THE PLAN AREA IS UNDERLAIN BY GEOLOGIC UNITS POSSESSING PALEONTOLOGICAL SENSITIVITY RANGING FROM LOW TO HIGH. GRADING AND EXCAVATION ON POTENTIAL HOUSING SITES COULD POTENTIALLY DISTURB PALEONTOLOGICAL RESOURCES. MITIGATION MEASURE MM GEO-1 WOULD REDUCE IMPACTS TO LESS THAN SIGNIFICANT.

Based on a paleontological literature review and existing fossil locality information available on the UCMP database and Paleobiology Database the paleontological sensitivities of the geologic units underlying the Plan Area were determined in accordance with criteria set forth by the SVP (2010).

Miocene volcanic rocks (Tcva, Tcvbp, Tcvb, db) have no paleontological sensitivity since the physical parameters of their formation are not conducive to fossil preservation. Preservation of organic remains as fossils does not occur in volcanic flows, except in very unusual cases with very specific conditions. In addition, engineered artificial fill (af) and previously disturbed sediments within the Plan Area lack taphonomic and other important scientific data and, as such, are also assigned no paleontological sensitivity.

Quaternary old (Pleistocene) sedimentary deposits (i.e., Qoa), Miocene shale and sandstone (Tuss, Tush, Tud), Miocene Monterey Formation (Tmss, Tmcg, Tm), Pliocene Fernando Formation (Pml, Pu), upper Miocene Topanga Formation (Ttucg, Ttus, Ttuc), and lower Miocene Topanga Formation

(Ttlc, Ttls) have the potential to contain buried intact paleontological resources because these units have proven to yield scientifically significant vertebrate fossils in Los Angeles County and throughout California (Paleobiology Database 2021; UCMP 2021), and are assigned a high paleontological sensitivity.

Quaternary young (Holocene) sedimentary deposits (Qa, Qg, Qls) are too young to preserve fossil resources as defined by SVP standards (2010) (i.e., deposits that are less than 5,000 years old cannot, by definition, contain fossils). Holocene sedimentary deposits are assigned a low paleontological sensitivity at the surface; however, these units grade downward into older, potentially fossiliferous deposits of Pleistocene age (e.g., Qoa) at unknown depths, that can only be estimated, based on regional geologic setting in the absence of additional data. Accurately assessing the boundaries between younger and older units within the Plan Area is generally requires site-specific stratigraphic data, some form of radiometric dating, or fossil analysis from nearby sites. Conservative estimates of the depth at which paleontologically sensitive units may occur reduces potential for impacts to paleontological resources. The depths at which these units become old enough to yield fossils is highly variable, but generally does not occur at depths of less than five feet throughout most of the San Fernando Valley. Sensitive units could occur at depths shallower than five feet on basin margins and near contact points with high sensitivity units. Pleistocene sedimentary deposits have a well-documented record of abundant and diverse vertebrate fauna throughout California (Jefferson 2010; Paleobiology Database 2021; UCMP 2021). Therefore, areas mapped as Quaternary young (middle to late Holocene) sedimentary deposits (Qa, Qg, Qls) are assigned a high paleontological sensitivity at depths greater than five feet.

The General Plan Update would prioritize development on infill sites and in areas that have previously been developed and disturbed, which are less likely to contain paleontological resources than undisturbed areas that have not previously been excavated or disturbed below the ground surface. In addition, where suitable geologic units are present, paleontological resources are most likely to occur in the first five feet below the ground surface. As such, while development under the General Plan Update would most often occur on previously disturbed areas, paleontological resources could be impacted if a previous site development did not include excavation of the first five feet of the ground surface and a proposed development would. Similarly, if a proposed development would occur on a previously disturbed site, but would require deeper excavations than were previously conducted, paleontological resources may be impacted. Projects under the General Plan Update would adhere to Policy XI-2 in the 2030 General Plan. These policies include:

Policy XI-2 Preserve significant archeological and paleontological resources in-situ, when feasible. When avoidance of impacts is not possible, require data recovery mitigation for all significant resources.

The policies protect paleontological resources by avoiding development in areas of high paleontological sensitivity or gathering data from the resource when avoidance is not feasible. Potential impacts to paleontological resources are most likely to occur in areas with known paleontological sensitivity, as defined by the geologic units summarized above and portrayed on Figure 4.5-1.

Most reasonably foreseeable development under the General Plan Update would be unlikely to involve impacts to paleontological resources, due to the locations in infill areas where previous disturbance has occurred. However, given the extent of mapped geologic units with high paleontological sensitivity in the Plan Area, a substantial adverse change in or a disturbance to known or unknown resources is possible, which would constitute a significant impact under CEQA.

Mitigation Measures

As discussed in the impact analysis above, the characterization of potential impacts to paleontological resources considers the previous disturbance on the site, and geologic characteristics of the site. Accordingly, mitigation measures for paleontological resources also considers these factors.

MM GEO-1 Retain a Qualified Paleontologist

Prior to any ground-disturbing activities, a Qualified Paleontologist shall be retained to review project plans for ground disturbing activities within intact (native) geologic units of high paleontological sensitivity (Qoa, Tuss, Tush, Tud, Tmss, Tmcg, Tm, Pml, Pu, Ttucg, Ttus, Ttuc, Ttlc, Ttls) and excavations exceeding five feet below ground level (bgs) within areas mapped as low sensitivity at the surface (i.e., Qa, Qg, Qls) to determine if underlying paleontologically sensitive units) could be impacted. If potentially significant impacts are identified, the Qualified Paleontologist shall prepare and implement a Paleontological Resources Mitigation Plan (PRMP) that details mitigation recommendations including paleontological monitoring procedures; communication protocols for unanticipated fossil discoveries; preparation, curation, and reporting requirements; and Worker Environmental Awareness Program (WEAP) training to be delivered at a preconstruction meeting for all on-site construction personnel. A Qualified Paleontologist is an individual who meets the education and professional experience standards as set forth by the Society of Vertebrate Paleontology (SVP) (2010), which recommends the paleontologist shall have at least a master's degree or equivalent work experience in paleontology, shall have knowledge of the local paleontology, and shall be familiar with paleontological procedures and techniques.

Significance After Mitigation

Potential impacts to paleontological resources and unique geological features associated with implementation of the General Plan Update would be reduced to less than significant with the implementation of Mitigation Measure MM GEO-1.

4.5.4 Cumulative Impacts

The geographic extent of cumulative analysis for the General Plan Update is the Plan Area, consistent with the impact analysis provided above. Cumulative impacts may occur if impacts of the proposed project combine with similar impacts of other projects in the cumulative scenario. In this case, the proposed project is the General Plan Update, inclusive of housing development under the General Plan Update.

Impacts to both geological and paleontological resources are site-specific, such that cumulative impacts would only occur if other projects in the cumulative scenario would occur on the same site and/or affect the same paleontological resource(s) as a project under the General Plan Update. Other development that would occur in the Plan Area during the 2021-2029 timeframe would be subject to applicable State and City regulations regarding seismic and geological hazards. Thus, the General Plan Update would not contribute to a cumulatively considerable significant impact regarding seismic and geological hazards.

Projects developed under the General Plan Update would adhere to Mitigation Measure MM GEO-1, which would reduce potential impacts to paleontological resources to less than significant with the standard conditions of approval described above in addition to site-specific mitigation as needed and would not contribute to a cumulatively considerable impact.

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4.6 Greenhouse Gas Emissions

This section of the EIR identifies and evaluates issues related to greenhouse gas (GHG) emissions and climate change in the context of the General Plan Update. It describes the physical and regulatory setting, the criteria used to evaluate the significance of potential impacts, the methods used to evaluate these impacts, and the results of the impact analysis.

4.6.1 Setting

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record, which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed a high degree of confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century (IPCC 2014a).

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are usually by-products of fossil fuel combustion, and CH₄ results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆ (United States Environmental Protection Agency [U.S. EPA] 2020).

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO₂e), which is the amount of GHG emitted multiplied by its GWP. Carbon

dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 28, meaning its global warming effect is 28 times greater than CO₂ on a molecule per molecule basis (IPCC 2014b).¹

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2020). However, since 1750, estimated concentrations of CO₂, CH₄, and N₂O in the atmosphere have increased by 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity (Forster et al. 2007). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

Greenhouse Gas Emissions Inventory

Global Emissions Inventory

Worldwide anthropogenic emissions of GHGs were approximately 49,000 million metric tons (MMT) of CO₂e in 2010 (IPCC 2014a). Carbon dioxide emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, CO₂ was the most abundant, accounting for over 75 percent of total 2010 emissions. Methane emissions accounted for 16 percent, while N₂O and fluorinated gases accounted for 6 percent and 2 percent respectively (IPCC 2014a).

United States Emissions Inventory

Total United States (U.S.) GHG emissions were 6,558 MMT of CO₂e in 2019. Emissions decreased by 1.7 percent from 2018 to 2019; since 1990, total U.S. emissions have increased by an average annual rate of 0.06 percent for a total increase of 1.8 percent between 1990 and 2019. The decrease from 2018 to 2019 reflects the combined influences of several long-term trends, including population changes, economic growth, energy market shifts, technological changes such as improvements in energy efficiency, and decrease carbon intensity of energy fuel choices. In 2019, the industrial and transportation end-use sectors accounted for 30 percent and 29 percent, respectively, of nationwide GHG emissions while the commercial and residential end-use sectors accounted for 16 percent and 15 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors (U.S. EPA 2021).

California Emissions Inventory

Based on the California Air Resource Board's (CARB) California Greenhouse Gas Inventory for 2000-2018, California produced 425.3 MMT of CO₂e in 2018. The major source of GHG emissions in California is the transportation sector, which comprises 41 percent of the state's total GHG emissions. The industrial sector is the second largest source, comprising 24 percent of the state's GHG emissions while electric power accounts for approximately 15 percent (CARB 2020a). The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate, which reduces energy consumption for heating and cooling as compared to other states with more extreme weather

¹ The IPCC's (2014b) *Fifth Assessment Report* determined that methane has a GWP of 28. However, modeling of GHG emissions was completed using the California Emissions Estimator Model version 2016.3.2, which uses a GWP of 25 for methane, consistent with the IPCC's (2007) *Fourth Assessment Report*.

variations (United States Energy Information Administration 2021). In 2016, through implementation of stringent GHG emission reduction policies (see further discussion in Section 4.6.2, *Regulatory Setting*), the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of CO₂e (CARB 2020a). The annual 2030 statewide target emissions level is 260 MMT of CO₂e (CARB 2017).

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature (GMST) from 2011 to 2020 was approximately 0.82°C higher than the average GMST for the 20th century (National Oceanic and Atmospheric Administration 2020). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations jointly indicate that LSAT and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014a and 2018).

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally-specific climate change case studies (State of California 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

Scientists project that the annual average maximum daily temperatures in California could rise by 2.5 to 5.8°F in the next 50 years and by 5.6 to 8.8°F in the next century. Since 1896, the top five warmest years in the Los Angeles region (in terms of annual average temperature) have all occurred since 2012 (State of California 2018). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain (see Section 4.2, *Air Quality*, for a discussion of the health and environmental effects of ozone pollution). In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains. In southern California, the average size of summertime non-Santa Ana based fires has significantly increased from 1,129 hectares in the 1960s to 2,121 hectares in the 2000s (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large

wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains could tend to temporarily clear the air of particulate pollution, which would effectively reduce the number of large wildfires and thereby ameliorate the pollution associated with them (California Natural Resources Agency 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring-based reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This trend of increased dry and wet extremes is expected to increase in the future across most of the Los Angeles region (State of California 2018). The uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western U.S., including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and southern California coasts (State of California 2018). The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the proportion of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack. Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding. The number of atmospheric rivers (regions of high water vapor transport from the tropics to the Pacific Coast that produce intense topographic-induced precipitation along southern California mountain ranges) is expected to increase in the future, resulting in an extended flood hazard season (State of California 2018). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from coastal flooding. The rate of increase of global mean sea levels between 1993 to 2020, observed by satellites, is approximately 3.6 millimeters per year, more than double the twentieth century trend of 1.6 millimeters per year (World Meteorological Organization 2013; National Aeronautics and Space Administration 2021). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea level rise of 0.25 to 0.94 meter by 2100 (IPCC 2018). A rise in sea levels could erode 31 to 67 percent of southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events. In the Los

Angeles region, the effects of sea level rise on the coastline is expected to be compounded by the impacts of wave events during coastal storms because much of the coastline is comprised of wide sandy beaches (State of California 2018).

Agriculture

California has an over \$50 billion annual agricultural industry (\$176 billion of which is from Los Angeles County) that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2021). Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resultant changes in weather patterns could have ecological effects on global and local scales. Soil moisture is likely to decline in many regions as a result of higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

4.6.2 Regulatory Setting

The following regulations and case law address both climate change and GHG emissions.

Federal

Federal Clean Air Act

The U.S. Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the U.S. EPA has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the U.S. EPA may not determine whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit under the federal Clean Air Act based on the level of GHG emissions generated by the source. The Court also held that Prevention of Significant Deterioration permits otherwise required

based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the U.S. E.PA and the National Highway Traffic Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The SAFE Rule Part One revokes California’s authority to set its own GHG emissions standards and to adopt its own zero-emission vehicle mandates. On April 30, 2020, the U.S. E.PA and the National Highway Traffic Safety Administration published Part Two of the SAFE Vehicles Rule, which revised corporate average fuel economy and CO₂ emissions standards for passenger cars and trucks of model years 2021 to 2026 such that the standards increase by approximately 1.5 percent each year through model year 2026 as compared to the approximately five percent annual increase required under the 2012 standards (National Highway Traffic Safety Administration 2020). To account for the effects of the SAFE Vehicles Rule, CARB released off-model adjustment factors on June 26, 2020 to adjust GHG emissions outputs from the EMFAC model (CARB 2020b).

State

CARB is responsible for the coordination and oversight of state and local air pollution control programs in California. There are numerous regulations aimed at reducing the state’s GHG emissions. These initiatives are summarized below. For more information on the Senate and Assembly Bills, executive orders, building codes, and reports discussed below, and to view reports and research referenced below, please refer to the following websites:

<https://www.energy.ca.gov/data-reports/reports/californias-fourth-climate-change-assessment>, www.arb.ca.gov/cc/cc.htm, and <https://www.dgs.ca.gov/BSC/Codes>.

California Advanced Clean Cars Program

Assembly Bill (AB) 1493 (2002), California’s Advanced Clean Cars program (referred to as “Pavley”), requires CARB to develop and adopt regulations to achieve “the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles.” On June 30, 2009, the U.S. EPA granted the waiver of Clean Air Act preemption to California for its GHG emission standards for motor vehicles, beginning with the 2009 model year, which allowed California to implement more stringent vehicle emission standards than those promulgated by the U.S. EPA. Pavley I regulates model years from 2009 to 2016 and Pavley II, now referred to as “LEV (Low Emission Vehicle) III GHG,” regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, the rules will be fully implemented, and new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011). However, as a result of the federal SAFE Vehicles Rule discussed above, California’s waiver of Clean Air Act preemption was revoked, thereby rescinding the CARB’s authority to implement the Advanced Clean Cars program.

California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)

The “California Global Warming Solutions Act of 2006,” (AB 32), outlines California’s major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32

requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT of CO₂e, which was achieved in 2016. The CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

The CARB approved the 2013 Scoping Plan update in May 2014. The update defined the CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the state's longer term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed later). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with statewide per capita goals of six metric tons (MT) of CO₂e by 2030 and two MT of CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017).

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO's Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as "transit priority projects") can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8 percent reduction in per capita GHG emissions from passenger vehicles by 2020 and a 19 percent reduction in per capita GHG emissions from passenger vehicles by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements. On September 3, 2020, the SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS entitled Connect SoCal, which meets the requirements of SB 375.

Senate Bill 1383

Adopted in September 2016, SB 1383 (Lara, Chapter 395, Statutes of 2016) requires the CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

As a result, the CARB adopted the Short-Lived Climate Pollutant Reduction Strategy in 2017 and has initiated implementation. SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills. CalRecycle has initiated the rulemaking process for these regulations with the proposed regulation text submitted to the Office of Administrative Law in October 2020.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state’s Renewables Portfolio Standard (RPS) Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

On September 10, 2018, the former Governor Brown issued Executive Order (EO) B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

California Building Standards Code

Title 24 of the California Code of Regulations (CCR) is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards, which the City of Calabasas has adopted in Calabasas Municipal Code Chapter 15.04. The California Building Standards Code’s energy-efficiency and green building standards are outlined below.

PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS/ENERGY CODE

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California’s energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC).

PART 11 – CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The 2019 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers (Tiers I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- 20 percent reduction in indoor water use relative to specified baseline levels;²
- 65 percent construction/demolition waste diverted from landfills;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards;
- Dedicated circuitry to facilitate installation of electric vehicle (EV) charging stations in newly constructed attached garages for single-family and duplex dwellings (“EV ready”); and
- Designation of at least ten percent of parking spaces for multi-family residential developments as electric vehicle charging spaces capable of supporting future electric vehicle supply equipment (“EV capable”).

The voluntary standards require:

- **Tier I:** stricter energy efficiency requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste with third-party verification, 10 percent recycled content for building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof; and
- **Tier II:** stricter energy efficiency requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste with third-party verification, 15 percent recycled content for building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar reflective roof.

California Integrated Waste Management Act (Assembly Bill 341)

The California Integrated Waste Management Act of 1989, as modified by AB 341 in 2011, requires each jurisdiction’s source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995 through source reduction, recycling, and composting activities and (2) diversion of 50 percent of all solid waste on and after January 1, 2000.

² Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified by CALGreen or a reduced per-plumbing-fixture water use rate.

Regional and Local

2020 - 2045 RTP/SCS

On September 3, 2020, the SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS entitled Connect SoCal. The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020).

City of Calabasas General Plan

Although the City of Calabasas has not adopted a qualified GHG reduction plan that meets the requirements of CEQA Guidelines Section 15183.5(b) for streamlining GHG analyses under CEQA, the current Calabasas General Plan, adopted in 2008, and amended in 2015 via adoption of the City's 5th RHNA cycle Housing Element, lists two policies related to GHG emissions in Section IV.C (Air Quality) of its Conservation Element that would be applicable to the proposed project (City of Calabasas 2015):

- Policy IV-18** Minimize emissions of air pollutants, including greenhouse gases, generated by electricity and natural gas consumption through implementation of the energy conservation policies listed in subchapter IV.F and the solid waste recycling policies listed in subchapter IV.G.
- Policy IV-19** Reduce per capita emissions of GHGs by at least 25 percent from 2005 levels as stipulated in AB 32.

Although SB 375 had not yet taken effect at the time of adoption of the current Calabasas General Plan in 2008, the City proactively included the principles of SB 375 in the General Plan by focusing planned areas of future growth around and in close proximity to existing commercial nodes and available multimodal transportation options. In recognition of this effort, the current Calabasas General Plan received a Sustainable Communities award from SCAG.

Clean Power Alliance

In 2017, Calabasas was the first City in Los Angeles County to join the Clean Power Alliance, a community choice energy program providing local control and clean renewable energy with a variety of options for renewable power mixes for customers.³ In February 2021, the Calabasas City Council voted to change the City's default electricity option within the Clean Power Alliance to 100 percent clean, renewable energy starting October 2021.

³ The current offerings available to residential customers are 36 percent ("Lean Power"), 50 percent ("Clean Power"), and 100 percent ("100% Green Power") renewable energy.

4.6.3 Impact Analysis

Methodology and Significance Thresholds

Methodology

Construction and operational GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., high-rise condominiums, hotel, enclosed parking garage), and location, to estimate a project's construction and operational emissions. Emissions were modeled for reasonably foreseeable development, which would consist of 1,305 residential units, as outlined in Section 2, *Project Description*. GHG emissions were modeled for year 2029, which is the horizon year of the Housing Element Update.

Construction Emissions

Construction activities emit GHGs primarily through combustion of fuels (mostly diesel) in the engines of off-road construction equipment and in on-road construction vehicles and in the commute vehicles of the construction workers. Smaller amounts of GHGs are emitted indirectly through the energy required for water used for fugitive dust control and lighting for the construction activity. Every phase of the construction process, including demolition, grading, paving, building, and architectural coating, emits GHG emissions in volumes proportional to the quantity and type of construction equipment used. Heavier equipment typically emits more GHGs per hour than does lighter equipment because of its engine design and greater fuel consumption. CalEEMod estimates construction emissions by multiplying the time equipment is in operation by emission factors.

Future construction based on the General Plan Update was analyzed based on the CalEEMod default construction schedule and construction equipment list. Approximately 209,415 square feet of existing buildings would be demolished to accommodate reasonably foreseeable development. In addition, conservatively assuming that each site would require one level of subterranean parking approximately 12 feet in depth, approximately 37,455,888 cubic feet of soil export would be required, which equates to approximately 1,387,255 million cubic yards.⁴ This analysis conservatively assumes that all construction activities facilitated by the General Plan Update would occur within the first three years of the planning horizon. If buildout occurs over a longer timeframe, construction equipment would be more efficient in later years and would emit fewer GHG emissions than those estimated herein. It is assumed that all construction equipment used would be diesel-powered. This analysis assumes that the project would comply with all applicable regulatory standards. In accordance with South Coast Air Quality Management District's (SCAQMD) recommendation, GHG emissions from construction of the General Plan Update were amortized over a 30-year period and added to annual operational emissions to determine the project's total annual GHG emissions (SCAQMD 2008b).

⁴ The combined area of the 12 identified housing sites is approximately 3,121,324 square feet.

Operational Emissions

AREA SOURCE EMISSIONS

Area sources include GHG emissions that would occur from the use of landscaping equipment and fireplaces, which emit GHGs associated with fuel combustion. The landscaping equipment emission values were derived from the 2011 Off-Road Equipment Inventory Model (California Air Pollution Control Officers Association 2017). Reasonably foreseeable development facilitated by the General Plan Update may include natural gas fireplaces; however, in accordance with SCAQMD Rule 445, no wood-burning devices would be installed.

ENERGY USE EMISSIONS

GHGs are emitted on-site during the combustion of natural gas for space and water heating and off-site during the generation of electricity from fossil fuels in power plants. CalEEMod estimates GHG emissions from energy use by multiplying average rates of residential and non-residential energy consumption by the quantities of residential units and non-residential square footage entered in the land use module to obtain total projected energy use. This value is then multiplied by electricity and natural gas GHG emission factors applicable to the project location and utility provider. Building energy use is typically divided into energy consumed by the built environment and energy consumed by uses that are independent of the building, such as plug-in appliances. Non-building energy use, or “plug-in energy use,” can be further subdivided by specific end-use (refrigeration, cooking, office equipment, etc.). In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. In accordance with Section 150.1(b)14 of the 2019 Building Energy Efficiency Standards in Title 24, all new residential uses under three stories must install photovoltaic (PV) solar panels that generate an amount of electricity equal to expected electricity usage. Reasonably foreseeable development would be subject to the 35-foot height limitation contained in CMC Chapter 17.13.020, which is equivalent to three stories. Therefore, it was assumed that the project’s electricity usage would be supplied by on-site PV solar panels and would not generate GHG emissions.

MOBILE SOURCE EMISSIONS

Mobile source emissions consist of emissions generated by vehicle trips. The trip generation estimates from the Vehicle Miles Traveled Analysis prepared by Fehr & Peers (2021; Appendix C) were used to estimate mobile source emissions for the General Plan Update. As stated therein, reasonably foreseeable development would generate approximately 16.8 daily vehicle miles traveled (VMT) per capita. As discussed in Section 4.11, *Population and Housing*, the proposed General Plan Update is expected to increase the population of the Plan Area by approximately 3,537 persons by 2029, assuming full build-out. Therefore, the General Plan Update would generate approximately 59,422 daily VMT (16.8 daily VMT per person x 3,537 persons), or approximately 21,689,030 annual VMT (59,422 daily VMT x 365 days per year). Accordingly, the default trip lengths in CalEEMod were adjusted to reflect the estimated annual VMT.

WATER AND WASTEWATER EMISSIONS

Water used and wastewater generated by a project generate indirect GHG emissions. These emissions are a result of the energy used to supply, convey, and treat water and wastewater. In addition to the indirect GHG emissions associated with energy use, the wastewater treatment process itself can directly emit both methane and nitrous oxide.

The indoor and outdoor water use consumption data for each land use subtype comes from the Pacific Institute's 2003 *Waste Not, Want Not: The Potential for Urban Water Conservation in California* (CAPCOA 2017). Based on that report, a percentage of total water consumption was dedicated to landscape irrigation, which is used to determine outdoor water use. Wastewater generation was similarly based on a reported percentage of total indoor water use.

All wastewater generated by the project would be treated by the Tapia Water Reclamation Facility, which does not utilize septic tanks or facultative lagoons and does not include a co-generation system (Las Virgenes Municipal Water District 2021). As a result, CalEEMod was adjusted to account for 100 percent aerobic treatment of the project's wastewater with no co-generation of electricity.

SOLID WASTE EMISSIONS

The disposal of solid waste produces GHG emissions from the transportation of waste, anaerobic decomposition in landfills, and incineration. To calculate the GHG emissions generated by solid waste disposal, the total volume of solid waste was calculated using waste disposal rates identified by the California Department of Resources Recycling and Recovery (CalRecycle). The methods for quantifying GHG emissions from solid waste are based on the IPCC method, using the degradable organic content of waste.

SERVICE POPULATION

The service population of a project is the number of estimated residents and employees accommodated by the project. As discussed in Section 4.11, *Population and Housing*, the General Plan Update is expected to increase the population of the Plan Area by approximately 3,537 persons by 2029, assuming full build-out. It was conservatively assumed that no net new employment opportunities would be associated with the General Plan Update based on the general assumption that employees hired for new commercial spaces would be offset by the loss of employment opportunities associated with redeveloped/converted commercial space. Therefore, the service population of the project is 3,537 persons. To compare the estimated emissions to the locally-applicable, project-specific efficiency threshold (see *Significance Thresholds* below), the per person GHG emissions for the General Plan Update were calculated by dividing total GHG emissions by the service population.

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, an impact related to GHG emissions would be significant if the General Plan Update would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

The majority of individual projects do not generate sufficient GHG emissions to create significant project-specific environmental effects. However, the environmental effects of a project's GHG emissions can contribute incrementally to cumulative environmental effects that are significant, such as climate change, even if an individual project's environmental effects are limited (CEQA Guidelines Section 15064[h][1]). The issue of a project's environmental effects and contribution towards climate change typically involves an analysis of whether or not a project's contribution towards climate change is cumulatively considerable. Cumulatively considerable means that the

incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

Section 15064.4 of the CEQA Guidelines recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines Section 15064.4 does not establish a threshold of significance. Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, as long as any threshold chosen is supported by substantial evidence (CEQA Guidelines Section 15064.7[c]).

According to CEQA Guidelines Section 15183.5, projects can tier off of a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. However, the City has not adopted a qualified GHG reduction plan; therefore, it is not appropriate to use this approach for evaluating the General Plan Update. Accordingly, this analysis utilizes three thresholds to evaluate the significance of the project's GHG emissions, which are discussed in the following subsections.

Consistency with Applicable Plans, Policies, and Regulations for the Reduction of GHG Emissions

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem in the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of GHG emissions" (CEQA Guidelines Section 15064[h][3]). Therefore, a lead agency can make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions. The General Plan Update's consistency with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions is evaluated qualitatively. A project is considered consistent with the provisions of these documents if it meets the general intent in reducing GHG emissions in order to facilitate the achievement of local- and state-adopted goals and does not impede attainment of those goals.

Locally-Appropriate, Project-Specific Efficiency Threshold

Because the City has not adopted a general use threshold for evaluating the significance of GHG emissions, the City has chosen to use project-specific thresholds that are prepared for projects on a case-by-case basis. For this project, the City has calculated a locally-appropriate 2030 project-

specific efficiency threshold. Efficiency thresholds are quantitative thresholds based on a measurement of GHG efficiency for a given project, regardless of the amount of mass emissions. These thresholds identify the emission level below which new development would not interfere with attainment of statewide GHG reduction targets. A project that attains such an efficiency target, with or without mitigation, would result in less than significant GHG emissions. This project-specific efficiency threshold was derived from the statewide GHG emission reduction target under SB 32 and CARB's recommendations in the 2017 Climate Change Scoping Plan Update and incorporates local and project-specific conditions that tailor the threshold to this project. The methodology used to develop the project-specific efficiency threshold is consistent with the methodology described in the Bay Area Air Quality Management District's *California Environmental Quality Act: Air Quality Guidelines Appendix D. Threshold of Significance Justification* for developing an efficiency-based threshold for land use projects, which is a widely-accepted industry standard methodology (Bay Area Air Quality Management District 2017). The SCAQMD has not published final, detailed guidance on the methodology for developing an efficiency-based threshold for land use projects; however, the methodology published by the Bay Area Air Quality Management District is consistent with the generalized, draft guidance provided by SCAQMD in its *Draft Guidance Document - Interim CEQA GHG Significance Threshold* (2008) under Tier 4, Compliance Option 3.

A project-specific efficiency threshold can be calculated by dividing statewide GHG emissions by the sum of statewide jobs and residents. However, not all statewide emission sources would be relevant to the General Plan Update and local jurisdiction (e.g., agriculture and industrial sources). Accordingly, the 2030 statewide inventory target was modified with substantial evidence provided to establish a locally-appropriate, evidence-based, mixed-use project-specific threshold consistent with the SB 32 target.

To develop this threshold, the Plan Area was first evaluated to determine emissions sectors that are present and would be directly affected by potential land use changes. A description of the major emissions sectors that are included in the 2017 Scoping Plan and representative sources in Calabasas can be found in Table 4.6-1. According to the City's General Plan Land Use Element, there are no agricultural or industrial land uses within the Plan Area (City of Calabasas 2015). Therefore, the Agricultural and Industrial Emissions Sectors were considered locally inappropriate and were removed from the state 2030 emissions forecast. Furthermore, Cap and Trade emissions reductions⁵ occur independent of any local jurisdictional land use decisions and were also excluded from the locally-appropriate target. After removing Agricultural, Industrial, and Cap and Trade emissions, the remaining emissions sectors with sources within the Plan Area were then summed to create a locally-appropriate emissions total for the General Plan Update. These emissions sectors are applicable to the housing projects that would be facilitated by the proposed Housing Element updates because the projects would include residential uses, require electric power, include sources of GHGs with high global warming potentials such as air conditioning systems, generate solid waste and recycling products, and result in vehicle trips by residents. This locally-appropriate, project-specific emissions total is divided by the statewide 2030 service person population to determine a locally-appropriate, project-level threshold of 3.3 MT of CO₂e per service population that is consistent with SB 32 targets, as shown in Table 4.6-1 and Table 4.6-2.

⁵ The Cap and Trade program regulates major sources of GHG emissions throughout California by imposing a declining limit (i.e., a cap) on allowable GHG emissions. Entities subject to the program can buy and sell (i.e., trade) emissions allowances during an annual auction with entities selling excess allowances if their emissions are lower than allowed and entities purchasing allowances if their emissions are higher than allowed.

Table 4.6-1 SB 32 Scoping Plan Emissions Sector Targets

GHG Emissions Sector¹	2030 State Emissions Target (MMT of CO₂e per Year)¹	Locally Appropriate²	Project-Specific	Major Sources³
Residential and Commercial	38	Yes	Yes	Natural gas end uses, including space and water heating of buildings
Electric Power	53	Yes	Yes	Electricity uses, including lighting, appliances, machinery and heating
High Global Warming Potential	11	Yes	Yes	SF ₆ from power stations, HFCs from refrigerants and air conditioning ⁴
Recycling and Waste	8	Yes	Yes	Waste generated by residential, commercial, and other facilities
Transportation	103	Yes	Yes	Passenger, heavy duty, and other vehicle emissions
Industrial	83	Yes	No	Oil, gas, and hydrogen production, refineries, general fuel use, and mining operations do not occur within the Plan Area
Agriculture	24	No	No	Enteric fermentation, crop residue burning, and manure management do not occur within the Plan Area
Cap and Trade Reductions	-60	No	No	Reductions from facilities emitting more than 25,000 MT of CO ₂ e per year ⁵
Scoping Plan Target (All Sectors)	260	No	No	All emissions sectors
Locally Inapplicable Sector (Industrial)	-83	Yes	No	Oil, gas, and hydrogen production, refineries, general fuel use, and mining operations ⁵
Locally Inapplicable Sector (Agriculture)	-24	No	No	Enteric fermentation, crop residue burning, and manure management
Locally Inapplicable Sector (Cap and Trade)	60	No	No	Reductions from facilities emitting more than 25,000 MT of CO ₂ e per year ⁵
2030 Locally Applicable Emissions Sectors	213	Yes	Yes	Emissions applicable to Plan Area

MMT = million metric tons; MT = metric tons; CO₂e = carbon dioxide equivalents, SF₆ = sulfur hexafluoride; HFC= hydrofluorocarbons

¹ See the 2017 Climate Change Scoping Plan, page 31 for sector details (CARB 2017).

² Locally-appropriate is defined as having significant emissions in Scoping Plan Categorization categories within Calabasas.

³ See CARB GHG Emissions Inventory Scoping Plan Categorization for details, available at: <https://www.arb.ca.gov/cc/inventory/data/data.htm>

⁴ SF₆ is used primarily as an insulator in electrical substations while HFCs can be found in many residential and commercial refrigeration and air conditioning units. HFCs are in the process of being phased out through 2036 in most developed countries.

⁵ Cap and Trade is excluded as reductions will occur independent of local project land use decisions and are therefore not locally appropriate.

Table 4.6-2 SB 32 Locally-Appropriate Project-Specific Threshold

California 2017 Climate Change Scoping Plan	California 2030 Population (persons) ¹	41,860,549
	California 2030 Employment Projection (persons) ²	23,459,500
	Service Population (persons)	65,320,049
Locally-Appropriate 2030 Project Threshold	2030 Locally-Appropriate Emissions Sectors (MT of CO ₂ e)	213,000,000
	2030 Service Population (persons)	65,320,049
	2030 Service Person Target (MT of CO ₂ e per Service Person)	3.3

¹ California Department of Finance 2021

² Average of employment range projections under implementation scenario. See CARB 2017 Climate Change Scoping Plan Update, page 55 (CARB 2017).

MT = metric tons; CO₂e = carbon dioxide equivalents

At this time, the state has codified a target of reducing emissions to 40 percent below 1990 emissions levels by 2030 (SB 32) and has developed the 2017 Scoping Plan to demonstrate how the state will achieve the 2030 target and make substantial progress toward the 2050 goal of an 80 percent reduction in 1990 GHG emission levels set by EO S-3-05. In EO B-55-18 (2018), which identifies a new goal of carbon neutrality by 2045 and supersedes the goal established by EO S-3-05, CARB has been tasked with including a pathway toward the EO B-55-18 carbon neutrality goal in the next Scoping Plan update.

While state and regional regulators of energy and transportation systems, along with the state’s Cap and Trade program, are designed to be set at limits to achieve most of the reductions needed to hit the state’s long-term targets, local governments can do their fair share toward meeting the state’s targets by siting and approving projects that accommodate planned population growth and projects that are GHG-efficient. The Association of Environmental Professionals Climate Change Committee recommends that CEQA GHG analyses evaluate project emissions in light of the trajectory of state climate change legislation and assess their “substantial progress” toward achieving long-term reduction targets identified in available plans, legislation, or EOs. Consistent with AEP Climate Change Committee recommendations (2016), GHG impacts are analyzed in terms of whether the General Plan Update would impede “substantial progress” toward meeting the reduction goal identified in SB 32 and EO B-55-18. As SB 32 is considered an interim target toward meeting the 2045 state goal, consistency with SB 32 would be considered contributing substantial progress toward meeting the state’s long-term 2045 goals. Avoiding interference with, and making substantial progress toward, these long-term state targets is important because these targets have been set at levels that achieve California’s fair share of international emissions reduction targets that will stabilize global climate change effects and avoid the adverse environmental consequences described under Section 4.5.2, *State Regulations* (EO B-55-18).

Threshold 1: Would the General Plan Update generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Threshold 2: Would the General Plan Update conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Impact GHG-1 CONSTRUCTION AND OPERATION OF REASONABLY FORESEEABLE DEVELOPMENT ASSOCIATED WITH THE GENERAL PLAN UPDATE WOULD GENERATE TEMPORARY AND LONG-TERM INCREASES IN GHG EMISSIONS THAT WOULD NOT RESULT IN A SIGNIFICANT IMPACT ON THE ENVIRONMENT RELATED TO CLIMATE CHANGE. IN ADDITION, THE GENERAL PLAN UPDATE WOULD NOT CONFLICT WITH AN APPLICABLE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING GHG EMISSIONS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Consistency with Applicable Plans, Policies, and Regulations

Several plans and policies have been adopted to reduce GHG emissions in the southern California region, including the State’s 2017 Scoping Plan, SCAG’s 2020-2045 RTP/SCS, and local policies contained in the City’s General Plan. The General Plan Update’s consistency with these plans is discussed in the following subsections. As discussed therein, the General Plan Update would not conflict with plans and policies aimed at reducing GHG emissions. No impact would occur.

CITY OF CALABASAS GENERAL PLAN

As discussed in Section 4.6.2(c), *Regional and Local Regulations*, the City of Calabasas 2030 General Plan includes two policies related to reducing GHG emissions. New housing units facilitated by the General Plan Update would be required to comply with the California Building Energy Efficiency Standards and CALGreen, which would achieve energy conservation. Furthermore, housing units would be opted into the Clean Power Alliance by default, which would supply electricity from 100 percent clean, renewable energy. In addition, housing projects facilitated by the General Plan Update would be required to comply with the City’s recycling and green waste requirements for multi-family residential land uses set forth in CMC Chapters 8.16.500(C), 8.16.500(D) and 8.16.500(G), which would maximize the recycling and solid waste diversion. These factors would minimize GHG emissions associated with electricity and natural gas consumption as well as solid waste disposal (Policy IV-18). Furthermore, as demonstrated in Table 4.6-5, per capita GHG emissions associated with the General Plan Update would not exceed the locally-applicable, project-specific threshold that was determined based on the GHG reduction target contained in SB 32, which is more stringent than the GHG reduction target contained in AB 32. As discussed in Section 4.13, Transportation, the General Plan Update would also result in lower home-based VMT per capita for the proposed housing units than the City’s current baseline home-based VMT per capita, thereby resulting in lower per capita GHG emissions associated with vehicle trips. Therefore, the General Plan Update would not conflict with the City’s policy to reduce per capita GHG emissions by at least 25 percent below 2005 levels consistent with AB 32 (Policy IV-19). As a result, the General Plan Update would be consistent with the GHG reduction policies of the City’s 2030 General Plan.

2020-2045 SCAG RTP/SCS

On September 3, 2020, SCAG’s Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). The SCAG 2020-2045 RTP/SCS is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. The

2016-2040 RTP/SCS includes ten goals with corresponding implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The General Plan Update’s consistency with the 2020-2045 RTP/SCS is discussed in Table 4.6-3. As shown therein, the General Plan Update would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

Table 4.6-3 General Plan Update Consistency with Applicable SCAG 2020-2045 RTP/SCS Strategies

Reduction Strategy	Project Consistency
<p>Focus Growth Near Destinations & Mobility Options.</p> <ul style="list-style-type: none"> ▪ Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations ▪ Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets ▪ Plan for growth near transit investments and support implementation of first/last mile strategies ▪ Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses ▪ Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods ▪ Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) ▪ Identify ways to “right size” parking requirements and promote alternative parking strategies (e.g. shared parking or smart parking) 	<p>Consistent. The proposed housing site inventory update primarily recommends housing production on vacant and underutilized sites near transportation corridors and within biking and walking distance of existing residential and commercial development. In addition, the proposed rezoning program that would increase the allowable density in the CMU and RM zones, the AHO zone, and continued facilitation of ADUs under the proposed Housing Element would incentivize additional infill development. Furthermore, housing sites 1 (Raznick), 3 (Cruzan Parking Lot), 4 (Old Town Vacant Site), 5 (Las Virgenes Shopping Center), 9 (Agoura Road Offices), and 11 (Commons Shopping Center) would be located within 0.25 mile of bus stops for LA Metro Line 161, which provides service to Canoga Park, Woodland Hills, Hidden Hills, and Agoura Hills. Therefore, the proposed Housing Element updates would emphasize land use patterns that facilitate multimodal access to work, educational, and other destinations, plan growth near existing transit corridors, prioritize infill and redevelopment of underutilized land to accommodate new growth and increase connectivity in existing neighborhoods, and encourage design and transportation options to reduce reliance on single-occupancy passenger automobiles. In addition, updates to the Circulation Element to remove level of service standards and incorporate VMT reduction policies would serve to encourage less reliance on single-occupancy passenger automobiles and reduce GHG emissions associated with VMT in the Plan Area, including a policy to facilitate transportation demand management programs.</p>
<p>Promote Diverse Housing Choices.</p> <ul style="list-style-type: none"> ▪ Preserve and rehabilitate affordable housing and prevent displacement ▪ Identify funding opportunities for new workforce and affordable housing development ▪ Create incentives and reduce regulatory barriers for building context sensitive accessory dwelling units to increase housing supply ▪ Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of GHGs 	<p>Consistent. The General Plan Update includes updates to the Housing Element of the City’s General Plan to demonstrate a pathway to achieving the City’s Regional Housing Needs Assessment allocation, which would include a rezoning program to increase the allowable density in the CMU and RM zones, an AHO zone to increase the production of affordable housing, and updated projections for ADUs. The proposed Housing Element updates also include an updated housing site inventory , which proposes sites along major transportation corridors and in proximity to existing residential and commercial development, which would minimize GHG emissions associated with vehicle trips. Therefore, the General Plan Update would promote diverse housing choices that support the reduction of GHGs.</p>

Reduction Strategy	Project Consistency
<p>Leverage Technology Innovations.</p> <ul style="list-style-type: none"> ▪ Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space ▪ Improve access to services through technology— such as telework and telemedicine as well as other incentives such as a “mobility wallet,” an app-based system for storing transit and other multi-modal payments ▪ Identify ways to incorporate “micro-power grids” in communities, for example solar energy, hydrogen fuel cell power storage and power generation 	<p>Consistent. Housing projects facilitated by the proposed Housing Element updates would be required to comply with State and local regulations, including the California Building Energy Efficiency Standards and CALGreen, related to the provision of electric vehicle supply equipment for parking spaces and the installation of photovoltaic solar panels on all low-rise residential buildings (three stories or less) that generate an amount of electricity equal to expected electricity usage. Therefore, the General Plan Update would leverage technology innovations.</p>
<p>Support Implementation of Sustainability Policies.</p> <ul style="list-style-type: none"> ▪ Pursue funding opportunities to support local sustainable development implementation projects that reduce GHG emissions ▪ Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations ▪ Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space ▪ Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies ▪ Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region ▪ Continue to support long range planning efforts by local jurisdictions ▪ Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy 	<p>Consistent. The project would be consistent with the GHG reduction policies of the City’s current General Plan (discussed above) and would be constructed in accordance with the California Building Energy Efficiency Standards and CALGreen. Therefore, the General Plan Update would support implementation of sustainability policies.</p>

Reduction Strategy	Project Consistency
<p>Promote a Green Region.</p> <ul style="list-style-type: none"> ▪ Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards ▪ Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration ▪ Integrate local food production into the regional landscape ▪ Promote more resource efficient development focused on conservation, recycling and reclamation ▪ Preserve, enhance and restore regional wildlife connectivity ▪ Reduce consumption of resource areas, including agricultural land ▪ Identify ways to improve access to public park space 	<p>Consistent. The proposed housing site inventory update includes infill development and redevelopment sites for housing units. In addition, the proposed rezoning program that would increase the allowable density in the CMU and RM zones, the AHO zone, and continued facilitation of ADUs under the proposed Housing Element would incentivize additional infill development. Furthermore, as discussed in Section 4.16, <i>Effects Found Not to Be Significant</i>, the General Plan Update would not result in the conversion of agricultural land. Projects facilitated by the General Plan Update would be required to install photovoltaic solar panels on all low-rise residential buildings (three stories or less) that generate an amount of electricity equal to expected electricity usage in accordance with the California Building Energy Efficiency Standards. Therefore, the General Plan Update would support development of a green region.</p>
<p>Source: SCAG 2020</p>	

2017 SCOPING PLAN

The principal state plans and policies are AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020, and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan’s strategies that are applicable to the General Plan Update include reducing fossil fuel use, energy demand, and VMT; maximizing recycling and diversion from landfills; and increasing water conservation. The General Plan Update would be consistent with these goals as the City would require individual projects to comply with the latest Title 24 Green Building Code and Building Efficiency Energy Standards and install energy-efficient LED lighting, water-efficient faucets and toilets, water efficient landscaping and irrigation, and EV charging stations. Further, projects facilitated by the General Plan Update would be served by Clean Power Alliance, and the City’s default electricity option will switch to 100 percent clean, renewable energy starting October 2021 (City of Calabasas 2021).

Furthermore, the General Plan Update recommends housing production on vacant and underutilized infill and redevelopment sites near transportation corridors and within biking and walking distance of existing residential and commercial development. In addition, the proposed rezoning program that would increase the allowable density in the CMU and RM zones, the AHO zone, and continued facilitation of ADUs under the proposed Housing Element would incentivize additional infill development. Housing sites 1 (Raznick), 3 (Cruzan Parking Lot), 4 (Old Town Vacant Site), 5 (Las Virgenes Shopping Center), 9 (Agoura Road Offices), and 11 (Commons Shopping Center) would be located within 0.25 mile of bus stops for LA Metro Line 161, which provides service to Canoga Park, Woodland Hills, Hidden Hills, and Agoura Hills. Therefore, the General Plan Update would facilitate the use of walking, biking, and transit to access destinations, which would reduce future residents’ VMT and associated fossil fuel usage. In addition, updates to the Circulation Element to remove level of service standards and incorporate VMT reduction policies would serve to encourage less reliance on single-occupancy passenger automobiles and reduce GHG emissions associated with VMT in the Plan Area. Moreover, housing projects facilitated by the General Plan Update would be required to comply with the City’s recycling and green waste requirements for

multi-family residential land uses set forth in CMC Chapters 8.16.500(C), 8.16.500(D) and 8.16.500(G), which would maximize the recycling and solid waste diversion. Therefore, the General Plan Update would be consistent with the 2017 Scoping Plan.

Quantitative GHG Emissions Assessment

Construction and operation of the General Plan Update would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of CO₂, methane, and nitrous oxide emissions are provided to identify the magnitude of potential project effects.

Construction activities facilitated by the General Plan Update would generate temporary GHG emissions primarily as a result of operation of construction equipment on-site as well as from vehicles transporting construction workers to and from the project sites and heavy trucks to transport demolition debris, building materials, and soil export. As shown in Table 4.6-4, construction of reasonably foreseeable development under the General Plan Update would generate an estimated total of 9,108 MT of CO₂e over the planning horizon. For the purposes of this analysis, it was conservatively assumed all construction activities facilitated by the General Plan Update would occur within the first three years of the planning horizon (i.e., 2022 to 2024), which is the default buildout period in CalEEMod for the level of development anticipated to be facilitated by the General Plan Update. If buildout occurs over a longer timeframe (i.e., 2022 to 2029), construction equipment would be more efficient in later years and would emit fewer GHG emissions than those estimated herein. As discussed under *Methodology and Significance Thresholds*, SCAQMD guidance recommends amortizing the total GHG emissions associated with a development project over a 30-year period (the assumed lifespan of the project) and adding amortized construction emissions to annual operational emissions to determine the project’s total annual GHG emissions, which can then be compared to the threshold of significance.⁶ Amortized over a 30-year period per SCAQMD guidance, construction of reasonably foreseeable development under the General Plan Update would generate an estimated 304 MT of CO₂e per year.

Table 4.6-4 Estimated GHG Emissions during Construction

Year¹	Annual Emissions (MT of CO₂e)
2022	6,839
2023	1,712
2024	557
Total	9,108
Amortized over 30 years	304

MT = metric tons; CO₂e = carbon dioxide equivalents

¹ This analysis conservatively assumes that all construction activities facilitated by the General Plan Update would occur within the first three years of the planning horizon, which is the default buildout period in CalEEMod for the level of development anticipated to be facilitated by the General Plan Update. If buildout occurs over a longer timeframe, construction equipment would be more efficient in later years and would emit fewer GHG emissions than those estimated herein.

See Appendix B for GHG emissions modeling output files.

⁶ If a specific project has a longer lifespan than 30 years, its annual GHG emissions would be lower than those estimated herein because construction emissions would be amortized over a longer timeframe, which would result in lower annual amortized construction emissions.

Operation of the reasonably foreseeable development facilitated by the General Plan Update would generate GHG emissions associated with area sources (e.g., fireplaces, landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. As shown in Table 4.6-5, annual operational emissions generated by the General Plan Update combined with amortized construction emissions would total approximately 8,270 MT of CO₂e per year, or approximately 2.3 MT of CO₂e per service person per year, which would not exceed the locally-applicable, project-specific threshold of 3.2 MT of CO₂e per year. Therefore, impacts would be less than significant.

Table 4.6-5 Combined Annual GHG Emissions

Emission Source	Annual Emissions (MT of CO₂e per year)
Construction	304
Operational	
Area	273
Energy	781
Mobile	6,568
Solid Waste	302
Water	42
Total Emissions	8,270
Service Population (Residents)	3,537
Emissions per Service Person	2.3
Locally-Applicable, Project-Specific Efficiency Threshold (per Service Person)	3.3
Threshold Exceeded?	No

Notes: Emissions modeling was completed using CalEEMod, except for N₂O mobile emissions. N₂O mobile emissions completed consistent with the description in Section 4.6.3(a), *Methodology and Significance Thresholds*. See Appendix B for modeling results.

Summary

As discussed above, the General Plan Update would be consistent with the GHG emission reduction policies of the City’s General Plan, the SCAG 2020-2045 RTP/SCS, and the CARB 2017 Scoping Plan. Therefore, impacts related to GHG emissions would be less than significant. Furthermore, emissions associated with the General Plan Update would be approximately 2.3 MT of CO₂e per service person per year, which would not exceed the locally-applicable, project-specific threshold of 3.3 MT of CO₂e per service person per year. Therefore, the General Plan Update would not generate GHG emissions that may have a significant impact on the environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.6.4 Cumulative Impact Analysis

The geographic scope for related projects considered in the cumulative impact analysis for GHG emissions is global because the impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. Therefore, GHG emissions and climate change are, by definition, cumulative impacts. As discussed under Section 2.3, *Potential Effects of Climate Change*, the adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. Refer to Impact GHG-1 for a detailed discussion of the impacts of the General Plan Update related to climate change and GHG emissions. As discussed therein, the General Plan Update would be consistent with the GHG emission reduction policies of the City's General Plan, the SCAG 2020-2045 RTP/SCS, and the CARB 2017 Scoping Plan. Furthermore, emissions associated with the General Plan Update would be approximately 2.3 MT of CO₂e per service person per year, which would not exceed the locally-applicable, project-specific threshold of 3.3 MT of CO₂e per service person per year. Therefore, the contribution of the General Plan Update to the cumulative impact of climate change would not be cumulatively considerable.

4.7 Hazards and Hazardous Materials

This section analyzes the impacts associated with exposure to hazards and hazardous materials from implementation of the General Plan Update. The hazards and hazardous materials analysis consists of a summary of the existing conditions in the Plan Area, the hazard and hazardous materials regulatory framework, and a discussion of the potential hazardous impacts from development on candidate housing sites. Impacts relating to hazardous materials use, transportation, and development on contaminated sites are addressed. The candidate housing sites were evaluated in this EIR at a programmatic level, based on information available to the City, where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Project-specific analysis was not conducted as those projects are not yet known and analysis would be speculative. Potential hazards associated with wildland fires are discussed in Section 4.15, *Wildfire*.

4.7.1 Setting

Definition of Hazardous Materials and Hazardous Waste

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous waste is defined in Title 22, Section 66261.10 of the California Code of Regulations (CCR) as one that has a characteristic that may:

Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed.

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosiveness, and reactivity. Sections 66261.20 through 66261.24 of Title 22 of the CCR defines the aforementioned properties for hazardous waste and may be used to define such characteristics of a hazardous material. The release of hazardous materials or hazardous wastes into the environment can contaminate soils, surface water, and groundwater supplies.

Land Use Patterns

Small quantities of hazardous materials in the Plan Area are routinely used, stored, and transported by commercial and retail businesses as well as by educational facilities and households. Hazardous materials users and waste generators in the Plan Area include businesses, public and private institutions, and households. Federal, State, and local agency databases maintain comprehensive information on the locations of facilities using large quantities of hazardous materials, as well as facilities generating hazardous waste. Some of these facilities use certain classes of hazardous materials that require accidental release scenario modeling and risk management plans to protect surrounding land uses.

Past and present land use patterns are good predictors of the potential for past contamination by hazardous materials and the current use and storage of hazardous materials. Industrial sites and certain commercial land uses, such as gas stations, are more likely to use and store large quantities of hazardous materials than residential land uses. Land use patterns are also useful for identifying the location of sensitive receptors, such as schools, day-care facilities, hospitals, and nursing homes.

In the Plan Area, industrial and commercial land uses are concentrated along major transportation corridors, such as US-101, Las Virgenes Road, and Agoura Road.

Public educational services within Calabasas are provided by the Las Virgenes Unified School District (LVUSD). LVUSD serves approximately 11,500 students from Agoura Hills, Calabasas, Hidden Hills, and the Los Angeles County portion of Westlake Village. LVUSD oversees 15 schools, including three high schools and three middle schools (LVUSD n.d.). There are also private educational institutions in the Plan Area. Figure 4.7-1 shows the locations of public and private school facilities in the Plan Area as well as a 0.25-mile radius surrounding each school.

Existing Hazardous Material Contamination

Several existing contaminants, including asbestos; lead, in sources such as lead-based paint in buildings or in soil; and contaminated soil and groundwater, may be present in the Plan Area. As many buildings in the Plan Area were constructed prior to 1973 when asbestos was banned, it is reasonable to assume that asbestos could be present in some structures. Similarly, lead may be present in paint that was sold prior to 1978 when it was banned or in soil that was contaminated by leaded gasoline or improperly discarded batteries. Contamination of soils may also be present at past and existing industrial uses, gas stations and automotive service uses, and dry cleaners within the Plan Area. Soil contamination may also be present at residential development due to contamination from household hazardous wastes (HHW). The U.S. Environmental Protection Agency (USEPA) describes HHW as leftover household products that can catch fire, react, or explode under certain circumstances, or that are corrosive or toxic. HHW includes products such as paints, cleaners, oils, batteries, and pesticides (USEPA 2021b).

The State Water Resources Control Board (SWRCB) GeoTracker website identifies Leaking Underground Storage Tanks (LUST) cleanup sites; Cleanup Program Sites, formerly known as Spills, Leaks, Investigations, and Cleanups (SLIC) sites; military sites; land disposal sites, or landfills; permitted underground storage tank sites; Waste Discharge Requirement sites; Irrigated Lands Regulatory Program sites; and California Department of Toxic Substances Control (DTSC) cleanup and hazardous waste permit sites. A search of the GeoTracker database was conducted on April 2, 2021 (SWRCB 2021). In addition, the DTSC's EnviroStor database was searched on April 2, 2021 for cleanup sites in the Plan Area (DTSC 2021). According to the database search, there are a total of 13 contaminated sites in the Plan Area: 11 are inactive and closed and 2 are listed as are open. The Dandee Gasoline Tanker Spill on US-101 (Site ID SL0611106052) is listed as an open and inactive cleanup program site. The second site is a cleanup program site, Rantec Microwave Systems, Inc. site (Site ID T10000004899), located at 24003 Ventura Boulevard and is listed is open – site assessment.

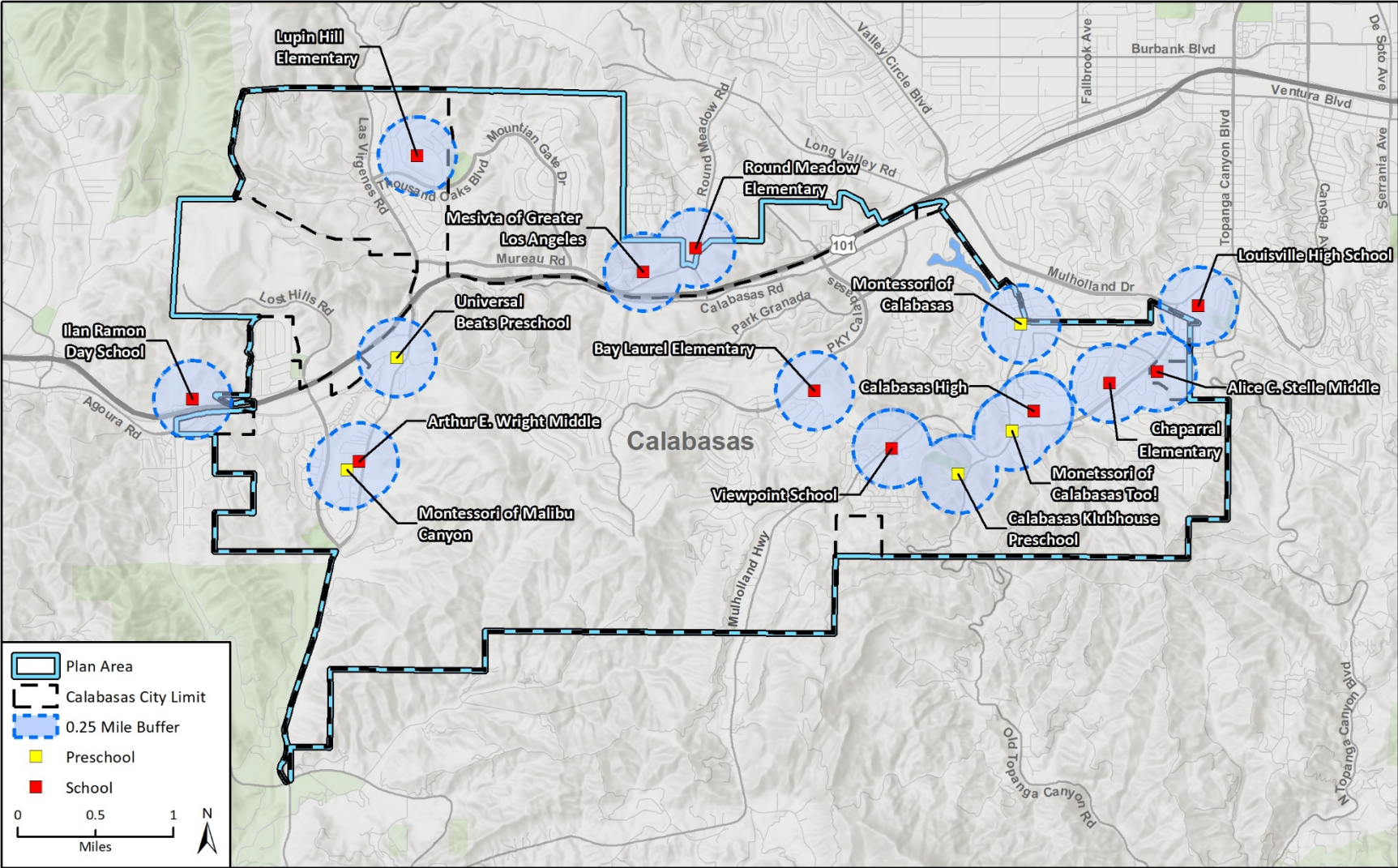
Airports and Aircraft Hazards

There are no public or private airports in the Plan Area. The nearest airport is Van Nuys Airport located approximately 10 miles northeast and Santa Monica Airport located approximately 14 miles southeast of the Plan Area. The airports influence areas do not extend into the Plan Area.

Emergency Response Plans

California Government Code Section 8568, the "California Emergency Services Act," states that "the State Emergency Plan shall be in effect in each political subdivision of the State, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof." The Act provides the basic authorities for conducting emergency operations

Figure 4.7-1 Existing Plan Area Schools with a 1/4-Mile Buffer



Basemap provided by ESRI and its licensors © 2021.
 Additional Sources California Department of Education, 2021; City of Calabasas 2018

Fig 4.7-1 School Sites

following the proclamations of emergencies by the Governor or appropriate local authority, such as a City Manager. The provisions of the Act are reflected and expanded on by appropriate local emergency ordinances. The Act further describes the function and operations of government at all levels during extraordinary emergencies, including war.

All local emergency plans are extensions of the State of California Emergency Plan. The State Emergency Plan conforms to the requirements of California's Standardized Emergency Management System (SEMS), which is the system required by Government Code 8607(a) for managing emergencies involving multiple jurisdictions and agencies (California Office of Emergency Services [CalOES] 2017). The SEMS incorporates the functions and principles of the Incident Command System (ICS), the Master Mutual Aid Agreement, existing mutual aid systems, the operational area concept, and multi-agency or inter-agency coordination (CalEOS 2021). Local governments must use SEMS to be eligible for funding of their response-related personnel costs under state disaster assistance programs. The SEMS consists of five organizational levels that are activated as necessary, including: field response, local government, operational area, regional, and State. CalOES divides the State into six mutual aid regions. Calabasas is located in Mutual Aid Region I, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, and Orange counties (CalOES 2020).

The five cities of the Las Virgenes-Malibu Council of Governments (LVMCOG) (Agoura Hills, Calabasas, Hidden Hills, Westlake, and Malibu) prepared a Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) in 2018 (LVMCPG 2018). The MJHMP focuses on identifying common hazardous threats and identifying regional mitigation strategies. The MJHMP includes a list of activities to reduce risk and prevent loss from hazardous events. Strategies address multi-hazard issues as well as hazard specific activities for fire, earthquakes, flooding, landslides, and windstorms.

4.7.2 Regulatory Setting

The management of hazardous materials and hazardous wastes is regulated at federal, State, and local levels, including through programs administered by the USEPA; agencies within the California Environmental Protection Agency, such as the DTSC; federal and State occupational safety agencies; and the Certified Unified Program Agency (CUPA), which for Calabasas is the Los Angeles County Fire Department.

Federal

The USEPA is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are contained in the Code of Federal Regulations (CFR) Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. The management of hazardous materials is governed by the following laws:

- Resource Conservation and Recovery Act of 1976 (42 U.S. Code [USC] 6901 et seq.);
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA); also called the Superfund Act (42 USC 9601 et seq.);
- Federal Insecticide, Fungicide, and Rodenticide Act (7 USC 136 et. Seq.); and
- Superfund Amendments and Reauthorization Act of 1986 (SARA, Public Law 99 499).

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. The USEPA provides oversight and supervision for Federal Superfund investigation/remediation projects, evaluates remediation technologies, and

develops hazardous materials disposal restrictions and treatment standards. Each of the aforementioned federal regulations is described below, along with applicable lead-based paint regulations.

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976

These acts established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. The Resource Conservation and Recovery Act was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle to grave” system of regulating hazardous wastes. Among other things, the use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Act.

The Comprehensive Environmental Response, Compensation and Liability Act (enacted 1980), Amended by the Superfund Amendments and Reauthorization Act (1986)

CERCLA provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Among other things, CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled revision of the National Contingency Plan, which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List.

The Federal Insecticide, Fungicide, and Rodenticide Act

The Federal Insecticide, Fungicide, and Rodenticide Act (7 USC 136 *et seq.*) provides federal control of pesticide distribution, sale, and use. The USEPA was given authority under the Federal Insecticide, Fungicide, and Rodenticide Act to study the consequences of pesticide usage and require users (farmers, utility companies, and others) to register when purchasing pesticides. Later amendments to the law required users to take exams for certification as applicators of pesticides. All pesticides used in the United States must be registered/licensed by the USEPA. Registration assures that pesticides will be properly labeled and that, if used in accordance with specifications, they will not cause unreasonable harm to the environment.

Lead-Based Paint Elimination Final Rule 24 Code of Federal Regulations

Regulations for lead-based paint are contained in the Lead-Based Paint Elimination Final Rule 24 CFR 33, governed by the U.S. Housing and Urban Development (HUD), which requires sellers and lessors to disclose known lead-based paint and lead-based paint hazards to prospective purchasers and lessees. Additionally, all lead-based paint abatement activities must be in compliance with California and Federal Occupational Safety and Health Administrations and with the State of California Department of Health Services requirements. Only lead-based paint trained and certified abatement personnel are allowed to perform abatement activities. All lead-based paint removed from structures must be hauled and disposed of by a transportation company licensed to transport this type of material at a landfill or receiving facility licensed to accept the waste.

State

Department of Toxic Substances Control

As a department of the California Environmental Protection Agency, the DTSC is the primary agency in California that regulates hazardous waste, assumes authority for clean-up of the most serious existing contamination sites, and looks for ways to reduce the hazardous waste produced in California. The DTSC regulates hazardous waste in California primarily under the authority of the Resource Conservation and Recovery Act and the California Health and Safety Code.

The DTSC also administers the California Hazardous Waste Control Law to regulate hazardous wastes. While the Hazardous Waste Control Law is generally more stringent than the Resource Conservation and Recovery Act, both State and federal laws apply in California. The Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the SWRCB, and the California Department of Resources Recycling and Recovery (CalRecycle) to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the State. The Secretary for Environmental Protection consolidates the information submitted by these agencies and distributes it to each city and county where sites on the lists are located. Before the lead agency accepts an application for any development project as complete, the applicant must consult these lists to determine if the site at issue is included.

If soil is excavated from a site containing hazardous materials, it is considered a hazardous waste if it exceeds specific criteria in Title 22 of the CCR. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking jurisdiction.

Hazardous Waste Control Act

The hazardous waste management program enforced by DTSC was created by the Hazardous Waste Control Act (California Health and Safety Code Section 25100 *et seq.*), which is implemented by regulations described in the CCR Title 22. The State program is similar to, but more stringent than, the federal program under the Resource Conservation and Recovery Act. The regulations list materials that may be hazardous, and establish criteria for their identification, packaging, and disposal. Environmental health standards for management of hazardous waste are contained in CCR Title 22, Division 4.5. In addition, as required by California Government Code Section 65962.5, DTSC maintains a Hazardous Waste and Substances Site List for the State called the Cortese List.

California Department of Pesticide Regulation, Department of Food and Agriculture, and the Department of Public Health

The California Department of Pesticide Regulations, a division of the California Environmental Protection Agency, in coordination with the California Department of Food and Agriculture, and the California Department of Public Health have the primary responsibility to regulate pesticide use,

vector control, food, and drinking water safety. The Department of Pesticide Regulations registers pesticides, and pesticide use is tracked by the County. Title 22 is used to regulate both small and large California Department of Public Health water systems.

California Fire Code (2019)

The 2019 Fire Code establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare for the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of this code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy classification, location, maintenance, removal, and demolition of every building or structure throughout the State of California.

Local

Los Angeles County Fire Department

The Emergency Operations Section of the Los Angeles County Fire Department's Health Hazardous Materials Division (HHMD) has been certified by the California Environmental Protection Agency as the CUPA for Calabasas. As the CUPA, the HHMD is responsible for administering California safety and environmental compliance laws and regulations related to hazardous materials and hazardous wastes in Calabasas. The HHMD's Emergency Operations Section (EOS) provides 24-hour-a-day response to spills and releases of hazardous materials and wastes throughout the County. To protect the citizens of Los Angeles County from actual or threatened releases, EOS has three teams of highly trained, state-certified Hazardous Materials Specialists. The EOS addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, or national security emergencies, including incidents involving major hazardous material upset. The plan provides operational concepts, identifies sources of outside support that would be provided through mutual aid agreements, State and Federal agencies, and the private sector.

City of Calabasas Safety Element

The City of Calabasas General Plan Safety Element aims to protect life and property from adverse effects associated with the transportation, storage, treatment, and disposal of hazardous materials within Calabasas. The Safety Element contains the following relevant policies to meet those objectives.

- Policy VII-21** Manage activities within Calabasas involving the transport, use, store or dispose of hazardous materials in a responsible manner that protects public health, safety, and the environment.
- Policy VII-22** Promote the availability of safe and legal options for the management of hazardous wastes generated by businesses and households within and adjacent Calabasas.
- Policy VII-23** Promote community education and understanding of sound management practices for the storage, handling, use, and disposal of hazardous materials.

Policy VII-24 Enforce the requirement that industrial facilities and construction sites have adequate Hazardous Materials Handling and Spill Response Plans to ensure that the goals of pollutant control are consistent with the City’s public safety needs and the General Plan’s water quality objectives.

4.7.3 Impact Analysis

Methodology and Significance Thresholds

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. The General Plan Update would have a significant impact with respect to hazards and hazardous materials if it would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school
4. Be located on a site included on a list of hazardous material sites compiled pursuant to State Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment
5. Result in a safety hazard or excessive noise for people residing or working in the project area that is located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

As described at the beginning of this section, an analysis of the risk of exposure to wildland fires resulting from implementation of the General Plan Update is contained in Section 4.15, *Wildfire*. Therefore, threshold 7 is addressed in Section 4.15, *Wildfire*.

Project Impacts and Mitigation Measures

- Threshold 1:** Would the General Plan Update create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Threshold 2:** Would the General Plan Update create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact HAZ-1 IMPLEMENTATION OF THE GENERAL PLAN UPDATE COULD RESULT IN AN INCREMENTAL INCREASE IN THE OVERALL ROUTINE, TRANSPORT, USE, AND DISPOSAL OF HAZARDOUS MATERIALS IN CALABASAS NEAR RESIDENTIAL LAND USES. COMPLIANCE WITH APPLICABLE REGULATIONS RELATED TO HAZARDOUS MATERIALS AND COMPLIANCE WITH GENERAL PLAN POLICIES WOULD MINIMIZE THE RISK OF RELEASES AND EXPOSURE TO THESE MATERIALS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Development facilitated by the General Plan Update would incrementally accommodate the development of 1,305 new residential units and redevelopment and development of commercial space. Thus, implementation of the General Plan Update may increase the number of people in the city that could be exposed to a potential accidental release of hazardous materials. Development facilitated by the General Plan Update would increase residential density near major arterial streets, such as Lost Hills Road, Las Virgenes Road, and Calabastas Road. Industrial and commercial uses on these arterials may require the routine transport of hazardous materials for their business operations. Therefore, development facilitated by the General Plan Update would increase the number of people, including residents, near transportation corridors where hazardous materials may be routinely transported.

The General Plan Update would facilitate mixed-use development (including residences) within several areas in and around the City where hazardous materials could be stored or used. These mixed-use areas are generally located in the eastern and western portions of the Plan Area and include areas within the City (along Agoura and Calabastas Roads and near the Las Virgenes Road/Mureau Road intersection) as well as the Craftsman's Corner area (north of US-101 and generally east of Parkway Calabastas). By allowing for mixed-use development in commercial areas where there may have been past use of hazardous materials, the potential for exposure may increase due to: (1) potential soil/groundwater contamination due to past practices; and (2) the proximity of new residential development to ongoing activity involving the use of hazardous materials. The introduction of residential components in these areas of the Plan Area could potentially increase exposure to hazardous materials.

Hazardous Materials Transport

Hazardous materials may be transported into and throughout the Plan Area on US-101; Lost Hills Road, Las Virgenes Road, Mulholland Highway, Calabastas Road, and collector and local streets. Accidents on these roadways could result in the release of hazardous materials.

The U.S. Department of Transportation's Office of Hazardous Materials Safety regulates the transportation of hazardous materials, as described in Title 49 of the CFR, and implemented by Title 13 of the CCR. The U.S. Documentation of compliance with hazardous materials regulations codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code, is required for all hazardous waste transport. In addition, individual contractors and property owners are required to comply with all applicable federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of

hazardous waste, including but not limited to, Title 49 of the CFR. Adherence to applicable regulations and laws would reduce the potential hazards associated with the transport of hazardous materials, including accidental release of hazardous materials during transport.

In addition to mandatory adherence to laws and regulations, Policy VII-29 of the 2030 General Plan Safety Element would reduce the potential hazard associated with the transport of hazardous materials in the Plan Area. Policy VII-29 would require management of the transport of hazardous materials in the Plan Area in a manner that protects public health, safety, and the environment, thus reducing the risk of accidental release of hazardous materials in transport. Impacts to hazardous materials transport would be less than significant.

Hazardous Materials Use and Disposal

Although the overall quantity of hazardous materials used and requiring disposal in Calabasas could incrementally increase as a result of implementation of the General Plan Update, all new development that uses hazardous materials would be required to comply with the regulations, standards, and guidelines established by the USEPA, the State of California, Los Angeles County, and Calabasas related to storage, use, and disposal of hazardous materials.

As described above in the *Regulatory Setting* discussion, the Emergency Operations Section of the Los Angeles County Fire Department's HHMD has been certified by the California Environmental Protection Agency as the CUPA. As the CUPA, the HHMD provides 24-hour emergency response services to hazardous materials incidents occurring throughout Los Angeles County and performs inspections to prevent exposure to environmental health hazards for businesses and residents in Calabasas. Businesses that produce, use, process, distribute or store certain chemicals over a threshold quantity are required to develop a Risk Management Program, prepare a Risk Management Plan (RMP), and submit the RMP to the HHMD. An RMP is a detailed engineering analysis of a facility's potential to cause an accident, and the mitigation measures that can be implemented to reduce this potential for an unplanned release. The RMP must consider the proximity to sensitive populations located in schools, residential areas, hospitals, long-term health care facilities and child day care facilities. The RMP must also consider external events such as seismic activity. Mandatory implementation of RMPs would reduce the potential hazard to residents and the general public from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Similarly, the RMP would prevent substantial risks to residential uses facilitated by the General Plan Update within proximity to industrial development.

In addition to mandatory adherence to laws and regulations, compliance with Safety Element policies from the General Plan Update, listed below, would reduce the potential for accidental exposure and hazards associated with the use and disposal of hazardous materials.

- Policy VII-30** Promote the availability of safe and legal options for the management of hazardous wastes generated by businesses and households within and adjacent Calabasas.
- Policy VII-31** Promote community education and understanding of sound management practices for the storage, handling, use, and disposal of hazardous materials.
- Policy VII-33** Enforce the requirement that industrial facilities and construction sites have adequate Hazardous Materials Handling and Spill Response Plans to ensure that the goals of pollutant control are consistent with the City's public safety needs and the General Plan's water quality objectives.

Demolition and Redevelopment Activities

The General Plan Update would facilitate and encourage infill development and redevelopment for residential uses within urbanized areas of the City. Demolition activities related to future development and re-development projects in Calabasas would potentially result in emission of lead and asbestos. Lead-based materials and asbestos exposure are regulated by the California Occupational Safety and Health Administration (Cal OSHA). The CCR Section 1532.1 requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed Cal OSHA standards. Under this rule, construction workers may not be exposed to lead at concentrations greater than fifty micrograms per cubic meter of air averaged over an eight-hour period and exposure must be reduced to lower concentrations if the work day exceeds eight hours. Similarly, CCR Section 1529 sets requirements for asbestos exposure assessments and monitoring, methods of complying with exposure requirements, safety wear, communication of hazards, and medical examination of workers.

The control of asbestos during demolition or renovation of buildings is regulated under the Federal Clean Air Act. The Federal Clean Air Act requires a thorough inspection for asbestos where demolition will occur and specifies work practices to control emissions, such as removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expeditiously as practicable (USEPA 2021a). Compliance with the CCR and Federal Clean Air Act, which is mandatory, would reduce the potential hazards and risks associated with release of lead and asbestos.

Summary

Compliance with existing applicable regulations and programs and implementation of General Plan Update policies would minimize risks from routine transport, use, and disposal of hazardous materials, including potential hazards from the accidental release of hazardous materials. Oversight by the appropriate federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these materials. Therefore, impacts from a hazard to the public or the environment through routine transport, use or disposal of hazardous materials, or from accidental release or exposure to these materials would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 3: Would the General Plan Update emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
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Impact HAZ-2 IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY RESULT IN HAZARDOUS EMISSIONS OR HANDLING OF HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN 0.25 MILE OF AN EXISTING OR PROPOSED SCHOOL. HOWEVER, COMPLIANCE WITH EXISTING REGULATORY REQUIREMENTS WOULD MINIMIZE RISKS TO SCHOOLS AND STUDENTS, RESULTING IN A LESS THAN SIGNIFICANT IMPACT.

The General Plan Update would facilitate residential and mixed-use development in Calabasas. Residential uses and mixed-use development typically do not emit hazardous materials or

substances. Mixed-use development would include retail and commercial uses, not uses that generate hazardous materials such as gas stations or auto body shops. However, because the General Plan Update does not include specific development projects future use of hazardous materials is currently unknown and may occur within 0.25 mile of an existing school, as shown in Figure 4.7-1.

Hazardous materials and waste generated from future development under the General Plan Update would not pose a health risk to nearby schools because businesses that handle or have on-site storage of hazardous materials would be required to comply with the provisions of the California Fire Code and the HHMD CUPA requirements set forth in the California Health and Safety Code, Division 20, Chapter 6.95, Articles 1 and 2. As described in the *Regulatory Setting* above, all businesses that handle more than a specified amount of hazardous materials are required to submit a hazardous materials business plan to a regulating agency, in this case, the HHMD. Therefore, future development facilitated by General Plan Update would not result in use of new hazardous material use within a 0.25-mile radius of existing public and private schools in the Plan Area. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 4: Would development facilitated by the General Plan Update be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

Impact HAZ-3 IMPLEMENTATION OF THE GENERAL PLAN UPDATE COULD FACILITATE DEVELOPMENT ON OR NEAR HAZARDOUS MATERIALS SITES. HOWEVER, COMPLIANCE WITH APPLICABLE REGULATIONS RELATING TO SITE CLEANUP WOULD MINIMIZE HAZARDS FROM DEVELOPMENT ON CONTAMINATED SITES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Existing sites that may potentially contain hazardous land uses in the City include large and small-quantity generators of hazardous waste, such as gas stations, dry cleaners, and industrial uses. As noted previously, there are two open sites containing or potentially containing hazardous materials contamination located within the Plan Area, one of which is a spill site on US-101. Development facilitated by the General Plan Update, specifically proposed residential development, could expose construction workforce and as well as future occupants to hazardous materials. New development may occur on documented or undocumented hazardous materials sites. Specifically, sites inventory locations in the northeast portion of the City may be exposed to hazardous materials from the open site located at 24003 Ventura Boulevard.

Development near 24003 Ventura Boulevard and US-101 spill site would be preceded by investigation, remediation, and cleanup under the supervision of the Regional Water Quality Control Board or DTSC, likely before construction activities could begin. Therefore, the site would be remediated in accordance with State and regional standards.

It is also possible that underground storage tanks (USTs) in use prior to permitting and record keeping requirements may be present in the Plan Area. If an unidentified UST were uncovered or disturbed during construction activities, it would be removed under permit by the HHMD; if such removal would potentially undermine the structural stability of existing structures, foundations, or impact existing utilities, the tank might be closed in place without removal. Tank removal activities

could pose both health and safety risks, such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors. Potential risks, if any, posed by USTs would be minimized by managing the tank according to existing standards contained in Division 20, Chapters 6.7 and 6.75 (Underground Storage Tank Program) of the California Health and Safety Code as enforced and monitored by the HHMD.

The extent to which groundwater may be affected from an underground tank, if at all, depends on the type of contaminant, the amount released, the duration of the release, and depth to groundwater. If groundwater contamination is identified, characterization of the vertical and lateral extent of the contamination and remediation activities would be required by the RWQCB prior to the commencement of any new construction activities that would disturb the subsurface. If contamination exceeds regulatory action levels, the developer would be required to undertake remediation procedures prior to grading and development under the supervision of the RWQCB, depending upon the nature of any identified contamination. Compliance with existing State and local regulations as well as implementation of the General Plan Update policies would reduce impacts to a less than significant level.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the General Plan Update result in a safety hazard or excessive noise for people residing or working in the project area?

Impact HAZ-4 **THERE ARE NO AIRPORTS WITHIN TWO MILES OF THE PLAN AREA, AND THE PLAN AREA IS NOT WITHIN THE INFLUENCE AREA OF AN AIRPORT. THERE WOULD BE NO IMPACT.**

There are no public or private airports within the Plan Area. The nearest airport is the Van Nuys Airport located approximately 10 miles northeast of the Plan Area limits. As described above, the Plan Area is located entirely outside of the area of influence for the Van Nuys Airport. Therefore, the General Plan Update would have no impact related to excessive noise hazards within airport land use plan areas or in proximity to airports.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 6: Would the General Plan Update impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact HAZ-5 **THE GENERAL PLAN UPDATE POLICIES ADDRESS MAINTAINING A LOCAL HAZARD MITIGATION PLAN AND COORDINATION WITH ADJACENT JURISDICTIONS. THEREFORE, THE GENERAL PLAN UPDATE WOULD NOT RESULT IN INTERFERENCE WITH THESE TYPES OF ADOPTED PLANS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Development facilitated by the General Plan Update would accommodate future population growth and would decrease vehicle miles travelled in the City. As discussed in Section 4-15, *Wildfire*, an Emergency Evaluation Assessment was prepared for the Housing Element Update in July 2021 by Fehr & Peers (Appendix C). The evaluation assessed capacity during an emergency evacuation event

assuming complete evacuation of the City, which may occur during a wildfire. Seven roadway segments were analyzed that would be used to access US-101 from the proposed housing sites. Roadway segments are listed in Section 4-15, *Wildfire*. Citywide evacuation access was determined by reviewing the vehicle travel demand on each roadway during an evacuation event. It was assumed that access to the south was not available, and that all land uses in the City would need to evacuate toward US-101. The City was further separated into five evacuation areas based on topography and access to day roadways to US-101. The five evacuation areas included:

- Northwest: vehicles would travel southbound on Las Virgenes Road and Lost Hills Road
- Southwest: vehicles would travel northbound on Las Virgenes Road and Lost Hills Road
- Northeast: vehicles would travel southbound on Parkway Calabasas
- Central: vehicles would travel northbound on Parkway Calabasas
- Southeast: vehicles would travel northbound on Mulholland Drive

As described in additional detail in Appendix C, both employee and household evacuation were analyzed for the General Plan Update. Using vehicle ownership data from the SCAG travel demand model evacuation, demand was generated for residential uses in the City. Vehicle ownership in Calabasas ranges from one to four or more vehicles per household. Therefore, to estimate travel demand generated by residents, one vehicle trip was assumed to be generated by the one vehicle households, two vehicle trips were assumed to be generated by two vehicle households, and 2.5 vehicle trips were assumed to be generated by three or more vehicle households. For people who work in Calabasas, each employee was assumed to generate one vehicle trip. Using this approach total vehicle demand for Calabasas was determined to be 40,557 vehicles. The General Plan Update is anticipated to add approximately 2,640 vehicles to City roadways during an evacuation event, which is an approximately seven percent increase from existing (2021) conditions.

The travel demand during an evacuation event was then compared to the roadway capacity for the seven roadway segments that would provide access to US-101. The total evacuation travel demand assumes that two-thirds of the evacuation would occur during a one-hour period based on consultation with public safety experts. The General Plan Update is projected to increase evacuation demand by approximately five percent in the northwest area, seven percent in the southwest area, eight percent in the central area, and 24 percent in the northeast area. None of the proposed housing sites were located in the southeast area, therefore this area was not analyzed. The large percent change in the northeast area is because the existing evacuation demand only accounts for the land uses in the City's sphere of influence and not the additional development that is located in the north. Please refer to Table 6 of Appendix C for hourly demand in each of the five evaluation areas following an evacuation order. Therefore, traffic from buildout of the General Plan Update would be minor compared to existing conditions in the Plan Area. Therefore, the General Plan Update would not have a significant effect on emergency evacuation.

Additionally, objectives and policies as part of the General Plan Update would further reduce evacuation impacts. Objective VII.F of the proposed General Plan Safety Element and associated policies, listed below, are intended to ensure effective and coordinated response to disasters.

Objective VII.F. Maintain a system of emergency services and disaster response preparedness that will save lives, protect property, and facilitate recovery with a minimum of social disruption following both minor emergencies and major catastrophic events.

- Policy VII-39** Maintain and update the City's Emergency Operations Plan every 8 years at a minimum to account for all types of emergencies consistent with the Standardized Emergency Management System (SEMS).
- Policy VII-50** Maintain and update an Evacuation Plan every 8 years at a minimum to account for all types of emergencies.
- Develop and employ evacuation alternatives and/or alternative emergency access routes in neighborhoods that have single ingress/egress.
 - Develop and maintain evacuation options for residents with mobility challenges.
 - Designate and publicize evacuation routes; include existing pedestrian pathways.
 - Designate safety zones or shelter-in-place locations as places of refuge when evacuation routes become blocked.
- Policy VII-51** Require new development to provide adequate access (ingress, egress) and a minimum of two roadways with widths and lengths in compliance with California Building Code Chapter 7A requirements.
- Policy VII-52** Prioritize undergrounding of utilities for designated routes to make them more reliable.
- Policy VII-53** Conduct regular evacuation trainings with single-access community HOAs and residents; encourage residents in single-access communities to maintain emergency supplies for at least 3 days.
- Policy VII-54** Maintain emergency roadways and improve them as necessary and appropriate to ensure ongoing serviceability
- Policy VII-55** Establish higher standards of defensible space for residential neighborhoods/higher priority targets for enforcement.
- Policy VII-56** Future roadway design, especially in areas that have less accessibility and on key evacuation routes, should consider evacuation capacity and consider design treatments such as painted medians (instead of raised medians) or other treatments that could assist in creating reversible lanes and facilitate additional capacity in an evacuation event scenario.
- Policy VII-57** Evacuation event signal timing should be periodically reviewed and updated to provide additional evacuation capacity. Incorporate Caltrans in the City's emergency operations center protocol to develop emergency evacuation signal timing for freeway on and off-ramps.
- Policy VII-58** Continue coordinating with nearby jurisdictions, the Las Virgenes-Malibu Council of Governments (LVMCOG) and Los Angeles County Office of Emergency Management on developing strategies to address freeway congestion on the US-101 freeway which functions as the main evacuation route in the region.
- Policy VII-59** Consider the needs of vulnerable populations in the city, such as senior housing facilities and schools, and others without access to a personal vehicle in City evacuation plans.

In addition to policies from the Safety Element, the City contracts with the Los Angeles County Sheriff's Department to provide emergency services. The City has prepared an Emergency Operations Plan (2012) that describes how the City will effectively prepare for, respond to, and

recover from natural disasters, technological incidents, and national security emergencies. The Emergency Operations Plan establishes the emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts of the various emergency staff and service elements utilizing the Standardized Emergency Management System and the National Incident Management System. Implementation of the General Plan Update policies and implementation programs associated with emergency planning and response, in addition to City emergency planning and local programs such as the Multi-Jurisdictional Hazard Mitigation Plan, would ensure that implementation of the General Plan Update would result in less than significant impacts relating to implementation of adopted emergency response and evacuation plans.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.7.4 Cumulative Impacts

Cumulative development in the Plan Area in combination with development proposed under the General Plan Update may contribute to an increase in regional hazards related to the use of and exposure to hazardous material. Implementation of the General Plan Update would increase density, and therefore potentially expose additional residences to hazardous materials. However, implementation of the Safety Element policies contained in the General Plan Update and compliance with existing laws and regulations would reduce cumulative hazards and hazardous materials. Therefore, the General Plan Update would have an incremental contribution to cumulative impacts associated with hazards and hazardous materials, but would not be cumulatively considerable. Cumulative impacts would be less than significant.

4.8 Hydrology and Water Quality

This section addresses impacts to the Plan Area's drainage infrastructure and surface water quality. Watershed information was obtained from the City of Calabasas' *Creeks Master Plan* (2006), while data regarding groundwater and water quality was obtained from the Las Virgenes Municipal Water District's *2015 Urban Water Management Plan* (2016).

4.8.1 Setting

Watershed and Surface Water

Three main creeks flow through the Plan Area: Las Virgenes Creek in the Malibu Creek watershed; Dry Canyon and McCoy Creeks in the Los Angeles River watershed, as shown in Figure 4.8-1. These three creeks serve to convey storm water flows to the lower watershed during the wet season. Smaller flows associated with rare summer storm runoff, irrigation runoff, industrial/ commercial runoff, and natural seeps and springs, also pass through the creeks on the way to Malibu Creek and the Los Angeles River. Two additional smaller creeks, Cold and Stokes creeks, also lie within the Plan Area.

Las Virgenes Creek

The primary hydrologic feature is Las Virgenes Creek, which is located in the western portion of the Plan Area. Las Virgenes Creek originates in Simi Valley and is formed from Las Virgenes Canyon. Additional shorter branches that originate in Ventura County are also tributary to the creek. Las Virgenes Creek flows into Malibu Creek below Mulholland Highway and eventually makes its way to Santa Monica Bay. Malibu Creek's watershed encompasses approximately 109 square miles and spans five cities and unincorporated areas of Los Angeles County. The creek traverses through natural open space, concrete channelization, culverts, vegetation, and dense residential areas. The creek is characterized by medium flows south of Mureau Road and intermittent to low flows north of Parkmor Road.

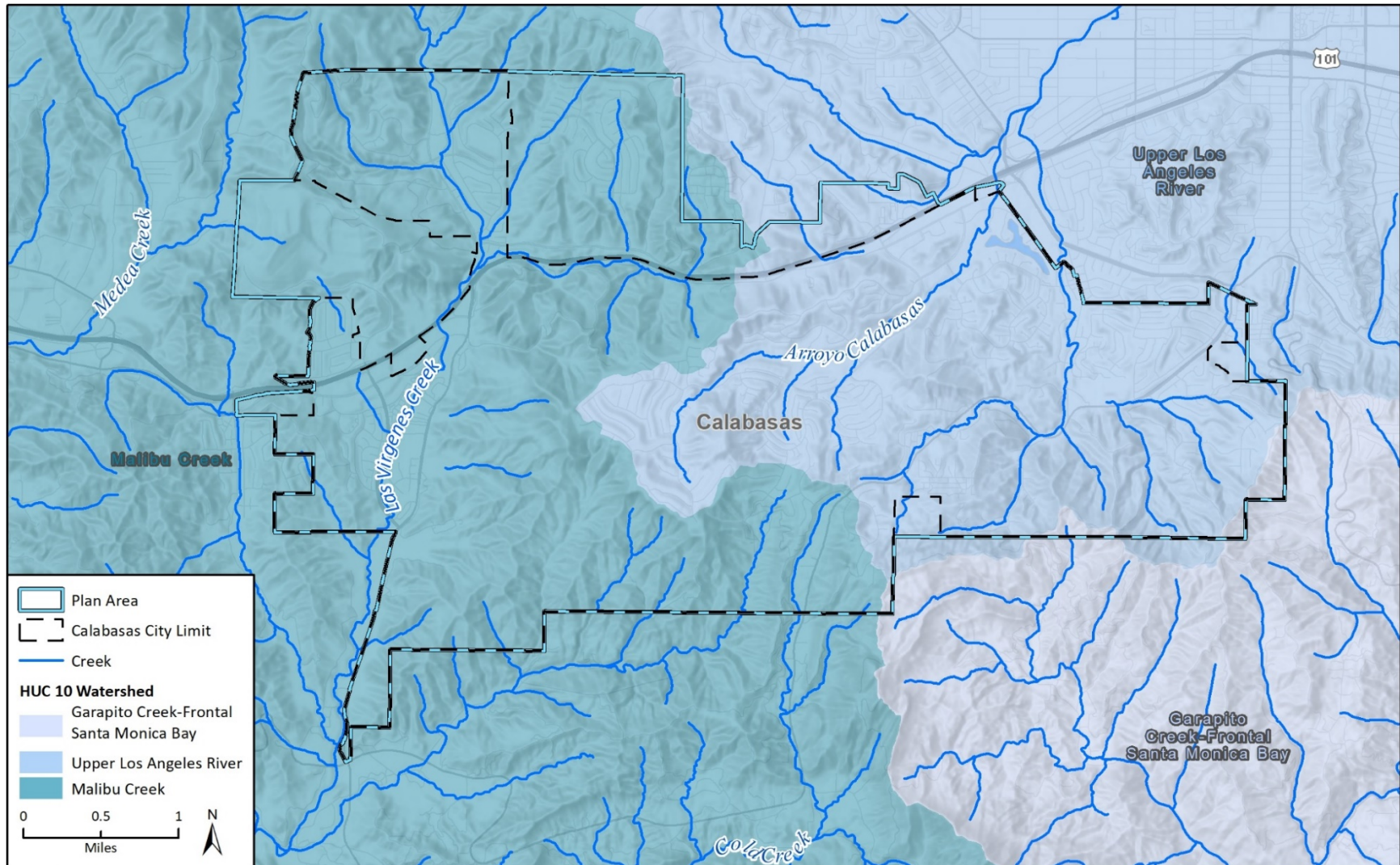
Dry Canyon Creek

Dry Canyon Creek is part of the Los Angeles River Watershed. It begins in the Calabasas Highlands area, flows parallel to Mulholland Drive, then north along Old Topanga Canyon Road to the confluence with Calabasas Creek. Dry Canyon Creek and its surroundings have been impacted by large residential developments since the start of the 20th century although there are numerous patches of open space dotting the canyon. The creek is characterized by low to intermittent flows from the top of the watershed to Headwaters Corner and medium flows from Wrencrest Drive to the city boundary.

McCoy Creek

McCoy Creek is also part of the Los Angeles River Watershed. The creek emerges from a cement underground culvert under Parkway Calabasas at the eastern boundary of The Oaks property through areas of native vegetation and natural channeling until passing into a golf course, which flanks the creek on both sides for the next 0.6 mile. Along the way, the creek passes Calabasas Lake.

Figure 4.8-1 Watershed and Surface Waters



Base map provided by Esri and its licensors © 2021.
Sources provided by United States Geological Survey 2021; California Department of Water Resources 2021; City of Calabasas 2018

FigX Watershed and Surface Waters

On the north side of Calabasas Road, the creek crosses under the Ventura Freeway to join Dry Canyon Creek and form Calabasas Creek. Creek flows are classified as low from The Oaks property to the golf course and moderate from the golf course to the Calabasas Road.

Topography

The topographical conditions in the Plan Area are varied, consisting of differential hillside terrain with numerous valley and arroyo conditions. Flat or level topography constitutes a small percentage of the terrain in the Plan Area.

The unique canyons and arroyos that characterize the Plan Area include McCoy Canyon, Crummer Canyon, and Las Virgenes Canyon. Calabasas Peak is located just south of the southern border of the city along Calabasas Peak Mountain way. Ridgelines are described in Section 4.1, *Aesthetics*, and topographic conditions are described in Section 4.5, *Geology and Soils*.

Groundwater

Calabasas does not have any water sources sufficient to supply its citizens with water service. The City contracts with the Las Virgenes Municipal Water District (LVMWD) to supply water. More information on water supply can be found in Section 4.14, *Utilities and Service Systems*.

Groundwater in the LVMWD service area is currently only used to supplement the recycled water system at the Tapia Water Reclamation Facility (TWRf). Groundwater is extracted from the 3,110-acre Thousand Oaks Area Groundwater Basin, which underlies a valley between Lake Sherwood and Thousand Oaks in southeastern Ventura County and western Los Angeles County. The basin is bounded by the Santa Monica Mountains, which contain semi-permeable soils. The valley is drained by Conejo Creek and Triunfo Canyon. The basin has an estimated storage capacity of 130,000 AF (California Department of Water Resources [DWR] 2004). Groundwater from the basin is extracted by two groundwater wells known as the Westlake Wells (LVMWD 2016a). Groundwater is conveyed from these wells via the wastewater conveyance system and mixed with treated effluent from the TWRf to meet peak demands for recycled water.

LVMWD jointly owns and operates a recycled water system with Triunfo Sanitation District (TSD) and Calleguas Municipal Water District. The system begins at the TWRf where wastewater is treated to a tertiary level to allow for distribution for non-potable uses. During periods of peak demand, tertiary effluent is mixed with groundwater extracted from the Thousand Oaks Area Basin and imported water, as described in Section 4.14, *Utilities and Service Systems*. Recycled water is used in the LVMWD service area almost exclusively for landscape and golf course irrigation with a minor quantity used for various commercial uses (LVMWD 2016a). Existing recycled infrastructure includes a series of pipelines, pump stations, tanks, reservoirs, and associated appurtenant structures throughout the LVMWD service area.

The San Fernando Basin is located in the Upper Los Angeles River Area (ULARA). The basin overlays the northeastern portion of Calabasas and consists of 112,000 acres. Water is imported from this basin to the cities of Los Angeles, Burbank, and Glendale. Los Angeles, under its Pueblo Water Right, has an exclusive right to extract and utilize the entire native safe yield of the San Fernando Basin of 43,660 acre-feet per year. Groundwater levels in this basin have declined in the recent years due to increased urbanization and runoff (ULARA 2021).

Flood Hazards

Flooding can cause widespread damage to affected areas. Buildings and vehicles can be damaged or destroyed, while smaller objects can be buried in flood-deposited sediments. Floods can also cause drowning or isolation of people or animals. In addition, floodwaters can break utility lines, interrupting services and potentially affecting health and safety, particularly in the case of broken sewer or gas lines.

The secondary effects of flooding are due to standing water, which can result in crop damage, septic tank failure, and well water contamination. Standing water can also damage roads, foundations, and electrical circuits.

FEMA 100-Year Flood Hazard

As shown on Figure 4.8-2, a small portion of the Plan Area is in the 100-year floodplain as delineated by the FEMA Flood Rate Insurance Maps (FIRMs). The 100-year flood, or “base flood”, refers to the flood resulting from a storm event that has a probability of occurring once every 100 years, or a one percent chance of occurring in any given year. Areas mapped in the 100-year floodplain area are subject to inundation during a 100-year storm event. In the Plan Area, these areas are located along the Las Virgenes Creek and extend from the northern boundary to the southern border. North of US-101, the 100-year flood zones are adjacent to the Malibu Canyon Apartments, The Village, Calabasas Colony, and the Malibu Canyon residential neighborhoods. South of US-101, Stone Creek, Deer Springs, and Malibu Meadow Apartments are located adjacent to the 100-year flood zone. Delineated flood hazard areas are localized areas of potential inundation that exist immediately adjacent to the water courses noted. These developed areas that are mapped as being in the 100-year flood zone are actually outside the floodplain either by elevation or by amendment of the Flood Insurance Rate Map (FIRM) Panels done by Letters of Map Revision or Letters of Map Amendment. Such documents modify the FIRM panels by removing areas of development within the Las Virgenes Creek corridor (such as areas north of Thousand Oaks Boulevard and areas north of Mureau Road) and the Mulholland corridor. The City requires that all new development be elevated above delineated or calculated base flood elevations per FEMA and City floodplain management requirements.

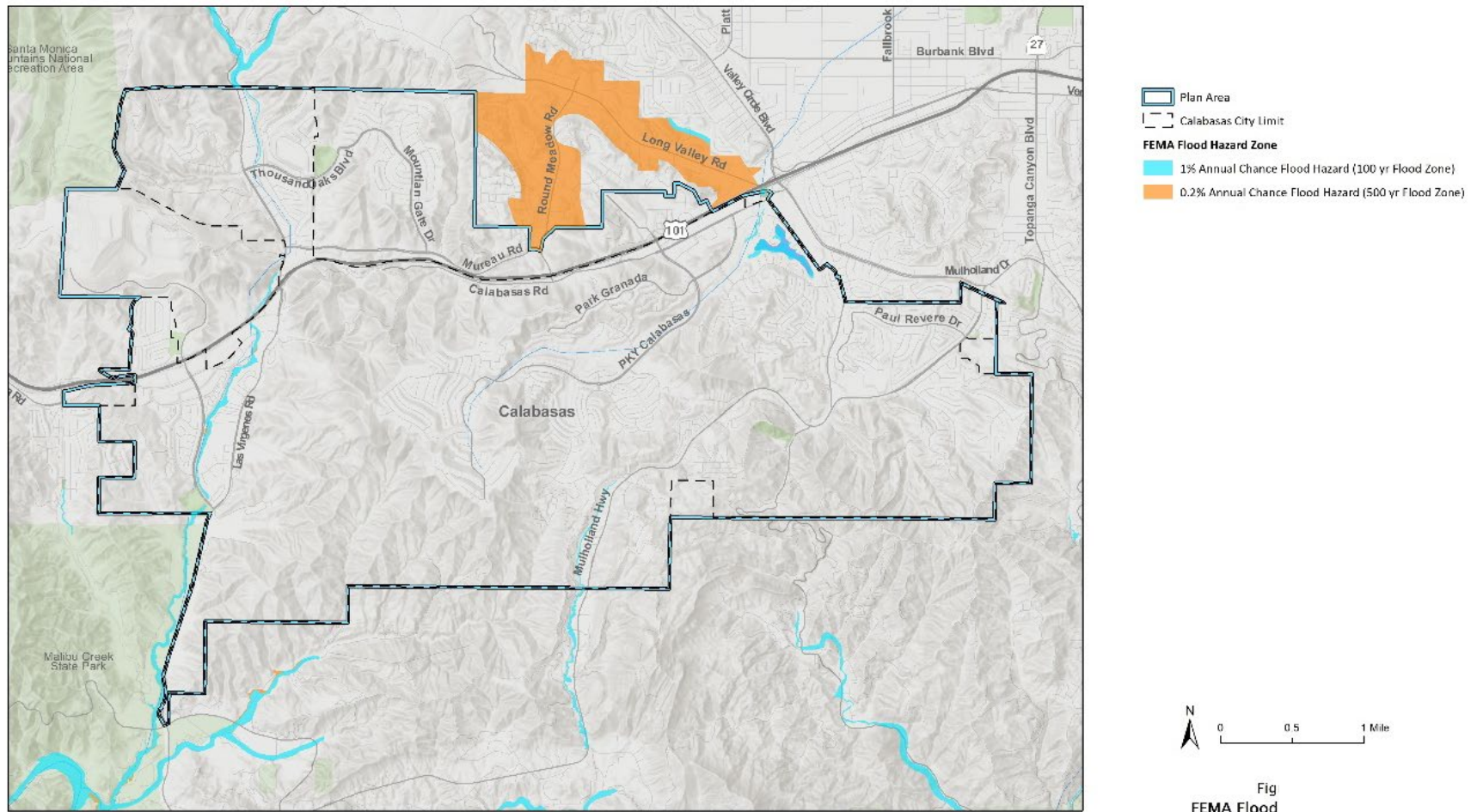
Dam Inundation

Calabasas is not in the dam inundation area for any major stream or river in the region. Bard Reservoir, Chatsworth Reservoir, and Encino Reservoir are all located within 10 miles of the City of Calabasas. Due to the topography of the surrounding areas and the location and size of the reservoirs, flooding risk from these reservoirs would be low. It is highly unlikely that flood waters from dam failures at these reservoirs could physically reach the Plan Area.

Water Quality

The primary sources of pollution to surface and groundwater resources include stormwater runoff from paved areas, which can contain hydrocarbons, sediments, pesticides, herbicides, toxic metals, and coliform bacteria. Improperly placed septic tank leach fields and properly placed septic tanks that do not have proper residence time or are not properly maintained or have improperly disposed of household cleaners and other materials can cause similar types of contamination. Illegal waste dumping can introduce contaminants such as gasoline, pesticides, herbicides and other harmful chemicals.

Figure 4.8-2 FEMA Flood Hazard Zones



Source: City of Calabasas, 2007, and Rincon Consultants, 2021. Updated April 2021. Basemap provided by ESRI and its licensors © 2021.

As discussed above, Calabasas does not have groundwater supplies to serve its citizens and instead receives water from the LVMWD. The LVMWD receives imported water via the Metropolitan Water District of Southern California (MWDSC), which receives water from Northern California through the State Water Project and the Colorado River Aqueduct. MWDSC draws water from the California Aqueduct for supplying water to Calabasas. The water is treated at Jensen Filtration Plant in Granada Hills prior to delivery to LVMWD. MWDSC water is treated in accordance with potable standards at filtration plants located throughout Southern California. Metropolitan tests and treats its water for microbial, organic, inorganic, and radioactive contaminants as well as pesticides and herbicides. Although not required, Metropolitan monitors and samples elements that are not regulated but have captured scientific and/or public interest. These substances include perchlorate, arsenic, methyl tertiary butyl ether, and chromium VI among others. Existing water supplies could be threatened in the future because of contamination or the discovery of an unknown contaminant. Changes to the quality of imported water could directly impact the amount of water supplies available to the LVMWD.

4.8.2 Regulatory Setting

Development in the Plan Area is subject to various local, State, and federal regulations and permits regarding the use of water resources.

Federal

Clean Water Act

The Federal Clean Water Act, enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The Act established the basic structure for regulating discharges of pollutants into the waters of the United States. The Clean Water Act gave the U.S. Environmental Protection Agency (USEPA) authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the Clean Water Act is administered by the USEPA and U.S. Army Corps of Engineers (USACE). At the State and regional levels in California, the act is administered and enforced by the State Water Resources Board (SWRCB) and the nine regional water quality control boards (RWQCBs).

Clean Water Act Section 401

Under Section 401 of the Clean Water Act, the RWQCBs have regulatory authority over actions in waters of the United States and/or the State of California through the issuance of water quality certifications, which are issued in conjunction with any federal permit (e.g., permits issued by the USACE under Section 404 of the Clean Water Act, described above). Section 401 of the Clean Water Act provides the SWRCB and the RWQCBs with the regulatory authority to waive, certify, or deny any proposed activity that could result in a discharge to surface waters of the State. To waive or certify an activity, these agencies must find that the proposed discharge would comply with State water quality standards, including those protecting beneficial uses and water quality. If these agencies deny the proposed activity, the federal permit cannot be issued. This water quality certification is generally required for projects requiring Section 404 authorization involving the discharge of dredged or fill material to wetlands or other waters of the United States.

Clean Water Act Section 402

Section 402 of the Clean Water Act requires that all construction sites on an acre or greater of land, as well as municipal, industrial and commercial facilities discharging wastewater or stormwater directly from a point source (e.g., pipe, ditch, or channel) into a surface water of the United States must obtain permission under the National Pollutant Discharge Elimination System (NPDES) permit. All NPDES permits are written to ensure that the surface water receiving discharges will achieve specified water quality standards.

According to federal regulations, NPDES permit coverage for stormwater discharges associated with construction activity can be obtained through individual State permits or general permits. Individual permitting involves the submittal of specific data on a single construction project to the appropriate permitting agency that will issue a site-specific NPDES permit to a project. NPDES coverage under a general permit involves the submittal of a Notice of Intent by the regulated construction project that they intend to comply with a general permit to be developed by USEPA or a state with delegated permitting authority.

In California, the NPDES program is administered by the SWRCB through the RWQCBs and requires municipalities to obtain permits that outline programs and activities to control wastewater and stormwater pollution. The Federal Clean Water Act prohibits discharges of stormwater from construction projects unless the discharge is in compliance with an NPDES permit. The SWRCB is the permitting authority in California, and adopted an NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order 2009-0009, as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). Containment and spill cleanup are also encompassed in the Storm Water Pollution Prevention Plan (SWPPP). This includes inspections for spills, a requirement that chemicals be stored in watertight containers with secondary containment to prevent spillage or leakage, procedures for addressing hazardous and non-hazardous spills, including a spill response and implementation procedure, include on-site equipment for cleanup and spills, and spill training for construction personnel.¹

The order applies to construction sites that include one or more acre of soil disturbance. Regulated construction activities include clearing, grading, grubbing, excavation, stockpiling, and reconstruction of existing facilities involving removal or replacement. The Construction General Permit requires that the landowner and/or contractor file permit registration documents prior to commencing construction and then pay a fee annually through the duration of construction. These documents include a notice of intent, risk assessment, site map, stormwater pollution prevention plan (SWPPP), and signed certification statement. The SWPPP must include measures to ensure that: all pollutants and their sources are controlled; non-stormwater discharges are identified and eliminated, controlled, or treated; site best management practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges; and BMPs installed to reduce or eliminate pollutants after construction are completed and maintained. The Construction General Permit specifies minimum BMP requirements for stormwater control based on the risk level of the site.

Clean Water Act Section 404

Under Section 404 of the Clean Water Act, proposed discharges of dredged or fill material into waters of the United States require USACE authorization. Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands

¹ See https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_complete.pdf

(with the exception of isolated wetlands). Federal regulations are currently pending that would revise the definition of “waters of the United States” subject to Section 404 of the Clean Water Act, as further discussed in Section 4.3, *Biological Resources*. The USACE identifies wetlands using a multi-parameter approach, which requires positive wetland indicators in three distinct environmental categories: hydrology, soils, and vegetation. According to the *Corps of Engineers Wetlands Delineation Manual (1987)*, except in certain situations, all three parameters must be satisfied for an area to be considered a jurisdictional wetland. The *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008)* is also used when conducting jurisdictional wetland determinations in areas identified within the boundaries of the arid west.

When an application for a Section 404 permit is made, the applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;
- Minimized unavoidable impacts on waters of the U.S. and wetlands; and
- Provided mitigation for unavoidable impacts.

National Flood Insurance Act/Flood Disaster Protection Act

The National Flood Insurance Act of 1968 made flood insurance available for the first time. The Flood Disaster Protection Act of 1973 made the purchase of flood insurance mandatory for the protection of property located in Special Flood Hazard Areas. These laws are relevant because they led to mapping of regulatory floodplains and to local management of floodplain areas according to guidelines that include prohibiting or restricting development in flood hazard zones.

Drinking Water Regulations

The Federal Safe Drinking Water Act was enacted in 1974, allowing the USEPA to promulgate national primary drinking water standards specifying Maximum Contaminants Levels for each contaminant present in a public water system with an adverse effect on human health. Primary Maximum Contaminants Levels have been established for approximately 90 contaminants in drinking water. The USEPA has also adopted secondary Maximum Contaminants Levels as non-enforceable guidelines for contaminants that may cause cosmetic or aesthetic effects. States have the discretion to adopt them as enforceable standards. USEPA has delegated to the State Water Resources Control Board the responsibility for administering California’s drinking-water program. In 1976, California adopted its own safe drinking water act (see *California Safe Drinking Water Act* described in the State regulatory section below).

Federal Emergency Management Agency

FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues Flood Insurance Rate Maps (FIRMs) that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection is established by FEMA. FEMA’s minimum level of flood protection for new development is the 100-year flood event, also described as a flood that has a one percent chance of occurring in any given year.

FEMA has also developed requirements and procedures for evaluating earthen levee systems and mapping the areas affected by those systems. Levee systems are evaluated for their ability to provide protection from 100-year flood events and the results of this evaluation are documented in

the FEMA Levee Inventory System (FLIS). Levee systems must meet minimum freeboard standards and must be maintained according to an officially adopted maintenance plan. Other FEMA levee system evaluation criteria include structural design and interior drainage.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) is the primary statute covering the quality of waters in California. Under the act, SWRCB has the ultimate authority over the State's water quality policy. SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the nine RWQCBs conduct planning, permitting, and enforcement activities. The RWQCBs also regulate water quality under this act through the regulatory standards and objectives set forth in Water Quality Control Plans (also referred to as Basin Plans) prepared for each region.

California Safe Drinking Water Act

The USEPA has delegated to the California Department of Public Health responsibility for administering California's drinking-water program. In 1976, two years after the Federal Safe Drinking Water Act was passed, California adopted its own safe drinking water act (contained in the Health and Safety Code) and adopted implementing regulations (contained in Title 22 California Code of Regulations). California's program sets drinking water standards that are at least as stringent as the Federal standards. Each community water system also must monitor for a specified list of contaminants, and the monitoring results must be reported to the state. Responsibility for the state's Drinking Water Program was transferred from the Department of Public Health to the Division of Drinking Water, which is a division of the SWRCB that was created in July 2014.

California General Plan Law, Government Code Section 65302

Government Code Section 65302(a) requires cities and counties located within the state to review the Land Use, Conservation, and Safety elements of the general plan "for the consideration of flood hazards, flooding, and floodplains" to address flood risks. The code also requires cities and counties in the state to annually review the land use element with respect "those areas covered by the plan that are subject to flooding identified by floodplain mapping prepared by FEMA or the California DWR."

Sustainable Groundwater Management Act (SGMA)

Effective in 2015, SGMA creates a framework for sustainable, local groundwater management in California. SGMA allows local agencies to customize groundwater sustainability plans to their regional economic and environmental needs. This act requires local regions to create a GSA and to adopt groundwater management plans for groundwater basins or subbasins that are designated as medium or high priority. High-priority and medium-priority basins or subbasins must adopt groundwater management plans by 2020 or 2022, depending upon whether the basin is in critical overdraft. GSAs will have until 2040 or 2042 to achieve groundwater sustainability.

Regional and Local

Los Angeles Regional Water Quality Control Board (LARWQCB) Basin Plan

The Plan Area is in the jurisdiction of the LARWQCB, which is one of the nine RWQCBs in California. LARWQCB protects ground and surface water quality in the Los Angeles Region, including the coastal watersheds of Los Angeles and Ventura Counties, along with very small portions of Kern and Santa Barbara counties. LARWQCB provides permits for projects that may affect surface waters and groundwater locally. LARWQCB is responsible for preparing the Basin Plan, which is updated as necessary every three years. The latest Basin Plan was updated in 2014. The Basin Plan establishes water quality objectives for surface waters and groundwater in the Los Angeles region. The Basin Plan designates the beneficial uses of inland surface waters, including the Hollywood Reservoir and Los Angeles River, and specifies both narrative and numerical water quality objectives for these surface waters in the County. Water quality objectives, as defined by the CWA Section 13050(h), are the “limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area.”

Storm Water Pollution Prevention Plan

On March 23, 2003, the City established a requirement that sites disturbing one acre or greater of land to furnish proof that at Notice of Intent (NOI) was filed with the State Water Board and that a Storm Water Pollution Prevention Plan (SWPPP) has been prepared. The City’s process for BMP selection generally coincides with four standard elements, sediment control, erosion control, site management, and materials and waste management. There are both structural BMPs and construction BMPs required by the City for mitigation of long-term and temporary water quality impacts, respectively. Structural BMPs, are those measures such as mechanical filtration, separators, vegetative swales, and biofilters that reduce or eliminate long term impacts to water quality. The City emphasizes the use of natural treatment measures that are not dependent upon periodic inspection and maintenance (i.e., catch basin and other filtration measures, mechanical separators, etc.) and the City has developed quantitative standards for natural treatment BMPs that mitigate specific pollutants of concern with specific types of vegetation and vegetative geometry. Discretionary development projects would implement ‘natural’ water quality mitigation measures utilizing vegetative swales, diversion into landscape areas, and other similar flow based BMPs consistent with the current provisions of the Municipal Code. Maintenance covenants are required for Standard Urban Stormwater Mitigation Plan BMPs to help ensure that post-construction BMPs remain effective in the long term.

Los Angeles County Hydrology Manual

The standards for the development of hydrology and related drainage models for development in the area are contained in the latest edition of the Los Angeles County Hydrology Manual. The manual describes the methodologies to be utilized in the calculation of existing and proposed storm water runoff, based on soils types, density of development, flow path characteristics and time of concentration. The manual specifies the design event for which the facility under consideration must be designed (10-year, 25-year or 50-year frequency event). The manual contains multiple appendices which provide site specific data Countywide on soil characteristics, runoff coefficients, intensity of rainfall versus storm duration, impermeability versus land use, as well as debris production classification.

The methodology contained in the Los Angeles County Hydrology Manual is supplemented by the City of Calabasas based on their knowledge of local conditions, as well as site specific modeling requirements. These supplemental requirements can be categorized according to the following: Detention - the City of Calabasas has a 'no net increase' approach to development; and Time of Concentration - consultation with the City is required in order to insure that the methodology for calculating peak flow and times of concentration are not misapplied (especially for projects under 10 acres).

Los Angeles County Flood Control District's Design Manual

The requirements for design and construction of storm drains and related facilities (debris and detention basins, inlet and outlet structures) are contained in the Los Angeles County Flood Control District's Design Manual (Hydraulic), Debris Basin Manual and Los Angeles County Sedimentation Manual. The methodologies contained in these Manuals are adopted for use in Calabasas and are used by the County of Los Angeles for their review of storm drains and related interception and conveyance facilities intended for transfer to the County for ownership and maintenance. The methodology and materials requirements contained in the Los Angeles County storm drain design and construction standards are supplemented by the City of Calabasas for private projects based on their knowledge of local conditions, site specific modeling requirements, and the proposed ownership and maintenance conditions of the project under consideration.

City of Calabasas Municipal Code

Calabasas relies on Municipal Code Title 8 Health and Safety, Title 17 Land Use and Development, City Ordinance No. 97-117 and other enforcement sections of the Municipal Code to require permits and oversee the implementation for any land use or development involving grading activities, or the construction of new structures or paving. Chapters 17.52, Grading Permit Requirements, and 8.28, Storm Water and Runoff Pollution Prevention Controls, provide the legal authority to require implementation of development construction, new development and redevelopment controls for private and public projects within the city. In addition, the City has a number of administrative policies and procedures issued by the Public Works Director/City Manager that also govern implementation of storm water pollution prevention controls.

4.8.3 Impact Analysis

Methodology and Significance Thresholds

Impacts would be considered significant if development facilitated by the General Plan Update would:

1. Violate any water quality standards or waste discharge requirements (WDR's) or otherwise substantially degrade surface or ground water quality;
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:
 - a. result in substantial erosion or siltation on- or off-site,

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- b. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite,
 - c. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or
 - d. impede or redirect flood flows;
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation;
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Threshold 1: Would the General Plan Update violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact HWQ-1 REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD NOT VIOLATE WATER QUALITY STANDARDS OR WDRs, OR OTHERWISE SUBSTANTIALLY DEGRADE SURFACE OR GROUNDWATER QUALITY DUE TO INDIVIDUAL DEVELOPMENT PROJECTS BEING REQUIRED TO COMPLY WITH STATE AND LOCAL REGULATIONS AND PERMIT REQUIREMENTS WHICH REQUIRE USE OF BMPs. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

As described in Section 2.0, *Project Description*, the General Plan Update would allow for the development of 1,305 housing units at 12 sites throughout the Plan Area. Construction activities associated with development under the General Plan Update could result in soil erosion due to earth-moving activities such as excavation, grading, soil compaction and moving, and soil stockpiling. Specific development associated with the General Plan Update would be required to comply with State and local water quality regulations designed to control erosion and protect water quality during construction. This includes compliance with the requirements of the SWRCB Construction General Permit, which requires preparation and implementation of a SWPPP for projects that disturb one acre or more of land. Future development built under the General Plan Update greater than one acre in size would be subject to the SWRCB Construction General Permit and would be required to develop a SWPPP. The SWPPP must include erosion and sediment control BMPs that would meet or exceed measures required by the Construction General Permit. BMPs to reduce potential construction impacts may include measures such as the installation of silt fences to trap sediments, slope stabilization, and regular sweeping of construction sites to control dust. Post-construction stormwater performance standards are also required to specifically address water quality and channel protection events. Implementation of the required SWPPP would reduce the potential for eroded soil and any contaminants attached to that soil to contaminate a waterbody following a storm event. Construction impacts to surface and groundwater quality would be less than significant.

Operation

The City of Calabasas is a permittee under the Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watersheds of Los Angeles County, issued by the LARWQCB (Order No. R4-2012-0175), which also serves as a NPDES permit under the Federal Clean Water Act (NPDES No. CAS004001), as well as Waste Discharge

Requirements under California law (the "Municipal NPDES permit"). Specific project development would be required to adhere to all requirements under the Los Angeles County MS4 permit. Future developments under the General Plan Update would employ low-impact development (LID) techniques and stormwater control measures as outlined under Chapter 8.28.160 of the Calabasas Municipal Code. The City's LID control measures aim to conserve natural areas, protect slopes and channels, provide storm drain system stenciling and signage, divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability, and direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability. Furthermore, reasonably foreseeable development under the General Plan Update would be required to comply with Chapter 15.11.080 *Storm Drainage and Runoff*, Chapter 15.11.090 *Dust Prevention and Control*, and Chapter 15.11.100 *Erosion and Sediment Control* of the Calabasas Municipal Code. These chapters of the Municipal Code outline requirements and BMPs for both construction and operation of projects to reduce the discharge of sediment and other particulate matter into the City's groundwater system.

Compliance with the regulations, permit requirements, and BMPs, described above would prevent or minimize impacts related to water quality and ensure that construction and operation of all future development under the General Plan Update would not cause or contribute to the degradation of water quality in receiving waters. Construction and operation of specific developments built under the General Plan Update would not violate any water quality standards or WDRs or otherwise substantially degrade water quality, and water quality impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 2: Would the General Plan Update substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the General Plan Update may impede sustainable groundwater management of the basin?

Impact HWQ-2 REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD NOT INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE SUCH THAT THE GENERAL PLAN UPDATE MAY IMPEDE SUSTAINABLE GROUNDWATER MANAGEMENT OF THE BASIN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Information about the City's demand on groundwater supply is in Section 4.14, *Utilities and Service Systems*. The discussion below focuses upon physical interference associated with impervious surfaces.

The northeastern portion of the Plan Area is located in the San Fernando Basin. The San Fernando Basin was adjudicated in 1968, and grants exclusive rights to the cities of Los Angeles, Burbank, and Calabasas. The City of Calabasas is not a part of the 1968 adjudication agreement and therefore does not extract groundwater from the San Fernando Basin. Further discussion on the adjudication is discussed below under HWQ-5.

As stated above under *Setting*, the City augments water supplies by extracting groundwater from the Thousand Oaks Basin solely for recycled water in the city. LVMWD jointly owns and operates a recycled water system with TSD and Calleguas Municipal Water District. During periods of peak demand, tertiary effluent is mixed with groundwater extracted from the Thousand Oaks Area Basin

and imported water. Recycled water is used in the LVWMD service area almost exclusively for landscape and golf course irrigation with a minor quantity used for various commercial uses during peak demand in the summer.

Development facilitated by the General Plan Update would incrementally increase the amount of impervious surface in the Plan Area, which could incrementally reduce the potential for groundwater recharge from infiltration of precipitation. Development under the General Plan Update would primarily be infill development in previously disturbed areas and increase in impervious surface area introduced by new housing development would be marginal. Only one site included in the sites inventory is currently a vacant lot, and this site is 0.96 acre, or less than 0.1 percent of the basin surface area. In addition, the City requires new construction and redevelopment to use LID techniques such as bioswales and permeable pavement. These techniques would ensure that pervious surfaces are incorporated into development that would be facilitated by the General Plan Update. Therefore, impacts of impervious surfaces on groundwater recharge would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

<p>Threshold 3a: Would the General Plan Update substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?</p>
<p>Threshold 3b: Would the General Plan Update substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</p>
<p>Threshold 3c: Would the General Plan Update substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</p>

Impact HWQ-3 REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE MAY ALTER DRAINAGE PATTERNS AND INCREASE RUNOFF IN THE PLAN AREA, BUT WOULD NOT RESULT IN SUBSTANTIAL EROSION OR SILTATION, RESULT IN INCREASED FLOODING, EXCEED THE CAPACITY OF EXISTING OR PLANNED STORMWATER DRAINAGE SYSTEMS, OR RESULT IN SUBSTANTIAL ADDITIONAL POLLUTED RUNOFF. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction activities would involve stockpiling, grading, excavation, dredging, paving, and other earth-disturbing activities resulting in the alteration of existing drainage patterns. As described under Impact HWQ-1 above, compliance with SWRCB's NPDES Construction General Permit, NPDES MS4 General Permit, and the Calabasas Municipal Code would reduce the risk of short-term erosion

and increased runoff resulting from drainage alterations during construction. Therefore, impacts would be less than significant.

Operation

The General Plan Update would allow for the development of 1,305 housing units and the development and redevelopment of commercial space at 12 sites throughout the Plan Area, which would potentially alter the existing drainage patterns in the Plan Area through the introduction of new impervious surfaces and infrastructure. Specific development under the General Plan Update would primarily consist of infill-development and development near transportation modes would be encouraged under the General Plan. This type of future development would not have a substantial effect on drainage patterns or stormwater runoff volumes due to the relatively minor change in impervious surface area compared with development on vegetated vacant sites.

However, new impervious surfaces would increase the rate and/or amount of surface runoff, redirect runoff to different discharge locations, or concentrate runoff from sheet flow to channelized flow. Surface water runoff rate and amount is determined by multiple factors, including the amount and intensity of precipitation, amount of other imported water that enters a watershed, and amount of precipitation and imported water that infiltrates to the groundwater. Infiltration is also determined by several factors, including soil type, antecedent soil moisture, rainfall intensity, the amount of impervious surfaces in a watershed, and topography. The rate of surface runoff is largely determined by topography. Runoff that does not infiltrate would be captured in the city's storm drain system and ultimately discharge to the Pacific Ocean.

Development facilitated by the General Plan Update would adhere to existing regulatory requirements that instruct stormwater management, including management of rainfall at the source by infiltrating stormwater as close to the source as practicable. Per NPDES requirements, post-construction peak runoff must be maintained at or below pre-project levels. Impact HWQ-1 discusses applicable regulations that would limit pollutant discharges, including sediment and silt, from development under the General Plan Update. As discussed above for Impact HWQ-1, the Calabasas Municipal Code requires BMPs to control the volume, rate, and potential pollutant load of stormwater runoff from new development and redevelopment projects as a requirement of the MS4 General Permit. The Municipal Code also sets forth requirements and BMPs pertaining to the mitigation of erosion, sediment control and runoff as outlined in Chapter 15.11.100 and Chapter 15.11.08. The City incorporates such requirements in any land use entitlement and construction or building-related permit to be issued relative to such development or redevelopment. Furthermore, the City's LID ordinance outlined in Chapter 8.28.160 aims to specifically reduce the amount of surface runoff and aid in groundwater recharge through techniques such as infiltration, evapotranspiration, bioretention and/or rainfall harvest and additional uses in accordance with the requirements set forth in the MS4 permit and the LID standards manual.

Given compliance with the above regulations and requirements, the General Plan Update would not alter the existing drainage patterns or contribute runoff water in a manner which would result in substantial erosion, siltation, or flooding, nor would it exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 3d: Would the General Plan Update substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

Threshold 4a: In flood hazard, tsunami, or seiche zones, would the General Plan Update risk release of pollutants due to inundation?

Impact HWQ-4 REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE MAY INCREASE IMPERVIOUS SURFACES IN THE PLAN AREA DUE TO THE CONSTRUCTION OF NEW DEVELOPMENT BUT WOULD NOT SUBSTANTIALLY ALTER DRAINAGE PATTERS TO SUCH A DEGREE THAT IT WOULD IMPEDE OR REDIRECT FLOOD FLOWS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As stated in Section 4.8.1, *Setting*, a small portion of the Plan Area is located within a 100-year floodplain area. These areas are located along Las Virgenes Creek and extend from the northern border to the southern border of the Plan Area. The Raznick site, identified as Site 1, is located in the 100-year flood plain. Development on this site would be required to comply with Chapter 15.16 *Flood Hazard Prevention* of the Calabasas Municipal Code, which sets forth design requirements in flood-prone areas such as elevating all residential structures at least two feet above the base flood elevation and constructed with materials that can resist strong hydrostatic and hydrodynamic loads. Additionally, all specific project development under the General Plan Update would be required to comply with all regulations and requirements set forth by FEMA and the City’s Municipal Code. With compliance to the above regulations and measures, impacts to flood flows and the release of pollutants in flood-prone areas would be reduced. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 5: Would the General Plan Update conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact HWQ-5 REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD NOT SUBSTANTIALLY IMPEDE RECHARGE IN BOTH THE SAN FERNANDO BASIN AND THOUSAND OAKS BASIN AND WOULD BE SERVED BY LVMWD’S EXISTING AND PLANNED POTABLE WATER SUPPLIES. DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD AFFECT WATER QUALITY AND GROUNDWATER SUPPLY THROUGH CONSTRUCTION AND OPERATIONAL ACTIVITIES BUT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed under HWQ-2, housing developments facilitated by the General Plan Update would be served by the LVMWD. The LVMWD provides potable water, wastewater treatment, recycled water and biosolids composting to more than 75,000 residents in the cities of Agoura Hills, Calabasas, Hidden Hills, Westlake Village, and unincorporated areas of western Los Angeles County (LVMWD 2021). Water is brought to Calabasas through the California Aqueduct, and is purchased by LVMWD from the Metropolitan Water District of Southern California. The California Aqueduct provides potable water to jurisdictions with surface water, and therefore does not extract groundwater for potable water supply.

The northeastern portion of the city overlays the San Fernando Basin. The San Fernando Basin was adjudicated as part of the larger ULARA adjudication in 1968, which allows only the cities of Los

Angeles, Burbank, and Glendale to extract water within the basin's safe threshold. As an adjudicated basin, the San Fernando Subbasin is not required to prepare a Groundwater Sustainability Plan pursuant to SGMA. The City extracts groundwater from the Thousand Oaks Basin solely for recycled water purposes during peak demand in the summer. Although the City helps augment water supplies through recycled water via the Thousand Oaks Basin, the amount of water extracted is minimal and the basin itself is located outside of the Plan Area. Furthermore, the Thousand Oaks Basin is classified under SGMA as very low priority, and therefore does not have a basin plan (SGMA 2016). As discussed under Impact HWQ-2, the General Plan Update would not substantially impede recharge in the basin and would be served by LVMWD's existing and planned potable water supplies. Therefore, the General Plan Update would not conflict with or obstruct implementation of a sustainable groundwater management plan. Impacts would be less than significant.

The Plan Area is in the LARWQCB Basin Plan area. Development under the General Plan Update would affect water quality and groundwater supply through construction and operational activities. As discussed in Impact HWQ-1, compliance with relevant water quality regulations, BMPs, and policies would reduce the risk of water degradation from soil erosion and other pollutants related to construction and operational activities of development under the General Plan Update. The requirements of the Los Angeles County MS4 permit are intended to protect water quality and support attainment of water quality standards in downstream receiving water bodies. With incorporation of the BMPs described above under Impact HWQ-3 in accordance with the Los Angeles MS4 permit, future development built under the General Plan Update would not impair existing or potential beneficial uses of nearby or downstream water bodies and would not conflict with or obstruct implementation of the Basin Plan. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.8.4 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines Section 15065(a)(3)). The geographic scope for cumulative hydrology and water quality impacts is the western portions of the Upper Los Angeles River watershed and eastern portions of the Malibu Creek Watershed. This geographic scope is appropriate for hydrology and water quality because water quality impacts are localized in the watershed where the impact occurs.

Cumulative development would generally increase impermeable surface area in the Upper Los Angeles River and Malibu Creek watersheds. Development would potentially increase peak flood flows, alter drainage patterns, reduce groundwater recharge, and increase pollutants in the regional stormwater. However, all cumulative development would also be required to adhere to all applicable State and local regulations designed to control erosion and protect water quality, including the Calabasas Municipal Code, NPDES Construction General Permit, and LARWQCB Basin Plan. All construction sites larger than one acre in size would be required to prepare and submit a SWPPP, thereby reducing the risk of water degradation on- and off-site from soil erosion and other pollutants. This would reduce the quantity of stormwater runoff that enters the storm drainage system and discharges to the Pacific Ocean.

Implementation of NPDES and Calabasas Municipal Code requirements would also reduce the potential for increased pollutants in stormwater and groundwater. The NPDES Construction General

Permit requires the implementation of BMPs on all construction sites to limit erosion and sedimentation, thereby minimizing water quality impacts. These requirements would also decrease operational effects of cumulative development because each development proposal would be required to reduce the on-site post-development peak discharges at or below pre-development peak discharge rates by implementing on-site LID features and other groundwater recharge design elements. Compliance with mandatory Clean Water Act (NPDES Construction General Permit and MS4 General Permit) and Calabasas Municipal Code requirements would further reduce the potential for water quality degradation and violations of water quality standards as a result of cumulative development. Therefore, cumulative impacts would be less than significant.

As discussed under Impacts HWQ-1 and HWQ-3, reasonably foreseeable development under the General Plan Update would increase impervious surface area in the city and may alter drainage patterns. Cumulative development in the Upper Los Angeles River and Malibu Creek watersheds may also increase impervious surfaces resulting in localized impacts. However, projects would be analyzed and mitigated on a case-by-case basis and would be designed to avoid or mitigate potential impacts related to runoff and groundwater recharge in compliance with the jurisdiction's Municipal Code, relevant water quality regulations, BMPs, and policies which would help reduce the risk of water degradation from soil erosion and other pollutants related to General Plan Update construction and operational activities. Construction and operation of all cumulative development would be required to comply with the City's LID ordinance as outlined in Chapter 8.28.160 which aims to specifically reduce the amount of surface runoff and aid in groundwater recharge through techniques such as infiltration, evapotranspiration, bioretention and/or rainfall harvest. Compliance with the City's LID ordinance and the County's MS4 permit would reduce impacts to water quality and groundwater recharge. Impacts from the General Plan Update on water quality and groundwater recharge would be less than significant.

As discussed under Impact HWQ-4, portions of the Plan Area are located within a 100-year flood hazard area. Cumulative development in other areas in the Upper Los Angeles River and Malibu Creek watersheds that are subject to inundation may have localized impacts. However, projects would be analyzed and mitigated on a case-by-case basis, and would be designed to avoid or mitigate potential impacts related to flooding in compliance with the jurisdiction's Municipal Code. Cumulative impacts related to flooding, seiche, and tsunami would therefore be less than significant. The General Plan Update would not impede or redirect flood flows or risk release of pollutants due to inundation. Impacts from implementation of the General Plan Update related to flood flows and inundation would be less than significant. Because flooding is localized and site-specific, the General Plan Update would not have a cumulatively considerable contribution to a significant cumulative impact related to flood hazard or inundation risks.

As discussed under Impacts HWQ-2 and HWQ-5, the General Plan Update would increase the demand for water in the LVMWD service area. Cumulative development in the LVMWD service area would increase the demand for water from LVMWD. However, as a result of an adjudication agreement of the San Fernando Basin, groundwater supplies would not be extracted from the San Fernando Basin. Therefore, development facilitated by the General Plan Update would not result in a significant cumulative impact.

4.9 Land Use and Planning

This section evaluates consistency of the General Plan Update with applicable land use plans and policies adopted to address environmental effects. The physical environmental effects associated with the General Plan Update, many of which pertain to issues of land use compatibility (e.g., noise, aesthetics, air quality) are evaluated in other sections of this EIR.

4.9.1 Setting

Prior to incorporation, Calabasas was an unincorporated community governed by the County of Los Angeles. The formation of the city in 1991 represented an effort by local residents to exercise local control of the community's future. Among the original goals of incorporation were placement of greater emphasis on environmental protection and design compatibility, and creation of transitions between urban and rural land uses.

The Plan Area has a variety of land uses, as shown in Figure 4.9-1. Single-family residential areas are located throughout the Plan Area and in many cases are adjacent to designated open space areas. One area is designated Residential-Mobile Home near the southern portion of the Plan Area north of Mulholland Highway. Rural Residential and Rural Community land use designations are mostly in the southern portion of the Plan Area against the hills. One rural residential area is located within the Craftsman's Corner annexation territory. Mixed-use, business, and multifamily land uses are generally concentrated along Calabasas Road in the eastern portion of the Plan Area, Agoura Road in the western portion of the Plan Area, and the Craftsman's Corner annexation area north of US-101.

4.9.2 Regulatory Setting

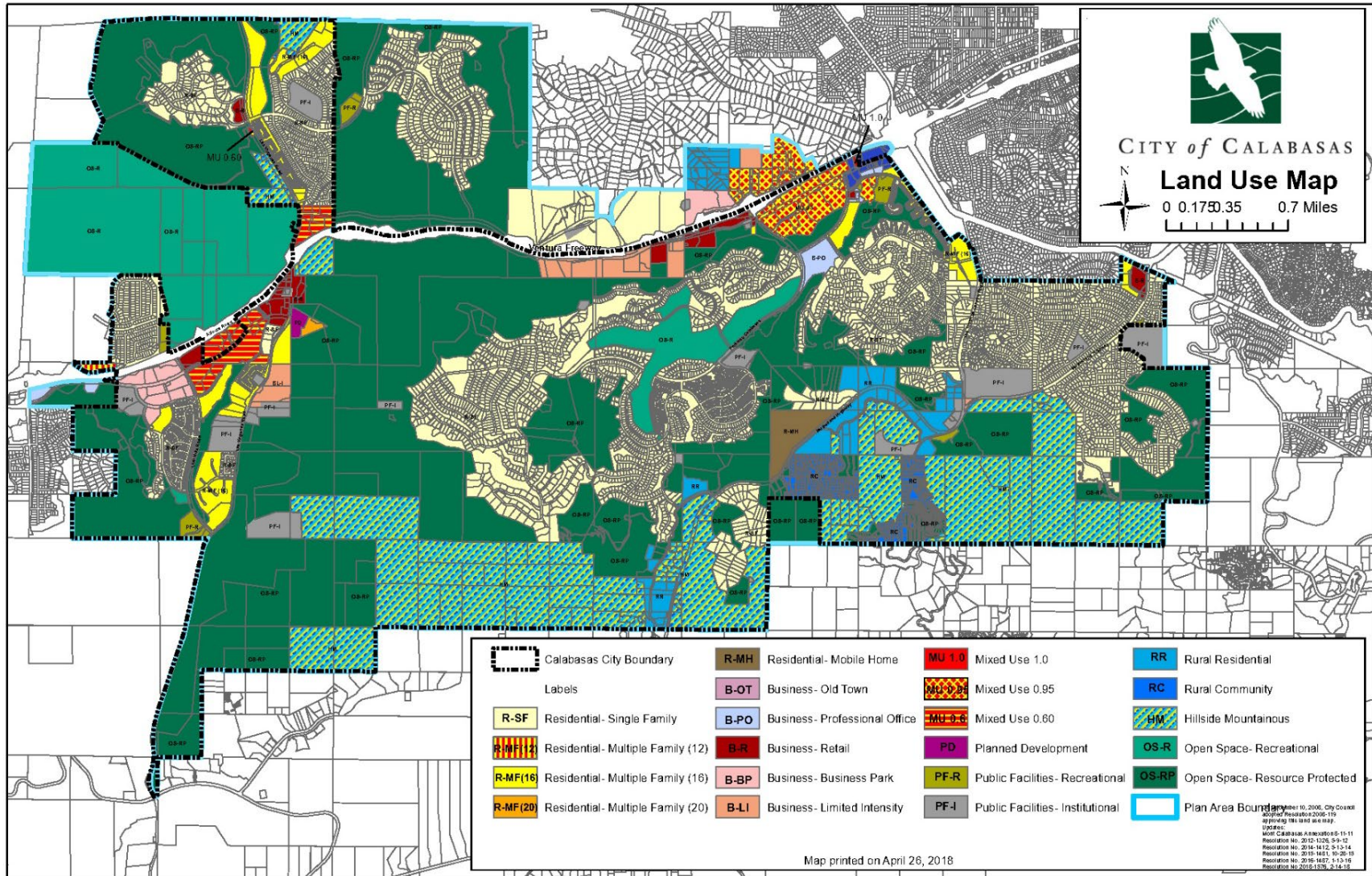
Calabasas is subject to the land use regulatory policies of various state and regional agencies. These agencies and the corresponding state and regional policy documents that affect land use planning in Calabasas are discussed below. No federal regulations apply to land use and planning impacts.

State

The Sustainable Communities and Climate Protection Act of 2008 (SB 375, Steinberg)

Senate Bill (SB) 375 focuses on aligning transportation, housing, and other land uses to achieve regional greenhouse gas (GHG) emission reduction targets established under the California Global Warming Solutions Act, also known as Assembly Bill (AB) 32. SB 375 requires Metropolitan Planning Organizations (MPO) to develop a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP), with the purpose of identifying policies and strategies to reduce per capita passenger vehicle-generated GHG emissions. As set forth in SB 375, the SCS must: (1) identify the general location of land uses, residential densities, and building intensities within the region; (2) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period; (3) identify areas within the region sufficient to house an eight-year projection of the regional housing need; (4) identify a transportation network to service the regional transportation needs; (5) gather and consider the best practically available scientific information regarding resource areas and farmland in the region; (6) consider the state housing goals; (7) establish the land use development pattern for the region that, when integrated with the transportation network and other transportation

Figure 4.9-1 Plan Area Land Use Map



Source: City of Calabasas 2018

measures and policies, will reduce GHG emissions from automobiles and light-duty trucks to achieve GHG emission reduction targets set by the California Air Resources Board (CARB), if there is a feasible way to do so; and (8) comply with air quality requirements established under the Clean Air Act.

Under SB 375, updates to general Plan housing elements must be accomplished no less frequently than every eight years, and the housing element period begins no less than 18 months after adoption of the RTP, to encourage closer coordination between housing and transportation planning. SB 375 also requires that the schedules for the RTP and RHNA processes be synchronized and requires the RHNA to allocate housing units within the region in a manner consistent with the development pattern adopted by the regional SCS.

As discussed further below, on September 3, 2020, SCAG adopted its Connect SoCal: The 2020-2045 RTP/SCS, which is an update to the previous 2016 RTP/SCS (SCAG 2020). Using growth forecasts and economic trends, the RTP/SCS provides a vision for transportation throughout the region for the next 25 years that achieves the statewide reduction targets and in so doing identifies the amount and location of growth expected to occur within the region.

Senate Bill 330, Housing Crisis Act of 2019

Senate Bill 330 (SB 330) took effect in 2019 and declared a statewide housing emergency to be in effect until January 1, 2025. SB 330 prohibits cities and counties from the following actions:

- Establishing rules that would change the land use designation or zoning of parcels to a less intensive use or reducing the intensity of the land that was allowed under the specific or general plan as is in effect on January 1, 2018;
- Imposing or enforcing a moratorium on housing development within all or a selection of the local agency's jurisdictions;
- Imposing or enforcing new design standards established on or after January 1, 2020, that are not objective design standards;
- Establishing or implementing limits on permit numbers issued by the local agency unless the limit was approved before January 1, 2005, in a "predominantly agricultural county."

Cortese-Knox-Hertzberg Local Government Reorganization Act

The Los Angeles County Local Agency Formation Commission (LAFCo) was formed and operates according to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, as amended (California Government Code §56000 et seq.). State law provides for LAFCos to be formed as independent agencies in each county in California. LAFCos implement state requirements and state and local policies relating to boundary changes for cities and most special districts, including spheres of influence, incorporations, annexations, reorganizations and other changes of organization. In this capacity, the Los Angeles County LAFCo is the boundary agency for cities and most special districts in Los Angeles County.

Local

Southern California Association of Governments (SCAG)

Calabasas is located in the jurisdiction of SCAG, a Joint Powers Agency established under California Government Code Section 6502 et seq. Pursuant to federal and State law, as discussed above, SCAG

serves as a Council of Governments, a Regional Transportation Planning Agency, and the Metropolitan Planning Organization (MPO) for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. SCAG's mandated responsibilities include developing plans and policies with respect to the region's population growth, transportation programs, air quality, housing, and economic development. Specifically, SCAG is responsible for preparing the RTP/SCS and RHNA, in coordination with other State and local agencies. These documents include population, employment, and housing projections for the region and its 15 subregions. Calabasas is located within the Los Angeles Subregion.

SCAG is tasked with providing demographic projections for use by local agencies and public service and utility agencies in determining future service demands. Projections in the SCAG RTP/SCS serve as the basis for demographic estimates in this analysis of project consistency with growth projections. The findings regarding growth in the region are consistent with the methodologies prescribed by SCAG and reflect SCAG goals and procedures.

SCAG data is periodically updated to reflect changes in development activity and actions of local jurisdictions (e.g., zoning changes). Through these updates, public agencies have advance information regarding changes in growth that must be addressed in planning for their provision of services. Changes in the growth rates are reflected in the new projections for service and utilities planning through the long-term time horizon

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

On September 3, 2020, SCAG's Regional Council adopted the Connect SoCal 2020–2045 RTP/SCS, the purpose of which is described under State regulations. On October 30, 2020, the California Air Resources Board (CARB) accepted SCAG's determination that the SCS would achieve GHG emission reduction targets. The 2020-2045 RTP/SCS meets federal and state requirements and is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS contains baseline socioeconomic projections that serve as the basis for SCAG's transportation planning.

Regional Housing Needs Assessment (RHNA)

SCAG prepares the RHNA, as mandated by State law, so that local jurisdictions can use this information during their periodic updates of the General Plan Housing Element. The RHNA identifies the housing needs for very low income, low income, moderate income, and above moderate-income groups, and allocates these targets among the local jurisdictions that comprise SCAG. The RHNA addresses existing and future housing needs based on the most recent U.S. Census, data on forecasted household growth, historical growth patterns, job creation, household formation rates, and other factors. The need for new housing is distributed among income groups so that each community will move closer to the regional average income distribution. The most recent RHNA allocation, the 6th Cycle Final RHNA Allocation Plan, was adopted by SCAG's Regional Council on March 4, 2021. The City of Calabasas was assigned an overall RHNA of 354 units for the 2021 to 2029 planning period. This allocation is broken down as follows: 132 Very Low Income units; 71 Low Income units; 70 Moderate Income units; and, 81 Above Moderate Income units. This allocation identifies housing needs for the planning period between October 2021 and October 2029. Local jurisdictions are required by State law to update their General Plan Housing Elements based on the most recently adopted RHNA allocation.

Santa Monica Mountains North Area Plan (Los Angeles County)

The Santa Monica Mountains North Area Plan is a component of the Los Angeles County General Plan. The North Area Plan's primary role is to provide more focused policy for the regulation of development within the unincorporated area of the Santa Monica Mountains west of the City of Los Angeles and north of the Coastal Zone boundary (the planning area) as part of the overall General Plan area of Los Angeles County and was adopted by the Board of Supervisors in October 2000 and last updated in May 2021. The Santa Monica Mountains North Area generally surrounds the City of Calabasas to the west, south, and north, except for the City of Agoura Hills to the west and the City of Los Angeles to the east. The North Area Plan refines the policies of the county-wide General Plan as it applies to this planning area.

City of Calabasas General Plan

The 2030 General Plan, adopted in 2008 and last updated in 2015, functions as a guide for future development and City land use decisions. The General Plan is a "constitution" for local decision making that addresses the range of immediate, mid-, and long-term issues with which the community is concerned, including but not limited to: environmental sensitivity and preservation, public services, public safety, local transportation needs, resource conservation, and economic vitality. The 2030 General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public health, safety, and "quality of life" considerations in a manner that recognizes the resource limitations and the fragility of the community's natural environment.

The Calabasas General Plan is organized into 13 chapters, which include an Introduction, 11 General Plan elements, and a chapter describing the General Plan Implementation Program. The 2030 General Plan expresses community development goals and embodies public policy relative to the distribution of future land uses, both public and private. As further mandated by the State, including Gov. Code Sections 65030.1 and 65302, the General Plan must serve to:

- Identify land use, circulation, environmental, economic, and social goals and policies for the City and its surrounding planning area as they relate to land use and development;
- Provide a framework within which the City's Planning Commission and City Council can make land use decisions;
- Provide citizens the opportunity to participate in the planning and decision-making process affecting the City and its surrounding planning area; and
- Inform citizens, developers, decision-makers, and other agencies, as appropriate, of the City's basic rules which will guide both environmental protection and land development decisions within the City and surrounding planning area.

City of Calabasas Land Use and Development Code

The Land Use and Development Code (Title 17 of the Calabasas Municipal Code) implements the policies of the 2030 General Plan by specifically classifying and regulating the development potential and the type of land uses permitted in the city. The Code also establishes development standards that allow the orderly growth and development of the city.

Las Virgenes Gateway Master Plan

The Las Virgenes Gateway Master Plan was adopted in 1998 and establishes more specific plans and guidelines for development occurring in the Las Virgenes Road and US-101 interchange area.

However, because the plan was adopted prior to the 2030 General Plan, some policies contained within the Las Virgenes Gateway Master Plan may be superseded by the policies established in the 2030 General Plan. This plan provides specific land use and development criteria for the area. The plan includes goals, a land use plan, a Las Virgenes Creek Reclamation Plan, design standards, a circulation plan, and a public improvements plan. The design guidelines include architectural standards, landscape standards, and sign standards.

Las Virgenes Road Corridor Design Plan

The Las Virgenes Road Corridor Design Plan was adopted in 1998 and establishes a master plan for the entire length of Las Virgenes Road, addressing beautification, circulation, and traffic improvements along the corridor. However, because the plan was adopted prior to the 2030 General Plan, some policies contained within the Las Virgenes Road Corridor Design Plan may be superseded by the policies established in the 2030 General Plan. The design plan includes a bicycle plan, a transit plan, a utility and drainage relocation plan, and beautification and traffic/circulation plans.

Mulholland Highway Master Plan

The Mulholland Highway Master Plan for Capital Improvements is a long-range planning document that provides recommendations for traffic, circulation, roadway, and landscaping improvements along a 1.7-mile segment of Mulholland Highway. The corridor extends from Mulholland Drive to the southern Old Topanga Canyon Road intersection. The Master Plan provides recommendations to respond to the City's General Plan vision statement for the area, which is to restore the original beauty of the Mulholland corridor by developing a comprehensive Master Plan for the roadway.

Old Town Calabasas Master Plan

Adopted in March 1994, the Old Town Calabasas Master Plan was created in response to City residents' desires to retain an important cultural resource and establish a historic retail "downtown" in Old Town Calabasas. The Master Plan provides design guidelines for Old Town to ensure that a "sense of place" that is special and unique to the City of Calabasas is retained and enhanced, to reflect the history and spirit of Calabasas.

Parks Master Plan

The Parks Master Plan discusses the findings and recommendations for meeting existing and future park and recreation service needs in the City of Calabasas. The plan identifies and evaluates existing park and recreation areas; assesses the need for additional park land, open space and specialized facilities; establishes criteria and standards for site selection, design, and management; and recommends an approach to implementation.

4.9.3 Impact Analysis

Methodology and Significance Thresholds

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. The General Plan Update would have a significant impact with respect to land use and planning if it would:

1. Physically divide an established community.
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Project Impacts

Threshold 1: Would the General Plan Update physically divide an established community?

Impact LU-1 THE GENERAL PLAN UPDATE WOULD ALLOW NEW RESIDENTIAL AND MIXED-USE DEVELOPMENT, MAINLY IN DEVELOPED AREAS OF THE CITY NEAR EXISTING RESIDENTIAL AND COMMERCIAL DEVELOPMENT AND WOULD NOT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY. THE GENERAL PLAN UPDATE WOULD NOT CONSTRUCT STRUCTURES, SUCH AS ROADWAYS, THAT WOULD DIVIDE AN ESTABLISHED COMMUNITY. FUTURE ANNEXATION ADJUSTMENTS WOULD BE SUBJECT TO LAFCO REVIEW TO ENSURE ORDERLY DEVELOPMENT. THEREFORE, THERE WOULD BE NO IMPACT.

The General Plan Update would implement an affordable housing overlay (AHO) on specific sites to allow for future residential development that aligns with community desires as well as regional growth objectives and State law. This would increase the potential number of dwelling units in the Plan Area and intensify development in existing urban areas, but would not create structures, such as roadways, that could physically divide an established community. Updates to the Safety Element include policy updates ensuring evacuation routes and other safety measures are implemented in accordance with State law but would not create structures that could physically divide an established community. The General Plan Update would not include or require the construction of a new road, freeway, or railway.

The Craftsman's Corner area, while in unincorporated Los Angeles County, is currently in the sphere of influence (SOI) for the City of Calabasas. Furthermore, the City of Calabasas has submitted to the Los Angeles County LAFCo an application for Municipal Reorganization that would annex the Craftsman's Corner territory to the City (several outlying parcels would annex to the City of Hidden Hills coincident with the Calabasas annexation.) The municipal reorganization action would take place at a future time and is not part of this General Plan Update. No adjustments to the City's corporate boundaries are proposed at this time, but annexation of this area within the next three years is anticipated. Any annexation would be reviewed by Los Angeles LAFCo to ensure orderly development and not divide an established community.

Development under the General Plan Update would not physically divide an established community and there would be no impact.

Mitigation Measures

There would be no impact. Therefore, mitigation is not required.

Threshold 2: Would the General Plan Update cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact LU-2 THE GENERAL PLAN UPDATE WOULD UPDATE ELEMENTS OF THE 2030 GENERAL PLAN BUT WOULD NOT CONFLICT WITH ANY LAND USE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As set forth by State law, the General Plan serves as the primary planning document for the City and all subordinate documents and plans are required to be consistent with the General Plan. The General Plan Update would update the Housing Element, Safety Element, Land Use Element, and Circulation Element of the General Plan elements, as described in Section 2, *Project Description*. The programs and policies in the Housing Element update would facilitate the development of housing at densities appropriate for respective income levels, consistent with the RHNA under State law.

The General Plan Update would facilitate development that would exceed the buildout projections described in the 2030 General Plan and the population and housing forecast provided in the SCAG 2020 RTP/SCS, as discussed in Section 4.11, *Population and Housing*. However, the General Plan Update complies with pertinent State housing law and the City's 6th cycle RHNA allocation and has been prepared specifically to be consistent with applicable requirements of housing law. Thus, despite accommodating growth beyond that anticipated in the current RTP/SCS and 2030 General Plan, housing growth under the General Plan Update would not be substantial or unplanned, and therefore consistent with State regulations. The General Plan Update would update the 2030 General Plan to reflect new housing requirements and the RTP/SCS would be brought into consistency with this update since the RTP/SCS will be updated at the next cycle to reflect new forecasts for each city in the region; therefore, the planned growth under the General Plan Update would not conflict with the adopted General Plan or the SCAG RTP/SCS.

Additionally, the sites included in the General Plan Update would allow high density residential development and/or mixed-use development under the General Plan land use designations. These sites are generally located in areas that provide access to services, shopping, and public transportation, while accommodating the City's 2021-2029 RHNA. The General Plan Update encourages development that focuses on intensification and reuse of existing lands. Infill development in existing urban areas, as opposed to development in vacant spaces, is designed to fulfil State housing requirements in such a way as to avoid biologically and culturally sensitive areas; reduce development in areas that exacerbate risk of geological and wildfire hazards; reduce per capita VMT and air quality, GHG, and energy impacts; reduce the need for additional utility infrastructure; and minimize potential impacts to scenic resources such as ridgelines.

For example, the General Plan Update would be consistent with the following policies of the 2030 General Plan that promote infill development to reduce potential environmental impacts (City of Calabasas 2015):

- **Policy II-8:** Emphasize retention of Calabasas' natural environmental setting, neighborhood character, and scenic features as a priority over the expansion of urban areas.
- **Policy IX-44:** Preserve large areas of natural hillsides and other dominant natural environmental features visible from the Ventura Freeway.

The General Plan Update would also be consistent with the following land use development objectives of the SCAG 2020 RTP/SCS (SCAG 2020):

- Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations.
- Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets.
- Plan for growth near transit investments and support implementation of first/last mile strategies.
- Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses.
- Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods.

Reasonably foreseeable development consistent with the General Plan Update (Housing Element, Land Use Element, Safety Element, and Circulation Element) would be required to be consistent with the other 2030 General Plan, including policies and programs adopted to address environmental impacts. Such development would be reviewed for consistency with the City's development standards set forth in the Municipal Code and Design Guidelines as part of the design review process. The General Plan Update would not remove or modify any policies or measures from the 2030 General Plan that are intended for environmental protection and would not conflict with any 2030 General Plan policies or measures that are intended for environmental protection. As discussed in Section 4.3, *Biological Resources*, the City is adjacent to the Los Angeles County Santa Monica Mountains Sensitive Ecological Area (SEA); however, the City is not obligated to abide by the County's SEA policies and standards. Additionally, development under the General Plan Update would be required to adhere to mitigation measures included in this EIR to reduce potential environmental impacts.

The Safety Element and Circulation Element updates included in the General Plan Update address evacuation routes and identify residential development in hazards areas with limited access. These updates are required by AB 747 and SB 99 and would not conflict with any adopted plans, policies, or regulations, but rather would be intended to improve the health and safety of residents in an emergency event. As discussed in Section 4.15, *Wildfire*, development under the General Plan Update would not produce direct or indirect effects that would substantially impair an adopted emergency response plan or emergency evacuation plan.

Therefore, the General Plan Update would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.9.4 Cumulative Impacts

Division of an Established Community

The cumulative setting for land use and planning impacts is the Plan Area. Cumulative land use and planning impacts, such as the potential for conflicts with adjacent land uses and consistency with adopted plans and regulations, are typically site- and project-specific. Subsequent projects allowed by the 2030 General Plan may result in site-specific land use conflicts. However, because the exact size, nature, and location of future developments and associated infrastructure improvements are not known at this time, it would be speculative to predict when impacts may occur. As discussed in Impact LU-1, the municipal reorganization action for annexation of the Craftsman's Corner area would take place at a future time and is not part of this General Plan Update. No adjustments to the City's corporate boundaries are proposed at this time, but annexation of this area within the next three years is anticipated. Any annexation would be reviewed by Los Angeles LAFCo to ensure orderly development and not divide an established community. The General Plan Update would not include any features that would physically divide an established community, and as such, would not contribute to cumulative impacts.

Consistency with Land Use Plans/Policies

As discussed under Impact LU-2, the General Plan Update would be consistent with applicable land use plans, policies, or regulations, including the 2030 General Plan and SCAG RTP/SCS, and as such, would not contribute to cumulative impacts.

4.10 Noise

This section of the EIR identifies and evaluates issues related to noise in the context of the General Plan Update. It describes the physical and regulatory setting, the criteria used to evaluate the significance of potential impacts, the methods used to evaluate these impacts, and the results of the impact analysis.

4.10.1 Setting

Overview of Environmental Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive an increase (or decrease) of up to 3 dBA in noise levels (i.e., twice [or half] the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (10.5 times the sound energy) (Caltrans 2013).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in sound level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, ventilation units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation, and the changes in noise levels with distance (i.e., the drop-off rate) result simply from the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can

significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce occupants’ exposure to noise as well. The FHWA’s guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of sound level alone. The time of day when noise occurs and the duration of the noise are also important. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. The L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, the L_{eq} is summed over a one-hour period. The L_{max} is the highest root mean squared (RMS) sound pressure level within the sampling period, and the L_{min} is the lowest RMS sound pressure level within the measuring period (Crocker 2007). Normal conversational levels are in the 60 to 65 dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018). Table 4.10-1 provides examples of A-weighted noise levels from common sounds.

Table 4.10-1 Typical Noise Levels

Noise Source	Noise Level (dBA L_{eq})
Recording Studio	20
Soft Whisper; Quiet Bedroom	30
Busy Open-plan Office	55
Normal Conversation	60-65
Automobile Traveling 20 Miles per Hour at 25 Feet	65
Vacuum Cleaner at 10 feet	70
Dump Truck Traveling 50 Miles an Hour at 50 Feet	90
Train Horn at 100 Feet	105
Claw Hammer; Jet Takeoff at 200 Feet	120
Shotgun at Shooter’s Ear	140

dBA = A-weighted decibel; L_{eq} = equivalent noise level
 Source: City of Calabasas 2015, Table VIII-1

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (DNL), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by DNL and CNEL usually differ by about 1 dBA. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range. There is no precise way to convert a peak hour L_{eq} to DNL or CNEL - the

relationship between the peak hour L_{eq} value and the DNL/CNEL value depends on the distribution of traffic volumes during the day, evening, and night.

Overview of Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hertz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body is from a low of less than 1 Hertz up to a high of about 200 Hertz (Crocker 2007). Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration.

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hertz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020a). When a building is impacted by vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020). Table 4.10-2 summarizes the vibration damage criteria recommended by Caltrans for evaluating the potential for structural damage to buildings.

Table 4.10-2 Criteria for Vibration Damage Potential

Structure and Condition	Vibration Level (in/sec PPV)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

in/sec = inches per second; PPV = peak particle velocity
 Source: Caltrans 2020a

In addition to the potential for building damage, the human body responds to vibration signals. However, unlike buildings, which are rigid, it takes some time for the human body to respond to vibration. In a sense, a building responds to the instantaneous movement while the human body responds to average vibration amplitude, which is measured as RMS. The averaging of the particle generally results in the RMS conservatively being equivalent to 71 percent of the PPV. Thus, human annoyance usually results in a more restrictive vibration limit than structural damage limits.

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 4.10-3.

Table 4.10-3 Criteria for Vibration Annoyance Potential

Human Response	Vibration Level (in/sec PPV)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity
 Source: Caltrans 2020

Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The Calabasas General Plan Noise Element identifies noise-sensitive land uses as residences, schools, parks, hotels, hospitals, libraries, hotels/motels, places of worship, and auditoriums (City of Calabasas 2015). Noise-sensitive receivers are located throughout and in the vicinity of the Plan Area and include the following:

- Residences and other residential facilities including Belmont Village Senior Living Calabasas (a retirement home), Silverado Calabasas Memory Care Community (a retirement home), Villa Mulholland II Assisted Living Facility for the Elderly, and Hillcrest Adolescent Treatment Center
- Schools including Montessori of Calabasas, Calabasas Klubhouse Preschool, Children’s Corner Play Center, Montessori of Malibu Canyon, Bay Laurel Elementary School, Viewpoint School, Round Meadow Elementary School, Lupin Hill Elementary School, Chaparral Elementary School, A.E. Wright Middle School, Alice C. Stelle Middle School, Calabasas High School, Louisville High School, Muse School (Prime Campus and Middle/High Campus), Mesivta of Greater Los Angeles, Ilan Ramon Day School, and Universal Beats Preschool
- Parks including Creekside Park, Juan Bautista de Anza Park, Grape Arbor Park, Gates Canyon Park, Wild Walnut Park, Calabasas Tennis and Swim Center, Calabasas Hill Park, Zev Yaroslavsky Las Virgenes Highlands Park, Calabasas Bark Park, Freedom Park, Calabasas Creek Park, Calabasas Park, Summit Valley Edmund D. Edelman Park, Malibu Creek State Park, and the Santa Monica Mountains National Recreation Area
- Calabasas Library
- Places of worship including Church in the Canyon, Christian City Church, Calvary Chapel Calabasas, Church of Jesus Christ of Latter-day Saints, Congregation Or Ami, Chabad of Calabasas, Valley Outreach Synagogue, and Calabasas Shul
- Hotels/motels including Good Nite Inn Calabasas Malibu, Hilton Garden Inn Calabasas, Cambria Hotel and Anza Hotel
- Performing Arts Education Center (on the campus of Calabasas High School)
- Agoura Hills/Calabasas Community Center

Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences and institutional uses, such as schools, churches, and hospitals. However, vibration-sensitive receivers also include fragile/historic-era buildings and buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studios or medical facilities with sensitive equipment).

Existing Noise Environment

The primary source of noise in the Plan Area is vehicular traffic on roadways; therefore, the highest noise levels in the Plan Area are generally adjacent to U.S. 101 and arterial roadways (including Las Virgenes Road, Agoura Road, Lost Hills Road, Parkway Calabasas, Park Granada, Calabasas Road, Mulholland Drive, Mulholland Highway, Old Topanga Canyon Road, and Mureau Road), while residential neighborhoods generally experience relatively low noise levels. To characterize ambient noise levels at housing sites throughout the Plan Area, four 15-minute sound level measurements were conducted on Thursday, May 13, 2021. The measurements were conducted at four of the proposed housing inventory sites and captured ambient noise levels along the U.S. 101 corridor, Las Virgenes Road south of U.S. 101, and Las Virgenes Road north of U.S. 101. As such, the noise levels captured at these sites are representative of ambient noise levels in the vicinity of the remaining housing inventory sites, which are exposed to similar noise sources. An Extech, Model 407780A, ANSI Type 2 integrating sound level meter was used to conduct the measurements.

Figure 4.10-1 shows the sound level measurement locations, and Table 4.10-4 summarizes the results of the noise measurements. Detailed sound level measurement data are included in Appendix D.

Table 4.10-4 Plan Area Sound Level Monitoring Results

#	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source(s)	L _{eq} (dBA)
1	Commons Shopping Center (Housing Site 11)	2:15 – 2:30 p.m.	45 feet from centerline of Calabasas Road, 500 feet from centerline of U.S. 101	65
2	Craftsman’s Corner (Housing Site 12)	2:57 – 3:12 p.m.	15 feet from centerline of Parkway Calabasas, 650 feet from centerline of U.S. 101	65
3	Las Virgenes Shopping Center (Housing Site 5)	3:31 – 3:46 p.m.	45 feet from centerline of Las Virgenes Road	68
4	Avalon Apartments (Housing Site 8)	4:16 – 4:31 p.m.	30 feet from centerline of Las Virgenes Road	71

See Appendix D for noise monitoring data. See Figure 4.10-1 for noise measurement locations.

4.10.2 Regulatory Setting

State

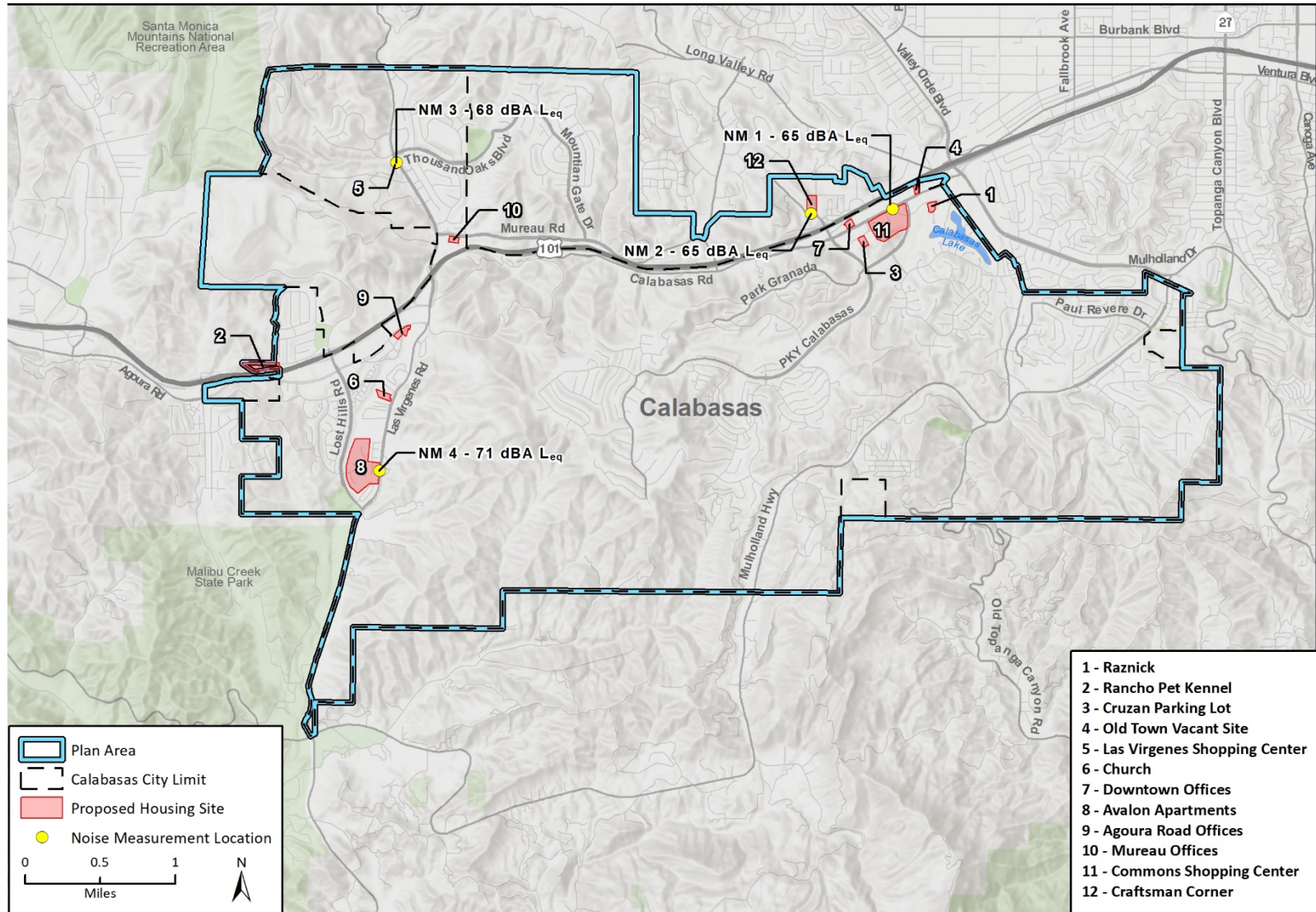
California Government Code Section 65302(f) requires each local government entity to implement a noise element as part of its general plan. In addition, the Office of Planning and Research has developed guidelines for preparing noise elements, which include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure. In addition, California Code of Regulations (CCR) Title 24, Part 2, Volume 1, Chapter 12, Section 1206.4, requires that interior noise levels attributable to exterior sources shall not exceed 45 CNEL in any habitable room.

Local

City of Calabasas General Plan

The City’s General Plan Noise Element adopted in 2008, and amended in 2015 via adoption of the City’s 5th RHNA cycle Housing Element, establishes noise-compatible land use performance standards for the range of uses present in and around Calabasas. Goals and policies of the Noise Element that would be applicable to the General Plan Update are as follows:

Figure 4.10-1 Noise Measurement Locations



Basemap provided by Esri and its licensors © 2021.
 Sources provided by City of Calabasas, 2018

Fig 4.10-1 Noise Measurement Locations

Policy VIII-1 Use the Land Use Compatibility for Community Noise Environments matrix (reproduced herein as Figure 4.10-2) to determine the compatibility of land use when evaluating proposed new land uses in the City. The matrix shall be used as a guide to assist in determining the acceptability of noise for existing or proposed land use.

In this matrix, the degree of acceptability is categorized by noise exposures that are normally acceptable, conditionally acceptable, normally unacceptable and clearly unacceptable. Action on proposed projects shall be guided according to the degree of land use/noise acceptability as follows.

- **Normally Acceptable:** The potential for project approval should not be encumbered by land use/noise compatibility issues
- **Conditionally Acceptable:** The potential for project approval should not be encumbered by land use/noise compatibility issues, provided the applicant has included measures or conditions that are acceptable to the Planning Commission or appropriate planning authority and ultimately result in land use/noise compatibility.
- **Normally Unacceptable:** The potential for project denial will be considered likely as a result of land use/noise incompatibility, unless extraordinary circumstances are present that do not involve adjacent properties or uses. Overriding project benefits cannot be utilized to justify extraordinary circumstances.
- **Clearly Unacceptable:** If a project falls into this category, it shall not be approved due to land use/noise compatibility issues.

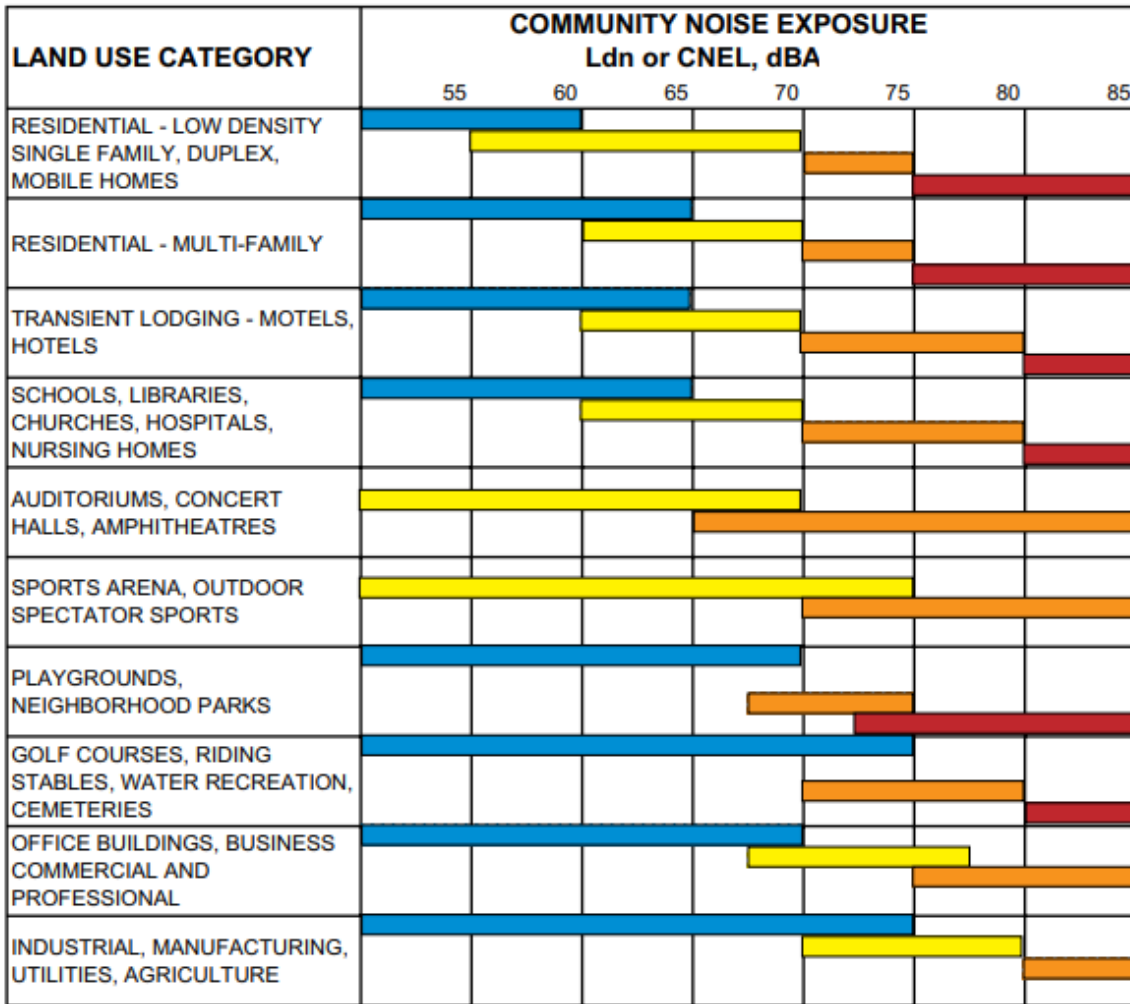
Policy VIII-2 If a proposed development project that will create or affect existing noise sensitive land uses is proposed in a location that is within a 60 dBA or greater CNEL noise contour, as determined by independent experts or consultants hired by the City, require that the project applicant demonstrate that, unless mitigation is available: (1) the project will not generate noise exceeding the “normally acceptable” range for existing uses on adjacent properties; and (2) adjacent influences will not generate ambient noise on the project site that exceeds the “normally acceptable” range for the proposed use.

Policy VIII-3 Locate and design noise-sensitive land uses and noise generators in such a manner that noise objectives will be maintained.

Policy VIII-4 Emphasize the following as the City's preferred noise management strategies, and as higher priorities than construction of noise barriers:

- Avoiding placement of noise-sensitive uses within noisy areas
- Increased setbacks from noise sources
- Building orientation that shields noise sensitive portions of a project from noise sources
- Use of sound attenuating architectural design and building features

Figure 4.10-2 Land Use Compatibility for Community Noise Environments



NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

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

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

Source: City of Calabasas 2015, Figure VIII-3

- Policy VIII-6** Incorporate consideration of noise impacts to significant wildlife habitats into the development/environmental review process.
- Policy VIII-8** Use noise standards in the review of proposed developments to determine whether the proposal promotes acceptable noise compatible land uses both during construction and subsequently.
- Policy VIII-9** Pro-actively address noise along the Ventura Freeway and other major corridors.

Calabasas Municipal Code

The Calabasas Municipal Code (CMC) contains several provisions to regulate noise:

CMC Chapter 9.28.010. Prohibits the creation of loud, unnecessary, and unusual noise that disturbs the peace or quiet of any neighborhood or that causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

CMC Chapter 17.20.160(A)(1). Limits project-related noise to no greater than 60 CNEL within known wildlife nesting or migration areas, as well as within natural open space areas, as necessary to maintain tranquil open space and viable wildlife habitats and mobility.

CMC Chapter 17.20.160(D). Establishes ambient exterior noise standards for all properties within various noise zones, which are shown in Table 4.10-5.

CMC Chapter 17.20.160(E). Establishes interior noise standards for residential dwelling units, which are shown in Table 4.10-6.

CMC Chapter 17.20.160(F). Increases the exterior and interior noise standards by 5 dBA for mixed use projects.

CMC Chapter 17.20.160(C)(4). Exempts construction noise from the standards of CMC Chapter 17.20.160(D), provided that construction activities are restricted to between 7:00 a.m. and 6:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays. No construction is allowed on Sundays or federal holidays.

CMC Chapter 17.20.160(A)(2). Outlines a comprehensive set of noise reduction measures for proposed developments.

Table 4.10-5 Exterior Noise Level Standards

Zone	Days of the Week	Time Interval	Hourly Equivalent Sound Level (dBA L_{eq})
Residential Zones			
RS, RM, RMH, RR, RC, HM, OS	Monday through Friday	10:00 p.m. to 7:00 a.m.	50
RS, RM, RMH	Monday through Friday	7:00 a.m. to 10:00 p.m.	65
RR, RC, HM, OS	Monday through Friday	7:00 a.m. to 10:00 p.m.	60
RS, RM, RMH, RR, RC, HM, OS	Saturday and Sunday	10:00 p.m. to 8:00 a.m.	50
	Saturday and Sunday	8:00 a.m. to 10:00 p.m.	60
Commercial and Special Purpose Zones			
PD, CL, CR, CO, CMU, CB, CT, PF, REC	Monday through Sunday	10:00 p.m. to 7:00 a.m.	60
PD, CL, CR, CO, CMU, CB, CT, PF	Monday through Sunday	7:00 a.m. to 10:00 p.m.	65
REC with active recreation areas	Monday through Sunday	7:00 a.m. to 10:00 p.m.	70
dBA = A-weighted decibel; L_{eq} = equivalent noise level; RS = Residential, Single-Family; RM = Residential, Multifamily; RMH = Residential, Mobile Home; RR = Rural Residential; RC = Rural Community; HM = Hillside/Mountainous; OS = Open Space; PD = Planned Development; CL = Commercial, Limited; CR = Commercial, Retail; CO = Commercial, Office; CMU = Commercial, Mixed Use; CB = Commercial, Business Park; CT = Commercial, Old Town; PF = Public Facilities; REC = Recreation Source: CMC Chapter 17.20.160(D), Table 3-1			

Table 4.10-6 Interior Noise Level Standards

	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly Equivalent Sound Level (dBA L_{eq})	45	40
Maximum Sound Level (dBA L_{max})	60	55
dBA = A-weighted decibels; L_{eq} = equivalent noise level; L_{max} = maximum instantaneous noise level Note: Interior noise standards only apply to residential land uses. Source: CMC Chapter 17.20.160(E), Table 3-2		

4.10.3 Impact Analysis

Methodology and Significance Thresholds

Construction Noise

Construction noise from development facilitated by the General Plan Update is estimated based on reference noise levels reported by the FHWA's Roadway Construction Noise Model (2006) for various pieces of construction equipment. It is conservatively assumed that construction equipment typically operates an average of 25 to 50 feet from the nearest noise-sensitive receivers. Construction noise level estimates do not account for the presence of intervening structures or topography, which could reduce noise levels at receiver locations.

Off-site Traffic Noise

Based on the Institute of Transportation Engineers’ (ITE) *Trip Generation Manual, 10th Edition* (2017), mid-rise multi-family housing land uses generate approximately 5.44 average daily trips (ADT) per unit. Therefore, reasonably foreseeable development under the proposed General Plan Update would generate approximately 7,099 net new ADT on roadways throughout the Plan Area (5.44 ADT per unit x 1,305 units). The additional trip volumes generated by reasonably foreseeable development are compared to baseline traffic conditions to determine the potential for a significant increase in off-site traffic noise levels. The ADT generated by the proposed sites in the General Plan Update is shown in Table 4.10-7.

Table 4.10-7 ADT Generated by Reasonably Foreseeable Development

Site Number	Site Name	ADT ¹	Primary Access Roadway
1	Raznick	228	Park Sorrento east of Park Granada
2	Rancho Pet Kennel	326	Canwood Street
3	Cruzan Parking Lot	479	Park Sorrento east of Parkway Calabasas
4	Old Town Vacant Site	234	Calabasas Road east of Parkway Calabasas
5	Las Virgenes Shopping Center	223	Las Virgenes Road north of U.S. 101
6	Church	604	Las Virgenes Road south of U.S. 101
7	Downtown Offices	326	Calabasas Road east of Parkway Calabasas
8	Avalon Apartments	718	Las Virgenes Road south of U.S. 101
9	Agoura Road Offices	680	Agoura Road east of Lost Hills Road
10	Mureau Office	392	Mureau Road east of Las Virgenes Road
11	Commons Shopping Center	1,088	Calabasas Road east of Parkway Calabasas
12	Craftsman Corner	1,278	Parkway Calabasas north of U.S. 101
ADUs		522	Distributed Citywide
Total		7,099	

ADT = average daily traffic

¹ Estimated using a trip generation rate of 5.44 ADT per unit in accordance with the trip generation rate for mid-rise multi-family housing published in the ITE *Trip Generation Manual, 10th Edition* (2017).

Vibration

The General Plan Update would not facilitate the construction of stationary, long-term sources of substantial vibration. Thus, construction activities facilitated by the General Plan Update have the greatest potential to generate groundborne vibration affecting nearby receivers in the Plan Area, especially during grading and paving of individual sites of reasonably foreseeable development. The greatest vibratory sources during construction would be jackhammers, bulldozers, vibratory rollers, and loaded trucks. At this level of planning, it is not anticipated that blasting or impact pile driving would be required for construction activities facilitated by the General Plan Update. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020; FTA 2018).

A quantitative assessment of potential vibration impacts from construction activities was conducted using the estimates and equations developed by Caltrans and the FTA (Caltrans 2020; FTA 2018). Table 4.10-8 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018). These pieces of construction equipment are

anticipated to be used during project construction and would generate the highest levels of vibration as compared to construction equipment not included in this analysis.

Table 4.10-8 Vibration Levels Measured during Construction Activities

Equipment	Vibration Level at 25 Feet (in/sec PPV)
Jackhammer	0.035
Large Bulldozer	0.089
Small Bulldozer	0.003
Vibratory Roller	0.210
Loaded trucks	0.076

PPV = peak particle velocity; in/sec = inches per second
 Source: FTA 2018

Noise/Land Use Compatibility

In accordance with the noise/land use compatibility guidelines provided in Figure VIII-3 of the City’s General Plan Noise Element, the noise/land use compatibility of the General Plan Update was evaluated by comparing estimated ambient noise levels under cumulative plus project conditions to the City’s noise/land use compatibility standards for low density, single family, duplex, mobile home, and multi-family residential land uses (see Figure 4.10-2 in Section 4.10.2, *Regulatory Setting*).

Significance Thresholds

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. The General Plan Update would have a significant impact with respect to noise if it would:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
2. Generation of excessive groundborne vibration or groundborne noise levels
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels

Construction Noise

Pursuant to CMC Chapter 17.20.160(C)(4), construction noise is exempt from the provisions of CMC Chapter 17.20.160(D) provided that construction activities occur between 7:00 a.m. and 6:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays. However, for purposes of analyzing impacts from this project, the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) criteria will be used. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} for an 8-hour period (FTA 2018).

On-site Operational Noise

Operational noise generated on-site noise sources associated with the General Plan Update would be significant if any of the following would occur:

- Noise levels generated by the project would not exceed the “normally acceptable” range for existing uses on adjacent properties (Calabasas General Plan Policy VIII-2)
- Noise levels generated by the project would exceed the noise level limits specified in CMC Chapter 17.20.160(D-F) at other properties (refer to Table 4.10-5 and Table 4.10-6; the exterior and interior noise standards are increased by 5 dBA for mixed use projects pursuant to CMC Chapter 17.20.160[F])
- Noise levels generated by the project would exceed 60 CNEL within known wildlife nesting or migration areas or within natural open space areas

Off-Site Traffic Noise

Traffic noise impacts are evaluated in consideration of the City’s Noise and Land Use Compatibility Guidelines (see Figure 4.10-2) and community response to changes in ambient noise levels. As discussed in Section 4.10.1, *Overview of Environmental Noise*, the average healthy ear can barely perceive an increase of up to 3 dBA in noise levels. Therefore, traffic noise impacts would be significant if traffic volumes associated with reasonably foreseeable development under the proposed General Plan Update would result in greater than a 3 dBA increase in noise levels.

Vibration

The City of Calabasas has not adopted standards to assess vibration impacts during construction and operation. However, Caltrans has developed limits for the assessment of vibrations from transportation and construction sources. The Caltrans vibration limits are reflective of standard practice for analyzing vibration impacts on structures from continuous and intermittent sources. As shown in Section 4.10.1(b), *Overview of Groundborne Vibration*, the Caltrans (2020) *Transportation and Construction Vibration Guidance Manual* identifies two sets of impact criteria for buildings and humans. Table 4.10-2 presents the impact criteria for buildings and Table 4.10-3 presents impact criteria for humans from construction and operational vibration sources. The thresholds of significance used in this analysis to evaluate vibration impacts are based on these impact criteria, as summarized in Table 4.10-9.

Table 4.10-9 Vibration Thresholds

Type of Impact	Thresholds for Construction Activities (in/sec PPV) ¹	Thresholds for Operational Activities (in/sec PPV) ¹
Human Annoyance ¹	0.25	0.04
Damage to Historic and Some Old Buildings	0.5	0.25
Damage to Older Residential Structures	0.5	0.3
Damage to Newer Residential Structures	1.0	0.5

in/sec = inches per second; PPV = peak particle velocity

¹ Thresholds are based on the points at which transient and steady state vibrations are distinctly perceptible from other vibrations.

Noise/Land Use Compatibility

The noise/land use compatibility of the project is evaluated in accordance with the City's land use compatibility criteria, shown in Figure 4.10-2 in Section 4.10.2, *Regulatory Setting*. The normally acceptable exterior ambient noise level is up to 65 CNEL for multi-family residential land uses.

Noise Level Increases over Ambient Noise Levels

The operational and construction noise thresholds used in this analysis are set at reasonable levels at which a substantial noise level increase as compared to ambient noise levels would occur. Operational noise thresholds are lower than construction noise thresholds to account for the fact that permanent noise level increases associated with continuous operational noise sources typically result in adverse community reaction at lower magnitudes of increase than temporary noise level increases associated with construction activities that occur during daytime hours and do not affect sleep. Furthermore, these noise thresholds are tailored to specific land uses; for example, the noise thresholds for residential land uses are lower than those for commercial land uses. The difference in noise thresholds for each land use indicates that the noise thresholds inherently account for typical ambient noise levels associated with each land use. Therefore, an increase in ambient noise levels that exceeds these absolute thresholds would also be considered a substantial increase above ambient noise levels. As such, a separate evaluation of the magnitude of noise level increases over ambient noise levels would not provide additional analytical information regarding noise impacts and therefore is not included in this analysis.

Threshold 1: Would the General Plan Update result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact N-1 CONSTRUCTION ACTIVITIES FACILITATED BY THE GENERAL PLAN UPDATE WOULD GENERATE SUBSTANTIAL TEMPORARY INCREASES IN AMBIENT NOISE LEVELS IN THE VICINITY OF FUTURE DEVELOPMENT PROJECTS. THEREFORE, IMPLEMENTATION OF MITIGATION MEASURE N-1 WOULD BE REQUIRED TO REDUCE IMPACTS TO A LESS-THAN-SIGNIFICANT LEVEL.

Residences and other noise-sensitive land uses adjacent to the proposed housing sites would be the most affected by construction noise associated with reasonably foreseeable development facilitated by the General Plan Update. Since there are no specific plans or time scales for reasonably foreseeable development, it is not possible to determine exact noise levels, locations, or time periods for construction. However, construction noise would be highest and of the longest duration in areas where future development and redevelopment is anticipated to occur. For example, construction activities at housing site #8 (Avalon Apartments) would occur adjacent to single-family residences at El Encanto and A.E. Wright Middle School, and construction activities at housing site #11 (Commons Shopping Center) would occur across the street from multi-family residences at Oak Park.

Most of the time, construction noise impacts result when construction activities occur during noise-sensitive times of the day (early morning, late evening, or nighttime hours), when construction occurs in areas immediately adjacent to noise-sensitive land uses, or when the duration of construction extends over long periods of time. Major noise-generating construction activities could include demolition activities, site grading and excavation, and building construction. These activities

could occur in areas immediately adjacent to existing noise-sensitive receivers or future noise-sensitive receivers developed within Calabasas.

Based on the nature of equipment used for each phase of construction activities, the highest construction noise levels would be generated during demolition, grading, and excavation activities, and the lowest levels would occur during paving and architectural coating activities. Table 4.10-10 presents the noise levels generated by common types of construction equipment. Typical construction noise levels are about 75 to 85 dBA $L_{eq(8-hour)}$ when measured at a distance of 50 feet from the center of the site during busy construction periods. These noise levels drop off at a rate of about 6 dBA per doubling of distance between the center of the construction site and the receiver. In addition, intervening structures or terrain would also attenuate noise and reduce levels. Nevertheless, construction activities occurring in close proximity to noise-sensitive receivers would have the potential to temporarily exceed the threshold of 80 dBA $L_{eq(8-hour)}$.

Table 4.10-10 Typical Noise Levels Generated by Construction Equipment

Equipment	Type	Typical Noise Levels (dBA $L_{eq(8-hour)}$)	
		50 Feet from Center of Site	100 Feet from Center of Site
Air Compressor	Stationary	74	68
Backhoe	Mobile	74	68
Compactor (ground)	Mobile	76	70
Concrete Mixer	Stationary	75	69
Concrete Pump	Mobile	74	68
Crane	Mobile	73	67
Dozer	Mobile	78	72
Excavator	Mobile	77	71
Generator	Stationary	78	72
Grader	Mobile	81	75
Jackhammer	Stationary	82	76
Loader	Mobile	75	69
Paver	Mobile	74	68
Pneumatic Tools	Stationary	82	76
Roller	Mobile	73	67
Saw	Stationary	83	77
Scraper	Mobile	80	74
Warning Horn	Stationary	70	64
Welder/Torch	Stationary	70	64

Source: FHWA 2006

The City has adopted specific limitations in CMC Chapter 17.20.160(C)(4) for construction activities that requires compliance with the provisions of the Noise Ordinance for all construction activities occurring outside the hours of 7:00 a.m. and 6:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays. In addition, CMC Chapter 17.20.160(C)(4) prohibits construction activities on Sundays and federal holidays. These standards would ensure that construction noise impacts do not occur during noise-sensitive hours of sleep. Furthermore, Policy VIII-8 of the General Plan Noise Element aims to reduce noise impacts associated with construction activities:

Policy VIII-8 Use noise standards in the review of proposed developments to determine whether the proposal promotes acceptable noise compatible land uses both during construction and subsequently.

Nevertheless, daytime construction activities may result in a significant temporary increase in ambient noise levels at noise-sensitive uses, such as residences and schools, in excess of the threshold of 80 dBA $L_{eq8-hour}$ depending on the proximity of noise-sensitive receivers to the proposed housing sites. Therefore, impacts would be potentially significant, and implementation of Mitigation Measure N-1 would be required.

Mitigation Measures

MM N-1 Construction Noise Reduction Measures

The following standard construction noise reduction measures shall be required for all new projects located within 100 feet of noise-sensitive receivers to be implemented during all phases of demolition and construction activities:

- All equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained industrial grade mufflers consistent with manufacturers' standards.
- Whenever practicable, construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.
- All heavy-duty stationary construction equipment shall be placed so that emitted noise is directed away from the nearest sensitive receivers.
- All construction areas for staging and warming up equipment shall be located as far as practicable from nearby noise-sensitive receivers.
- Portable sound enclosures capable of reducing noise levels by at least 10 dBA shall be used for all generators, air compressors, and other stationary equipment.
- Two weeks prior to commencement of construction, notification shall be provided to off-site residential uses within 500 feet of project sites that discloses the construction schedule, including the types of activities and equipment that would be used throughout the duration of the construction period.
- Project applicants shall provide a non-automated telephone number for local residents to call to submit complaints associated with construction noise during all phases of construction. The project applicant shall maintain a log of complaints and shall address complaints to minimize noise issues for neighbors.
- Each project applicant shall coordinate regularly with other project applicants and/or construction contractors of projects located within 500 feet of the project site that will have overlapping construction schedules to minimize the amount of time during which simultaneous

construction activities are occurring and to avoid the simultaneous occurrence of high-noise generating activities, such as demolition and excavation.

Significance After Mitigation

Implementation of Mitigation Measure N-1 would entail the use of several noise reduction measures, including mufflers and portable sound enclosures, to reduce construction noise levels within 100 feet of noise-sensitive receivers. Beyond this distance, construction noise levels typically attenuate to less than 80 dBA L_{eq} without mitigation, as shown in Table 4.10-10, due to greater distances from the construction site as well as intervening structures that reduce noise. In addition, compliance with CMC Chapter 17.20.160(C)(4) and General Plan Policy VIII-8 would limit elevated construction noise levels to daytime hours from Monday to Saturday. Therefore, impacts would be less than significant with mitigation incorporated.

Impact N-2 OPERATION OF FUTURE DEVELOPMENT PROJECTS FACILITATED BY THE GENERAL PLAN UPDATE WOULD NOT RESULT IN THE GENERATION OF A SUBSTANTIAL PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THESE PROJECT SITES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The General Plan Update would primarily facilitate new residential development at 12 identified housing sites. Noise sources typically associated with residential land uses include mechanical equipment (e.g., heating, ventilation, and air conditioning equipment), conversations, landscaping equipment, recreational activities, parking, and social gatherings. The City has adopted specific standards for noise associated with projects in CMC Chapter 17.20.160, including limitations on exterior and interior noise levels and limitations on noise generated within known wildlife nesting or migration areas and natural open space. In addition, CMC Chapter 9.28.010 prohibits the creation of nuisance noise. Furthermore, the following policies in the General Plan Noise Element serve to minimize operational noise associated with new development projects:

- Policy VIII-2** If a proposed development project that will create or affect existing noise sensitive land uses is proposed in a location that is within a 60 dBA or greater CNEL noise contour, as determined by independent experts or consultants hired by the City, require that the project applicant demonstrate that, unless mitigation is available: (1) the project will not generate noise exceeding the “normally acceptable” range for existing uses on adjacent properties; and (2) adjacent influences will not generate ambient noise on the project site that exceeds the “normally acceptable” range for the proposed use.
- Policy VIII-3** Locate and design noise-sensitive land uses and noise generators in such a manner that noise objectives will be maintained.
- Policy VIII-4** Emphasize the following as the City's preferred noise management strategies, and as higher priorities than construction of noise barriers:
- Avoiding placement of noise-sensitive uses within noisy areas
 - Increased setbacks from noise sources
 - Building orientation that shields noise sensitive portions of a project from noise sources
 - Use of sound attenuating architectural design and building features
- Policy VIII-6** Incorporate consideration of noise impacts to significant wildlife habitats into the development/environmental review process.

Policy VIII-8 Use noise standards in the review of proposed developments to determine whether the proposal promotes acceptable noise compatible land uses both during construction and subsequently.

Compliance with the policies of the City's General Plan and the requirements of CMC Chapters 9.28.010 and 17.20.160 would minimize the permanent increase in ambient noise levels generated by operation of new development projects at nearby noise-sensitive receivers. Therefore, impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Impact N-3 INCREASED TRAFFIC NOISE GENERATED BY FUTURE DEVELOPMENT PROJECTS FACILITATED BY THE GENERAL PLAN UPDATE WOULD NOT RESULT IN THE GENERATION OF A SUBSTANTIAL PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THESE PROJECT SITES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Buildout under the proposed General Plan Update would have significant traffic noise impacts if it would increase noise levels at sensitive receivers by more than 3 dBA. As stated in Section 4.10.1, *Setting*, a doubling of the energy of a noise source, such as a doubling of traffic volumes, is necessary to increase the existing noise level by 3 dBA. Table 4.10-11 summarizes existing ADT along roadways with sensitive receivers that would be affected by increased traffic generated by reasonably foreseeable development under the proposed General Plan Update. As shown therein, traffic volumes associated with reasonably foreseeable development would not double existing traffic volumes along any affected roadways and therefore would not result in more than a 3 dBA increase in traffic noise levels at sensitive receivers for any of the 12 sites. The impacts of traffic volumes associated with reasonably foreseeable development at Craftsman's Corner (housing site #12) on Parkway Calabasas are not included in this table because it is anticipated that vehicle trips would primarily utilize the segment of Parkway Calabasas south of Ventura Boulevard to access US-101 and would not travel past sensitive receivers along Parkway Calabasas north of Ventura Boulevard given that this roadway dead-ends in the residential neighborhood. In addition, the impacts of traffic volumes associated with reasonably foreseeable development at the Cruzan Parking Lot (housing site #3) on Park Sorrento east of Parkway Calabasas are not included in this table because no sensitive receivers are located along this roadway. Furthermore, trips generated by reasonably foreseeable ADUs would be distributed throughout the Plan Area and would result in a minimal increase in traffic volumes on local roadways in neighborhoods where ADUs are constructed. Therefore, off-site traffic noise impacts would be less than significant.

Table 4.10-11 Existing plus Project Traffic Volumes on Affected Roadways

Roadway	Existing ADT	ADT from Reasonably Foreseeably Development ¹	Percent Increase
Las Virgenes Road north of U.S. 101	19,631 ²	223	1%
Las Virgenes Road south of U.S. 101	24,068 ²	1,322	5%
Agoura Road east of Lost Hills Road	9,579 ²	680	7%
Mureau Road east of Las Virgenes Road	6,705 ²	392	6%
Calabasas Road east of Parkway Calabasas	14,374 ²	1,648	11%
Park Sorrento east of Parkway Granada	1,164 ³	228	20%
Canwood Street	340 ⁴	326	96%

ADT = average daily traffic

¹ See Table 4.10-7 for ADT estimated for each housing site.

² Estimated using traffic volumes from the Final EIR for the 2030 General Plan Update with a 1.041 percent growth factor for year 2020 based on the guidance provided for the Agoura Hills/Calabasas/Hidden Hills area in the 2010 Los Angeles Congestion Management Program (City of Calabasas 2008; Los Angeles County Metropolitan Transportation Authority 2010).

³ Park Sorrento provides local access to Park Granada for approximately 143 apartment units, 93 single-family residences, and various commercial, retail, office, and recreational uses. Based on the trip generation rates of 5.44 ADT per unit for mid-rise multifamily housing and 9.44 ADT per residence for single-family detached homes published in the ITE *Trip Generation Manual, 10th Edition* (2017), existing residential land uses along Park Sorrento north of Park Jacaranda generate approximately 1,118 ADT ([5.44 ADT x 143 multifamily units] + [36 residences x 9.44 trips per residence]). Additional ADT associated with the commercial, office, retail, and recreational land uses also travel along Park Sorrento; however, due to a lack of available data, trip generation associated with these uses was conservatively not included in the estimate of existing trip volumes.

⁴ Canwood Street provides neighborhood access to Lost Hills Road for approximately 36 single-family detached homes. Based on the trip generation rate of 9.44 ADT per residence for single-family detached homes published in the ITE *Trip Generation Manual, 10th Edition* (2017), these 36 residences generate approximately 340 ADT (36 residences x 9.44 trips per residence).

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 2: Would the General Plan Update result in generation of excessive groundborne vibration or groundborne noise levels?

Impact N-4 CONSTRUCTION ACTIVITIES AND THE OPERATION OF FUTURE DEVELOPMENT PROJECTS FACILITATED BY THE GENERAL PLAN UPDATE WOULD NOT RESULT IN THE GENERATION OF EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction Vibration

The General Plan Update would facilitate the construction of housing units in the Plan Area. Certain types of construction equipment that would potentially be utilized during construction activities facilitated by the proposed General Plan Update, such as vibratory rollers, bulldozers, jackhammers, and loaded trucks can generate high levels of groundborne vibration. Construction vibration impacts are assessed for individual pieces of construction equipment in accordance with FTA guidance (FTA 2018). Due to site constraints and worker safety limitations, individual pieces of vibratory construction equipment typically do not operate in close proximity to each other such that any single off-site structure would experience substantial levels of vibration from multiple pieces of construction equipment. Therefore, the additive impacts of multiple pieces of vibratory construction equipment operating simultaneously are not evaluated.

Vibration-generating construction equipment would occasionally pass-by off-site structures within 25 to 50 feet.¹ As shown in Table 4.10-12, vibration levels from individual pieces of construction equipment would not exceed the human annoyance or structural damage thresholds for construction activities at distances of 25 and 50 feet. As a result, impacts would be less than significant.

Table 4.10-12 Estimated Vibration Levels at Various Distances (in/sec PPV)

Equipment	25 Feet	50 Feet
Jackhammer	0.04	0.02
Large Bulldozer	0.09	0.04
Small Bulldozer	< 0.01	< 0.01
Vibratory Roller	0.21	0.10
Loaded trucks	0.08	0.04
Threshold for Human Annoyance	0.25	0.25
Threshold Exceeded?	No	No
Threshold for Structural Damage to Older Residential Structures	0.5	0.5
Threshold Exceeded?	No	No
Threshold for Structural Damage to New Residential Structures	1.0	1.0
Threshold Exceeded?	No	No

in/sec = inches per second' PPV = peak particle velocity
 See Appendix D for vibration analysis worksheets.

Operational Vibration

The proposed residential land uses would not include significant stationary sources of vibration, such as manufacturing or heavy equipment operations. No operation-related vibration impact would occur.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

¹ Due to safety limitations and site constraints, it is not anticipated that vibration-generating equipment would operate within 25 feet of off-site structures.

Threshold 3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the General Plan Update expose people residing or working in the project area to excessive noise levels?

Impact N-5 PROJECTS FACILITATED BY THE GENERAL PLAN UPDATE WOULD BE LOCATED OUTSIDE THE PLANNING AREA FOR THE VAN NUYS AIRPORT. THEREFORE, THE GENERAL PLAN UPDATE WOULD NOT EXPOSE PEOPLE RESIDING IN THE PLAN AREA TO EXCESSIVE NOISE LEVELS. NO IMPACT WOULD OCCUR.

The nearest airport to the Plan Area is the Van Nuys Airport, located approximately 8.9 miles northeast of the Plan Area. Therefore, the General Plan Update would not be within the planning area of the Van Nuys Airport's land use plan or within the 65 CNEL noise level contour (Los Angeles County Airport Land Use Commission 2003). In addition, the Plan Area is not located within two miles of private airstrips. No impacts would occur.

Land Use Compatibility

Impact N-6 THE GENERAL PLAN UPDATE WOULD SITE NEW NOISE-SENSITIVE LAND USES IN AREAS WHERE EXISTING AMBIENT NOISE LEVELS FALL WITHIN THE "CONDITIONALLY ACCEPTABLE" AND "NORMALLY UNACCEPTABLE" RANGES OF THE CITY'S NOISE/LAND USE COMPATIBILITY CRITERIA. HOWEVER, FUTURE DEVELOPMENT PROJECTS WOULD BE REQUIRED TO COMPLY WITH THE POLICIES OF THE CITY'S GENERAL PLAN NOISE ELEMENT, WHICH WOULD MINIMIZE FUTURE RESIDENTS' EXPOSURE TO HIGH EXTERIOR AND INTERIOR NOISE LEVELS. THEREFORE, IMPACTS RELATED TO NOISE/LAND USE COMPATIBILITY WOULD BE LESS THAN SIGNIFICANT.

The ruling for *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)* determined that under CEQA, except for a few specified and limited instances, environmental impacts on residents of a proposed project are not required to be analyzed, except when the project would exacerbate environmental hazards or conditions that already exist (i.e., CEQA requires the analysis of the impacts of a project on the environment and not analysis of the environment's impacts on a project). As discussed under Impact N-3, additional traffic associated with the proposed General Plan Update would not significantly exacerbate existing ambient noise conditions; therefore, an evaluation of how future residents of the Plan Area would be affected by exacerbated conditions is not required. Accordingly, the following noise/land use compatibility discussion is provided for informational purposes only.

The General Plan Update would facilitate the construction of multi-family housing on several sites throughout the Plan Area. The City's General Plan Noise Element considers ambient exterior noise levels up to 65 CNEL to be normally acceptable and ambient noise levels up to 70 CNEL to be conditionally acceptable for multi-family land uses (see Figure 4.10-2 in Section 4.10.2, *Regulatory Setting*). As detailed Table 4.9-3 of the Final Environmental Impact Report for the current City of Calabasas General Plan, noise levels near U.S. 101 and arterial roadways in the Plan Area are estimated to reach 65 to over 75 CNEL at a distance of 50 feet, depending on the roadway and associated traffic volumes, under maximum buildout of the 2030 General Plan (City of Calabasas 2008).

Ambient noise levels at housing sites in close proximity to US-101, such as housing sites 1, 2, 3, 4, 7, 9, 11, and 12 are estimated to fall within 70 to 75 CNEL, which is the "normally unacceptable" range for new multi-family residential land uses. According to the City's General Plan Noise Element, if ambient noise levels fall within the "normally unacceptable" range, a detailed analysis of the noise

reduction requirements must be made and needed noise insulation features included in the design if new development proceeds (City of Calabasas 2015). Ambient noise levels at the remaining housing sites (i.e., sites 6, 7, and 9) are estimated to fall within 65 to 70 CNEL, which is the “conditionally acceptable” range for multi-family residential land uses. Ambient noise levels at these sites would be lower due to their distance from U.S. 101 and lower traffic volumes on arterial roadways such as Las Virgenes Road and Lost Hills Road. According to the City’s General Plan Noise Element, if ambient noise levels fall within the “conditionally acceptable” range, new development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

The following policies in the City’s current General Plan Noise Element serve to guide new development projects located in areas with existing ambient noise levels above “normally acceptable” levels in achieving noise/land use compatibility:

Policy VIII-1 Use the Land Use Compatibility for Community Noise Environments matrix (reproduced herein as Figure 4.10-2) to determine the compatibility of land use when evaluating proposed new land uses in the City. The matrix shall be used as a guide to assist in determining the acceptability of noise for existing or proposed land use.

In this matrix, the degree of acceptability is categorized by noise exposures that are normally acceptable, conditionally acceptable, normally unacceptable and clearly unacceptable. Action on proposed projects shall be guided according to the degree of land use/noise acceptability as follows.

- **Normally Acceptable:** The potential for project approval should not be encumbered by land use/noise compatibility issues
- **Conditionally Acceptable:** The potential for project approval should not be encumbered by land use/noise compatibility issues, provided the applicant has included measures or conditions that are acceptable to the Planning Commission or appropriate planning authority and ultimately result in land use/noise compatibility.
- **Normally Unacceptable:** The potential for project denial will be considered likely as a result of land use/noise incompatibility, unless extraordinary circumstances are present that do not involve adjacent properties or uses. Overriding project benefits cannot be utilized to justify extraordinary circumstances.
- **Clearly Unacceptable:** If a project falls into this category, it shall not be approved due to land use/noise compatibility issues.

Policy VIII-2 If a proposed development project that will create or affect existing noise sensitive land uses is proposed in a location that is within a 60 dBA or greater CNEL noise contour, as determined by independent experts or consultants hired by the City, require that the project applicant demonstrate that, unless mitigation is available: (1) the project will not generate noise exceeding the “normally acceptable” range for existing uses on adjacent properties; and (2) adjacent influences will not generate ambient noise on the project site that exceeds the “normally acceptable” range for the proposed use.

- Policy VIII-4** Emphasize the following as the City's preferred noise management strategies, and as higher priorities than construction of noise barriers:
- Avoiding placement of noise-sensitive uses within noisy areas
 - Increased setbacks from noise sources
 - Building orientation that shields noise sensitive portions of a project from noise sources
 - Use of sound attenuating architectural design and building features
- Policy VIII-8** Use noise standards in the review of proposed developments to determine whether the proposal promotes acceptable noise compatible land uses both during construction and subsequently.
- Policy VIII-9** Pro-actively address noise along the Ventura Freeway and other major corridors.

Therefore, compliance with the policies of the City's General Plan would require each new development proposal to be reviewed for its noise/land use compatibility and require the inclusion of design features to reduce exterior and interior noise exposure in areas where existing ambient noise levels exceed "normally acceptable" levels. As a result, impacts related to noise/land use compatibility would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.10.4 Cumulative Impacts

The geographic scope for cumulative noise impacts is generally limited to areas within 0.5 mile of the proposed housing sites. This geographic scope is appropriate for noise because the proposed project's noise impacts would be localized and site-specific. Beyond this distance, impulse noise may be briefly audible, but steady noise associated with reasonably foreseeable development facilitated by the proposed General Plan Update would generally dissipate such that the level of noise would reduce to below the daytime and nighttime thresholds and/or blend in with the background noise level. Cumulative projects include the full development potential of the City's General Plan Land Use Diagram as well as buildout of development projects in neighboring jurisdictions such as Agoura Hills, Hidden Hills, and unincorporated Los Angeles County.

Construction activities associated with the General Plan Update may overlap with construction activities for other cumulative development projects within and near the Plan Area. Construction noise is localized and rapidly attenuates within an urban environment. Construction activities for cumulative development projects would be subject to compliance with local ordinances and General Plan policies, including CMC Chapter 17.20.160(C)(4), which establishes the allowed hours of construction, and General Plan Policy VIII-8, which requires the review of construction noise for proposed development projects in the Plan Area. Nevertheless, combined noise levels associated with simultaneous construction activities at sites in close proximity to each other may result in a significant temporary increase in ambient noise levels at noise-sensitive uses, such as residences and schools, in excess of the threshold of 80 dBA $L_{eq8-hour}$ depending on the proximity of noise-sensitive receivers to the proposed housing sites. Therefore, cumulative construction noise impacts would be significant. Depending on the proximity of simultaneous construction activities, the contribution of reasonably foreseeable development facilitated by the General Plan Update may comprise the majority of these combined construction noise levels. As a result, the General Plan

Update's contribution to the cumulative construction noise impact would be cumulatively considerable. Mitigation Measure N-1, as outlined under Impact N-1, includes a provision to require project applicants to coordinate with other project applicants and/or construction contractors of projects located within 500 feet of the project site to minimize the magnitude and duration of combined construction noise levels. Implementation of this mitigation measure would reduce the project's contribution to cumulative construction noise impacts such that it would not be cumulatively considerable with mitigation incorporated.

Cumulative operational noise would consist of the combined operational noise of residential projects facilitated by the General Plan Update in conjunction with existing and future development in the vicinity of the proposed housing sites, which would result in potential increases in noise associated with operational sources such as mechanical equipment (e.g., heating, ventilation, and air conditioning equipment), conversations, landscaping equipment, recreational activities, parking, and social gatherings. However, operational noise generated by existing and future land uses would be subject to the restrictions of CMC Chapters 9.28.010 and 17.20.160, and future development projects would also be subject to the noise-related policies of the City's General Plan Noise Element. Compliance with the policies of the City's General Plan and the requirements of CMC Chapters 9.28.010 and 17.20.160 would minimize the permanent increase in ambient noise levels generated by operational activities associated with cumulative development and the General Plan Update at noise-sensitive receivers. Therefore, no cumulative operational noise impact would occur.

Table 4.10-13 presents cumulative plus project traffic volumes along roadways with sensitive receivers that would be affected by increased traffic generated by reasonably foreseeable development under the proposed General Plan Update. As shown therein, cumulative plus project traffic volumes would not double existing traffic volumes along affected roadways and therefore would not result in more than a 3 dBA increase in traffic noise levels at sensitive receivers. The impacts of cumulative traffic volumes associated with reasonably foreseeable development at Craftsman's Corner (housing site #12) on Parkway Calabasas are not included in this table because no cumulative growth is anticipated to occur in areas that would increase traffic volumes along the segment of Parkway Calabasas adjacent to sensitive receivers given that this segment dead-ends in a built-out residential neighborhood. In addition, the impacts of traffic volumes associated with reasonably foreseeable development at the Cruzan Parking Lot (housing site #3) on Park Sorrento east of Parkway Calabasas are not included in this table because no sensitive receivers are located along this roadway. Furthermore, trips generated by reasonably foreseeable ADUs would be distributed throughout built-out residential neighborhoods in the Plan Area where substantial further cumulative growth is not expected. Therefore, no cumulative traffic noise impact would occur.

Table 4.10-13 Cumulative plus Project Traffic Volumes on Affected Roadways

Roadway	Existing ADT ²	Cumulative (2030) Growth ADT ²	Cumulative (2030) Growth plus Reasonably Foreseeably Development ADT	Percent Increase Compared to Existing Conditions	Project Contribution to Cumulative Increase
Las Virgenes Road north of U.S. 101	19,631	20,046	20,269	7%	35%
Las Virgenes Road south of U.S. 101	24,068	24,577	25,899	12%	72%
Agoura Road east of Lost Hills Road	9,579	9,782	10,462	14%	77%
Mureau Road east of Las Virgenes Road	6,705	6,847	7,239	12%	73%
Calabasas Road east of Parkway Calabasas	14,374	14,678	16,326	18%	84%
Park Sorrento east of Park Granada	1,164	1,188	1,416	27%	90%
Canwood Street	340	340 ³	666	96%	100%

ADT = average daily traffic

¹ Sourced from Table 4.10-11.

² Estimated using traffic volumes from the Final EIR for the 2030 General Plan Update with a 1.063 percent growth factor for year 2030 based on the guidance provided for the Agoura Hills/Calabasas/Hidden Hills area in the 2010 Los Angeles Congestion Management Program (City of Calabasas 2008; Los Angeles County Metropolitan Transportation Authority 2010).

³ Cumulative growth affecting Canwood Street beyond existing conditions and reasonably foreseeable development under the proposed General Plan Update is not anticipated because this neighborhood is fully built out and does not provide through connections to other undeveloped areas.

As discussed under Section 4.10.1(b), *Overview of Groundborne Vibration*, vibration generated by human activities, such as construction, is localized and rapidly attenuates with distance. It is possible that construction activities facilitated by the General Plan Update would occur at the same time as other development projects in and near the Plan Area. However, it is unlikely that vibration-generating equipment used for construction of other development projects would operate close enough to the proposed housing sites and the nearest sensitive receivers such that cumulative vibration impacts at the same receivers or structures would occur. Therefore, no cumulative impact related to construction vibration would occur.

4.11 Population and Housing

This section evaluates potential impacts to population and housing that could arise from implementation of the General Plan Update.

Population

The City of Calabasas had a population of 24,193 residents in 2020, representing approximately 2.4 percent of the Los Angeles County population of 10,172,951 (California Department of Finance [DOF] 2021). The City’s population increased by 1,135, or approximately 4.9 percent, from the 2010 population of 23,058 (DOF 2021, U.S. Census 2021a). In 2011, the City annexed a territory adjacent to the northwestern corner of the City, and this territory included 110 existing single-family housing units. The estimated population within this territory was approximately 330 persons. The annexation accounted for 29 percent of the overall increase for the 10-year period between 2010 and 2020.

In comparison, the County of Los Angeles population grew by approximately 3.7 percent over the same period (DOF 2021, U.S. Census 2021b). Neighboring jurisdictions such as Agoura Hills and Thousand Oaks experienced a decrease in growth or marginal growth during this time.

As shown in Table 4.11-1, the City experienced its highest rate of average annual growth during 1992-2000, with a decreasing rate during the subsequent 20 years. The City incorporated in 1991. In 1992, the City had 17,801 residents. From 1992 to 2000, Calabasas saw an average growth of 444 people per year, or a 2.5 percent annual growth rate (City of Calabasas 2015). From 2010-2020, the annual growth rate was an average of 113.5 new residents per year, or approximately 0.5 percent per year (113.5 / 23,058).

Table 4.11-1 City of Calabasas Historical Population Growth

	2000	2010	2020
Population	20,100	23,058	24,193
Difference from Previous Decade ¹	2,299	2,958	1,135
Percent Total Increase from Previous Decade ¹	12.9	14.7	4.9
Percent Average Annual Growth Rate during Previous Decade ¹	2.5	1.5	0.5

¹ Difference from 1992 to 2000 for the year 2000.

Source: City of Calabasas 2015, DOF 2021, U.S. Census 2021a, FHA 2017

As of January 1, 2020, there were 9,230 housing units in the City and 407 housing units in the unincorporated areas of the Plan Area, for a total of 9,637 units. The average household size in the City is 2.71 persons according to the DOF. Based on this average, the current population of the Plan Area is estimated to be 26,116 (9,637 housing units x 2.71 persons per household).

In terms of future trends, the Southern California Association of Governments’ (SCAG) Demographics and Growth Forecast projects an increase of 707 persons (2.9 percent), in the City’s population over the next 25 years, for an estimated 2045 population of 24,900 residents (SCAG 2020a). This forecasted growth represents approximately 28 new residents per year. Based on this rate, the City is expected to add approximately 280 new residents by 2030, bringing the total population to 24,592. However, the SCAG forecast does not consider anticipated land annexations and does not include the population in the unincorporated areas of the Plan Area.

According to the 2019 five-year American Community Survey, the majority of residents identify as White (approximately 83 percent), and the average age in the City (43.6 is higher than the average age for Los Angeles County as a whole (37.0) (U.S. Census 2019a).

Housing

As of January 1, 2020, there were 9,230 housing units in the City and 407 housing units in the unincorporated areas of the Plan Area, for a total of 9,637 units. In the City, 6,886 (74.6 percent) were detached or attached single-family units, 2,113 (22.9 percent) were multifamily units, and 231 (2.5 percent) were mobile homes¹. Less than one percent of City residents live in group quarters. For the County as a whole, multi-family housing comprised 43.6 percent of housing units (DOF 2021). All 407 housing units in the unincorporated areas of the Plan Area are single-family homes.

Housing units in the City also include accessory dwelling units (ADUs). In January 2020, the City Council adopted an ordinance amending the City’s Development Code to comply with the latest State laws governing ADUs and Junior ADUs. Between the years 2017- June 2021, a total of 22 building permits were issued by the City for ADUs, with an additional nine ADU applications in process (City of Calabasas 2021).

In 2020, the City’s housing vacancy rate was 3.4 percent, lower than the County’s vacancy rate of 6.1 percent. The average household size in the City is 2.71 persons, lower than the County’s average household size of 2.96 (DOF 2021).

Table 4.11-2 provides the number of housing units in the City in 2000, 2010, and 2020. The pace of housing development between 2000 and 2010 was approximately 145 units per year on average but slowed to 44 units per year from 2010 to 2020. Most of the City’s housing stock was built after 1960 and before 2000, after which the pace of new housing development began to decline (U.S. Census 2019b).

Table 4.11-2 City of Calabasas Housing Growth

	2000	2010	2020
Housing Units	7,426	8,878	9,230
Difference from Previous Decade	–	1,452	442
Percent Total Increase from Previous Decade	–	19.6	5.0
Percent Average Annual Growth Rate during Previous Decade	–	2.0	0.5

Source: U.S. Census 2000, U.S. Census 2010, DOF 2021

In 2017, housing costs in the City accounted for an average of 39.8 percent of total household income for renters and an average of 26.1 percent of total household income for homeowners (SCAG 2019). The U.S. Department of Housing and Urban Development (HUD) defines cost-burdened families as those “who pay more than 30 percent of their income for housing” and “may have difficulty affording necessities such as food, clothing, transportation, and medical care.” Severe rent burden is defined as paying more than 50 percent of one’s income on rent (HUD 2014).

Less than three percent of renters and less than one percent of owners in Calabasas have been identified as overcrowded (defined as greater than 1.01 person per room, excluding kitchens,

¹ The City’s one mobile home park contains 210 units, indicating the Census counted 20 additional units in the “other” category which could be reflective of second units or guesthouses if they are occupied as someone’s current place of residence.

porches and hallways), in contrast to the 16 percent of renters and six percent of owners identified countywide as living in overcrowded conditions (SCAG 2020b).

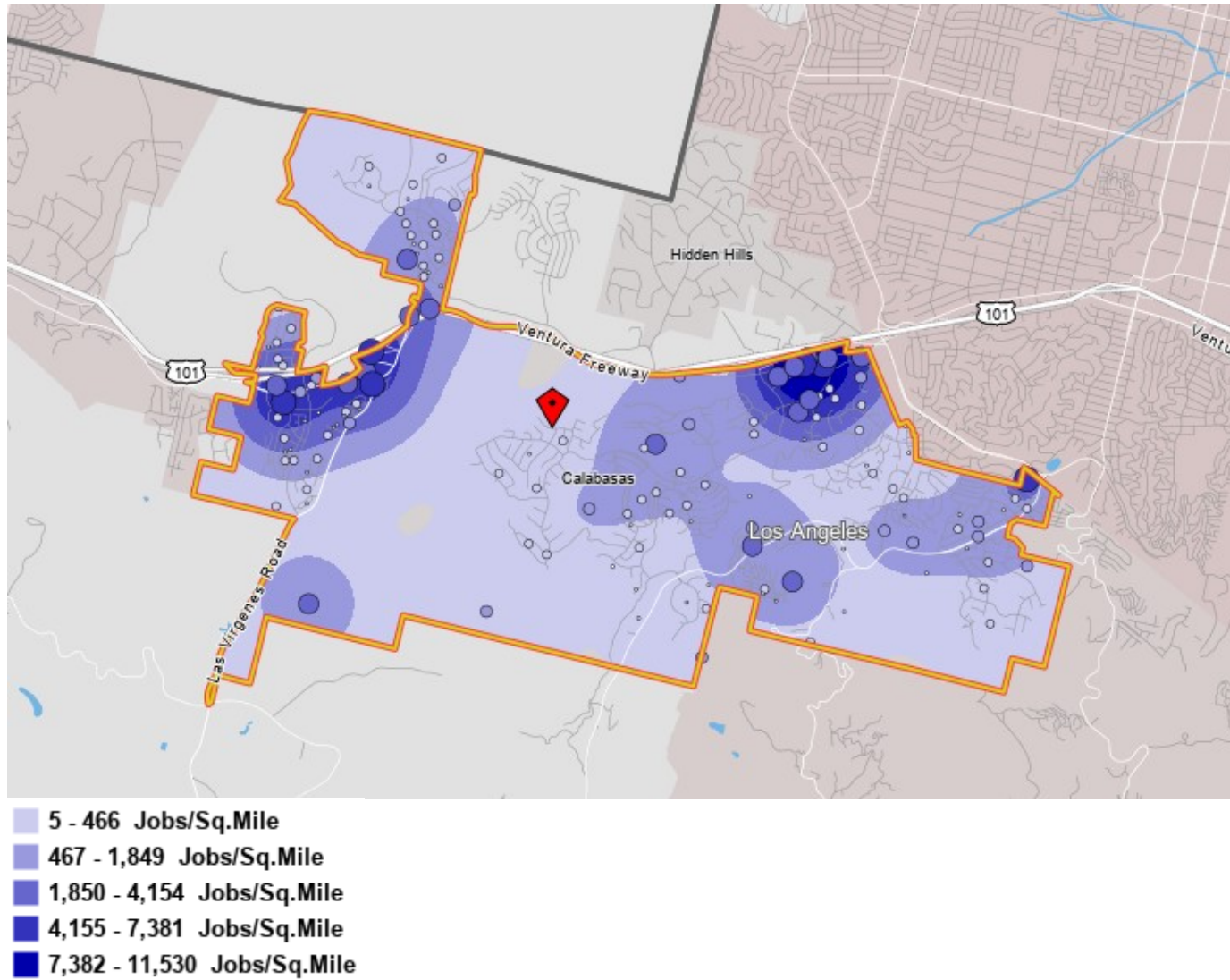
Employment

The SCAG Demographics and Growth Forecast estimated there was a total of 20,500 jobs in Calabasas in 2016, and projects a modest 1.5 percent increase in Calabasas' employment by 2045, for an estimated 20,800 jobs (SCAG 2020a). SCAG's Local Profile for Calabasas further breaks down employment by sector. As of 2017, professional and management was the largest employment sector at 22 percent, followed by finance (16.5 percent), leisure (15.5 percent) and education (13.3 percent). While the percentage of jobs in the leisure and education sectors increased between 2007 and 2017, construction and manufacturing sectors saw decreases. Based on the 2019 ACS data Table DP03, the labor force participation rate in the City was 65.8 percent, nearly the same as County's rate of 65.3 percent, and the unemployment rate was 4.1 percent, lower than the County's rate of 5.0 percent (U.S. Census 2019b).

Over 90 percent of persons who work in Calabasas commute in from outside the City, an indication of the shortage of local affordable housing opportunities for the community's workforce (SCAG 2020a). Similarly, Calabasas residents also face long commutes, with 35 percent of the City's employed residents commuting 25 miles or more to work (U.S. Census 2018). As shown in Figure 4.11-1, the highest concentration of employment is located in the northeast and northwest corners of the City near US-101, with other areas of employment near Mulholland Highway and scattered throughout.

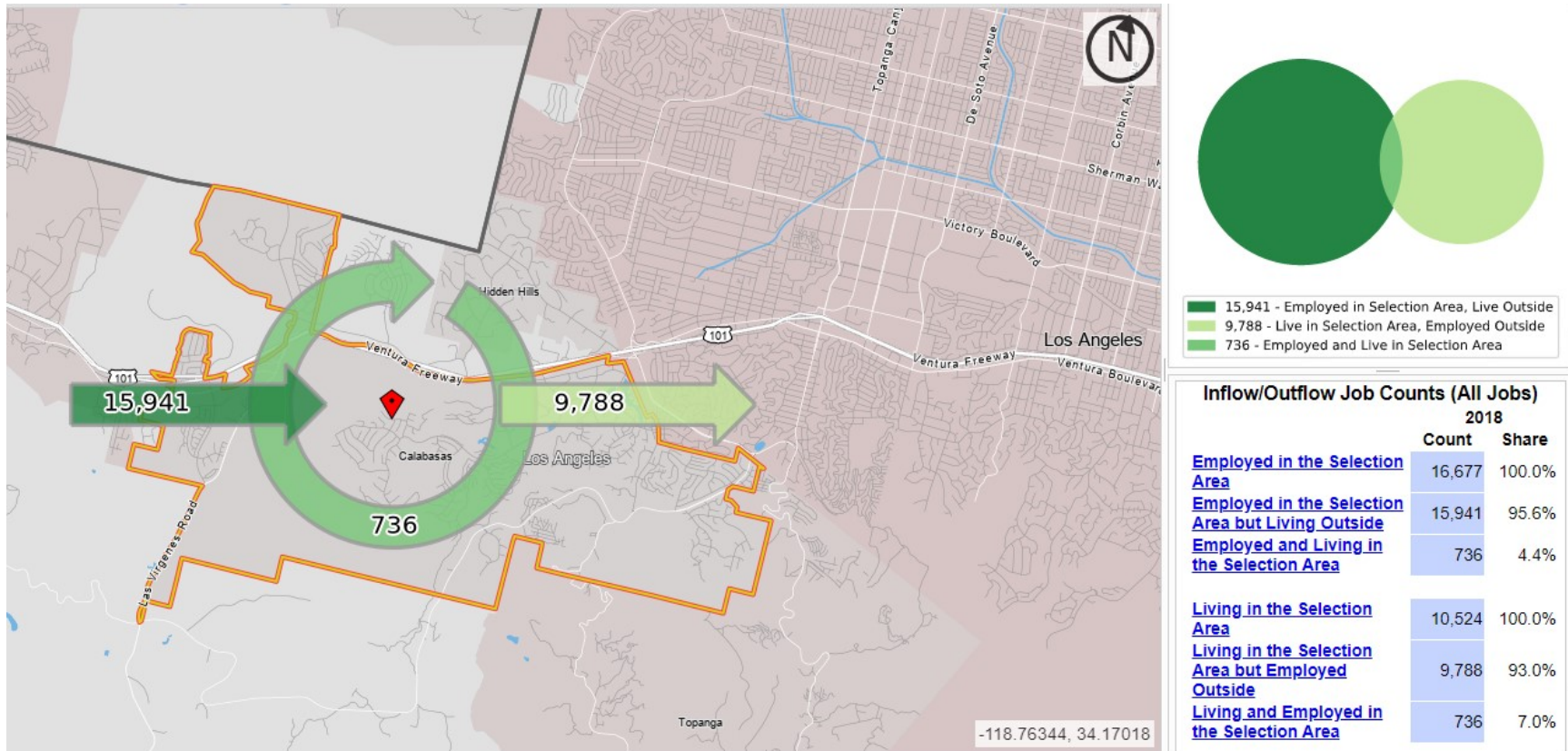
Figure 4.11-2 shows that more than 95 percent of jobs inside the City are held by residents of other jurisdictions, while only 4.4 percent of jobs inside the City are held by City residents, and 93 percent of employed City residents commute outside the City to work.

Figure 4.11-1 Distribution and Number of Jobs in 2018



Source: U.S. Census 2018: Calabasas Work Area Profile Analysis (<https://onthemap.ces.census.gov/>)

Figure 4.11-2 Inflow/Outflow Jobs Counts in 2018



Source: U.S. Census 2018: Calabasas Inflow/Outflow Analysis (<https://onthemap.ces.census.gov/>)

SCAG estimated a job count of 20,492 jobs in 2017; this number is higher than the U.S. Census because it includes self-employed persons. Using the higher SCAG jobs estimate to capture all jobs, the jobs-to-housing ratio is roughly 20,492 jobs / 9,230 housing units, or 2.2, which reflects a jobs-rich community.

The 2019 median household income in the City was \$125,814, higher than the County's median household income of \$72,797, and approximately 6.4 percent of families and people had incomes classified as below the poverty rate, compared to 13.4 percent for the County (U.S. Census 2019c).

Calabasas, in summary, has a higher degree of single-family housing than the County as a whole, is jobs-rich compared to the number of housing units, and has a higher median household income and lower poverty rate than the County as a whole, with a relatively large in- and out- commuting pattern.

4.11.1 Regulatory Setting

The following section summarizes regulations that pertain to population and housing.

State

Housing Element Law: California Government Code Section 65584(a)(1)

Pursuant to California Government Code Section 65584(a)(1), the California Department of Housing and Community Development (HCD) is responsible for determining the regional housing needs assessment (segmented by income levels) for each region's planning body known as a "council of governments" (COG), SCAG being the COG serving the Southern California area. HCD prepares an initial housing needs assessment and then coordinates with each COG to arrive at the final regional housing needs assessment. To date, there have been five previous housing element update "cycles." California is now in its sixth "housing-element update cycle." The SCAG RHNA and the City's General Plan Housing Element are discussed further below.

The Sustainable Communities and Climate Protection Act of 2008 (SB 375, Steinberg)

Senate Bill (SB) 375 focuses on aligning transportation, housing, and other land uses to achieve regional greenhouse gas (GHG) emission reduction targets established under the California Global Warming Solutions Act, also known as Assembly Bill (AB) 32. SB 375 requires Metropolitan Planning Organizations (MPO) to develop a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP), with the purpose of identifying policies and strategies to reduce per capita passenger vehicle-generated GHG emissions. As set forth in SB 375, the SCS must: (1) identify the general location of land uses, residential densities, and building intensities within the region; (2) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period; (3) identify areas within the region sufficient to house an eight-year projection of the regional housing need; (4) identify a transportation network to service the regional transportation needs; (5) gather and consider the best practically available scientific information regarding resource areas and farmland in the region; (6) consider the state housing goals; (7) establish the land use development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, will reduce GHG emissions from automobiles and light-duty trucks to achieve GHG emission reduction targets set by the California Air Resources Board (CARB), if there is a feasible way to do so; and (8) comply with air quality requirements established under the Clean Air Act.

The City of Calabasas is located in the jurisdiction of SCAG, a Joint Powers Agency established under California Government Code Section 6502 et seq. Pursuant to federal and State law, SCAG serves as a Council of Governments, a Regional Transportation Planning Agency, and the MPO for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. SCAG is responsible for preparing the RTP/SCS and RHNA in coordination with other State and local agencies. These documents include population, employment, and housing projections for the region and its 15 subregions.

Existing law requires local governments to adopt a housing element as part of their general plan and update the housing element every four to eight years. SB 375 requires the RHNA to allocate housing units within the region in a manner consistent with the development pattern adopted by the SCS.

On September 3, 2020, SCAG adopted its Connect SoCal: The 2020-2045 RTP/SCS, which is an update to the previous 2016 RTP/SCS (SCAG 2020a). Using growth forecasts and economic trends, the RTP/SCS provides a vision for transportation throughout the region for the next 25 years that achieves the statewide reduction targets and in so doing identifies the amount and location of growth expected to occur within the region.

Housing Crisis Act of 2019 – (SB 330, Skinner)

The Housing Crisis Act of 2019 (SB 330) seeks to speed up housing production in the next half decade by eliminating some of the most common entitlement impediments to the creation of new housing, including delays in the local permitting process and cities enacting new requirements after an application is complete and undergoing local review—both of which can exacerbate the cost and uncertainty that sponsors of housing projects face. In addition to speeding up the timeline to obtain building permits, the bill prohibits local governments from reducing the number of homes that can be built through down-planning or down-zoning or the introduction of new discretionary design guidelines. The bill is in effect as of January 1, 2020 and expires on January 1, 2025.

Fair Employment and Housing Act (FEHA)

The FEHA of 1959 (Government Code Section 12900 et seq.) prohibits housing discrimination on the basis of race, color, religion, sexual orientation, marital status, national origin, ancestry, familial status, disability, or source of income.

The Unruh Civil Rights Act

The Unruh Civil Rights Act of 1959 (Civ. Code Section 51) prohibits discrimination in “all business establishments of every kind whatsoever.” The provision has been interpreted to include businesses and persons engaged in the sale or rental of housing accommodations.

AB 1763

AB 1763, effective January 1, 2020, amends the State Density Bonus Law (Section 65915) to allow for taller and denser 100 percent affordable housing developments, especially those near transit, through the creation of an enhanced affordable housing density bonus.

Housing Element Law: California Government Code Section 65583(c)(7)

Section 65583 of the California Government Code requires cities and counties to prepare a housing element, as one of the state-mandated elements of the General Plan, with specific direction on its content. Pursuant to Section 65583(c)(7), the Housing Element must develop a plan that incentivizes

and promotes the creation of accessory dwelling units that can be offered at affordable rent, as defined in Section 50053 of the Health and Safety Code, for very low, low-, or moderate-income households.

Housing Element Law: California Government Code Section 65583.2(g)(3)

Pursuant to California Government Code Section 65583.2(g)(3), the Housing Element is required to include a program to impose housing replacement requirements on certain sites identified in the inventory of sites. Under these requirements, the replacement of units affordable to the same or lower income level, consistent with those requirements set forth in State Density Bonus Law (Government Code Section 65915(c)(3)), would be required.

Relocation Assistance: California Government Code Section 7261(a)

Section 7261(a) of the California Government Code requires that programs or projects undertaken by a public entity must be planned in a manner that (1) recognizes, at an early stage in the planning of the programs or projects and before the commencement of any actions which will cause displacements, the problems associated with the displacement of individuals, families, businesses, and farm operations, and (2) provides for the resolution of these problems in order to minimize adverse impacts on displaced persons and to expedite program or project advancement and completion. The displacing agency must ensure the relocation assistance advisory services are made available to all persons displaced by the public entity. If the agency determines that any person occupying property immediately adjacent to the property where the displacing activity occurs is caused substantial economic injury as a result of the displacement, the agency may also make the advisory services available to that person.

Regional

Regional Housing Needs Assessment (RHNA)

SCAG prepares the RHNA mandated by State law so that local jurisdictions can use this information during their periodic updates of the General Plan Housing Element. The RHNA identifies the housing needs for very low income, low income, moderate income, and above moderate-income groups, and allocates these targets among the local jurisdictions that comprise SCAG. The RHNA addresses existing and future housing needs based on the most recent U.S. Census, data on forecasted household growth, historical growth patterns, job creation, household formation rates, and other factors. The need for new housing is distributed among the four income groups so that each community moves closer to the regional average income distribution, referred to as a “social equity adjustment.” This adjustment resulted in Calabasas’ RHNA allocation being adjusted towards providing a greater proportion of lower income households, with 57 percent of the City’s RHNA falling in the very low and low income categories.

The most recent RHNA allocation, the 6th Cycle Final RHNA Allocation Plan, was adopted by SCAG’s Regional Council on March 4, 2021. The City of Calabasas was assigned a RHNA of 354 units for the 2021 to 2029 planning period. This allocation identifies housing needs for the projection period of June 30, 2021 to October 15, 2029. Local jurisdictions are required by State law to update their General Plan Housing Elements based on the most recently adopted RHNA allocation.

Local

City of Calabasas General Plan

The 2030 General Plan, adopted in 2008, was prepared pursuant to State law to guide future development and to identify the community's environmental, social, and economic goals and functions as a blueprint that defines how the City will evolve through 2030. The General Plan sets forth goals, objectives, and programs to provide a guideline for day-to-day land use policies and to meet the existing and future needs and desires of the community, while at the same time integrating a range of State-mandated elements including Land Use, Transportation, Noise, Safety, Housing, and Open Space/Conservation.

The Housing Element of the General Plan is prepared pursuant to State law and provides planning guidance in meeting the housing needs identified in SCAG's RHNA. The Housing Element identifies the City's housing conditions and needs; establishes the goals, objectives, and policies that are the foundation of the City's housing and growth strategy. The 2014-2021 Housing Element (responsive to the 5th RHNA) was adopted by the City Council in August 2013 (City of Calabasas 2013).

Calabasas Municipal Code

Zoning regulations provide for the types and densities of residential and other uses permitted in each of the City's zones. Zoning in the City establishes the maximum allowable development in a zone. Zoning also includes height limitations and other development standards which together regulate setbacks, building heights, floor area ratios (FAR), open space and parking for each parcel within the City, as applicable.

4.11.2 Impact Analysis

Methodology and Significance Thresholds

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. Accordingly, the General Plan Update would have a significant impact with respect to population and housing if it would:

1. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Threshold 1: Would the General Plan Update induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact PH-1 : REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD BE CONSISTENT WITH THE 2021-2029 RHNA AND BEYOND THE 2030 GENERAL PLAN AND SCAG 2020 RTP/SCS POPULATION FORECASTS. THE GENERAL PLAN UPDATE WOULD UPDATE THE 2030 GENERAL PLAN TO BE CONSISTENT WITH THE RHNA, AND SCAG'S NEXT RTP/SCS WOULD INCORPORATE THE CITY'S GENERAL PLAN UPDATES. THE GENERAL PLAN UPDATE WOULD NOT INCLUDE ROADWAYS OR OTHER INFRASTRUCTURE. THE GENERAL PLAN UPDATE WOULD NOT INDUCE UNPLANNED GROWTH DIRECTLY OR INDIRECTLY, AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

For purposes of analysis, "substantial" unplanned population growth is defined as growth exceeding that forecast in existing local and regional plans, including the 2021-2029 RHNA, the 2030 General Plan, and the SCAG 2020 RTP/SCS.

The General Plan Update would increase the development capacity of the City through the rezoning of certain selected parcels to meet the City's final RHNA allocation for the 2021 to 2029 planning period. As noted in Section 2.0, *Project Description*, the development potential accommodated by the changes to the land use designations would be 1,305 housing units plus as much as 148,853 square feet of new or redeveloped commercial space.

Development would be facilitated through the rezoning of selected sites in the City limits to accommodate new or higher residential density and the development of sites with housing in Craftsman's Corner, which is proposed for annexation to the City within three years. Rezoning of sites would involve currently developed sites in areas that are generally located near existing residential uses, transit corridors, job centers, neighborhood services, and amenities. These land use changes would be made to accommodate the densities appropriate for the 6th Cycle RHNA allocation.

As noted in the Setting, the Plan Area contained 9,637 housing units in 2020 (9,230 units in the City limits and 407 units in the unincorporated portions of the Plan Area). Based on 2.71 persons per household, the current Plan Area population is estimated at 26,116 residents. The General Plan Update would accommodate 1,305 additional housing units, which would add an estimated 3,537 additional persons (1,305 housing units x 2.71 persons per household). This would bring the 2029 Plan Area population to 29,653, a 13.5 percent increase over existing conditions. Employment associated with commercial development (mainly retail) would likely be filled by existing residents in the Plan Area or neighboring jurisdictions and would not result in substantial population growth.

Comparison to the 2030 General Plan

The 2030 General Plan anticipated facilitating a maximum buildout development for an estimated additional 4,777 residents, or a total population of 28,502 by 2030, including the Craftsman's Corner area that is currently outside the City limits (City of Calabasas 2015). Therefore, the 2029 population forecast for the Plan Area under the Housing Element Update would exceed the 2030 General Plan forecast by 1,151 residents (29,653 – 28,502). The 10,942 housing units forecast under the General Plan Update by 2029 would exceed the 2030 General Plan 2030 forecast of 10,287 by 655 units. Table 4.11-3 shows the difference between the forecasts for the Housing Element Update and the 2030 General Plan. The 2021-2029 Housing Element (included in the General Plan Update) would accommodate development of residential units that would be 4.4 percent above the 2030 General

Plan forecast, which would result in a City population that would be 4.0 percent above the 2030 General Plan forecast.

Table 4.11-3 Comparison of 2030 General Plan and General Plan Update Projections

	Existing Conditions (2020)	General Plan Update Growth Accommodation	2029 Plan Area Conditions with General Plan Update	2030 General Plan Projections	Difference	Percent Difference Over 2030 General Plan
Housing Units	9,637 ¹	1,305 units	10,942	10,287	655	4.4
Population	26,116 ²	3,537 residents	29,653	28,502	1,151	4.0

¹ The City's 9,230 housing units plus 407 housing units in unincorporated areas in the Plan Area but outside the City limits.

² Population for unincorporated areas was estimated using an average household size of 2.71 persons per household.

Sources: DOF 2020, City of Calabasas 2015

Comparison to the SCAG 2020 RTP/SCS Forecast

SCAG's 2020 RTP/SCS provides only 2045 development projections, so the projected 2029 population and housing numbers were interpolated from the 2045 projections using the average percent growth per year for the City. SCAG's 2020 RTP/SCS forecasts the City's population to grow from 24,200 to 24,900 between 2016 and 2045. The difference of 700 residents is equal to 2.9 percent total growth (700 residents / 24,200 residents). Divided by 29 years, SCAG forecasts an average annual growth rate of approximately 0.10 percent (2.9 / 29 years).

SCAG's 2020 RTP/SCS forecasts the City's housing stock to grow from 8,800 housing units in 2016 to 9,300 housing units by 2045, an increase of 500 units from 2016, or approximately 5.7 percent (500 housing units / 8,800 housing units). Divided by 29 years, SCAG forecasts an average annual growth rate of the City's housing stock of approximately 0.20 percent (5.7 percent / 29 years).

SCAG's 2020 RTP/SCS forecasts growth for the City only and not the entire Plan Area. To obtain the SCAG RTP/SCS 2029 forecast for the Plan Area population, the 0.01 percent annual growth rate was applied to the Plan Area population, multiplied by nine years (2020-2029). This number was added to the baseline 2020 population to obtain the 2029 forecasted population. The Plan Area's current estimated population (year 2000) is 26,116. Applying the SCAG RTP/SCS forecast growth rate for the City, the Plan Area population would increase by approximately 24 residents by 2029 (0.001 x 26,116 x 9 years) for a forecasted 2029 population of 26,140.

The Plan Area currently has 9,637 housing units. Using the same methodology as above, the average annual growth rate is applied and multiplied by nine to approximate the number of forecast housing units in the Plan Area. Under the SCAG RTP/SCS 2029 forecast, the Plan Area would add approximately 19 housing units per year, or 173 housing units by 2029 (0.002 x 9,637 x 9) for a total of 9,810 housing units.

Table 4.11-4 shows the difference between the growth forecasts for the General Plan Update and the SCAG RTP/SCS forecast for the Plan Area under 2029 conditions. The population growth under the General Plan Update would exceed SCAG's population growth forecast by approximately 13.4 percent and the housing growth forecast under the General Plan Update would exceed SCAG's forecast by approximately 11.5 percent.

Table 4.11-4 Comparison of SCAG RTP/SCS Forecast and General Plan Update Projections

	Existing Conditions (2020)	General Plan Update Growth Accommodation	2029 Plan Area Conditions with General Plan Update	SCAG 2029 Forecast for City of Calabasas	Difference	Percent Difference Over SCAG RTP/SCS Forecast
Housing Units	9,637 ¹	1,305 units	10,942	9,810 ³	1,132	11.5
Population	26,116 ²	3,537 residents	29,653	26,140 ⁴	3,513	13.4

¹ The City's 9,230 housing units plus 407 housing units in unincorporated areas in the Plan Area but outside the City limits.

² Estimated using an average household size of 2.71 persons per household.

³ Population forecast for the Plan Area was estimated using the SCAG RTP/SCS forecast growth rate for the City of 0.01 percent increase per year for nine years.

⁴ Housing forecast for the Plan Area was estimated using the SCAG RTP/SCS forecast growth rate for the City of 0.02 percent increase per year for nine years.

Sources: DOF 2020, SCAG 2020a

Conclusion

The General Plan Update would be consistent with State requirements for the RHNA. Although the General Plan Update would facilitate development beyond what is forecast in both the 2030 General Plan and SCAG's 2020 RTP/SCS, it would bring the forecasts for the City's General Plan and the RTP/SCS into consistency since the RTP/SCS will be updated to reflect new forecasts for each city in the region.

The State requires that all local governments adequately plan to meet the housing needs of their communities (HCD 2021). Given that the State is currently in an ongoing housing crisis due to an insufficient housing supply (SCAG 2020c), the additional units under the General Plan Update would further assist in addressing the existing crisis and meeting the housing needs of the City's communities. Furthermore, the Housing Element Update (as part of the General Plan Update) would first be submitted to the HCD for review and approval to ensure that it would adequately address the housing needs and demands of the City. Approval by the HCD would ensure that population and housing growth under the General Plan Update would not be substantial or unplanned.

The increase in affordable housing units would provide housing opportunities in proximity to jobs for those employed in the City that meet these household income categories. As the City is job-rich and the majority of those employed in the City commute from other jurisdictions, affordable housing units would provide opportunities for a better balance of jobs and housing that reduces regional vehicle miles traveled (VMT) and associated impacts related to transportation, air quality, and GHG emissions. Additionally, the proposed housing sites would concentrate housing development near existing job centers in the City (shown in Figure 4.11-1).

The future housing development facilitated by the General Plan Update is intended to be dispersed throughout the community to create managed levels of growth in specific areas. As discussed in Section 4.14, *Utilities and Service Systems*, the City is mostly developed and is supported by existing infrastructure even in the relatively few vacant areas available for new development. The General Plan Update would not create new roads and would not indirectly induce unplanned population growth. Therefore, the General Plan Update would not induce substantial unplanned population growth, either directly or indirectly, and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 2: Would the General Plan Update displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact PH-2 : REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD ADD UP TO 1,305 NEW HOUSING UNITS TO THE CITY'S HOUSING STOCK AND 3,537 NEW RESIDENTS BY 2029. THE GENERAL PLAN UPDATE WOULD FACILITATE NEW RESIDENTIAL DEVELOPMENT ON INFILL SITES AND REDEVELOPMENT SITES FOR EXISTING NON-RESIDENTIAL PROPERTIES ONLY AND WOULD NOT REPLACE ANY EXISTING HOUSING. THE GENERAL PLAN UPDATE WOULD THEREFORE NOT RESULT IN THE DISPLACEMENT OF PEOPLE OR HOUSING, AND THERE WOULD BE NO IMPACT.

"Substantial" displacement would occur if allowed land uses would displace more residences than would be accommodated through growth facilitated by the project. The project would accommodate new development and redevelopment projects in the City through rezoning to facilitate development with higher residential densities than previously allowed on those sites, an Affordable Housing Overlay, and production of accessory dwelling units (ADUs). Under the housing plan included in the proposed General Plan Update, these changes would allow an estimated 1,305 new housing units to be developed by 2029. The types of housing units anticipated under the General Plan Update would generally fall into the following categories of development projects: multi-family residential and/or mixed-use development on vacant sites, redevelopment of existing nonresidential and residential sites that would allow residential use or higher density residential use, and ADUs.

The General Plan Update addresses the need for future housing development at a greater number than required by the RHNA to account for a reasonable sites buffer. This buffer of additional units, which is considered in the inventory of candidate housing sites analyzed in this EIR, is intended to help the City address future "no net loss," if it becomes necessary to identify a replacement site during the 6th Cycle Housing Element (2021-2029) if a site is developed with fewer units or at a higher income category than assumed in the sites inventory. A portion of the housing units would be developed at a density range that could accommodate low and very-income housing as required to meet the RHNA the 6th Cycle allocation. Future development projects in the Affordable Housing Overlay zone would be incentivized or required to provide affordable units.

Only one site in the sites inventory includes existing residential uses: Avalon Apartments. The General Plan Update would facilitate only additional housing units at this site, and no current residents or housing units would be displaced. Therefore, the General Plan Update is not anticipated to result in the net loss or displacement of housing, necessitating the construction of replacement housing elsewhere, and there would be no impact.

Mitigation Measures

There would be no impact. Therefore, mitigation is not required.

4.11.3 Cumulative Impact Analysis

Cumulative population and housing impacts consider residential and nonresidential development and growth in the Plan Area. The City is expected to grow in population and housing through 2029. As shown in Table 4.11-3, the Plan Area population would be expected to grow by 3,537 residents by 2029 with the development facilitated by the project. Employment in the Plan Area is estimated to be slightly less in 2029 than 2021: 21,451 employees in 2021 and 21,383 employees in 2029, as noted in the vehicle miles traveled (VMT) study in Appendix C.

Inducement of Substantial Population Growth

The General Plan Update would accommodate all projected citywide population and housing growth through 2029. Employment growth associated with commercial development on mixed-use sites would be mostly filled by the existing workforce and would not induce substantial population growth. Therefore, cumulative impacts relating to population and housing would be the same as project impacts under Impact 4.11-1 and would be less than significant. The General Plan Update incorporates regional growth anticipated by SCAG's RHNA projections and thus considers cumulative growth.

Displacement of People and Housing

Implementation of the General Plan Update would accommodate the City's forecasted population and housing demand through 2029. The General Plan Update would result in an overall net increase of housing units in the City, including affordable housing, and would not result in the displacement of people or housing. Other jurisdictions in the region are updating their respective Housing Elements and have similar impacts related to displacement, but they would contain programs and policies to provide housing for low-income and special needs populations. Therefore, the General Plan Update for Calabasas would not contribute to cumulative impacts.

4.12 Public Services and Recreation

This section assesses potential impacts to public services, including fire and police protection, public schools, libraries, and parks and recreation that could arise from implementation of the General Plan Update. The impacts associated with the candidate housing sites were evaluated in this EIR at a programmatic level, based on information available, where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Project-specific analysis was not conducted as those projects are not yet known and analysis would be speculative.

4.12.1 Setting

Fire Protection

The Los Angeles County Fire Department (LACFD) provides fire protection and emergency medical service to Calabasas. LACFD's Division VII (Battalions 12, 15, and 19) oversees the City and neighboring jurisdictions and communities Agoura Hills, Hidden Hills, Malibu, West Hollywood, and Westlake Village. LACFD operates specialized divisions: Air and Wildland, Lifeguard, Forestry, Health Hazardous Materials, and Fire Prevention. Additionally, Fire Department Support staff operate a central communications center, fleet maintenance, construction and maintenance, and the Community Outreach, Recruitment, Diversity, and Inclusion Section (CORDI), as well as administration staff. LACFD is a special district and receives the majority of its revenue from property taxes (66.5 percent), as well as fee-for-service cities (10.7 percent), Prop E tax (6.7 percent), and other (16.1 percent). The 2019-20 adopted budget was \$1.29 billion (LACFD 2020a). For the 2021-2022 fiscal year, the City of Calabasas allocated \$20,800 to the LA County Fire District for fire protection services (City of Calabasas 2020).

LACFD operates 174 fire stations and serves approximately 4.1 million residents, 1.3 million housing units, 59 cities, and unincorporated communities. As of 2019, LACFD employed 5,901 personnel:

- 1,419 firefighters
- 933 administrative support
- 806 firefighter specialists
- 726 firefighter paramedics
- 692 captains
- 600 seasonally recurrent lifeguards
- 166 lifeguards
- 114 fire suppression aides
- 108 chief officers
- 107 hazardous materials specialists
- 97 dispatchers
- 74 call firefighters
- 45 foresters
- 14 pilots

In 2019, LACFD responded to nearly 399,000 incidents: approximately 7,100 fire incidents, 334,000 emergency medical incidents, and 58,000 other incidents (false alarms, mutual aid,

hazardous materials, and miscellaneous incidents) (LACFD 2020b). The City is served by both Station 68, located at 24130 Calabasas Road, and Station 125, located at 5215 Las Virgenes Road. Additionally, LACFD operates Station 67, located at 25801 Piuma Road, approximately 2.5 miles south of the Plan Area, and Station 69, located at 401 South Topanga Canyon Boulevard, approximately 2.9 miles southeast of the Plan Area. The City of Calabasas is further protected against fire hazards by the Mountains Recreation and Conservation Authority (MRCA) Fire Division. MRCA services more than 75,000 acres of parkland that is owned by the Santa Monica Mountains Conservancy, which are located in and near the Plan Area (MRCA 2021).

Police Protection

The Los Angeles County Sheriff's Department (LACSD) is under contract to the City to provide law enforcement services and is anticipated to remain so through 2030 (City of Calabasas 2015). The LACSD service area is the County of Los Angeles and provides service to 42 contract cities, 141 unincorporated communities, 216 facilities, hospitals, and clinics located throughout the County, nine community colleges, the Metropolitan Transit Authority, and 37 Superior Courts (LACSD 2017). The Plan Area is located within LACSD's NORTH Patrol Division and is served by the Malibu/Lost Hills Patrol Station. This station covers the cities of Agoura Hills, Calabasas, Hidden Hills, Malibu, Westlake Village, and surrounding unincorporated areas of Chatsworth Lake Manor, Malibu Lake, Topanga, and West Hills (LACSD 2013; LACSD 2021a). The Malibu/Lost Hills Patrol Station service area encompasses approximately 174 square miles with an estimated resident population of 79,680 persons. The Station is currently staffed by 112 sworn personnel and 32 civilian employees (LACSD 2021b).

In 2019, the Malibu/Lost Hills Patrol Station received 26,505 calls, a 3.6 percent decrease from the 27,505 calls received in 2018 (LACSD 2021a).

The LACSD tracks the number of Part I crimes, which are violent crimes and property crimes. In calendar year 2020, LACSD made 296 arrests for reported Part I crimes in the City of Calabasas, which comprised approximately 20 percent of the 1,461 arrests for Part I crimes reported to the Malibu/Lost Hills Patrol Station. Of the arrests in the City of Calabasas, 39 were for violent crimes (criminal homicide, rape, robbery, and aggravated assault), approximately 25 percent of the 155 arrests for violent crimes reported to the Malibu/Lost Hills Patrol Station (LACSD 2021c).

The crime rate for an area is the number of crimes per 10,000 residents. Crime rate information for the service area for the Malibu/Lost Hills Patrol Station was last updated in 2019. There was a three percent increase in the crime rate per 10,000 persons between 2018, approximately 179.62, and 2019, approximately 187.47. Alternatively, Calabasas saw a five percent decline in the crime rate per 10,000 persons between 2018 and 2019: 162.14 and 154.72 crimes per 10,000 persons, respectively. The City of Calabasas accounted for 1,720 reported incidents and 435 total arrests in 2018 by the LACSD (LACSD 2019).

Public Schools

The Las Virgenes Unified School District (LVUSD) provides public educational services in the City of Calabasas and serves approximately 5,919 students within the Plan Area (LVUSD 2019). LVUSD schools are organized as kindergarten through fifth grade elementary schools, sixth through eighth grade middle schools, and ninth through twelfth grade high schools. The LVUSD manages three elementary schools two middle schools, one high school, and two special programs in the Plan Area. Table 4.12-1 shows public school student enrollment and capacity for the schools in the Plan Area from 2019-2020 (LVUSD 2019).

Table 4.12-1 LVUSD Public School Enrollment and Capacity

School	2019/2020 Enrollment ¹	Total Capacity ¹	Percent Capacity
Alice C. Stelle Middle	798	1,176	67%
Arthur E. Wright Middle	884	784	112%
Bay Laurel Elementary	577	425	135%
Calabasas High	1,941	2,160	89%
Chaparral Elementary	606	475	127%
Lupin Hill Elementary	573	575	99%
Round Meadow Elementary ²	540	225	240%
Total	5,919	5,820	102%

¹ LVUSD 2019

² Round Meadows Elementary is located adjacent to the Plan Area but serves residents in the Plan Area.

Enrollment at LVUSD elementary schools serving Calabasas is 5,919 students for the 2019-2020 school year. Elementary schools in the City range in size from 425 to more than 575 students. The total maximum capacity of the three elementary schools is 1,475 students. The location of all public schools is shown in Figure 4.12-1.

Community Library

The Calabasas Library is the City’s sole library, which serves the Calabasas and the Hidden Hills area (City of Calabasas 2021). The Calabasas Library is funded through property tax revenues, as well as from a volunteer group of citizens named “The Friends of the Calabasas Library.” Tax revenue is used to supply income for the library, while funds from The Friends of the Calabasas Library are allocated towards library programs and events for Calabasas residents (City of Calabasas 2015).

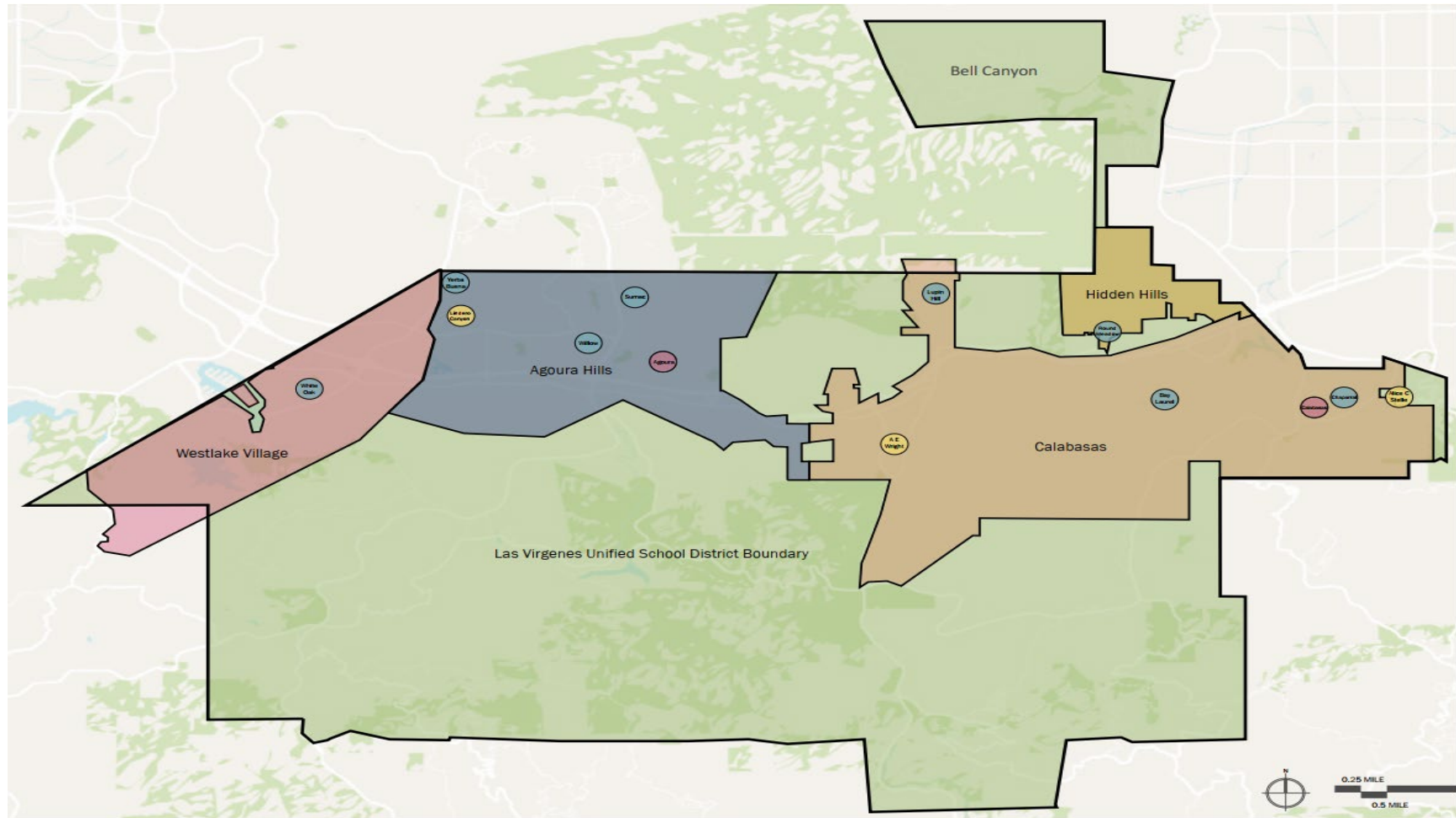
The Calabasas Library is a 27,000 square-foot facility, is open 44 hours a week during standard operating hours, 71,854 books, and has approximately 62,068 cardholders. In addition to books, cardholders have access to physical audio books, digital audio books, DVDs, streaming video, E-books, digital comics/graphic books, digital magazines, digital language learning, physical newspapers, and databases. The library also offers 233 children programs, 111 young adult programs, and 74 adult programs. Collectively, these programs had approximately 10,252 attendees during the 2019-2020 fiscal year (City of Calabasas n.d.). Current square feet of library space per 1,000 residents is 1,033.85, as shown in Table 4.12-2.

Table 4.12-2 Calabasas Library Space per Capita

Square-feet ¹	Plan Area Population	Square-feet per 1,000 residents
27,000	26,116	1,033.85

Source: City of Calabasas, n.d., City of Calabasas Library Annual Report FY 2019-2020

Figure 4.12-1 Location of Public Schools



Source: LVUSD 2019 (Note: City of Calabasas city boundary does not reflect recent boundary changes).

Parks and Recreational Services

Parkland

The City’s General Plan includes parkland and open space within the Plan Area that is outside of city limits within its calculations of relative availability for the community. Currently, Grape Arbor is the sole parkland that is both within and outside of city limits; all other parkland is within the city limits (City of Calabasas 2018a). As of 2014, the City managed 56.6 acres of developed park land (City of Calabasas 2015). As discussed in Section 4.11, *Population and Housing*, the Plan Area population is currently estimated at 26,116 residents. As shown in Table 4.12-3, the City had approximately 2.17 acres of parkland per 1,000 residents.

Table 4.12-3 Plan Area Parkland Space per 1,000 Residents

Existing Parkland (acres)	Plan Area Population (2020)	Acres per 1,000 Residents
56.6	26,116	2.17

Sources: City of Calabasas 2015

Among the facilities operated by the City are two mini-parks, two neighborhood parks, one community park, five special use areas, and one undesignated/undeveloped park site (see Table 4.12-4). Figure 4.12-2 shows parkland in the Plan Area.

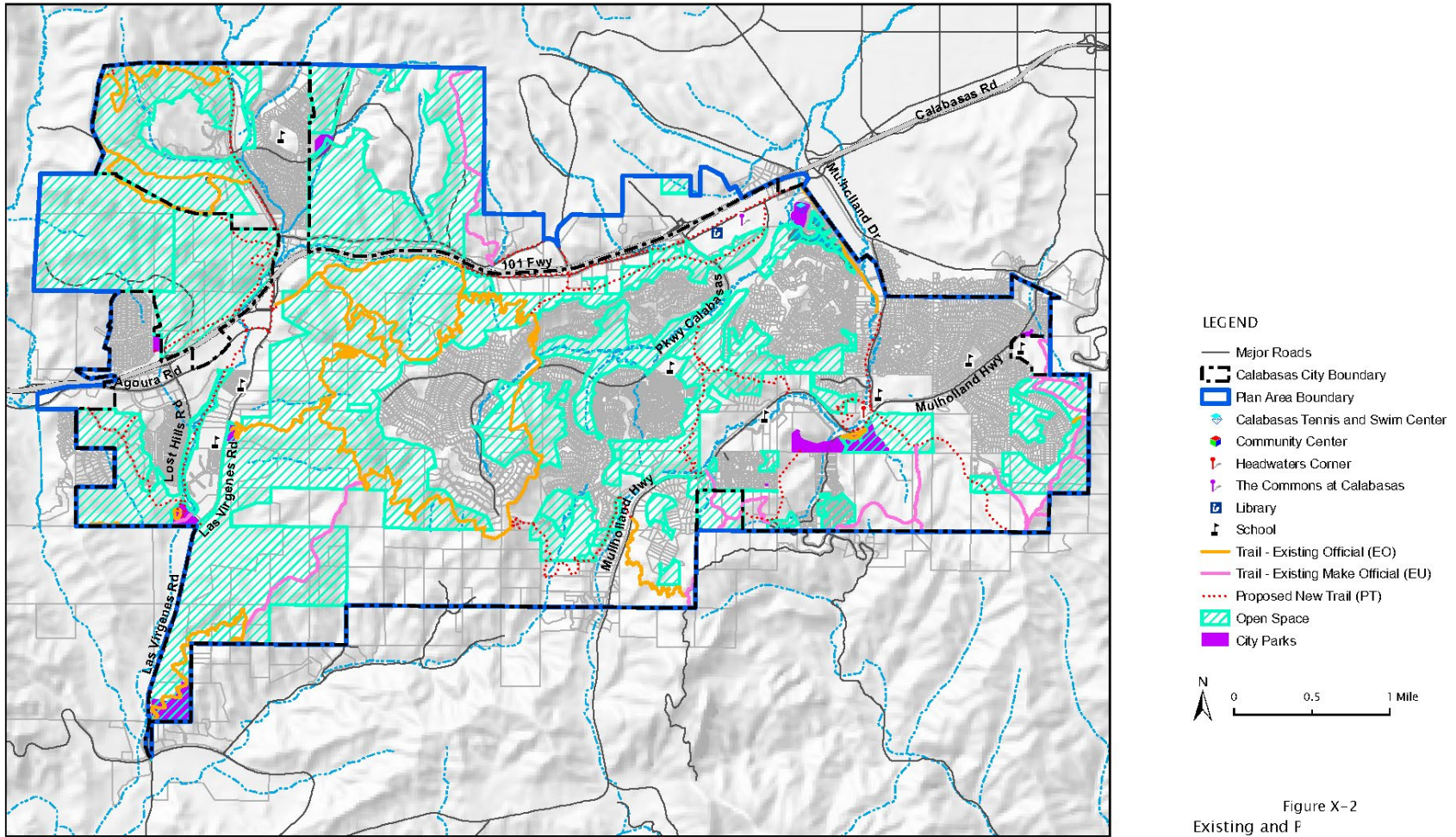
Table 4.12-4 Existing Parks and Recreation Areas

Park Type	Park Area
Mini Park	
Freedom Park	1.7
Highlands Park	0.5
Neighborhood Parks	
Gates Canyon Park	7.0
Grape Arbor Park	3.0
Community Park	
Juan Bautista de Anza Park	8.0
Special Use Areas	
Agoura Hills/Calabasas Community Center ¹	4.5
Creekside Park	11.8
Calabasas Bark Park	0.8
Tennis & Swim Center	7.5
Wild Walnut Park	10.0
Undeveloped/Undesignated	
Las Virgenes/Lost Hills (Juan Bautista de Anza)	1.8
Total	56.6

Source: City of Calabasas 2015

¹ The Agoura Hills/Calabasas Community Center closed during the 2020 COVID-19 pandemic.

Figure 4.12-2 Parkland, Open Space, Recreation Facilities, and Trails



Source: City of Calabasas, 2007, USGS, 2002, and Rincon Consultants, 2008. Updated March 2014.

Figure X-2
 Existing and F

Source: City of Calabasas 2015

Open Space

There are approximately 3,805 acres of land zoned as Open Space within the Plan Area. These open spaces are divided into two categories: recreational and resource protection. Open space outside of the city limits is exclusively for resource protection, while both recreational and resource protection open space exists within the city limits (City of Calabasas 2015). Collectively, the open space within the Plan Area is owned by seven entities including the City of Calabasas, Las Virgenes Municipal Water District, Los Angeles County, Mountains Recreation and Conservation Authority Land, Santa Monica Mountains Conservancy, U.S. National Park Service, and Other Open Space Properties.¹ Figure 4.12-2 shows open space area in the Plan Area. The 3,805 acres within the Plan Area account for 145.70 acres per 1,000 residents (see Table 4.12-5).

Table 4.12-5 Plan Area Open Space per 1,000 Residents

Existing Open Space (acres)	Plan Area Population (2020)	Acres per 1,000 Residents
3,805	26,116	145.70

Sources: City of Calabasas 2015; California Department of Finance (DOF) 2021

The 2030 General Plan’s Open Space Element outlines a goal of 4,000 acres of designated open space for the City, and lists six possible acquisition sites that collectively constitute approximately 943.4 acres throughout the Plan Area.² Acquisition would occur through the retirement of development rights in favor of designating land as open space (City of Calabasas 2015). Currently, the locations proposed for acquisition have not yet been rezoned to Open Space (City of Calabasas 2018b).

Recreational Facilities

Calabasas’ environmental setting allows for the development of trails and passive recreational opportunities. However, because of topographic and land constraints, it is not necessarily suitable for the development of active sports facilities such as soccer and baseball/softball fields. The City operates three sports fields: two with multi-use backstops (De Anza and Creekside parks) and one youth T-ball field (Grape Arbor Park).

Recreational facilities in and around Calabasas, but not operated by the City are also available to Calabasas residents. These include Malibu Creek State Park, the Headwaters Corner Education Center, King Gillette Ranch, LVUSD sites, and private facilities such as Calabasas Golf Course and multiple homeowner association-operated play areas, sports fields, and pools (City of Calabasas 2015). Calabasas has established successful joint use agreements with the LVUSD and other arrangements by which LVUSD facilities are used for non-school recreation functions since incorporation in 1991, see Table 4.12-6. The only public swimming pool in Calabasas is located at the Calabasas Tennis and Swim Center (TSC). The TSC includes an 8-lane, 25-yard, heated outdoor lap pool as well as a teaching/therapeutic pool. It is heavily used by TSC members and drop-ins and is the site of the City’s popular Calabasas Lagoon swim instruction and swim team programs (City of Calabasas 2015). The Agoura Hills/Calabasas Community Center located off Malibu Hills Road is an

¹ The 2030 General Plan denotes “Other Open Space Properties” to be those that are privately held or are miscellaneous public land.

² Potential Housing Sites for the 2029 Housing Element Update do not occur on proposed acquisition sites.

inside facility with a gym, basketball courts, rock climbing wall and multi-purpose space. It was completed in 1999 and is in need of repairs.

Table 4.12-6 Existing LVUSD Facilities Used for Non-School Recreational Activities

Schools	Total Acres	Facility
Calabasas High School	40.0	Track, lighted football field, 8 tennis courts, 4 outdoor basketball courts, 1 outdoor pool (25 yd, 6 lane), 1 practice football/ soccer field, Overlaid fields: 2 baseball fields, 1 softball field, 1 soccer field – all unfenced and unlighted. Gymnasium with two full basketball courts and dance studio
Indian Hills high School	1.5	Turf playfield – not large enough to provide an athletic field
A.E. Wright Middle School	19.0	6 outdoor basketball courts, gymnasium with one full basketball court, and large grass areas (~6-8 acres)
Alice C. Stelle Middle School	15.2	3 soccer fields overlaid on 3 multi-use backstop fields, 1 softball field, 8 outdoor basketball courts, gymnasium, multi-purpose room
Bay Laurel Elementary	8.0	1 soccer field, 1 youth baseball field
Chaparral Elementary	4.5	Open turf area, used as 1 soccer field
Lupin Hill Elementary	14.5	2 basketball courts, 4 baseball fields (3 youth, 1 adult)
Round Meadow Elementary	7.0	Youth baseball field overlaid on soccer field

Source: City of Calabasas 2015

Park Planning Efforts

The Calabasas 2030 General plan list three potential future park sites. None of these have been built or anticipated to be built in the near future.

- Pontoppidan Site: This 7.5-acre site located along the west side of Las Virgenes Road is designated Residential-Single Family.
- County Site: An approximately 74.2-acre property in unincorporated Los Angeles County north of US-101 and east of Lost Hills Road is a possible near-term location for limited development of sports fields.
- Calabasas Landfill Site: The 400.8-acre Calabasas Landfill is a potential long-term solution to the City’s sports field needs as it offers the best opportunity for a large park and sports complex. However, the site is not scheduled for closure until 2022, and would require time for post-closure procedures.

4.12.2 Regulatory Setting

Federal Regulations

Occupational Safety and Health Administration

The Federal Occupational Safety and Health Administrations (OSHA) as well as California OSHA (Cal-OSHA) enforce the provisions of the federal and state Occupational Safety and Health Acts, respectively, which collectively require safety and health regulations for construction under Part 1926 of Title 29 Code of Federal Regulations (CFR). The fire-related requirements of the Federal Occupational Safety and Health Act are specifically contained in Subpart F, Fire Protection and Prevention, of Part 1926. Examples of general requirements related to fire protection and

prevention include maintaining fire suppression equipment specific to construction on-site; providing a temporary or permanent water supply of sufficient volume, duration, and pressure; properly operating the on-site fire-fighting equipment; and keeping storage sites free from accumulation of unnecessary combustible materials.

Federal Emergency Management Act (FEMA)

FEMA was established in 1979 via executive order and is an independent agency of the federal government. In March 2003, FEMA became part of the U.S. Department of Homeland Security with the mission to lead the effort in preparing the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration.

Disaster Mitigation Act of 2000

Disaster Mitigation Act (42 United States Code [U.S.C.] Section 5121) provides the legal basis for FEMA mitigation planning requirements for state, local, and Indian Tribal governments as a condition of mitigation grant assistance. It amends the Robert T. Stafford Disaster Relief Act of 1988 (42 U.S.C. Section 5121-5207) by repealing the previous mitigation planning provisions and replacing them with a new set of requirements that emphasize the need and creates incentives for state, tribal, and local agencies to closely coordinate mitigation planning and implementation efforts. This Act reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and the streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of this Act include:

- Funding pre-disaster mitigation activities
- Developing experimental multi-hazard maps to better understand risk
- Establishing state and local government infrastructure mitigation planning requirements
- Defining how states can assume more responsibility in managing the Hazard Mitigation Grant Program (HMGP)
- Adjusting ways in which management costs for projects are funded

The mitigation planning provisions outlined in Section 322 of this Act establish performance-based standards for mitigation plans and require states to have a public assistance program (Advance Infrastructure Mitigation [AIM]) to develop county government plans. The consequence for counties that fail to develop an infrastructure mitigation plan is the chance of a reduced federal share of damage assistance from 75 percent to 25 percent if the damaged facility has been damaged on more than one occasion in the preceding 10-year period by the same type of event.

State Regulations

Fire Protection

CALIFORNIA BUILDING CODE AND CALIFORNIA FIRE CODE

The California Building Code (California Code of Regulations [CCR], Title 24, Part 2) is a compilation of building standards, including general fire safety standards for new buildings, which are presented with more detail in the California Fire Code (CCR Title 24, Part 9). California Building Code standards are based on building standards that have been adopted by state agencies without change from a

national model code; building standards based on a national model code that have been changed to address California conditions; and building standards authorized by the California legislature but not covered by the national model code. The 2019 edition of the California Building Code became effective on January 1, 2020.³ The building standards in the California Building Code apply to all locations in California, except where more stringent standards have been adopted by state agencies and local governing bodies. Typical fire safety requirements of the California Fire Code include: the installation of fire sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures within wildfire hazard areas.

CALIFORNIA FIRE SERVICE AND RESCUE EMERGENCY AID SYSTEM

The LACFD participates in the California Fire Service and Rescue Emergency Mutual Aid System through which the California Governor’s Office of Emergency Service (OES), Fire and Rescue Division is responsible for the development, implementation and coordination of the California Fire Service and Rescue Emergency Mutual Aid Plan (Mutual Aid Plan) (Governor’s Office of Emergency Services, Fire and Rescue Division 2014). The Mutual Aid Plan outlines procedures for establishing mutual aid agreements at the local, operational, regional, and State levels, and divides the State into six mutual aid regions to facilitate the coordination of mutual aid. The LACFD is located in Region I. Through the Mutual Aid Plan, the OES is informed of conditions in each geographic and organizational area of the state, and the occurrence or imminent threat of disaster.

CALIFORNIA VEHICLE CODE

Section 21806 of the California Vehicle Code (CVC) pertains to emergency vehicles responding to Code 3 incidents/calls. This section of the CVC states the following:

Upon the immediate approach of an authorized emergency vehicle which is sounding a siren and which has at least one lighted lamp exhibiting red light that is visible, under normal atmospheric conditions, from a distance of 1,000 feet to the front of the vehicle, the surrounding traffic shall, except as otherwise directed by a traffic officer, do the following: (a) (1) Except as required under paragraph (2), the driver of every other vehicle shall yield the right-of-way and shall immediately drive to the right-hand edge or curb of the highway, clear of any intersection, and thereupon shall stop and remain stopped until the authorized emergency vehicle has passed. (2) A person driving a vehicle in an exclusive or preferential use lane shall exit that lane immediately upon determining that the exit can be accomplished with reasonable safety. (b) The operator of every street car shall immediately stop the street car, clear of any intersection, and remain stopped until the authorized emergency vehicle has passed. (c) All pedestrians upon the highway shall proceed to the nearest curb or place of safety and remain there until the authorized emergency vehicle has passed.

CALIFORNIA CONSTITUTION ARTICLE XIII, SECTION 35

Section 35 of Article XIII of the California Constitution at subdivision (a)(2) states: “The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services.” Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directs the proceeds of a 0.50-percent sales tax to be expended exclusively on local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition

³ California Building Code (CCR, Title 24, Part 2).

172. Public safety services include fire protection. Section 30056 mandates that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year.

CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES (CAL OES)

In 2009, the State of California passed legislation creating the Cal OES and authorized it to prepare a Standard Emergency Management System (SEMS) program (Gov. Code Section 8607; Title 19 CCR Section 2401 et seq.), which sets forth measures by which a jurisdiction should handle emergency disasters. In California, SEMS provides the mechanism by which local government requests assistance. Non-compliance with SEMS could result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster. Cal OES coordinates the state's preparation for, prevention of, and response to major disasters, such as fires, floods, earthquakes and terrorist attacks. During an emergency, Cal OES serves as the lead state agency for emergency management in the state. It also serves as the lead agency for mobilizing the state's resources and obtaining federal resources. Cal OES coordinates the state response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the statewide mutual aid system. California Emergency Management Agency (Cal-EMA) maintains oversight of the state's mutual aid system.

Police Protection

CALIFORNIA CONSTITUTION ARTICLE XIII, SECTION 35

Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50-percent sales tax to be expended exclusively for local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include police protection. Section 30056 provides that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on police protection, as well as other public safety services. Section 35 at subdivision (a)(2) provides: "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." In *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services, including police protection, and that it is reasonable to conclude that the city will comply with that provision to ensure that public safety services are provided.

All law enforcement agencies in California are organized and operated in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under state law, all sworn municipal and county officers are state peace officers.

Public Schools

CALIFORNIA EDUCATION CODE

Educational services and school facilities for the General Plan Update are subject to the rules and regulations of the California Education Code, the California Department of Education (CDE) and governance of the State Board of Education (CBE) (Gov. Code Section 33000, et seq.). The CDE is the government agency responsible for public education throughout the state. With the State Superintendent of Public Instruction, the CDE is responsible for enforcing education law and regulations and for continuing to reform and improve public elementary school, secondary school, childcare programs, adult education, and preschool programs. The CDE oversees funding, and student testing and achievement levels for all state schools. A sector of the CDE, the SBE is the 11-member governing and policymaking body of the California Department of Education (CDE) that sets Kindergarten through 12th Grade (K–12) education policy in the areas of standards, instructional materials, assessment, and accountability. The State also provides funding through a combination of sales and income taxes. In addition, pursuant to Proposition 98, the State is also responsible for the allocation of educational funds that are acquired from property taxes. Further, the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.⁴

SENATE BILL 50

The Leroy F. Greene School Facilities Act of 1998 (known as the Greene Act), enacted in 1998, is a program for funding school facilities largely based on matching funds. For new school construction, grants provide funding on a 50/50 State and local match basis. For school modernization, grants provide funding on a 60/40 State and local match basis. Districts that are unable to provide some, or all, of the local match requirement and are able to meet the financial hardship provisions may be eligible for additional State funding (State of California, Office of Public School Construction 2019).

The Greene Act permits the local district to levy a fee, charge, dedication, or other requirement against any development project within its boundaries, for the purpose of funding the construction or reconstruction of school facilities. The Act also sets a maximum level of fees a developer may be required to pay. Pursuant to Government Code Section 65996, the payment of these fees by a developer serves to mitigate all potential impacts on school facilities that may result from implementation of a project to a less-than-significant level⁵.

OPEN ENROLLMENT POLICY (CAL. EDUC. CODE SECTIONS 48350, ET SEQ.)

The open enrollment policy is a state-mandated policy that enables students located in the LVUSD to apply to any regular, grade-appropriate district schools with designated “open enrollment” seats. Open enrollment seats are granted through an application process that is completed before the school year begins. Under the Open Enrollment Policy, students living in a particular school’s attendance area are not displaced by a student requesting an open enrollment transfer to that school.

⁴ California Education Code Section 17620(a)(1).

⁵ California Government Code Section 65996.

Parks and Recreations

QUIMBY ACT

California Government Code Section 66477, also known as the Quimby Act, was enacted by the California legislature in 1965. The Quimby Act authorizes cities and counties to enact ordinances requiring the dedication of land, or the payment of fees for park and/or recreational facilities in lieu thereof, or both, by developers of residential subdivisions as a condition to the approval of a tentative tract map or parcel map.

Local Regulations

Fire Protection

CITY OF CALABASAS 2030 GENERAL PLAN SAFETY ELEMENT

The City of Calabasas' 2030 General Plan Safety Element aims to identify and reduce the impact of natural and man-made hazards that may threaten the health, safety, and property of Calabasas residents, business owners, and visitors. Additionally, the element emphasizes the importance of reducing risk and the effects of disaster prevention and/or preparedness. The following policies found within the element are applicable to fire protection services within the Plan Area.

Objective VII.C Minimize the potential for loss of life, physical injury, property damage, and social disruption resulting from urban and wildland fires.

- Policy VII-16** Actively collaborate with regional, state and Federal fire agencies to coordinate and implement wildfire mitigation measures and fuel load modifications including load clearing, prescribed burns, and other mitigation activities for areas proximal to the city, particularly potential wildfire approach pathways.
- Policy VII-17** Develop and maintain a GIS-based land inventory to identify fuel reduction status and points of contact in order to inform load reduction activities.
- Policy VII-18** Incorporate wildfire risk reduction measures, including healthy hillside management, load clearing, and brush management into plans, operations and maintenance procedures for public access roads, parks, trails, open space, critical roads, and critical infrastructure.
- Policy VII-19** Develop and maintain building and landscaping requirements and protocols that integrate Cal Fire and LACFD regulations and procedures for retrofits and future development.
- Policy VII-20** Encourage existing businesses and residents to adopt drought tolerant and fire-resistant landscaping practices.
- Policy VII-21** Update the City's development standards to be in conformance with title 14, CCR, division 1.5, chapter 7, subchapter 2, articles 1-5 (commencing with section 1270) (SRA Fire Safe Regulations) and title 14, CCR, division 1.5, chapter 7, subchapter 3, article 3 (commencing with section 1299.01) (Fire Hazard Reduction Around Buildings and Structures Regulations).
- Policy VII-22** Discourage development and encourage sensitive siting of structures within hazardous fire areas as higher priorities than attempting to implement fuel modification techniques that would adversely affect significant biological resources.

- Policy VII-23** Update requirements and guidelines regarding landscaping design, species preferences, installation, and maintenance to reduce vulnerability to ember ignition, and generally, wildfire impacts.
- Policy VII-24** To reduce vulnerability of structures to ember ignition and wildfire impacts, review current building code standards and other applicable statutes, regulations, requirements, and guidelines regarding construction, and specifically the use and maintenance of non-flammable materials (both residential and commercial).
- Policy VII-25** Conduct a City-wide survey of vegetation conditions in drainage corridors and similarly well vegetated areas that could provide opportunities for wildfire to approach valued assets, and specify recommended actions to reduce wildfire risks in these locations.

Objective VII.F. Maintain a system of emergency services and disaster response preparedness that will save lives, protect property, and facilitate recovery with a minimum of social disruption following both minor emergencies and major catastrophic events.

- Policy VII-34** Encourage collaboration and partnership with local and regional partners on future enhancements of alert and notification systems.
- Policy VII-35** Provide bilingual (English and Spanish) public health, emergency preparedness, and evacuation information to citizens through libraries, the City website, radio, and other platforms.
- Policy VII-36** Engage with both homeowners and renters at a block- by -block level to better prepare for wildfire mitigation and protection. Empower the City's Public Safety Commission to serve as the City's Fire Safe Council, or create a separate citizen body for the purpose.
- Policy VII-37** Enhance the Community Emergency Response Training (CERT) program to provide disaster preparedness training to the community at the neighborhood level. Work with the Las Virgenes Unified School District to develop and implement a CERT curriculum.
- Policy VI-38** Increase access to essential resources and facilitate effective communication in the community to accelerate recovery following a disaster.
- Policy VII-39** Maintain and update the City's Emergency Operations Plan every 8 years at a minimum to account for all types of emergencies consistent with the Standardized Emergency Management System (SEMS).
- Policy VII-40** Coordinate with LACFD to include Calabasas in development and maintenance of a County Wildfire Protection Plan, and investigate the possibility of preparing a plan component specific to the Calabasas community.
- Policy VII-41** Staff performing emergency preparedness and response duties will be trained as necessary to fulfill their obligations; such training to include (but not be limited to): damage assessment protocols, EOC operations, SEMS, and Incident Command System protocols and operations.
- Policy VII-42** Establish and maintain mutual aid agreements with [federal, State, and local police, fire, and emergency response agencies], including for disaster response and evacuation assistance.

- Policy VII-43** Regularly evaluate the availability and anticipated demand for community facilities to serve as evacuation centers or designated cooling or smoke relief center during emergencies. Designate such facilities and regularly maintain them to comply with industry standards.
- Policy VII-44** Establish and maintain community fire breaks and fuel modification/reduction zones, including public and private road clearance.
- Policy VII-45** Ensure that the LACFD has complete access to all locations in the City, including gated communities and critical infrastructure.
- Policy VII-46** Require that all homes and businesses have visible street addressing and signage.
- Policy VII-47** Establish and maintain a Disaster Recovery Plan that includes critical needs, such as debris removal and evaluation of post-disaster re-development options.
- Policy VII-48** Ensure that water supply and system pressure is sufficient to provide adequate fire flow for current and planned peak demand.
- Policy VII-49** Permit new development only within areas that have adequate water pressure or fire flows.
- Policy VII-50** Maintain and update an Evacuation Plan every 8 years at a minimum to account for all types of emergencies.
- a. Develop and employ evacuation alternatives and/or alternative emergency access routes in neighborhoods that have single ingress/egress.
 - b. Develop and maintain evacuation options for residents with mobility challenges.
 - c. Designate and publicize evacuation routes; include existing pedestrian pathways.
 - d. Designate safety zones or shelter-in-place locations as places of refuge when evacuation routes become blocked.
- Policy VII-51** Require new development to provide adequate access (ingress, egress) and a minimum of two roadways with widths and lengths in compliance with California Building Code Chapter 7A requirements.
- Policy VII-52** Prioritize undergrounding of utilities for designated routes to make them more reliable.
- Policy VII-53** Conduct regular evacuation trainings with single-access community HOAs and residents; encourage residents in single-access communities to maintain emergency supplies for at least 3 days.
- Policy VII-54** Maintain emergency roadways and improve them as necessary and appropriate to ensure ongoing serviceability.
- Policy VII-55** Establish higher standards of defensible space for residential neighborhoods/higher priority targets for enforcement.
- Policy VII-56** Future roadway design, especially in areas that have less accessibility and on key evacuation routes, should consider evacuation capacity and consider design treatments such as painted medians (instead of raised medians) or other

treatments that could assist in creating reversible lanes and facilitate additional capacity in an evacuation event scenario.

- Policy VII-57** Evacuation event signal timing should be periodically reviewed and updated to provide additional evacuation capacity. Incorporate Caltrans in the City’s emergency operations center protocol to develop emergency evacuation signal timing for freeway on and off-ramps.
- Policy VII-58** Continue coordinating with nearby jurisdictions, the Las Virgenes-Malibu Council of Governments (LVMCOG) and Los Angeles County Office of Emergency Management on developing strategies to address freeway congestion on the US-101 freeway which functions as the main evacuation route in the region.
- Policy VII-59** Consider the needs of vulnerable populations in the city, such as senior housing facilities and schools, and others without access to a personal vehicle in City evacuation plans.

Police Protection

CITY OF CALABASAS 2030 GENERAL PLAN SAFETY ELEMENT

The City of Calabasas’ 2030 General Plan Safety Element aims to identify and reduce the impact of natural and man-made hazards that may threaten the health, safety, and property of Calabasas residents, business owners, and visitors. Additionally, the element emphasizes the importance of reducing risk and the effects of disaster prevention and/or preparedness. The following policies found within the element are applicable to police protection services within the Plan Area.

- Policy VII-42** Establish and maintain mutual aid agreements with [federal, State, and local police, fire, and emergency response agencies], including for disaster response and evacuation assistance.

CITY OF CALABASAS 2030 GENERAL PLAN SERVICES, INFRASTRUCTURE & TECHNOLOGY ELEMENT

The City of Calabasas’ 2030 General Plan General Services, Infrastructure & Technology Element focuses on providing adequate basic services and infrastructure throughout the Plan Area through prudent fiscal management. By ensuring adequate municipal income, the City is able to pay for services and facilities provided or contracted for the City. The following policy found within the element is applicable to police protection services within the Plan Area

- Policy XII-10** Continue coordination and information exchange between the City of Calabasas and local service providers such as the County sheriff’s and fire departments and the Las Virgenes Unified School District.

Public Schools

SCHOOL DISTRICT DEVELOPMENT FEES

As discussed above, Government Code Section 65995(h) was adopted by the State legislature in 1996, school fees generated by new development are deemed legally sufficient mitigation of any impacts to school facilities resulting from generation of new students associated with development. Currently, LVUSD collects level-one fees, which equal \$4.08 per square-foot of residential construction and \$0.66 per sf of commercial/industrial construction (LVUSD 2020).

CITY OF CALABASAS 2030 GENERAL PLAN SERVICES, INFRASTRUCTURE & TECHNOLOGY ELEMENT

The City of Calabasas' 2030 General Plan General Services, Infrastructure & Technology Element focuses on providing adequate basic services and infrastructure throughout the Plan Area through prudent fiscal management. By ensuring adequate municipal income, the City is able to pay for services and facilities provided or contracted for the City. The following policies found within the element are applicable to public schools within the Plan Area.

- Policy XII-10** Continue coordination and information exchange between the City of Calabasas and local service providers such as the County sheriff's and fire departments and the Las Virgenes Unified School District
- Policy XII-16** Maintain ongoing, open communication with Las Virgenes Unified School District and coordinate land development review activities with the District's master planning efforts
- Policy XII-17** Require new development to provide full mitigation for school impacts, subject to the provisions of state law that limit the City's ability to require school mitigation
- Policy XII-18** Work with the Las Virgenes Unified School District to assist in the formation of special assessment districts for construction of additional schools
- Policy XII-19** To the extent that joint school/park facilities meet local recreational needs, permit park fees collected by the City to be used for joint use recreational facilities

Community Library

CITY OF CALABASAS 2030 GENERAL PLAN SERVICES, INFRASTRUCTURE & TECHNOLOGY ELEMENT

The City of Calabasas' 2030 General Plan General Services, Infrastructure & Technology Element focuses on providing adequate basic services and infrastructure throughout the Plan Area through prudent fiscal management. By ensuring adequate municipal income, the City is able to pay for services and facilities provided or contracted for the City. The following policies found within the element are applicable to public libraries within the Plan Area.

- Policy XII-11** Promote additional library facilities and services as required to meet the needs of Calabasas residents, including but not limited to a possible offsite branch to be located on the west side of the City and more programming and events
- Policy XII-12** Promote the acquisition of library materials, collection expansion, technology growth, and staff development that reflect the needs and interests of Calabasas residents

Parks and Recreation

CITY OF CALABASAS PARKS AND RECREATION MASTER PLAN

In 2004, the City of Calabasas prepared a Parks & Recreation Master Plan (Parks Master Plan) that included an assessment of local park needs. The Parks Master Plan provides a framework to guide future recreational investments and decisions. As outlined in the Parks Master Plan, the purpose is to evaluate existing park and recreation areas; assess the need for additional park land, open space and specialized facilities; establish criteria and standards for site selection, design, and management; and recommend an implementation approach for the City (City of Calabasas 2004).

CITY OF CALABASAS TRAILS MASTER PLAN

In 2007, the City of Calabasas prepared a Trails Master Plan that provided a blueprint for the development of community trails over the following 10 years. The purpose of the Trails Master Plan is to provide a continuous trail system that would incorporate trail connections to open spaces, public facilities, and nearby regional parks for pedestrians, equestrians, and bicyclists. The Trails Master Plan also provided a framework to identify future trail alignments throughout the Plan Area (City of Calabasas 2007).

CITY OF CALABASAS 2030 GENERAL PLAN PARKS, RECREATION & TRAILS ELEMENT

The City of Calabasas' 2030 General Plan Parks, Recreation & Trails Element aims to ensure residents have ample access to high quality space for leisure and active recreation. The following policies found within the element are applicable to recreation within the Plan Area.

- Policy X-1** Work to provide adequate facilities to support a wide range of recreational activities for children, adults, families, senior citizens, and area employees and businesses, as outlined in the 2004 Park & Recreation Master Plan
- Policy X-2** Pursue expansion of joint use/park facilities with the Las Virgenes Unified School District as the highest priority for meeting demand for sports fields and other selected recreational facilities
- Policy X-3** Pursue establishment of joint use park facilities with neighboring communities to provide land for active recreational opportunities for selected programs
- Policy X-4** Pursue acquisition of sites that could be utilized as active recreational facilities in the future
- Policy X-5** Expand City-operated recreational facilities to the extent that such facilities can be developed without unacceptable environmental impacts
- Policy X-6** Pursue the development of an additional aquatic facility either through a joint use agreement with the Las Virgenes Unified School District or through development of a new facility in western Calabasas
- Policy X-7** Pursue the establishment of teen social and development centers, a senior center, and cultural/performing arts facilities
- Policy X-8** In coordination with Los Angeles County, the Santa Monica Mountains Conservancy, the State Parks Department, and the National Park Service, continue to develop and maintain a system of hiking and riding trails that provide safe, enjoyable access into the area's natural environment
- Policy X-9** Locate and construct trails in such a manner as to minimize maintenance requirements and maximize access
- Policy X-10** Make trails and staging areas easily accessible to the public in order to facilitate their use
- Policy X-11** Connect trail systems with existing open space areas and community activity centers
- Policy X-12** Incorporate trail design into plans for natural drainage channels, street right-of-way, landscape corridors, utility rights-of-way, public easements, and open space areas
- Policy X-13** It is the policy of the City to: 1) require recreation and trail planning and construction as conditions of approval for future development Projects on land adjoining trails or where proposed new trails are planned; and, 2) require all Project

plans to provide access to trail heads located on adjacent public lands. This policy must be achieved within the legal limitations of the City's land use power and with due respect for private property rights

- Policy X-14** Retain existing City-owned rights-of-way that have potential to assist in the implementation of the trail system. Obtain rights-of-way from other entities (e.g., utility districts) that assist in the implementation of the trail system
- Policy X-15** Implement trailheads and signage where roads intersect trails and a suitable pull-out or curb cut can be attained, especially in rural areas
- Policy X-16** Consider privacy and security of neighboring residents when designing and developing recreational trails
- Policy X-17** Provide a wide range of recreational activities for children, adults, families, senior citizens, and area employees and businesses, along with adequate facilities to support those activities
- Policy X-18** When feasible, raise revenues from recreational activities to make them as financially self-sufficient as possible and to subsidize activities that do not generate revenues
- Policy X-19** Pursue a variety of funding sources for City recreational programs, including but not limited to federal, state, and private grants
- Policy X-20** Address the development of additional recreational programs for people with disabilities

CITY OF CALABASAS 2030 GENERAL PLAN LAND USE ELEMENT

The City of Calabasas' 2030 General Plan Land Use Element focuses on the organization of the community's physical environment, such that the City's natural setting is not infringed upon by necessary growth and development. The following policies found within the element are applicable to recreation within the Plan Area.

- Policy II-5** Require annexation proposals to demonstrate a positive relationship between City facility and service costs and the revenues that will be generated subsequent to annexation with the exception of areas to be annexed for the purpose of parks, schools, open space, and other public facilities
- Policy II-12** Promote a citywide open space system consisting of not less than 3.0 acres per 1,000 population of active recreational land (i.e., public parks) and 4,000 acres of designated open space. The location and size should represent an extensive network of protected areas with a high degree of continuity and a systematic order of purposes, including resource conservation, recreation, and protection of public safety
- Policy II-13** Designate sufficient lands for needed public, quasi-public, and institutional activities in a manner that is compatible with Calabasas' natural environmental setting and the community's small town and rural character
- Policy II-14** Limit approval of new discretionary development Projects to those that can be integrated into the community, providing for the protection of existing neighborhoods, desirable non-residential land uses, and open space

CITY OF CALABASAS 2030 GENERAL COMMUNITY DESIGN ELEMENT

The City of Calabasas' 2030 General Plan Community Design Element aims to protect and preserve the hillsides, ridgelines, and open space areas that provide the aesthetic value for the greater Calabasas community. The following policies found within the element are applicable to recreation within the Plan Area.

Policy IX-7 Where applicable, enhance view corridors that are oriented toward existing or proposed community amenities, such as recreation facilities, parks, open space, or natural features

CITY OF CALABASAS 2030 GENERAL PLAN SERVICES, INFRASTRUCTURE & TECHNOLOGY ELEMENT

The City of Calabasas' 2030 General Plan General Services, Infrastructure & Technology Element focuses on providing adequate basic services and infrastructure throughout the Plan Area through prudent fiscal management. By ensuring adequate municipal income, the City is able to pay for services and facilities provided or contracted for the City. The following policy found within the element is applicable to recreation within the Plan Area.

Policy XII-14 Limit approval of new discretionary development Projects to those that can be integrated into the community, providing for the protection of existing neighborhoods, desirable non-residential land uses, and open space

4.12.3 Impact Analysis

Methodology and Significance Thresholds

Evaluation of public service impacts was based on a review current levels of service, service standards, and consultation with public service providers. This analysis focuses on determining whether the General Plan Update would result in adverse physical impacts to the environment due to the expansion of existing fire and/or police protection and emergency facilities, library facilities, or school facilities, or construction of new facilities.

The recreation analysis focuses on determining whether reasonably foreseeable development under the General Plan Update would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Furthermore, the analysis discusses whether the proposed project would create the need for new parks, the construction of which could result in significant environmental impacts. This analysis focuses on the existing conditions of parks and recreational facilities, and the potential for these facilities to be degraded or deteriorated, at an increased rate due to implementation of the General Plan Update. This analysis estimates the number of residents that would be generated by reasonably foreseeable housing development under the General Plan Update and assesses whether the General Plan Update would result in substantial physical deterioration of park/recreational facilities or the need for new facilities.

Public Services

Based on Appendix G of the CEQA Guidelines, implementation of the General Plan Update would have significant impact related to public services if it would:

1. Result in potentially significant impacts related to public services if it would result in substantial adverse physical impacts associated with the provision of new or physically altered

governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable services ratios, response times, or other performance objectives for any of the following public services:

- a) Fire protection
- b) Police protection
- c) Schools
- d) Parks
- e) Other public facilities (such as libraries)

Recreation

Based on Appendix G of the CEQA Guidelines, the General Plan Update would result in potentially significant impacts related to recreation if it would:

1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Threshold 1a: Would the General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impact PS-1 IMPLEMENTATION OF THE GENERAL PLAN UPDATE WOULD INCREMENTALLY INCREASE THE SERVICE POPULATION OF THE LACFD AND THE NUMBER OF STRUCTURES IN ITS SERVICE AREA. THE NEED FOR NEW OR EXPANDED FACILITIES WOULD BE DUE TO CUMULATIVE GROWTH IN THE SERVICE AREA AND NOT SOLELY DUE TO THE GENERAL PLAN UPDATE. ENVIRONMENTAL IMPACTS OF FUTURE NEW OR EXPANDED FACILITIES WOULD BE EVALUATED UNDER CEQA AT TIME OF PROPOSAL. ADDITIONALLY, DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD COMPLY WITH STATE AND LOCAL APPLICABLE REGULATIONS AND GENERAL PLAN POLICIES RELATED TO FIRE SERVICES AND FIRE SAFETY. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The General Plan Update would not expand the LACFD service area but would facilitate additional structures and population within the existing service area. As described in Section 2.0, *Project Description*, the General Plan Update would facilitate the development of approximately 1,305 housing units and development or redevelopment of commercial space in the Plan Area. The additional housing units would result in approximately 3,537 additional persons to the Plan Area and to the LACFD district (see Section 4.11, *Population and Housing*, for population estimation methodology).

New structures facilitated by the General Plan Update would be in the existing service area of LACFD and would not require expansion of the service area or for the LACFD to respond to calls in a new or more distance area. Population growth accommodated under the General Plan Update may contribute to a cumulative need for additional fire protection, but would not, by itself, necessitate the need for substantial new fire protection facilities. The population growth accommodated under the General Plan Update would be minor compared to the existing service population of the LACFD (less than one percent of the existing service population). According to LACFD, new units in existing

urban areas wouldn't necessarily impact LACFD's staffing, because the number of firefighters required is dictated by call response times. These response times are calculated based on a number of factors, but primarily the distance from the station to the residences in their station jurisdiction. The density/number of residents and number of calls per day come into play when determining the size of a station's jurisdiction. For Fire Stations 68 and 125, an increase of approximately 3,500 residents would not raise the number of calls per day enough to necessitate a change in jurisdiction or the addition of another station (Currier 2021).

Planning for new or physically altered LACFD stations is based on an assessment of the cumulative need for new facilities. The incremental contribution to demand for increased LACFD protection services from implementation of the General Plan Update would be offset by payment of proportionate property taxes and sales taxes to the City of Calabasas by developers and the addition of new residents. As stated in the City's General Plan, new development shall pay its own way, such that developers would provide funds needed for new services at no net cost to existing residents and businesses (City of Calabasas 2015). Taxes to the City's General Fund would support the City's budget for fire protection services. New or expanded fire protection facilities needed to accommodate future growth in LACFD's service area would be speculative at this time. Future proposals, if warranted, would undergo environmental review under CEQA.

Additionally, all new development that would occur under the General Plan Update would be required to comply with all applicable federal, State, and local regulations governing the provision of fire protection services, including adequate fire access, fire flows, and number of hydrants, such as the 2016 California Fire Code and 2019 California Building Code. The 2016 California Fire Code contains project-specific requirements such as construction standards in new structures and remodels, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for minimum fire flow rates for water mains. The 2019 California Building Code requirements for construction, access, water mains, fire flows, and hydrants, and would be subject to review and approval. Furthermore, the following Safety Element policies would continue and improve fire preparedness efforts and community safety:

Objective VII.C Minimize the potential for loss of life, physical injury, property damage, and social disruption resulting from urban and wildland fires.

- Policy VII-16** Actively collaborate with regional, state and Federal fire agencies to coordinate and implement wildfire mitigation measures and fuel load modifications including load clearing, prescribed burns, and other mitigation activities for areas proximal to the city, particularly potential wildfire approach pathways.
- Policy VII-17** Develop and maintain a GIS-based land inventory to identify fuel reduction status and points of contact in order to inform load reduction activities.
- Policy VII-18** Incorporate wildfire risk reduction measures, including healthy hillside management, load clearing, and brush management into plans, operations and maintenance procedures for public access roads, parks, trails, open space, critical roads, and critical infrastructure.
- Policy VII-19** Develop and maintain building and landscaping requirements and protocols that integrate Cal Fire and LACFD regulations and procedures for retrofits and future development.
- Policy VII-20** Encourage existing businesses and residents to adopt drought tolerant and fire-resistant landscaping practices.

- Policy VII-21** Update the City's development standards to be in conformance with title 14, CCR, division 1.5, chapter 7, subchapter 2, articles 1-5 (commencing with section 1270) (SRA Fire Safe Regulations) and title 14, CCR, division 1.5, chapter 7, subchapter 3, article 3 (commencing with section 1299.01) (Fire Hazard Reduction Around Buildings and Structures Regulations).
- Policy VII-22** Discourage development and encourage sensitive siting of structures within hazardous fire areas as higher priorities than attempting to implement fuel modification techniques that would adversely affect significant biological resources.
- Policy VII-23** Update requirements and guidelines regarding landscaping design, species preferences, installation, and maintenance to reduce vulnerability to ember ignition, and generally, wildfire impacts.
- Policy VII-24** To reduce vulnerability of structures to ember ignition and wildfire impacts, review current building code standards and other applicable statutes, regulations, requirements, and guidelines regarding construction, and specifically the use and maintenance of non-flammable materials (both residential and commercial).
- Policy VII-25** Conduct a City-wide survey of vegetation conditions in drainage corridors and similarly well vegetated areas that could provide opportunities for wildfire to approach valued assets, and specify recommended actions to reduce wildfire risks in these locations.
- Objective VII.F.** Maintain a system of emergency services and disaster response preparedness that will save lives, protect property, and facilitate recovery with a minimum of social disruption following both minor emergencies and major catastrophic events.
- Policy VII-34** Encourage collaboration and partnership with local and regional partners on future enhancements of alert and notification systems.
- Policy VII-35** Provide bilingual (English and Spanish) public health, emergency preparedness, and evacuation information to citizens through libraries, the City website, radio, and other platforms.
- Policy VII-36** Engage with both homeowners and renters at a block- by -block level to better prepare for wildfire mitigation and protection. Empower the City's Public Safety Commission to serve as the City's Fire Safe Council, or create a separate citizen body for the purpose.
- Policy VII-37** Enhance the Community Emergency Response Training (CERT) program to provide disaster preparedness training to the community at the neighborhood level. Work with the Las Virgenes Unified School District to develop and implement a CERT curriculum.
- Policy VI-38** Increase access to essential resources and facilitate effective communication in the community to accelerate recovery following a disaster.
- Policy VII-39** Maintain and update the City's Emergency Operations Plan every 8 years at a minimum to account for all types of emergencies consistent with the Standardized Emergency Management System (SEMS).
- Policy VII-40** Coordinate with LACFD to include Calabasas in development and maintenance of a County Wildfire Protection Plan, and investigate the possibility of preparing a plan component specific to the Calabasas community.

- Policy VII-41** Staff performing emergency preparedness and response duties will be trained as necessary to fulfill their obligations; such training to include (but not be limited to): damage assessment protocols, EOC operations, SEMS, and Incident Command System protocols and operations.
- Policy VII-42** Establish and maintain mutual aid agreements with [federal, State, and local police, fire, and emergency response agencies], including for disaster response and evacuation assistance.
- Policy VII-43** Regularly evaluate the availability and anticipated demand for community facilities to serve as evacuation centers or designated cooling or smoke relief center during emergencies. Designate such facilities and regularly maintain them to comply with industry standards.
- Policy VII-44** Establish and maintain community fire breaks and fuel modification/reduction zones, including public and private road clearance.
- Policy VII-45** Ensure that the LACFD has complete access to all locations in the City, including gated communities and critical infrastructure.
- Policy VII-46** Require that all homes and businesses have visible street addressing and signage.
- Policy VII-47** Establish and maintain a Disaster Recovery Plan that includes critical needs, such as debris removal and evaluation of post-disaster re-development options.
- Policy VII-48** Ensure that water supply and system pressure is sufficient to provide adequate fire flow for current and planned peak demand.
- Policy VII-49** Permit new development only within areas that have adequate water pressure or fire flows.
- Policy VII-50** Maintain and update an Evacuation Plan every 8 years at a minimum to account for all types of emergencies.
- a. Develop and employ evacuation alternatives and/or alternative emergency access routes in neighborhoods that have single ingress/egress.
 - b. Develop and maintain evacuation options for residents with mobility challenges.
 - c. Designate and publicize evacuation routes; include existing pedestrian pathways.
 - d. Designate safety zones or shelter-in-place locations as places of refuge when evacuation routes become blocked.
- Policy VII-51** Require new development to provide adequate access (ingress, egress) and a minimum of two roadways with widths and lengths in compliance with California Building Code Chapter 7A requirements.
- Policy VII-52** Prioritize undergrounding of utilities for designated routes to make them more reliable.
- Policy VII-53** Conduct regular evacuation trainings with single-access community HOAs and residents; encourage residents in single-access communities to maintain emergency supplies for at least 3 days.
- Policy VII-54** Maintain emergency roadways and improve them as necessary and appropriate to ensure ongoing serviceability.
- Policy VII-55** Establish higher standards of defensible space for residential neighborhoods/higher priority targets for enforcement.

- Policy VII-56** Future roadway design, especially in areas that have less accessibility and on key evacuation routes, should consider evacuation capacity and consider design treatments such as painted medians (instead of raised medians) or other treatments that could assist in creating reversible lanes and facilitate additional capacity in an evacuation event scenario.
- Policy VII-57** Evacuation event signal timing should be periodically reviewed and updated to provide additional evacuation capacity. Incorporate Caltrans in the City’s emergency operations center protocol to develop emergency evacuation signal timing for freeway on and off-ramps.
- Policy VII-58** Continue coordinating with nearby jurisdictions, the Las Virgenes-Malibu Council of Governments (LVMCOG) and Los Angeles County Office of Emergency Management on developing strategies to address freeway congestion on the US-101 freeway which functions as the main evacuation route in the region.
- Policy VII-59** Consider the needs of vulnerable populations in the city, such as senior housing facilities and schools, and others without access to a personal vehicle in City evacuation plans.

Therefore, the General Plan Update would not result in significant environmental impacts associated with the need for the provision of new or physically altered fire protection facilities, and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 1b: Would the General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impact PS-2 IMPLEMENTATION OF THE GENERAL PLAN UPDATE WOULD INCREMENTALLY INCREASE THE SERVICE POPULATION OF THE LACSD AND THE NUMBER OF STRUCTURES IN ITS SERVICE AREA. THE NEED FOR NEW OR EXPANDED FACILITIES WOULD BE DUE TO CUMULATIVE GROWTH IN THE SERVICE AREA AND NOT SOLELY DUE TO THE GENERAL PLAN UPDATE. ENVIRONMENTAL IMPACTS OF FUTURE NEW OR EXPANDED FACILITIES WOULD BE EVALUATED UNDER CEQA AT TIME OF PROPOSAL. ADDITIONALLY, DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD COMPLY WITH STATE AND LOCAL APPLICABLE REGULATIONS AND GENERAL PLAN POLICIES RELATED TO POLICE SERVICES AND PUBLIC SAFETY. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Police protection services are not “facility-driven,” meaning such services are not as reliant on facilities in order to effectively patrol a beat. An expansion of, or intensification of development within, a beat does not necessarily result in the need for additional facilities if police officers and patrol vehicles are equipped with adequate telecommunications equipment in order to communicate with police headquarters. However, if the geographical area of a beat is expanded, population increases, or intensification/redevelopment of an existing beat results in the need for new police officers, new or expanded facilities may be needed.

As described in Section 2.0, *Project Description*, the General Plan Update would facilitate the development of approximately 1,305 housing units and development and redevelopment of

commercial space in the Plan Area. The additional housing units would result in approximately 3,537 additional persons to the Plan Area and to the LACSD service district (see Section 4.11, *Population and Housing*, for population estimation methodology).

New structures facilitated by the General Plan Update would be in the existing service area of LACSD and would not require expansion of the service area or for the LACSD to respond to calls in a new or more distance area. The Malibu/Lost Hills Service Station is currently understaffed, and additional personnel to the Station to meet an acceptable service ratio would exacerbate the current shortage of space and supporting equipment. Any expansion of the Station, or construction of new facilities, would need to account for the current shortage and additional personnel and equipment (LACSD 2021b). The population growth accommodated under the General Plan Update would be minor compared to the existing service population of the LACSD (approximately four percent of the existing service population for the Malibu/Lost Hills Sheriff's Station) and would not, in itself, require the construction of new or expanded police protection facilities.

Planning for new or physically altered LACSD stations is based on an assessment of the cumulative need for new facilities. The incremental contribution to demand for increased LACSD protection services from implementation of the General Plan Update would be offset by payment of proportionate property taxes and sales taxes to the City of Calabasas by developers and the addition of new residents. As stated in the City's General Plan, new development shall pay its own way, such that developers would provide funds needed for new services at no net cost to existing residents and businesses (City of Calabasas 2015). The General Plan Update's incremental contribution to demand for new police protection services would be offset by payment of proportionate property taxes, sales taxes, and/or DIFs that would result from increased development and population growth. Taxes to the City's General Fund would support the City's budget for police protection services. New or expanded police protection facilities needed to accommodate future growth in LACSD's service area would be speculative at this time. Future proposals, if warranted, would undergo environmental review under CEQA.

Additionally, local policies, including Calabasas General Plan Policies such as those listed below would continue and improve disaster preparedness efforts, community safety, and coordination between agencies, such as those listed under Objective VII.F in Impact PS-1, above, and Policy XII-10. Therefore, the General Plan Update would not result in significant environmental impacts associated with the need for the provision of new or physically altered police protection facilities, and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 1c: Would the General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Impact PS-3 IMPLEMENTATION OF THE GENERAL PLAN UPDATE WOULD INCREASE THE ENROLLMENT OF STUDENTS IN LOCAL SCHOOLS AND WOULD EXACERBATE THE EXISTING CAPACITY CONCERNS. ENVIRONMENTAL IMPACTS OF FUTURE NEW OR EXPANDED FACILITIES WOULD BE EVALUATED UNDER CEQA AT TIME OF PROPOSAL. THEREFORE, THE GENERAL PLAN UPDATE WOULD NOT RESULT IN THE NEED FOR THE PROVISION OF NEW OR PHYSICALLY ALTERED SCHOOLS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 4.12.1, *Setting*, the LVUSD was over capacity during the 2019-2020 school year, suggesting that additional persons could necessitate expanding school facilities. As described in Section 2.0, *Project Description*, the General Plan Update would facilitate the development of approximately 1,305 housing units and development and redevelopment of commercial space in the Plan Area. The additional housing units would result in approximately 3,537 additional persons to the Plan Area and to the LVUSD district (see Section 4.11, *Population and Housing*, for population estimation methodology).

Estimated student generation rates were calculated using the methodology in LVUSD’s *Residential and Commercial/Industrial Development School Fee Justification Study (2020)*. Generation rates were created by cross-referencing LVUSD’s enrollment data against the County Assessors residential data for single family detached units (SFD), and multifamily attached units (MFA) (LVUSD 2020). MFA rates were used as the Housing Element Update would only facilitate the development of multi-family housing units. Estimated student generation as a result of the General Plan Update is shown in Table 4.12-7.

Table 4.12-7 Estimated Student Generation

Grade Level	Student Generation Factor ¹	Dwelling Units	Total Students Generated	2019/20 District (Shortfall) Capacity	2029 District (Shortfall) Capacity	Exceeds Available Capacity?
Elementary School	0.1304	1,305	170	269	99	No
Middle School	0.0729	1,305	95	(44)	(139)	Yes
High School	0.1280	1,305	167	(300)	(467)	Yes
Total	0.3313	1,305	432	(75)	(507)	Yes

¹ LVUSD 2020 (Tables 1 and 3)

Although all proposed housing under the General Plan Update would be multi-family residences, the LVUSD provides one “blended rate” for the Student Generation Factor of single-family and multi-family residences. Although the total number of students generated is potentially lower than if the Student Generation Factor were based solely on multi-family residences, LVUSD would still not have available capacity for the estimated number of elementary, middle, or high school students generated by the General Plan Update (see Table 4.12-7). Implementation of the General Plan Update may contribute to the existing need for new or expanded school facilities. Previous facility expansions at LVUSD schools involved the installation of temporary portable units, which typically result in minor environmental impacts (Kimmel 2021).

Applicants for new housing construction that would serve an increase in the resident population of Calabasas would be required to pay State-mandated school impact fees (as applied under the Leroy F. Greene School Facilities Act of 1998). As discussed under Impacts PS-1 and PS-2, this incremental contribution to demand for increased LVUSD services from implementation of the General Plan Update would be offset by payment of proportionate property taxes and sales taxes to the City of Calabasas by developers and the addition of new residents.

Any project associated with expanding school facilities, whether related to the construction of new facilities or modernization of existing facilities, would be subject to project-specific environmental review and mitigation pursuant to CEQA. It is the responsibility of the school districts to comply with CEQA requirements. Compliance with federal, State, and local regulations would be required prior to the construction of the new facilities. Therefore, the General Plan Update would not result in significant environmental impacts associated with the need for the provision of new or physically altered schools, and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

- Threshold 1d:** Would the General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?
- Threshold 2:** Would the General Plan Update increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- Threshold 3:** Does the General Plan Update include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact PS-4 DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD INCREMENTALLY INCREASE THE PLAN AREA POPULATION AND INCREASE THE USE OF EXISTING PARKS AND RECREATIONAL FACILITIES AND REDUCE THE CITY'S PARKLAND TO POPULATION RATIO. HOWEVER, DEVELOPMENT FEES FOR PARKS OR DONATION OF PARKLAND PURSUANT TO THE QUMBY ACT WOULD BE REQUIRED AS PART OF THE INDIVIDUAL PROJECTS. ENVIRONMENTAL IMPACTS OF FUTURE NEW OR EXPANDED FACILITIES WOULD BE EVALUATED UNDER CEQA AT TIME OF PROPOSAL. IMPACTS RELATED TO THE PHYSICAL DETERIORATION OF PARKLAND OR RECREATIONAL FACILITIES, AND THE NEED TO CONSTRUCT NEW FACILITIES, WOULD BE LESS THAN SIGNIFICANT.

As described in Section 2.0, *Project Description*, the General Plan Update would facilitate the development of approximately 1,305 housing units and development and redevelopment of commercial space in the Plan Area. The additional housing units would result in approximately 3,537 additional persons to the Plan Area. The General Plan Update would not include the provision of new or physically alter existing parkland or recreation centers. The Plan Area currently has 56.6 acres of parkland. The Plan Area currently has a parkland to population ratio of 2.17 acres per 1,000 residents.

The anticipated population increase associated with the General Plan Update would reduce the City's parkland per 1,000 residents from 2.17 acres per 1,000 residents to 1.91 acres per

1,000 residents by 2029 (see Table 4.12-8). The current parkland to population ratio does not meet the City’s goal of 3.0 acres per 1,000 residents, and the General Plan Update would result in a further reduction from that goal.

Table 4.12-8 Anticipated Parkland Per 1,000 Residents

Existing Parkland (Acres)	Existing Plan Area Population	Existing Parkland per 1,000 residents	Anticipated 2029 Population	2029 Parkland per 1,000 Residents	Difference in Parkland per 1,000 Residents	Percent Reduction from Existing Conditions
56.6	26,116	2.17	29,653	1.91	-0.26	12.0

Source: City of Calabasas, 2015.

As future residential development projects are approved, development fees for parks or donation of parkland (pursuant to the Quimby Act) would be required as part of the individual projects. Funding for maintenance of new and existing facilities is provided through property assessments and taxes. Park and recreational facility maintenance and acquisition needs in the City are evaluated with respect to population growth, locational needs, and budget. The General Plan Update would not preclude implementation or expansion of any parkland, trails, or recreation facility. Because Calabasas is mostly built out, space for new parks and recreation facilities is limited. However, as proposed in the 2030 General Plan and the Parks and Recreation Master Plan, the City could facilitate the addition of new park space or recreation facility through capital improvement projects and joint use agreements with neighborhood schools. The Parks and Recreation Master Plan established criteria and standards for site selection, design, and management of potential future parks. Similarly, the Trails Master Plan provides a blueprint for community trail development for the purpose of connecting open spaces, public facilities, and nearby regional parks.

Any project associated with new or expanding parkland or recreation facilities would be subject to project-specific environmental review and mitigation pursuant to CEQA. It is anticipated that the City’s review processes would adequately mitigate potential environmental impacts relating to the development of new or redeveloped parkland, open space, or other recreational facilities. Therefore, the General Plan Update would not result in substantial physical deterioration of existing parkland or substantial adverse physical impacts associated with the provision of new or physically altered parkland.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 1e: Would the General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, or the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impact PS-5 DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD INCREMENTALLY INCREASE THE PLAN AREA POPULATION AND INCREASE THE USE OF EXISTING LIBRARY FACILITIES. HOWEVER, PROPERTY TAXES RELATED TO NEW DEVELOPMENT WOULD CONTRIBUTE TO ANY NECESSARY NEW OR EXPANDED LIBRARY FACILITIES. ENVIRONMENTAL IMPACTS OF FUTURE NEW OR EXPANDED FACILITIES WOULD BE EVALUATED UNDER CEQA AT TIME OF PROPOSAL. IMPACTS RELATED TO THE PROVISION OF NEW OR PHYSICALLY ALTERED PUBLIC FACILITIES WOULD BE LESS THAN SIGNIFICANT.

As described in Section 2.0, *Project Description*, the General Plan Update would facilitate the development of approximately 1,305 housing units and development and redevelopment of commercial space in the Plan Area. The additional housing units would result in approximately 3,537 additional persons to the Plan Area. The General Plan Update would not include the provision of new or physically alter existing library space. The Plan Area currently has 27,000 square feet of library space and 1,034 square feet of space per 1,000 residents.

The anticipated population increase associated with the General Plan Update would reduce the ratio of library space to 911 square feet acres per 1,000 residents by 2029 (see Table 4.12-9).

Table 4.12-9 Projected Library Space per 1,000 Residents

Existing Library Space (square feet)	Existing City Population	Existing Square Feet per 1,000 residents	Anticipated 2029 Population	2029 Square Feet per 1,000 Residents	Difference in Square Feet per 1,000 Residents
27,000	26,116	1,034	29,653	911	-123

Sources: City of Calabasas, n.d., City of Calabasas 2020

Although the City does not have specific facility service goals or policies for the Calabasas Library, the City’s General Plan Policies XII-11 and XII-12 promote the expansion of library facilities and acquisition of library materials to serve the needs of Calabasas residents. As mentioned under Impact PS-1, impacts from development would be offset by payment of proportionate property taxes and sales taxes to the City. In the 2020-2021 Calabasas annual budget, approximately \$2.2 million in property tax funds was allocated to the Calabasas Library for operations and capital needs (City of Calabasas 2020).

Any project associated with new or expanding library facilities would be subject to project-specific environmental review and mitigation pursuant to CEQA. It is anticipated that the City’s review processes would adequately mitigate potential environmental impacts relating to the development of new or redeveloped library facilities. Therefore, the General Plan Update would not result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, or the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.12.4 Cumulative Impacts

The geographic area to analyze cumulatively considerable impacts to facilities related to public services is the service area of each agency, respectively: LACFD, LACSD, LVUSD, and the Calabasas Library. The geographic area to analyze cumulatively considerable impacts to facilities related to parkland and recreation facilities is the Plan Area.

Fire Protection Facilities

Jurisdictions in the LACFD service area are anticipated to experience population growth, and LACFD will likely need new or expanded facilities to meet service goals. Planning for new or physically altered LACFD stations is based on an assessment of the cumulative need for new facilities. The incremental contribution to demand for increased LACFD protection services from implementation of the General Plan Update would be offset by payment of proportionate property taxes and sales taxes by developers and the addition of new residents.

If new LACFD facilities are needed, such facilities will undergo their own environmental review pursuant to CEQA when details about the project are known. Projects would be required to comply with federal, State, and local regulations related to their physical impacts on the environment. Therefore, the General Plan Update would not result in cumulatively considerable significant environmental impacts associated with the need for the provision of new or physically altered fire protection facilities.

Police Protection Facilities

Planning for new or physically altered LACSD stations is based on an assessment of the cumulative need for new facilities. The incremental contribution to demand for increased LACSD protection services from implementation of the General Plan Update would be offset by payment of proportionate property taxes and sales taxes by developers and the addition of new residents.

If new LACSD facilities are needed, such facilities will undergo their own environmental review pursuant to CEQA when details about the project are known. Projects would be required to comply with federal, State, and local regulations related to their physical impacts on the environment. Therefore, the General Plan Update would not result in cumulatively considerable significant environmental impacts associated with the need for the provision of new or physically altered police protection facilities.

School Facilities

Development projects associated with increased population growth in the LVUSD service area would be required to pay impact fees consistent with local jurisdiction requirements to ensure the adequate provision of future facilities associated with public services, including schools. As part of the renovation and revitalization process, school projects would undergo project-specific environmental review under CEQA and be required to comply with federal, State and local regulations related to their physical impacts on the environment. Therefore, the General Plan Update would not result in cumulatively considerable significant environmental impacts associated with the need for the provision of new or physically altered schools, and impacts would be less than significant.

Public Facilities

The Calabasas Library serves the Calabasas and Hidden Hills area. Impacts from development in both jurisdictions would be offset by payment of proportionate property taxes and sales taxes. Any project associated with new or expanding library facilities would be subject to project-specific environmental review and mitigation pursuant to CEQA. It is anticipated that the City's review processes would adequately mitigate potential environmental impacts relating to the development of new or redeveloped library facilities. Therefore, the General Plan Update would not result in cumulatively considerable significant environmental impacts associated with the need for the provision of new or physically altered public facilities, and impacts would be less than significant.

Parks and Recreation

For impacts to parks and recreation, the geographic area for cumulatively considerable projects is the Plan Area. As stated in Impact PS-4, the General Plan Update would not preclude implementation or expansion of any parkland, trails, or recreation facility, but it would decrease the parkland to population ratio that is already below the City's desired goal of 3.0 acres of parkland per 1,000 residents.

As future residential development projects are approved, development fees for parks or donation of parkland (pursuant to the Quimby Act) would be required as part of the individual projects. Any project associated with new or expanding parkland or recreation facilities would be subject to project-specific environmental review and mitigation pursuant to CEQA. It is anticipated that the City's review processes would adequately mitigate potential environmental impacts relating to the development of new or redeveloped parkland, open space, or other recreational facilities. Therefore, the General Plan Update would not result in cumulatively considerable substantial physical deterioration of existing parkland or substantial adverse physical impacts associated with the provision of new or physically altered parkland.

Based on the above information, the incremental effect of the General Plan Update with respect to the deterioration of public services and recreation facilities would not be cumulatively considerable, and cumulative impacts would be less than significant.

4.13 Transportation

This section presents evaluates the potential impacts on transportation, consistent with CEQA requirements. Information presented in this section is primarily derived from the *Vehicle Miles Traveled (VMT) Analysis for Calabasas Housing Element Update* and the *Calabasas Housing Element Update Emergency Evacuation Assessment* located in Appendix C.

4.13.1 Setting

Existing Roadway System

The Plan Area is served by a network of freeways, arterial, collector, and local roadways as shown on Figure 2-2 in Section 2, *Project Description*. The Plan Area is geographically divided into two distinct east and west halves. The only roadway connections between the two sides of the Plan Area are US-101 and Mureau Road, which runs parallel to the north side of US-101. US-101 is under the jurisdiction of the California Department of Transportation (Caltrans). Roadways within the city limits are under the jurisdiction of the City of Calabasas. Roadways outside of the city are under the jurisdiction of the County of Los Angeles. The primary components of the street system in the Plan Area include the following:

- **US-101:** US-101 is an eight-lane freeway that travels east-west through the City of Calabasas. This freeway connects Calabasas with Los Angeles to the southeast and with the cities of Thousand Oaks, Camarillo, Oxnard, and Ventura to the northwest. Within the Plan Area, freeway interchanges are provided at Lost Hills Road, Las Virgenes Road, Parkway Calabasas, Calabasas Road, and Valley Circle Boulevard. During periods of heavy congestion on US-101, regional traffic is diverted from the freeway to the local city street network. Arterials parallel to the freeway, including Calabasas Road, Mureau Road, and Agoura Road, carry diverted freeway traffic through the city.
- **Las Virgenes Road:** Las Virgenes Road is a north-south arterial street that connects Calabasas to the Malibu area via its junction with Malibu Canyon Road. South of US-101, Las Virgenes Road is four lanes wide until just south of its intersection with Lost Hills Road, where it becomes a two-lane facility. North of US-101, Las Virgenes Road continues as a four-lane arterial that serves the adjacent residential neighborhoods until narrowing to a two-lane local street just north of its intersection with Mont Calabasas Drive. The roadway is one of the major north-south travel routes in the western portion of the Plan Area. Las Virgenes Road is controlled by traffic signals at its intersections with the US-101 northbound and southbound ramps, Agoura Road, Mureau Road, Oak Glenn Street/Paxton Place, Willow Glenn Street, Malibu School District Road, Meadow Creek Lane, Lost Hills Road, and Mulholland Highway and by stop signs at its intersection with Thousand Oaks Boulevard/Brittany Court.
- **Lost Hills Road:** Lost Hills Road is a two- to four-lane north-south arterial street that extends north from Las Virgenes Road to its terminus at the Calabasas Sanitary Landfill north of US-101. The roadway provides one of the major north-south travel routes in the western portion of the Plan Area. Lost Hills Road is controlled by traffic signals at its intersections with Canwood Street, the US-101 northbound and southbound ramps, Agoura Road, and Las Virgenes Road. Stop signs control traffic at its intersections with Cold Springs Street and Calabasas Hills Road/Meadow Creek Lane.

- **Mureau Road:** Mureau Road is a two-lane arterial that travels parallel to US-101 on the north side of the freeway. It is noted that Mureau Road does not operate with the capacity typical of an arterial roadway; however, it is classified as one due to the fact that it provides the only connection between the eastern and western portions of the Plan Area, other than US-101. It extends as a four-lane road from Las Virgenes Road on the west and narrows to two lanes as it continues through unincorporated Los Angeles County before crossing over US-101 and connecting with Calabasas Road approximately two miles to the east. Mureau Road is controlled by traffic signals at the Las Virgenes Road, Mountain View Drive, and Round Meadow Road intersections.
- **Agoura Road:** Agoura Road is a four-lane east-west arterial roadway which extends westerly from Las Virgenes Road to Lost Hills Road and beyond to the cities of Agoura Hills and Westlake Village. Agoura Road is controlled by traffic signals at the Lost Hills Road and Las Virgenes Road intersections.
- **Calabasas Road:** Calabasas Road is an east-west arterial road that travels parallel to US-101. Calabasas Road is two-lanes west of the freeway ramps and four-lanes east of the freeway ramps (the section of Calabasas Road in the “Old Town” area of Calabasas is two-lanes wide). Calabasas Road extends from west of Mureau Road to Mulholland Drive, where it becomes Avenue San Luis in the City of Woodland Hills. Calabasas Road is controlled by signals at US-101 southbound ramps (east), Parkway Calabasas, Commons Way, Park Centre, Park Granada, US-101 southbound ramps (west), and Mulholland Drive intersections.
- **Parkway Calabasas:** Parkway Calabasas is a north-south arterial that extends from Calabasas Road southwest until it dead ends just south of the southern terminus of Prado de la Felicidad. North of Calabasas Road, Parkway Calabasas continues as a two- to four-lane collector until its terminus approximately 0.5 mile north of Ventura Boulevard. Parkway Calabasas continues south of Calabasas Road as a two- to four-lane collector that serves residential areas south of Park Granada. Parkway Calabasas is controlled by signals at the Ventura Boulevard, Calabasas Road, Park Sorrento, Park Granada, Park Entrada, intersections and by a roundabout at its intersection with Cam Portal.
- **Park Granada:** Park Granada is a four-lane arterial that connects Calabasas Road to Parkway Calabasas before continuing into a private residential neighborhood. Park Granada is controlled by signals at the Calabasas Road, Park Sorrento, Park Capri, and Parkway Calabasas intersections.
- **Mulholland Highway:** Mulholland Highway is a two-lane arterial that travels from its eastern terminus at Mulholland Drive southwest through the Plan Area and unincorporated Los Angeles County before connecting to Pacific Coast Highway near the Ventura County line. Mulholland Highway is signalized at Paul Revere Drive, Calabasas High School, and Old Topanga Canyon Road.
- **Old Topanga Canyon Road/Valmar Road:** Old Topanga Canyon Road/Valmar Road is a two-lane arterial that extends south from Mulholland Drive to Mulholland Highway (the Valmar Road portion consists of the segment located between Mulholland Drive and Peacock Court), and then becomes a two-lane collector from Mulholland Highway until its terminus at Topanga Canyon Boulevard. Old Topanga Canyon Road briefly terminates at its intersection with Mulholland Highway, but then restarts at its other intersection with Mulholland Highway (Old Topanga Road essentially becomes or joins Mulholland Highway for approximately 1,000 feet). Old Topanga Road is signalized at the Mulholland Drive, Blue Bird Drive, Park Ora Road/Brenford Street intersections and its northern intersection with Mulholland Highway and is stop sign-

controlled at its southern intersection with Mulholland Highway and the Topanga Canyon Boulevard intersection.

- **Mulholland Drive:** Mulholland Drive is a four-lane arterial that extends from Calabasas Road to the Woodland Hills community of Los Angeles to the southeast. North of Calabasas Road, Mulholland Drive continues as Valley Circle Boulevard and serves the city of Hidden Hills and the West Hills community of Los Angeles. This roadway is not located within the Plan Area but serves as part of the local roadway network that serves traffic volumes associated with development in the Plan Area. Near the Plan Area, Mulholland Drive is signalized at the Calabasas Road intersection.

The City's policy is to reduce the amount of regional traffic on neighborhood streets. However, the City does not have jurisdiction over many of the surrounding facilities that carry regional traffic through and around the city. One of the goals in the City's Circulation Element is to reduce the influence of regional traffic on the community by limiting development of roadway connections that will carry traffic through Calabasas to Los Angeles, Malibu, and cities in Ventura County.

Pedestrian and Bicycle Facilities

Sidewalks and Class II (on-street) bike lanes are located throughout the Plan Area along various arterial, collector, and local streets. Of particular note with regard to the proposed housing sites are: sidewalks along the southbound lane of Las Virgenes Road south of US-101, the northbound and southbound lanes of Las Virgenes Road north of US-101, the northbound and southbound lanes of Lost Hills Road, the westbound and eastbound lanes of Agoura Road, the westbound lane of Canwood Street, the westbound and eastbound lanes of Thousand Oaks Boulevard, the northbound and southbound lanes of Parkway Calabasas, the westbound lane of Ventura Boulevard, the westbound and eastbound lanes of Calabasas Road, the westbound and eastbound lanes of Park Sorrento, the northbound lane of Park Granada between Calabasas Road and Park Sorrento, and the southbound lane of Park Granada. In addition, Class II bike lanes are located along the northbound and southbound lanes of Las Virgenes Road north and south of US-101, the westbound and eastbound lanes of Agoura Road, the northbound and southbound lanes of Parkway Calabasas south of US-101, the westbound and eastbound lanes of Calabasas Road, and the northbound and southbound lanes of Park Granada.

Existing Transit Service

The Plan Area is served by several public transit providers, including the Los Angeles Department of Transportation (LADOT), the Los Angeles County Metropolitan Transportation Authority (LA Metro), and the City of Calabasas. LADOT Commuter Express Line 423 provides service between Thousand Oaks and downtown Los Angeles and has stops in and near the Plan Area along Calabasas Road at Mulholland Drive, Park Granada, and Parkway Calabasas; at Park Granada/Parkway Calabasas, at Las Virgenes Road/US-101, and along Lost Hills Road and Agoura Road and the US-101. LA Metro Line 161 provides service to Canoga Park, Woodland Hills, Calabasas, Hidden Hills, and Agoura Hills and has stops in and near the Plan Area at Agoura Road/Liberty Canyon and along Calabasas Road at Parkway Calabasas, Park Granada, and Mulholland Drive.

Prior to the COVID-19 pandemic, the City of Calabasas operated a public transit service consisting of one citywide route (Line 1), four peak-hour routes (Line 2 through 5), and a weekend service (Calabasas Trolley) (City of Calabasas 2021a). The shuttle operated Monday through Friday from 6:30 a.m. to 6:00 p.m. The Line 1 Shuttle provides the main route through the city, with a total of

48 stops. Lines 2 through 4 generally operated between 7:00 a.m. and 8:00 a.m. Monday through Friday; 2:00 p.m. to 4:00 p.m. on Mondays, Tuesdays, Thursdays, and Fridays; and 12:30 p.m. to 3:00 p.m. on Wednesdays. Line 5 generally operated between 7:00a.m. and 8:00 a.m. and 3:00 p.m. and 4:00 p.m. Monday through Friday. Lines 2 through 5 primarily connected residential neighborhoods to local schools. The City also operated a trolley service on Saturdays between 10:00 a.m. and 10:00 p.m. The trolley’s service had 24 stops throughout the City. It is expected that the City’s public transit services will resume as normal following the end of the COVID-19 pandemic.

VMT Conditions

On September 27, 2013, Governor Jerry Brown signed SB 743 into law, which initiated a process to change transportation impact analyses completed in support of CEQA documentation. SB 743 provides a new performance metric, Vehicle Miles Traveled (VMT), for determining significant transportation impacts under CEQA. As a result, the State is shifting from measuring a project’s impact to drivers (level of service, LOS) to measuring the impact of driving (VMT) as it relates to achieving State goals of reducing GHG emissions, encouraging infill development, and improving public health through active transportation. Daily VMT is the average vehicle miles traveled per day by the occupants of a dwelling unit or by occupants/visitors to a non-residential use via personal vehicles (for example, cars and trucks; not transit or alternative modes of travel such as cycling or walking). As such, daily VMT encompasses the total of all trips made over a 24-hour period by individual occupants/visitors to and from a specific location and includes all vehicle types (e.g., passenger vehicles, commercial vehicles, trucks, buses). VMT-based measurements and analyses focus on traffic congestion caused by frequency of trips and the length of travel between destinations. The Governor’s Office of Planning and Research (OPR) states that VMT reductions address regional congestion more effectively than LOS standards because they reduce congestion at the source (OPR 2021).

A community will experience far less congestion on its roadways and intersections when homes, workplaces, and shopping destinations are placed in closer proximity to one another and in locations and densities that favor use of transit and alternative travel modes (e.g., bicycling and walking) because the average VMT will be low. Conversely, a community with scattered homes, workplaces, and shopping destinations will tend to not favor use of transit and alternative travel modes and will therefore experience greater congestion on its roadways and intersections.

The City’s baseline VMT values -- for total or overall VMT and for home-based VMT -- is shown in Table 4.13-2. The baseline year of 2021 corresponds to the date of the Notice of Preparation publication for this EIR. The methodology for calculation of baseline VMT is detailed under Section 4.13.3(a), *Methodology and Significance Thresholds*.

Table 4.13-1 Baseline VMT for City of Calabasas (2021)

VMT Metrics		Baseline VMT (2021)
Total VMT	Baseline VMT Per Service Population	42.8
Home-Based VMT	Baseline Home-Based VMT per Capita	20.6

Source: Fehr & Peers 2021 (Appendix C)

4.13.2 Regulatory Setting

State

California Environmental Quality Act

CEQA generally requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of proposed projects, and to reduce those environmental impacts to the extent feasible. CEQA Guidelines Section 15064.3 describes specific considerations for determining a project's transportation impacts. Generally, VMT is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. The criteria used to analyze transportation impacts are included in Section 4.13.3, *Impact Analysis*.

California Senate Bill 743

Senate Bill 743 (SB 743) was signed into law on September 27, 2013 and directed OPR to develop revisions to the CEQA Guidelines to establish new criteria for determining the significance of transportation impacts. SB 743 was enacted, in part, as further implementation of California's Climate Action Plan to meet California Global Warming Solutions Act (Assembly Bill [AB] 32) GHG emission reduction targets. SB 743 seeks to reduce criteria air pollutants and GHG emissions in the transportation sector by reducing VMT. SB 743 changed the approach to transportation impact analysis by establishing measures such as VMT, VMT per capita, or automobile trip generation rates as the primary measures of transportation impacts and eliminates the traditionally used measures of auto delay and congestion, such as Level of Service (LOS), and other measures of traffic congestion as a basis for determining significant impacts.

In December 2018, OPR adopted and promulgated its changes to the CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000 et seq.) in response to SB 743. Section 15064.3 of the CEQA Guidelines contains the operative language for implementing the goals of SB 743 when determining the significance of a project's transportation impacts. There are four key aspects of CEQA Guidelines Section 15064.3 that apply in the case of the proposed project:

1. "[A] project's effect on automobile delay shall not constitute a significant environmental impact" (Section 15064.3[a]).
2. For a land use project like the proposed project, "Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact... Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact" (Section 15064.3[b][1]).
3. "A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure" (Section 15064.3[b][4]).
4. The terms and conditions of Section 15064.3 apply prospectively and a lead agency "may elect to be governed by the provisions of [15064.3] immediately. Beginning on July 1, 2020, the provisions of [15064.3] shall apply statewide" (Section 15064.3[c]).

California Assembly Bill 32, Senate Bill 32, and Senate Bill 375

The “California Global Warming Solutions Act of 2006” (AB 32) outlines California’s major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020, a reduction of approximately 15 percent below emissions expected under a “business as usual” scenario. On September 8, 2016, the governor signed Senate Bill 32 (SB 32) into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged).

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state’s ability to reach AB 32 goals by directing the California Air Resources Board (CARB) to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO’s Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as “transit priority projects”) can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8 percent reduction in per capita GHG emissions from passenger vehicles by 2020 and a 19 percent reduction in per capita GHG emissions from passenger vehicles by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements. On September 3, 2020, the SCAG’s Regional Council formally adopted the 2020-2045 RTP/SCS titled Connect SoCal, which meets the requirements of SB 375.

Local

SCAG 2020 - 2045 RTP/SCS

On September 3, 2020, the SCAG’s Regional Council formally adopted the 2020-2045 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), which is also titled “Connect SoCal.”¹ The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes 10 goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center focused place-making, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020).

LA Metro First Last Mile Strategic Plan

The *First Last Mile Strategic Plan and Planning Guidelines* (2014) (The First Last Mile Plan) outlines an approach for identifying barriers and planning for/implementing improvements for connecting

¹ The 2020-2045 RTP/SCS is found at: <https://scag.ca.gov/read-plan-adopted-final-plan>.

transit services to nearby trip origins (e.g., an individuals' home) and destinations (e.g., an individuals' place of employment). Examples of first/last mile improvements include but are not limited to: pedestrian and bicycle infrastructure, signage and wayfinding, and shared use services (e.g., car share). The First Last Mile Plan developed what is known as "The Pathway," a proposed countywide transit access network designed to enhance transit accessibility. The Pathway is a series of active transportation improvements that connect to and from Metro Rail and Bus Rapid Transit stations.

City of Calabasas General Plan

The Circulation Element of the Calabasas General Plan addresses broad issues of physical mobility -- how goods and people move about within the community. Transportation is one of the most pervasive issues of the General Plan, and is related to land use, community design, air quality, energy consumption, and the City's infrastructure. Moreover, circulation issues are not simply local concerns, but require coordination with regional, state, and federal agencies, as well as adjacent communities. The updated Circulation Element, as part of the General Plan Update, includes the following policies:

- Policy VI-1** Reducing VMT will help reduce adverse impacts to air quality and may also reduce adverse impacts to other sensitive environmental features and improve residents' quality of life.
- Policy VI-2** Limit the intensity and VMT generation of new development in the City to that which would not compromise attainment and/or maintenance of VMT reduction targets.
- Policy VI-3** Where (1) existing or (2) projected VMT at General Plan buildout prevent a project from complying with Policy VI-2 or would otherwise conflict with policies in other elements of this General Plan, limit development to the basic development intensity identified in Table II-1 of the Land Use Element.
- Policy VI-4** Exempt the construction of a single family dwelling on an existing lot designated for single family residential use from the limitations of policies VI-2 and VI-3. The intent of this policy exemption is to allow the owner of a single legally created parcel of land to build a dwelling.
- Policy VI-5** Because transportation capital, operation, and maintenance funds are limited, pursue transportation funding based on the following principles:
- System efficiency enhancements required by new growth are to be paid for by those who generate the need and benefit from them.
 - System efficiency enhancements necessitated by existing development should have needed improvements financed from transportation funds, such as gasoline taxes, Transportation Development Act funds, local transportation sales taxes, etc. Freeway interchange improvements should be coordinated with Caltrans and other appropriate agencies. Where funding sources prove inadequate, roadway funds should be augmented by assessment districts, impact fees, and related funding mechanisms.
 - Existing excess road capacity should not automatically be granted to new users. In cases where existing developments have provided excess roadway capacity in order to serve future development, new development should pay for that

existing capacity or multi-modal infrastructure investments just as it would for new roads.

- To the extent permitted by law, maintenance of the City’s transportation infrastructure should be paid for by road users.
- Pursue funding opportunities to implement programs and projects that contribute to the City’s vision of achieving a livable community.

Policy VI-6 Limit roadway and intersection efficiency enhancement construction to that which will allow maintenance of the integrity of Calabasas' bicycle and pedestrian circulation systems. Prohibit roadway and intersection efficiency enhancements that would create gaps in the area's bicycle and pedestrian circulation systems.

Policy VI-7 Promote the roadway designs that optimize safe traffic flow within established roadway configurations by minimizing turning movements, uncontrolled access, on-street parking, and frequent stops to the extent consistent with the character of adjacent land uses.

Policy VI-8 Aggressively enforce posted speed limits and other traffic laws on all City roadways, particularly those located within or adjacent to residential areas and schools.

Policy VI-9 Discourage cut through traffic between the Ventura Freeway and points south of Calabasas on roadways such as Mulholland Highway, Las Virgenes Road, and Lost Hills Road.

Policy VI-10 Provide adequate levels of maintenance for all components of the circulation system, including roadways, sidewalks, bicycle facilities, and trails.

Policy VI-11 Maintain an adequate supply of parking to support the function of the uses parking serves, and to facilitate transportation demand management programs.

Policy VI-12 Facilitate transportation system efficiency improvements at roads/intersections affected by freeway diversion only to the degree that such improvements would not adversely affect environmental resources and the quality of life for Calabasas residents.

Policy VI-13 Reduce the need for vehicular travel by:

- Establishing and maintaining a comprehensive system of bicycle routes and providing appropriate facilities for bicycle riders
- Supporting the maintenance and responsible expansion of public transit services within Calabasas, including connections between major destinations within the community and the metropolitan area
- Continuing to expand transit options including shuttle services for local travel, shuttle services for major employment centers and expanding dial-a-ride service as needs dictate and funding allows
- Promoting the use of public transit and ride sharing, including on-demand ride-share services, through development of convenient and attractive facilities, including park-and-ride facilities and connections to the regional transit network and designated passenger loading areas for ride-share vehicles (potential park-and-ride facility locations are shown on Figure VI-2 [of the Circulation Element])

- Promoting transportation demand management actions that make the use of commute alternatives more attractive through continued implementation of the City's transportation demand management ordinance
- Promoting mixed use development in certain areas of the City to encourage living and working in the same area, thereby reducing the number and length of vehicle trips

- Policy VI-14** Encourage bicycling by preserving existing bicycle paths, lanes, and routes, and developing new and expanded bicycle facilities that offer direct connections between residential and non-residential areas, in accordance with the Calabasas Bicycle Master Plan.
- Policy VI-15** Ensure that parking for bicycles is available at major destinations to promote bicycle riding for commuting and recreation.
- Policy VI-16** Make the safety and convenience of bicycle riders the primary concern with regard to determining locations for bicycle facilities.
- Policy VI-17** Implement a safe routes to school program to help ensure that students can safely walk or bicycle to and from school.
- Policy VI-18** Promote pedestrian system improvements that create and sustain vibrant and active streets in major places of activity as well as providing direct connections between residential and non-residential areas.
- Policy VI-19** Provide neighborhood streets that are walkable and that contribute to the physical safety and comfort of pedestrians.
- Policy VI-20** Develop an inventory of and plan for implementing needed pedestrian system improvements and possible pedestrian system enhancements.
- Policy VI-21** Require new development in Calabasas to incorporate pedestrian-oriented circulation features, as described in the Community Design Element. Such features should include amenities that make walking not only available, but desirable.
- Policy VI-22** As commercial and mixed use districts redevelop over time, consider re-designing roadways in these areas to improve pedestrian circulation and safety (possible re-design options include, but are not limited to, roadway narrowing, crosswalk enhancements, streetscape treatments that buffer pedestrians from traffic, and widened sidewalks). Re-designs of roadways or intersections should be accomplished only when the re-design would support the City's goal of reducing VMT and would not create unacceptable levels of service or unsafe conditions for vehicular traffic, cyclists, or pedestrians.
- Policy VI-23** Continue to provide and improve access to environmentally friendly and convenient transit options for Calabasas residents and businesses.
- Policy VI-24** Continue to encourage the use of transit through enhanced service, education, development of park-and-ride facilities, and increased public awareness about available transit options.
- Policy VI-25** Require new developments to provide, and/or provide funding for, transit facilities (such as bus shelters and park-and-ride facilities) that ensure access to transit.
- Policy VI-26** Coordinate transit services and programs with all City departments.

Policy VI-27 Provide transit services to support community events that have special mobility needs and have the potential for adverse traffic and parking effects in neighborhoods adjacent to special event venues.

Calabasas Pedestrian and Bicycle Master Plan

The Calabasas Pedestrian and Bicycle Master Plan (2013) includes an inventory of existing bicycling and pedestrian facilities in the Plan Area and identifies key issues and needs related to bicycle and pedestrian facilities. The plan proposes 5.3 miles of new Class II on-street bicycling lanes, 1.9 miles of new Class III signed and marked bicycling routes, and 11.1 miles of inter-jurisdictional improvements as well as several new locations for bicycle parking. In addition, the plan proposes improvements to bicycle facilities on school properties and nearby streets to enhance students' ability to access schools via bicycle. Furthermore, the plan suggests a variety of programs and strategies to support bicycling in Calabasas and improve accessibility, maintenance, safety, and education related to bicycling. The City is also currently participating in a regional effort to improve cycling options and safety through input to the Las Virgenes/Malibu Council of Governments Bike Plan (City of Calabasas 2021b).

4.13.3 Impact Analysis

Methodology and Significance Thresholds

Vehicle Miles Traveled Analysis

VMT generated under existing conditions, baseline conditions, and under the proposed project conditions were calculated to analyze potential VMT impacts of the proposed project in accordance with SB 743. The SCAG RTP/SCS trip-based model is a travel demand model with socioeconomic and transportation network inputs, such as population, employment and the regional and local roadway network. The model outputs several travel behavior metrics, such as vehicle trips and trip lengths, that can be used to calculate VMT. The SCAG RTP/SCS trip-based model was used to estimate the baseline VMT for the City of Calabasas, shown in Table 4.13-1 in Section 4.13.1, *Setting*. The current 2016 SCAG model has 2012 as the base year and 2040 as the forecast year.

This baseline VMT methodology includes vehicle trips within the SCAG model to generate the following metrics that are applicable to the Housing Element Update:

1. Total VMT per Service Population: The total VMT to and from all zones in the city are divided by the total service population, which includes population and employment, to get the efficiency metric of VMT per service population.
2. Home-Based VMT per Capita: Home-based vehicle trips are traced back to the residence of the trip-maker (non-home-based trips are excluded) and then divided by the residential population within the city. This metric is used to estimate VMT for residential land uses.

The SCAG RTP/SCS model was also used to estimate the VMT associated with the proposed General Plan Update. The number of new housing units for each of the 12 housing opportunity sites along with the corresponding population growth was added to the base year (2012) and future year (2040) versions of the SCAG model. The SCAG model inputs were also updated to account for the change in land use that would occur on each opportunity site. For each site, the amount and type of commercial uses with the General Plan Update were compared to the existing land uses, and any increase or decrease in commercial square footage and employment were accounted for in the

SCAG model runs. The SCAG model outputs were used to estimate the VMT for the General Plan Update's horizon year of 2029. Because the Housing Element Update is a long-term plan being analyzed programmatically, the total amount of home-based VMT per capita generated collectively for all 12 opportunity sites was also estimated. The total amount of home-based VMT per capita generated by all sites collectively was calculated and then compared to the City baseline VMT to evaluate the significance of project impacts.

Significance Thresholds

Impacts related to transportation would be potentially significant if the General Plan Update would:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
2. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or,
4. Result in inadequate emergency access.

SB 743 directed OPR to “prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed revisions to the guidelines adopted pursuant to Section 21083 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas... Upon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion within a transit priority area, shall not support a finding of significance pursuant to this division...”

On January 20, 2016, OPR published “Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA.” In this update, the evaluation of VMT was recognized as “generally the most appropriate measure of transportation impacts.” On November 2017, OPR proposed a new section, CEQA Guidelines Section 15064.3, to help determine the significance of transportation impacts. The purpose of this section is to describe specific elements for considering the transportation impacts of a given project given the use of VMT as the primary measurement. This section was updated in July 2018 and finalized in December 2018 with criteria for analyzing transportation impacts, those of which are shown below.

Per CEQA Guidelines Section 15064.3(c), “a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide.” LOS is no longer an acceptable metric for analyzing transportation impacts under CEQA; therefore, this issue is not discussed in this EIR.

VMT SIGNIFICANCE THRESHOLDS

The City of Calabasas has prepared Local Transportation Study Guidelines (2021) regarding VMT impact analysis but has not yet formally adopted its own VMT impact threshold for determining whether proposed projects would have a VMT impact. However, the City's Local Transportation Study Guidelines (2021) recommend that projects with VMT that exceeds a level of 15 percent below the baseline VMT be considered to have a significant VMT impact. This threshold is consistent with OPR's recommendation in its *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018), which states, “Achieving 15 percent lower per capita (residential) or per employee (office) VMT than existing development is both generally achievable and is supported by evidence that

connects this level of reduction to the State’s emissions goals.” Therefore, for the purposes of this analysis, the City of Calabasas has identified a threshold of a 15-percent reduction from baseline VMT as an appropriate threshold to apply to the proposed General Plan update. If the project would generate VMT higher than the threshold, it would be expected to have a VMT impact, and if the project would generate VMT lower than the threshold, then it would not be expected to have a VMT impact. Table 4.13-2 presents the City’s VMT impact thresholds.

Table 4.13-2 Baseline VMT for City of Calabasas (2021)

VMT Metrics		Baseline VMT (2021)	VMT Impact Threshold (2021) ¹
Total VMT	Baseline VMT Per Service Population	42.8	36.4
Home-Based VMT	Baseline Home-Based VMT per Capita	20.6	17.5

¹ The VMT impact threshold for each VMT metric is 15 percent below the respective baseline VMT.
 Source: Fehr & Peers 2021 (Appendix C)

In addition, according to OPR guidance, a project that is below the VMT impact thresholds and therefore does not have a VMT impact under baseline conditions would also not have a cumulative impact as long as it is aligned with long-term State environmental goals, such as reducing greenhouse gas emissions, and relevant plans, such as the SCAG RTP/SCS (Fehr and Peers 2021; Appendix C).

Threshold 1: Would the General Plan Update conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact T-1 THE GENERAL PLAN UPDATE WOULD NOT CONFLICT WITH A PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE AND PEDESTRIAN FACILITIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The four primary plans that address the circulation system in the Plan Area are the SCAG 2020-2045 RTP/SCS, the LA Metro First Last Mile Strategic Plan, the City of Calabasas General Plan, and the Calabasas Pedestrian and Bicycle Plan. Each of these plans addresses various modes of transportation, including vehicles, bicycles, pedestrian, and transit and includes objectives and policies related to these modes of transportation. These plans are detailed in Section 4.13.2, *Regulatory Setting*.

Construction

During construction of reasonably foreseeable development, there would be a temporary increase in heavy truck trips and construction worker vehicle trips on the existing regional and local roadway network in the Plan Area. Construction-related trips would consist primarily of passenger cars and light duty pickup trucks used by construction workers, haul truck trips to export soil from the proposed housing sites, and occasional movement of heavy equipment and materials to and from the construction sites. Construction traffic would likely utilize US-101 and arterial roadways to access the proposed housing sites; however, construction equipment and materials would primarily be staged on each construction site. Nevertheless, construction activities may temporarily alter the movement of vehicles, public transit, bicycles, and/or pedestrians within the Plan Area due to slow

vehicle speeds and possible temporary lane closures. However, project applicants for reasonably foreseeable future development would be required to coordinate with the City's Department of Public Works for temporary lane closures, to identify appropriate detours and timing, and to minimize impacts to the overall circulation network (including bicycle and pedestrian facilities). Due to the temporary nature of construction traffic, the existing high volumes of traffic on US-101 and arterial roadways in the Plan Area, and required coordination with the City for possible temporary lane closures, construction traffic associated with reasonably foreseeable development under the proposed project would not have the potential to interfere with or obstruct the implementation of plans related to the circulation network, such as the SCAG 2020-2045 RTP/SCS, the LA Metro First Last Mile Strategic Plan, the City of Calabasas General Plan, and the Calabasas Pedestrian and Bicycle Plan. Impacts would be less than significant.

Operation

Reasonably foreseeable development would not include design features that would interfere with or obstruct existing plans to improve the circulation network, including transit, roadway, bicycle, and pedestrian facilities. In addition, reasonably foreseeable development would be required to implement necessary circulation system improvements based on the results of individual traffic studies prepared for each project, which would serve to enhance the circulation network. In addition, reasonably foreseeable development would be required to comply with the standards contained in CMC Chapter 17.20.020 related to medians, intersection improvements, on-street parking, sidewalks, and bicycle facilities. Furthermore, associated circulation improvements (if necessary) for reasonably foreseeable development would be required to undergo review by the City's Community Development Department and Public Works Department for consistency with the policies of the City's General Plan and the standards of the CMC prior to project construction. Individual projects would also be subject to review by the City's Traffic and Transportation Commission where warranted. These review processes would minimize the potential for the conflicts with the circulation system. Therefore, operation of reasonably foreseeable development under the proposed project would not have the potential to interfere with or obstruct the implementation of plans related to the circulation network, such as the SCAG 2020-2045 RTP/SCS, the LA Metro First Last Mile Strategic Plan, the City of Calabasas General Plan, and the Calabasas Pedestrian and Bicycle Plan. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 2: Would the General Plan Update conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
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Impact T-2 THE GENERAL PLAN UPDATE WOULD RESULT IN A LESS THAN SIGNIFICANT VMT IMPACT UNDER EXISTING AND CUMULATIVE CONDITIONS.

Given that the primary change in land use with the Housing Element Update is the addition of new housing units in the city, the VMT analysis focuses on the residential home-based VMT per capita for each opportunity site. Of the 12 housing opportunity sites, nine of the sites are located in a low VMT area, which is defined as an area with residential home-based VMT per capita that is 15 percent or more below the City baseline. These nine housing sites include 86 percent of the total number housing units, which means 86 percent of housing units in the General Plan Update are in a low

VMT area. Table 4.13-3 shows the collective residential home-based VMT per capita estimate for the proposed General Plan Update. As shown therein, the housing sites proposed in the General Plan Update are expected to generate 16.8 home-based VMT per capita, which is approximately 18 percent below the citywide baseline of 20.6 home-based VMT per capita. Therefore, reasonably foreseeable development under the General Plan update would collectively generate home-based VMT per capita that is more than 15 percent below the City baseline. Therefore, impacts related to VMT would be less than significant.

Table 4.13-3 Total Home-Based VMT for Proposed General Plan Update

Proposed General Plan Update Home-Based VMT per Capita	City Baseline Home-Based VMT per Capita (2021)	Net Change in VMT per Capita
16.8	42.8	36.4

Source: Fehr & Peers 2021 (Appendix C)

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 3: Would the General Plan Update substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Impact T-3 THE GENERAL PLAN UPDATE WOULD NOT SUBSTANTIALLY INCREASE HAZARDS DUE TO A DESIGN FEATURE (E.G. SHARP CURVES OR DANGEROUS INTERSECTIONS) OR INCOMPATIBLE USES (E.G. FARM EQUIPMENT). NO IMPACT WOULD OCCUR.

The General Plan Update would facilitate the development of additional residential units in the Plan Area. The types of vehicle traffic generated by residential land uses would be compatible with that generated by existing residential and commercial development in the Plan Area. In addition, reasonably foreseeable development would be required to comply with the standards contained in CMC Chapters 17.20.020 and 17.28.080 related to the number and location of driveway access points, the width and length of driveways, medians, access grades, sight distance, driveway clearance from appurtenances, intersection improvements, on-street parking, sidewalks, and bicycle facilities. Furthermore, future site plans and associated circulation improvements (if necessary) would be required to undergo review for safety by the City’s Community Development Department and Public Works Department, and by the Los Angeles County Fire Department prior to project construction. Individual projects would also be subject to review by the City’s Traffic and Transportation Commission where warranted. These review processes would evaluate future projects’ geometric design features, if any, and minimize the potential for the creation of safety hazards. Therefore, given the nature of the General Plan Update and required compliance with existing standards and review processes, the General Plan Update would not substantially increase hazards due to a geometric design feature or incompatible use(s). No impact would occur.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 4: Would the General Plan Update result in inadequate emergency access?

Impact T-4 THE GENERAL PLAN UPDATE WOULD NOT RESULT IN INADEQUATE EMERGENCY ACCESS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The General Plan Update would facilitate the development of additional residential units in the Plan Area. The on-site circulation systems and parking for reasonably foreseeable development would connect to the City's existing circulation network and would not include construction of features that would impede emergency access. In addition, as discussed under Impact T-3, reasonably foreseeable development would be required to comply with the standards contained in CMC Chapters 17.20.020 and 17.28.080 related to the number and location of driveway access points, the width and length of driveways, medians, access grades, sight distance, driveway clearance from appurtenances, intersection improvements, and on-street parking. Furthermore, future site plans and associated circulation improvements (if necessary) would be required to undergo review for safety by the City's Community Development Department and Public Works Department, and by the Los Angeles County Fire Department prior to project construction. Individual projects would also be subject to review by the City's Traffic and Transportation Commission where warranted. These review processes would evaluate the design of future projects' emergency access schematics, which would minimize the potential for the creation of inadequate emergency access.

Furthermore, as detailed in Section 4.15, *Wildfire*, an Emergency Evaluation Assessment was prepared for the Housing Element Update in July 2021 by Fehr & Peers (Appendix C). The evaluation assessed capacity during an emergency evacuation event, assuming complete evacuation of Calabasas, which may occur during a wildfire. Seven roadway segments were analyzed that would be used to access US-101 from the proposed housing sites. The roadway segments included:

- Lost Hills Road from Canwood Street to US-101 Northbound On-Ramp
- Lost Hills Road from Agoura Road to US-101 Southbound On-Ramp
- Las Virgenes Road from Agoura Road to US-101 Southbound On-Ramp
- Parkway Calabasas, North of Ventura Boulevard
- Parkway Calabasas, South of Calabasas Road
- Calabasas Road, Between Parkway Calabasas and Civic Center

Citywide evacuation access was determined by reviewing the vehicle travel demand on each roadway during an evacuation event. It was assumed that access to the south was not available and that all land uses in the City would need to evacuate toward US-101. The City was further separated into five evacuation areas based on topography and access to day roadways to US-101. The five evacuation areas included:

- Northwest: vehicles would travel southbound on Las Virgenes Road and Lost Hills Road
- Southwest: vehicles would travel northbound on Las Virgenes Road and Lost Hills Road
- Northeast: vehicles would travel southbound on Parkway Calabasas
- Central: vehicles would travel northbound on Parkway Calabasas
- Southeast: vehicles would travel northbound on Mulholland Drive

As described in additional detail in Section 4.15, *Wildfire*, and Appendix C, both employee and household evacuation were analyzed for the General Plan Update. Using this approach, total vehicle demand for Calabasas during an evacuation event was determined to be 40,557 vehicles. The

General Plan Update is anticipated to add approximately 2,640 vehicles to City roadways during an evacuation event, which is an approximately seven percent increase from existing (2021) conditions.

The travel demand during an evacuation event was then compared to the roadway capacity for the seven roadway segments that would provide access to US-101. The total evacuation travel demand assumes that two-thirds of the evacuation would occur during a one-hour period based on consultation with public safety experts. The impact of reasonably foreseeable development under the General Plan Update on congestion during an evacuation event is detailed in Table 4.13-4. As shown therein, the General Plan Update is projected to increase evacuation demand by approximately five percent in the northwest area, seven percent in the southwest area, eight percent in the central area, and 24 percent in the northeast area. None of the proposed housing sites are located in the southeast area; therefore, this area was not analyzed. The large percent change in the northeast area is because the existing evacuation demand only accounts for the land uses in the City's sphere of influence and not the additional development that is located to the north. As shown in Table 4.13-4, with the General Plan Update, the increased evacuation demand would increase the volume-to-capacity (V/C) ratio² for the study roadways by 0.05 in the northwest area, 0.13 in the southwest area, between 0.07 and 0.21 in the Central area, and 0.38 in the northeast area. Roadway segments that exceed a V/C of 1.0 indicate that the evacuation demand would exceed the roadway capacity, and therefore, it would take vehicles more than one hour to evacuate. Therefore, traffic from buildout of the General Plan Update would be minor compared to existing conditions in the Plan Area. As a result, additional traffic volumes associated with the General Plan Update would not have a significant impact on the transportation system that would result in inadequate emergency access during an evacuation event.

² The V/C ratio is a measure of delay at an intersection. For intersections where vehicular volumes are at or near capacity and/or intersection operations are inefficient, drivers can experience greater congestion and longer vehicle delays, which equate to higher V/C ratios.

Table 4.13-4 Evacuation Analysis

Roadway	Roadway Capacity	Existing Conditions – Typical Weekday Peak Hour Volume ¹	Existing Conditions – Evacuation Demand (vehicle per hour)	Existing Conditions – Evacuation Roadway Operations (V/C)	General Plan Update – Evacuation Demand	General Plan Update – Evacuation Roadway Operations (V/C)	Change in Evacuation Demand	Percent Change in Evacuation Demand	Change in Evacuation Roadway Operations (V/C)
Northwest Evacuation Area									
Lost Hills Road from Canwood Street to US-101 NB On-ramp	1,900	810	1,501	0.79	1,601	0.84	101	7%	0.05
Las Virgenes Road from Mureau Road to US-101 NB On-ramp	1,900	1,480	2,372	1.25	2,464	1.30	92	4%	0.05
Total	3,800	2,290	3,873	1.02	4,065	1.07	192	5%	0.05
Southwest Evacuation Area									
Lost Hills Road from Agoura Road to US-101 SB On-ramp	1,900	990	3,344	1.76	3,587	1.89	243	7%	0.13
Las Virgenes Road from Agoura Road to US-101 SB On-ramp	1,900	2,070	3,344	1.76	3,587	1.89	243	12%	0.13
Total	3,800	3,060	6,688	1.76	7,173	1.89	485	8%	0.13
Central Evacuation Area									
Parkway Calabasas, South of Calabasas Road	2,850	900	8,342	2.93	8,959	3.14	618	7%	0.21
Calabasas Road, Between Parkway Calabasas and Civic Center	1,900	750	1,058	0.56	1,189	0.63	131	12%	0.07
Total	4,750	1,650	9,399	1.98	10,148	2.14	749	8%	0.16
Northeast Evacuation Area									
Parkway Calabasas, North of Ventura Boulevard	950	900	1,472	1.55	1,830	1.93	358	24%	0.38
Total	950	900	1,472	1.55	1,830	1.93	358	24%	0.38

Roadway	Roadway Capacity	Existing Conditions – Typical Weekday Peak Hour Volume ¹	Existing Conditions – Evacuation Demand (vehicle per hour)	Existing Conditions – Evacuation Roadway Operations (V/C)	General Plan Update – Evacuation Demand	General Plan Update – Evacuation Roadway Operations (V/C)	Change in Evacuation Demand	Percent Change in Evacuation Demand	Change in Evacuation Roadway Operations (V/C)
Southeast Evacuation Area									
Mulholland Drive, South of Avenue San Luis ²	NA	NA	NA	NA	NA	NA	NA	NA	NA

V/C = volume-to-capacity ratio

¹ The peak hour count for each segment reflects the highest observed volume in a 24-hour period for a typical weekday in fall 2019.

² Mulholland Drive was not analyzed as this roadway is outside of the Plan Area. Furthermore, there are no housing sites proposed for the Southeast Evacuation Area; therefore, an analysis of the impacts of the General Plan Update on this evacuation area is not necessary.

Source: Appendix C

Additionally, proposed housing sites would be located close to major arterials. Table 4.13-5 summarizes the proposed housing sites, the closest arterial that would be used for evacuation, and the distance to the arterial.

Table 4.13-5 Distance to Arterials for Evacuation

Proposed Housing Site	Potential Housing Units	Additional Residents	Closest Arterial	Distance (feet)
Raznick Offices	42	114	MHD	3,619
Rancho Pet Kennel	60	163	VFW	2,677
Cruzan Parking Lot	88	238	VFW	1,916
Old Town Vacant Lot	43	117	MHD	1,417
Las Virgenes Shopping Center	41	111	LVR	0
Church in the Canyons	111	301	LVR	94
Downtown Offices	60	163	VFW	1,201
Avalon Apartments	142	385	LVR	0
Agoura Road Offices	125	339	LVR	1,108
Mureau Offices	64	173	LVR	615
Commons Shopping Center	201	545	VFW	2,534
Craftsman Corner	236	640	VFW	703

Source: TSS Consultants 2021, Appendix E

VFW = Ventura Freeway, LVR = Las Virgenes Road, MDH = Mulholland Highway

As show in Table 4.13-5, all proposed housing sites are within a mile of an already defined evacuation route included in the City’s evacuation planning documents, as described under Section 4.15.2, *Local Regulations*, in Section 4.15, *Wildfire*. In the event of the most dangerous type of wildfires, one occurring from prevailing south winds and approaching the City over the heavily wooded landscapes at the southern edges of the Plan Area, none of the proposed housing sites would be cut off from using the defined evacuation routes and US-101 evacuation system. If all sites were to be evacuated in a single event, instead of phased evacuation to avoid congestion, the General Plan Update would contribute to less than 1,400 vehicle miles traveled (Appendix C). Policy VII-50 of the General Plan Update would also require designated shelter-in-place zones during a wildfire. These zones would reduce the overall congestion on area roadways during evacuation since some individuals may choose to shelter-in-place. Therefore, buildout associated with the General Plan Update would not substantially alter or otherwise interfere with public rights-of-way, and individual projects would provide adequate and multiple internal ingress and egress for necessary emergency response vehicles.

Furthermore, the Safety Element of the 2030 General Plan directs the City to accommodate safety needs when planning and designing, while increasing the resiliency of the City’s residents and businesses to respond to and be prepared for potential emergencies and disasters. The Safety Element Update included as part of the General Plan Update addresses new state requirements pertaining to climate change, wildfire risk, and evacuation routes for residential neighborhoods. Related objectives and policies are listed below.

Objective VII.F. Maintain a system of emergency services and disaster response preparedness that will save lives, protect property, and facilitate recovery with a minimum of social disruption following both minor emergencies and major catastrophic events

- Policy VII-39.** Maintain and update the City's Emergency Operations Plan every 8 years at a minimum to account for all types of emergencies consistent with the Standardized Emergency Management System (SEMS).
- Policy VII-50** Maintain and update an Evacuation Plan every 8 years at a minimum to account for all types of emergencies.
- a. Develop and employ evacuation alternatives and/or alternative emergency access routes in neighborhoods that have single ingress/egress.
 - b. Develop and maintain evacuation options for residents with mobility challenges.
 - c. Designate and publicize evacuation routes; include existing pedestrian pathways.
 - d. Designate safety zones or shelter-in-place locations as places of refuge when evacuation routes become blocked.
- Policy VII-51** Require new development to provide adequate access (ingress, egress) and a minimum of two roadways with widths and lengths in compliance with California Building Code Chapter 7A requirements.
- Policy VII-52** Prioritize undergrounding of utilities for designated routes to make them more reliable.
- Policy VII-53** Conduct regular evacuation trainings with single-access community HOAs and residents; encourage residents in single-access communities to maintain emergency supplies for at least 3 days.
- Policy VII-54** Maintain emergency roadways and improve them as necessary and appropriate to ensure ongoing serviceability
- Policy VII-55** Establish higher standards of defensible space for residential neighborhoods/higher priority targets for enforcement.
- Policy VII-56** Future roadway design, especially in areas that have less accessibility and on key evacuation routes, should consider evacuation capacity and consider design treatments such as painted medians (instead of raised medians) or other treatments that could assist in creating reversible lanes and facilitate additional capacity in an evacuation event scenario.
- Policy VII-57** Evacuation event signal timing should be periodically reviewed and updated to provide additional evacuation capacity. Incorporate Caltrans in the City's emergency operations center protocol to develop emergency evacuation signal timing for freeway on and off-ramps.
- Policy VII-58** Continue coordinating with nearby jurisdictions, the Las Virgenes-Malibu Council of Governments (LVMCOG) and Los Angeles County Office of Emergency Management on developing strategies to address freeway congestion on the US-101 freeway which functions as the main evacuation route in the region.

Policy VII-59 Consider the needs of vulnerable populations in the city, such as senior housing facilities and schools, and others without access to a personal vehicle in City evacuation plans.

Therefore, given the nature of the project, the results of the Emergency Evaluation Assessment, Safety Element Update policies, and required compliance with existing standards and review processes, the General Plan Update would not result in inadequate emergency access. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.13.4 Cumulative Impacts

The geographic scope of potential cumulative transportation impacts is the Plan Area and surrounding region. This geographic scope is appropriate for evaluating transportation impacts because it includes the regional and local transportation network that would primarily be impacted by reasonably foreseeable development associated with the General Plan Update.

Similar to reasonably foreseeable development facilitated by the General Plan Update, cumulative development would be required to implement necessary circulation system improvements based on the results of individual traffic studies prepared for each project, which include evaluations of cumulative traffic impacts. In addition, cumulative development would be required to comply with the standards contained in CMC Chapter 17.20.020, and associated circulation system improvements (if needed) would be required to undergo review by the City's Public Works Department for consistency with the policies of the City's General Plan and the standards of the CMC prior to project construction, and individual projects would also be subject to review by the City's Traffic and Transportation Commission where warranted. These review processes would minimize the potential for the conflict with the circulation system. Therefore, no cumulative impacts to the circulation system would occur.

The proposed General Plan Update would facilitate new housing units and induce changes in commercial and employment uses in the city (with an emphasis on mixed commercial and residential developments as well as housing site placements in close proximity to existing shopping and employment centers and transit points of access). The cumulative VMT analysis estimates the change in total VMT resulting from these land use changes and is represented through the metric of total VMT per service population. The cumulative VMT estimates also reflect the potential development of 96 ADUs in the city under the General Plan Update. Table 4.13-6 compares the City's baseline VMT to the VMT forecast for Year 2029 with and without the proposed Housing Element Update. The total VMT per service population in 2029 with the Housing Element Update decreases in comparison to the city baseline (2021) and decreases in comparison to the future year (2029) without the Project. Given that the total VMT per service population is forecasted to decrease with the Housing Element Update, the additional housing units and changes in land uses being proposed will help the city to decrease VMT generated on a per capita basis over time.

Table 4.13-6 Cumulative VMT Analysis

Citywide Total VMT for Baseline Year (2021)	Future Year (2029) No Project Total VMT	Future Year (2029) with Housing Element Total VMT	Net Change in VMT per Capita from Baseline	Net Change in Total VMT per Capita from Future (2029) No Project Scenario
42.8	42.8	42.3	-4%	-2%

Source: Fehr & Peers 2021 (Appendix C)

According to OPR guidance, a project that is below the VMT impact thresholds and does not therefore have a VMT impact under baseline conditions also would not result in a cumulative impact as long as the project is aligned with long-term State environmental goals, such as reducing greenhouse gas emissions, and relevant plans, such as the SCAG RTP/SCS. Therefore, since the General Plan Update would generate home-based VMT per capita that is more than 15 percent below the City’s baseline, reduce total VMT per service population in the city under future (2029) conditions, and provide the housing required to meet State and regional needs, the General Plan Update would not result in a cumulative VMT impact.

4.14 Utilities and Service Systems

This section of the EIR identifies and evaluates issues related to utilities and service systems in the context of the General Plan Update. It describes the physical and regulatory setting, the criteria used to evaluate the significance of potential impacts, the methods used to evaluate these impacts, and the results of the impact analysis.

4.14.1 Setting

The following section describes the existing setting with respect to water, wastewater, stormwater, solid waste, electric power, natural gas, and telecommunications facilities.

Water Sources, Supply, Demand, and Distribution

Water Sources

The Plan Area receives water from the Las Virgenes Municipal Water District (LVMWD), which provides water service to Calabasas, Agoura Hills, Hidden Hills, and Westlake Village as well as various unincorporated areas. The LVMWD serves a population of over 75,000 residents across a 122-square-mile area (LVMWD 2021a).

The LVMWD obtains its water through the following sources:

- **The Metropolitan Water District of Southern California (Metropolitan).** Metropolitan provides supplemental water to southern California from northern California via the State Water Project (SWP) and from the Colorado River via the Colorado River Aqueduct. Metropolitan is comprised of 26-member public agencies that provide water to more than 19 million people in Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. All member agencies use and develop local water supplies as much as possible to meet demand and purchase the remainder from Metropolitan when necessary (Metropolitan 2020). The LVMWD is one of Metropolitan's member agencies. Currently, the configuration of Metropolitan's distribution system allows LVMWD to receive solely SWP water originating from northern California through the Sacramento-San Joaquin Bay-Delta (LVMWD 2021b).
- **City of Simi Valley/Ventura County Waterworks District and City of Los Angeles Department of Water and Power.** The LVMWD receives a small amount of treated imported water from the City of Simi Valley/Ventura County Waterworks District 8 and Ventura County Waterworks District 17. On average, these supplies account for less than one percent of LVMWD's potable water deliveries. Interconnections with these agencies provide potable water to two small areas in the hills west of the San Fernando Valley - Woolsey Canyon and Box Canyon. These areas are geographically isolated and are currently not connected to the rest of the LVMWD distribution system (LVMWD 2021b). In addition, LVMWD only purchases water supplied by the City of Los Angeles Department Water and Power during times of Metropolitan system outages. Although this water would not be accessible to residents of Calabasas and is therefore not discussed in detail in this analysis, it is included in the tables below to provide an accurate estimate of the projected water supply for LVMWD for comparison against the projected water demand because unlike supply, the water demand is not disaggregated by supply source.
- **Groundwater.** Due to its poor quality, groundwater in the LVMWD service area is currently only used to supplement the recycled water system at the Tapia Water Reclamation Facility (TWRF). Groundwater is extracted from the Thousand Oaks Area Groundwater Basin, which underlies a

valley between Lake Sherwood and Thousand Oaks in southeastern Ventura County and western Los Angeles County. The basin is bounded by the Santa Monica Mountains, which contain semi-permeable soils. The valley is drained by Conejo Creek and Triunfo Canyon. The basin has an estimated storage capacity of 130,000 AF (California Department of Water Resources [DWR] 2004). Groundwater from the Thousand Oaks Area Basin water is extracted by two groundwater wells known as the Westlake Wells (LVMWD 2021b). Groundwater is conveyed from these wells via the wastewater conveyance system and mixed with treated effluent from the TWRP to meet peak demands for recycled water.

- **Las Virgenes Reservoir.** A small portion of LVMWD’s water supply comes from surface runoff to Las Virgenes Reservoir, which is a reservoir used by LVMWD to store imported water supplies. While the reservoir's watershed area does not supply a significant source of water in most years, it is estimated that sufficient runoff is typically produced to offset evaporative losses. Due to the uncertainties of runoff volumes and minimal contribution to overall water supplies, this runoff is not accounted for in LVMWD supply estimates.
- **Recycled Water.** LVMWD jointly owns and operates a recycled water system with Triunfo Sanitation District (TSD) and Calleguas Municipal Water District. The system begins at the TWRP where wastewater is treated to a tertiary level to allow for distribution for non-potable uses. During periods of peak demand, tertiary effluent is mixed with groundwater extracted from the Thousand Oaks Area Basin and imported water. Recycled water is used in the LVMWD service area almost exclusively for landscape and golf course irrigation with a minor quantity used for various commercial uses (LVMWD 2021b). Existing recycled infrastructure includes a series of pipelines, pump stations, tanks, reservoirs, and associated appurtenant structures throughout the LVMWD service area.

Water Supply and Demand

In 2020, the LVMWD supplied approximately 20,817 acre-feet (AF) of imported water from Metropolitan, Ventura County Waterworks Districts 8 and 17, and the City of Los Angeles. In addition, approximately 299 AF of groundwater and approximately 5,892 AF of recycled water were supplied to the service area for non-potable use (LVMWD 2021b). The residential sector accounts for an average of 83 percent of total water use (76 percent for single-family residences and 7 percent for multi-family residences), while the commercial, landscape, and other sectors account for the remaining 17 percent of use (LVMWD 2021b).¹

The LVMWD projects in its 2020 Urban Water Management Plan (UWMP) that annual water demand for the service area will be 26,539 acre-feet per year (AFY) in 2040 under normal year conditions, which includes potable and recycled water (LVMWD 2021b). Table 4.14-1 through Table 4.14-3 show forecast water supplies under normal, single dry year, and multiple dry year conditions. The LVMWD projects that, under non-drought conditions, water supplies will increase to 26,539 AFY by 2040 (see Table 4.14-1). The minimum available annual water supply for a scenario involving multiple dry years is estimated at 28,872 AF in 2040, as shown in Table 4.14-3 (LVMWD 2021b). The LVMWD planned supply accommodates the projected demand for the service area under both normal, single year, and multiple year drought conditions. In addition to the LVMWD’s UWMP, Metropolitan prepared a 2015 UWMP that indicates that Metropolitan anticipates providing reliable water supplies to its member agencies under both normal year, dry year, and multiple dry year conditions (Metropolitan 2016).

¹ Other sectors include potable water supplements to the recycled water system and construction and fire services.

Table 4.14-1 LVMWD Normal Year Supply and Demand Comparison (AFY)

Sources	2025	2030	2035	2040	2045
Purchased or Imported Water	19,190	17,146	18,263	19,444	20,692
Supply from Storage	0	3,100	3,100	3,100	3,100
Recycled Water	3,995	3,995	3,995	3,995	3,995
Total Existing Supplies	23,185	24,241	25,358	26,539	27,787
Demand	23,185	24,241	25,358	26,539	27,787
Total Surplus	0	0	0	0	0

Source: LVMWD 2021b

Table 4.14-2 LVMWD Single Dry Year Supply and Demand Comparison (AFY)

Sources	2025	2030	2035	2040	2045
Supplies	25,488	26,298	27,549	28,872	30,270
Demand	25,488	26,298	27,549	28,872	30,270
Total Surplus	0	0	0	0	0

Source: LVMWD 2021b

Table 4.14-3 LVMWD Multiple Dry Year Supply and Demand Comparison (AFY)

Sources	2025	2030	2035	2040	2045
First Year					
Supplies	25,488	26,298	27,549	28,872	30,270
Demand	25,488	26,298	27,549	28,872	30,270
Total Surplus	0	0	0	0	0
Second Year					
Supplies	25,488	26,298	27,549	28,872	30,270
Demand	25,488	26,298	27,549	28,872	30,270
Total Surplus	0	0	0	0	0
Third Year					
Supplies	25,680	26,470	27,732	29,066	30,477
Demand	25,680	26,470	27,732	29,066	30,477
Total Surplus	0	0	0	0	0
Fourth Year					
Supplies	25,680	26,470	27,732	29,066	30,477
Demand	25,680	26,470	27,732	29,066	30,477
Total Surplus	0	0	0	0	0
Fifth Year					
Supplies	25,872	26,642	27,915	29,261	30,684
Demand	25,872	26,642	27,915	29,261	30,684
Total Surplus	0	0	0	0	0

Source: LVMWD 2021b

Water Distribution System

The LVMWD operates two water distribution systems: the potable water distribution system and the recycled water distribution system. The LVMWD maintains three connections to the Metropolitan system, receiving imported supplies on its eastern side and then distributing it to its customers through the potable water distribution system. LVMWD maintains three connections to the MWD system, and prior to delivery to the LVMWD, imported water is treated at Metropolitan's Jensen Treatment Facility in Granada Hills to ensure that all water quality standards are met (LVMWD 2021b). The LVMWD's potable water distribution system includes 25 storage tanks, 24 pump stations, and nearly 400 miles of pipelines. LVMWD's recycled water distribution system consists of 62 miles of pipelines, three storage tanks, three open reservoirs, and four pump stations (LVMWD 2021b). LVMWD is also served by two emergency connections provided by the Los Angeles Department of Water and Power that are used during planned and unplanned Metropolitan outages.

The LVMWD also owns and operates the Las Virgenes Reservoir, located just south of Westlake Village. This potable water reservoir has a total capacity of 9,500 AF and provides storage to balance differences between seasonal supply and demands. This reservoir is filled with imported water, which is withdrawn and replenished as needed. In the low demand season, the LVMWD puts water into the reservoir, while in the high demand season LVMWD draws upon the reservoir to meet the increased demands (LVMWD 2021b). Water withdrawn from the reservoir is treated at the Westlake Filtration Plant, which is rated for 15 million gallons per day (mgd) and typically operates during periods of peak demand in the summer. The total volume of the reservoir typically fluctuates by several hundred to more than 1,000 AF each year. Since its creation, the reservoir has remained at a volume of approximately 7,300 AF, but occasionally drops below 4,000 AF during dry months and reaches over 9,000 AF when recharge water is purchased from Metropolitan (LVMWD 2021b).

Wastewater Collection and Treatment

The City's Public Works Department is responsible for managing the City's wastewater collection system. The system consists of approximately 64.2 miles of gravity sewer lines and two pump stations. Most of the collection system was constructed in the 1970s. The City's local sewer collection system discharges into the LVMWD's trunk sewer links for conveyance to the TWRP. The LVMWD is responsible for wastewater treatment in Calabasas, which it accomplishes through joint ownership and operation of the TWRP with the TSD. The TWRP treats and recycles wastewater generated in Calabasas. In addition, certain areas within Calabasas are on private septic systems, including portions of Calabasas Highlands, Saint Andrews Lane and Turtle Creek Road located west of Mulholland Highway, Dry Canyon Cold Creek Road and the connector roads Dorothy Road, Valdez Road, and Canyon Drive, Old Topanga Canyon Road between Mulholland Highway and Mulholland Drive and Black Bird Way, and Hummingbird Way (City of Calabasas 2019).

The TWRP was initially constructed in 1965 with an initial capacity of 0.5 mgd. The plant is located on Malibu Canyon Road at the southern edge of LVMWD's wastewater service area and provides primary, secondary, and tertiary treatment for wastewater contributed by both LVMWD and TSD from their respective service areas. The current design treatment capacity of the TWRP is 16 mgd. However, due to permit limitations on nutrients, its current dry weather treatment capacity is approximately 12 mgd. The average daily flows to the TWRP are fairly constant but show some seasonal variation. During storm events, the daily flows into the TWRP can double due to inflow and infiltration into the sewer mains (LVMWD 2021b). The plant currently processes an average of 9.5 mgd (LVMWD 2021c). Treated effluent is discharged to Malibu Creek during the months of

November to April, and additional effluent beyond what is permitted for discharge to Malibu Creek is discharged to the Los Angeles River via the Arroyo Calabasas Creek (LVWMD 2021b).

Stormwater Drainage

Stormwater discharges consist of surface water runoff generated from various land uses. The quality of these discharges varies and is affected by geology, land use, season, hydrology, and sequence and duration of hydrologic events. Stormwater is generally directed to a series of public street catch basins and drainage area catch basins located throughout Calabasas. Water flow in these basins is correlated with stormwater runoff and generally limited to periods during and following precipitation events. Public street catch basins within Calabasas are maintained by the Los Angeles County Road Department and drainage area catch basins are maintained by the County of Los Angeles Flood Control District (City of Calabasas 2015). Stormwater ultimately runs off to Malibu Creek, Las Virgenes Creek (a tributary to Malibu Creek), and Arroyo Calabasas Creek (a tributary to the Los Angeles River).

Electric Power Supply, Demand, and Infrastructure

State Electric Power Supply

In 2019, California's in-state electricity generation totaled 200,475 megawatts (California Energy Commission [CEC] 2020a). Primary fuel sources for the state's electricity generation in 2019 included natural gas, hydroelectric, solar photovoltaic, wind, nuclear, geothermal, biomass, and solar thermal. According to the 2019 Integrated Energy Policy Report, California's electric grid relies increasingly on clean sources of energy such as solar, wind, geothermal, hydroelectricity, and biomass. In addition, by 2025 the use of electricity sourced from out-of-state coal generation will be eliminated. As this transition advances, the grid is also expanding to serve additional loads produced by building and vehicle electrification among other factors. California produces more renewable energy than any other state in the United States with 23,313 megawatts of installed renewable capacity (CEC 2020b; United States Energy Information Administration [U.S. EIA] 2020a).

Clean Power Alliance of Southern California

In 2017, Calabasas was the first City in Los Angeles County to join the Clean Power Alliance of Southern California (Clean Power Alliance), a community choice energy program providing local control and clean renewable energy with a variety of options for renewable power mixes for electricity customers.² In February 2021, the Calabasas City Council voted to change the City's default electricity option within the Clean Power Alliance to 100 percent clean, renewable energy starting October 2021. According to the Clean Power Alliance's Integrated Resource Plan, Clean Power Alliance anticipates meeting an energy load of 11,867 gigawatt-hours with a forecast peak of 2,975 megawatts by 2030 (Clean Power Alliance 2020). The Clean Power Alliance uses transmission infrastructure operated and maintained by Southern California Edison (SCE) to supply electricity to its customers. SCE is one of the nation's largest electric utility companies, serving 15 million people. It maintains 91,375 miles of electric distribution lines and 12,365 miles of interconnected transmission lines (SCE 2021). As of May 2021, Calabasas had a residential participation rate of approximately 98 percent with an opt-out rate of 2 percent (Hang 2021). Therefore, for the

² The current offerings available to residential customers are 36 percent ("Lean Power"), 50 percent ("Clean Power"), and 100 percent ("100% Green Power") renewable energy.

purposes of this analysis, it is assumed that the CPA would be the primary electricity provider for reasonably foreseeable development under the proposed project.

Electric Power Demand

As shown in Table 4.14-4, communitywide development in Los Angeles County (the smallest scale at which electricity consumption data is readily available) consumed approximately 66,119 gigawatt-hours in 2019, which was approximately 24 percent of statewide electricity consumption (CEC 2019a). In comparison, the population of Los Angeles County is approximately 26 percent of California’s population (California Department of Finance 2020). Therefore, per capita electricity consumption in Los Angeles County is slightly higher than the statewide average. The CEC forecasts that electricity consumption within the CPA service area is anticipated to increase by approximately 2.3 percent annually between 2018 and 2030 in the mid-energy demand/mid-Additional Achievable Energy Efficiency scenario (CEC 2020c).³

Table 4.14-4 2019 Electricity Consumption

Energy Type	Los Angeles County (GWh)	California (GWh)	Proportion of Statewide Consumption ¹
Electricity	66,119	279,402	23.7%

GWH = gigawatt-hours

¹ For reference, the population of Los Angeles County (10,172,951 persons) is approximately 25.6 percent of the population of California (39,782,870 persons) (California Department of Finance 2020).

Source: CEC 2019a

Electric Power Infrastructure

There is one solar power plant in Calabasas located adjacent to LVMWD headquarters on Las Virgenes Road (U.S. EIA 2021). This facility is used to pump recycled water for regional use (LVMWD 2021d). The Plan Area also includes aboveground and belowground electric power transmission lines and distribution lines to supply electricity to existing development.

Natural Gas Supply, Demand, and Infrastructure

Natural Gas Supply

State

California’s net natural gas production for 2018 was 180.6 billion cubic feet, or approximately 187,282 billion British thermal units (Btu; California Department of Conservation Division of Oil, Gas, and Geothermal Resources 2019). The state relies on out-of-state natural gas imports for nearly 90 percent of its supply (CEC 2021a). The CEC estimates that approximately 45 percent of the natural gas burned across the state is used for electricity generation, and the remainder is consumed in the residential (21 percent), industrial (25 percent), and commercial (9 percent) sectors. Building and appliance energy efficiency standards account for up to 39 percent in natural gas demand savings between 1975 and 2010 (CEC 2021a).

³ Additional Achievable Energy Efficiency refers to energy savings resulting from efforts that are reasonably expected to occur but lack funding commitments or implementation plans. These efforts include future updates of building code standards, appliance regulations, and new or expanded energy efficiency programs.

Southern California Gas Company

Natural gas is provided to Calabasas by the Southern California Gas Company (SoCalGas), whose service area spans southern California (SoCalGas 2021a). SoCalGas serves approximately 21.8 million customers with approximately 3,526 miles of gas transmission pipelines, 49,715 miles of gas distribution pipelines, and 48,888 miles of service lines (SoCalGas 2013). Natural gas supplied by SoCalGas is sourced primarily from several sedimentary basins in the Western United States and Canada including New Mexico, West Texas, the Rocky Mountains, western Canada, and California (California Gas and Electric Utilities 2020).

Natural Gas Demand

As shown in Table 4.14-5, communitywide development in Los Angeles County (the smallest scale at which electricity consumption data is readily available) consumed approximately 3,048 million US therms in 2019, which was approximately 56 percent of natural gas consumption by Southern California gas company customers and 23 percent of statewide natural gas consumption (CEC 2019a). In comparison, the population of Los Angeles County is approximately 26 percent of California’s population (California Department of Finance 2020). Therefore, per capita natural gas consumption in Los Angeles County is lower than the statewide average. Natural gas demand in the SoCalGas service area is projected to decline at a rate of one percent per year between 2020 and 2035 primarily due to increasing energy efficiency, modest economic growth, increasing building decarbonization, and statewide efforts to reduce greenhouse gas emissions from the electricity generation sector, even when accounting for moderate growth in the adoption of natural gas vehicles (California Gas and Electric Utilities 2020).

Table 4.14-5 2019 Natural Gas Consumption

Energy Type	Los Angeles County (millions of US therms)	Southern California Gas Company (millions of US therms)	California (millions of US therms)	Proportion of Southern California Gas Company Consumption ¹	Proportion of Statewide Consumption ¹
Natural Gas	3,048	5,425	13,158	56.2%	23.2%

¹ For reference, the population of Los Angeles County (10,172,951 persons) is approximately 25.6 percent of the population of California (39,782,870 persons) (California Department of Finance 2020).

Source: CEC 2019a

Natural Gas Infrastructure

There are four idle and four plugged dry hole oil and gas extraction wells in or adjacent to the Plan Area (California Department of Conservation Division of Oil, Gas, and Geothermal Resources 2021). Two idle wells are located along Las Virgenes Road, one idle well is located along Mulholland Highway, and one idle well is located north of Stokes Canyon Road. No natural gas processing plants are located in the area (U.S. EIA 2021). The Plan Area contains natural gas transmission lines and high pressure distribution lines along the U.S. 101 corridor as well as distribution lines to supply natural gas to existing development (SoCal Gas 2021b).

Telecommunications

In California, approximately 98 percent of households have access to telecommunication infrastructure, including telephone and cable access (California Cable & Telecommunications Association 2019). The Plan Area located in area code 818 (California Public Utilities Commission [CPUC] 2008a). The Plan Area is located in AT&T California's carrier of last resort territory. A carrier of last resort is a telecommunications company that commits, or is required by law, to provide service to any customer in a service area that requests it, even if serving that customer would not be economically viable at prevailing rates (CPUC 2018).

Solid Waste Collection and Disposal

The City currently has an exclusive franchise agreement with Waste Management/G.I. Industries for the collection of solid waste from all residential and commercial properties. The City also contracts with several privately-owned and operated companies for temporary (roll-off/rent-a-bin) collection services (City of Calabasas 2021). Most solid waste in Calabasas is transported to and disposed of at the Calabasas Sanitary Landfill, which is a Class III facility⁴ owned and operated by the County of Los Angeles Sanitation District. The landfill and facility site consists of 505 acres and is located north of the U.S. Highway 101 at 5300 Lost Hills Road in unincorporated Los Angeles County in the northwest portion of the Plan Area. The landfill accepts construction/demolition, industrial, mixed municipal, tires, and green material waste from the cities of Calabasas, Agoura Hills, Malibu, Thousand Oaks, and Westlake Village as well as portions of unincorporated Los Angeles and Ventura counties and the Los Angeles Area Integrated Waste Management Authority (California Department of Resources Recycling and Recovery [CalRecycle] 2021a). In 2019, a total of 573,393 tons of solid waste were disposed of at the Calabasas Sanitary Landfill, 11 percent of which originated in the city of Calabasas (CalRecycle 2020a). In 2019, the city disposed of 65,051 tons of solid waste at the Calabasas Sanitary Landfill and 19,473 tons of solid waste at several other regional landfills, including the Simi Valley Landfill and Recycling Center, H.M. Holloway, Inc., Azusa Land Reclamation Company Landfill, El Sobrante Landfill, and the Sunshine Canyon City/County Landfill (CalRecycle 2021b).

According to its Solid Waste Facility Permit, the total capacity of the Calabasas Sanitary Landfill is 69.3 million cubic yards, and the maximum permitted daily throughput is 3,500 tons. As of December 31, 2014, the remaining capacity of the landfill was approximately 14.5 million cubic yards (CalRecycle 2021). An average of 1,624 tons of waste is deposited in the landfill daily; therefore, the average daily surplus is 1,876 tons per day (CalRecycle 2020b). The landfill's estimated closure date is 2029 (CalRecycle 2021a). However, CalRecycle is currently reviewing a request to update the landfill's estimated closure year to 2042 (CalRecycle 2016).

The City promotes solid waste reduction through numerous diversion programs aimed at reducing the amount of solid waste going to landfills. These programs include residential and commercial site pickup, business/government source reduction, greenwaste reduction, backyard and on-site composting/mulching, electronic disposal, recycling, economic incentives, and educational programs.

⁴ A Class III landfill is a municipal landfill that is not authorized to accept hazardous waste.

4.14.2 Regulatory Setting

Water

Federal

CLEAN WATER ACT

The Federal Clean Water Act, enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The Clean Water Act establishes the basic structure for regulating discharges of pollutants into the waters of the United States. The Clean Water Act gave the United States Environmental Protection Agency (USEPA) the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the Clean Water Act is administered by the USEPA and the United States Army Corp of Engineers (USACE). At the state and regional levels in California, the act is administered and enforced by the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCB).

SAFE DRINKING WATER ACT

The Safe Drinking Water Act (SDWA) regulates public water systems (PWSs) that supply drinking water (42 United States Code [U.S.C.] Section 300(f) et seq.; 40 Code of Federal Regulations [CFR] Section 141 et seq.). The principal objective of the federal SDWA is to ensure that water from the tap is potable (safe and satisfactory for drinking, cooking, and hygiene). The main components of the federal SDWA are to:

- Ensure that water from the tap is potable
- Prevent contamination of groundwater aquifers that are the main source of drinking water for a community
- Regulate the discharge of wastes into underground injection wells pursuant to the Underground Injection Control program (see 40 CFR Section 144)
- Regulate distribution systems

State

SENATE BILL 610

Senate Bill 610 (SB 610) amended California Water Code to require detailed analysis of water supply availability for certain types of development projects. This law requires cities and counties to develop water supply assessments (WSA) when considering approval of applicable development projects in order to determine whether projected water supplies can meet the project's anticipated water demand. Projects requiring the preparation of a WSA include the following:

- Residential developments of more than 500 dwelling units
- Shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space

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- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space
- Hotels or motels with more than 500 rooms
- Industrial, manufacturing, or processing plants, or industrial parks 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
- Mixed-use projects that include one or more of the projects listed above
- Projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project

A General Plan Update is not subject to preparation of a Water Supply Assessment because (1) it is not expressly listed as a project which is subject to a Water Supply Assessment under Water Code Section 10912; (2) General Plan law sets forth an alternative process for local governments to consult with water supply agencies during General Plan preparation (see Government Code Section 65352.5); and (3) the California Legislature envisioned the General Plan being considered during preparation of long-term Urban Water Management Plan preparation, to serve as the first tier of land use and water supply planning coordination, prior to consideration of individual development projects. Furthermore, the County of San Bernardino Superior Court rules in *Citizens for Responsible Equitable Environmental Development v. City of Chino* (2011) that a “General Plan is not the type of actual development project identified in Water Code 10912 triggering the WSA requirement.” Therefore, the proposed General Plan Update does not require preparation of a WSA pursuant to SB 610. Nevertheless, water supply availability is assessed under Impact UTIL-2.

SENATE BILL 221

Whereas SB 610 requires a written assessment of water supply availability, SB 221 requires lead agencies to obtain an affirmative written verification of sufficient water supply prior to approval of certain specified subdivision projects. For this purpose, water suppliers may rely on an Urban Water Management Plan (UWMP) if the General Plan Update is accounted for within the UWMP, a WSA or other acceptable information that constitutes “substantial evidence.” “Sufficient water supply” is defined in SB 221 as the total water supplies available during normal, single-dry and multiple-dry water years within the 20-year (or greater) projection period that are available to meet the projected demand associated with the General Plan Update, in addition to existing and planned future uses. WSAs are required for residential projects of more than 500 units or a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space. Because the General Plan Update is a plan and not a subdivision project, it does not require affirmative written verification of sufficient water supply. Nevertheless, water supply availability is assessed under Impact UTIL-2.

CALIFORNIA SAFE DRINKING WATER ACT

The California SDWA (Health & Safety Code Section 116270 et seq.; 22 Cal. Code Regs. Section 64400 et seq.) regulates drinking water more rigorously than the federal law. Like the federal SDWA, California requires that primary and secondary maximum contaminant levels (MCLs) be established for pollutants in drinking water; however, some California MCLs are more protective of health. The California SDWA also requires the SWRCB to issue domestic water supply permits to public water systems.

The SWRCB enforces the federal and State SDWAs and regulates more than 7,500 PWSs across the state. (Implementation of the federal SDWA is delegated to the State of California.) The SWRCB Division of Drinking Water oversees the State’s comprehensive Drinking Water Program (DWP). The DWP is the agency authorized to issue PWS permits.

SUSTAINABLE GROUNDWATER MANAGEMENT ACT

In September 2014, the governor signed legislation requiring that California’s critical groundwater resources be sustainably managed by local agencies. The Sustainable Groundwater Management Act (SGMA) gives local agencies the power to sustainably manage groundwater and requires groundwater sustainability plans to be developed for medium- and high-priority groundwater basins, as defined by DWR. Pursuant to California Water Code Section 10933, prioritizations are assigned by DWR to each groundwater basin based on the overlying population, the current and projected rates of population growth, the number of public supply wells that draw from the basin, the total number of wells that draw from the basin, the irrigated acreage overlying the basin, the degree to which people overlying the basin rely on groundwater as their primary source of water, documented impacts on the groundwater within the basin (e.g., overdraft, subsidence, saline intrusion, water quality degradation), and any other relevant information (e.g., adverse impacts to local habitat and streamflows). The northeastern portion of the Plan Area overlies the San Fernando Valley Groundwater Basin (also referred to as the Upper Los Angeles River Area Groundwater Basin), and a portion of the water provided by LVMWD to development in the Plan Area is provided from the Russell Valley Groundwater Basin and the Thousand Oaks Groundwater Basin. All three of these groundwater basins are designated “very low priority” by DWR (DWR 2021). Only high- and medium-priority groundwater basins are required by SGMA to form a groundwater sustainability agency and adopt a groundwater sustainability plan (or alternative). Low and very-low priority basins may adopt a groundwater sustainability plan (or alternative) but are not required to do so.

CALIFORNIA BUILDING STANDARDS CODE

The California Code of Regulations (CCR) Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards. The California Building Standards Code’s water conservation standards are outlined below.

Part 5 – California Plumbing Code

The California Plumbing Code is codified in Title 24, California Code of Regulations, Part 5. The Plumbing Code contains regulations including, but not limited to, plumbing materials, fixtures, water heaters, water supply and distribution, ventilation, and drainage. More specifically, Part 5, Chapter 4, contains provisions requiring the installation of low flow fixtures and toilets. Existing development will also be required to reduce its wastewater generation by retrofitting existing structures with water efficient fixtures (SB 407 [2009] Civil Code Sections 1101.1 et seq.).

Part 11 – California Green Building Standards

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The 2019 CALGreen includes mandatory

minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers (Tiers I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements. With regard to water conservation and stormwater drainage, the mandatory standards include requirements for a 20 percent reduction in indoor water use relative to specified baseline levels,⁵ the use of water-efficient irrigation systems for new development with an aggregate landscape area equal or greater than 500 square feet, and other indoor and outdoor water efficiency and conservation measures such as separate water submeters for subsystems and specific fixtures and fittings. The voluntary standards include stricter water conservation requirements for specific fixtures as well as 20 percent permeable paving for the Tier 1 standards and 30 percent permeable paving for the Tier II standards.

WATER CONSERVATION IN LANDSCAPING ACT

The Water Conservation in Landscaping Act, enacted in 2006, required the DWR to update the Model Water Efficient Landscape Ordinance (MWELo). In 2009, the Office of Administrative Law approved the updated MWELo, which required a retail water supplier or a county to adopt the provisions of the MWELo by January 1, 2010, or enact its own provisions equal to or more restrictive than the MWELo provisions. The MWELo is contained in Chapter 2.7 of the California Water Code. The City of Calabasas uses the DWR-adopted MWELo which applies to new construction with landscape area equal or greater than 500 square feet square feet, rehabilitated landscape projects with landscape area equal or greater than 2,500 square feet, existing landscapes, and cemeteries.

WATER CONSERVATION ACT OF 2009 (SENATE BILL X7 7 (2009))

State law (SB-X7 7) mandates the reduction of per capita water use and agricultural water use in throughout the State by 20 percent by 2020.

EXECUTIVE ORDER B-40-17

On April 7, 2017, the governor issued Executive Order B-40-17, which lifts the drought emergency in California counties, except for Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects continue to address diminished groundwater supplies. The executive order retains a prohibition on wasteful practices and advances measures to make conservation a way of life (State of California 2017). These wasteful practices include:

- Hosing off sidewalks, driveways and other hardscapes;
- Washing automobiles with hoses not equipped with a shut-off nozzle;
- Using non-recirculated water in a fountain or other decorative water feature;
- Watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and
- Irrigating ornamental turf on public street medians

⁵ Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

Regional

LAS VIRGENES MUNICIPAL WATER DISTRICT 2015 URBAN WATER MANAGEMENT PLAN

The California Urban Water Management Planning Act (the Act; California Water Code Division 6, Part 2.6 Sections 10610–10656) applies to municipal water suppliers like LVMWD, which serve more than 3,000 customers or provides more than 3,000 AFY of water. The Act requires these water suppliers to update their UWMP every five years to identify short-term and long-term water demand management measures to meet growing water demands during normal, dry and multiple-dry years. The plan should include a description of existing and planned water sources, alternative sources, conservation efforts, reliability and vulnerability assessments, and a water shortage contingency analysis. The LVMWD’s 2020 UWMP characterizes historical water supplies and use, projects future demand and supply through 2040, and identifies cumulative water demand projections and water shortage contingency plans. Supply and demand projections address climate variability. Details of LVMWD’s efforts to promote the efficient use and management of its water resources are also contained in its 2020 UWMP (LVMWD 2021b). The LVMWD Urban Water Management Plan is incorporated by reference.⁶

Local

CITY OF CALABASAS GENERAL PLAN

The current Calabasas General Plan, adopted in 2008, and amended in 2015 via adoption of the City’s 5th RHNA cycle Housing Element, lists several policies related to water supply and infrastructure in Section IV.D (Water Resources) of its Conservation Element, Section V.E (Development of Affordable Housing) in its Housing Element, and Section XII.D (Water Service & Infrastructure) of its Services, Infrastructure & Technology Element. The following policies are applicable to the General Plan Update (City of Calabasas 2008):

- Policy IV-21** Coordinate land development review with the LVMWD to ensure that adequate water supplies are available to support any new development.
- Policy IV-22** Ensure that new buildings are designed to minimize domestic water use based on the requirements of the City’s Green Building Ordinance and consider establishing incentives to achieve greater water use efficiencies than are required by the Ordinance.
- Policy IV-23** Promote the use of drought-tolerant plants and efficient landscape irrigation design in existing developed areas and as part of new public and private development approvals.
- Policy IV-24** Where reclaimed water service is or can be made available, promote the use of dual water systems on new development to facilitate the use reclaimed wastewater for landscape irrigation.
- Policy V-16** Encourage use of sustainable and green building design in new and existing housing to reduce energy and water consumption.
- Policy XII-20** Coordinate land development review with the master planning efforts of the LVMWD to facilitate provision of adequate services and facilities.

⁶ LVMWD 2020 UWMP available online at: <https://www.lvmwd.com/your-water/urban-water-management-plan>.

- Policy XII-21** Direct new development to areas with adequate existing water facilities and services, areas that have adequate facilities and services committed, or areas where facilities and services can be economically extended consistent with the LVMWD’s master plan.
- Policy XII-23** Support conservation and efficient water use in an effort to minimize the need for new water sources.
- Policy XII-24** Continue to implement opportunities to increase the use of recycled water and secondary effluent in coordination with the Las Virgenes Municipal Water District, potentially including the development of incentives to encourage the use of reclaimed water.

CALABASAS MUNICIPAL CODE

Calabasas Municipal Code (CMC) Section 17.20.230 requires implementation of water conservation measures for all proposed development. These measures include clustering landscaping areas to maximize the efficiency of irrigation systems, eliminating the watering of impervious surfaces by irrigation systems, installation of water efficient kitchen and bathroom fixtures and appliances, installation of insulated hot water lines, and installation of recycled water systems for irrigation purposes when recycled water is or can be made feasible available by LVWMD.

CMC Chapter 17.26.050 requires implementation of water conservation measures specifically for landscaping, including the use of water-efficient irrigation systems with smart irrigation controllers, rain sensor devices and soil moisture sensors (where appropriate), and water meters for projects with landscape and non-landscape areas.

CMC Chapter 17.46.120 requires proposed subdivisions to install water mains and services to serve each lot with connections to the LVMWD. These installations require a separate permit issued by the LVMWD. If any part of the water system is to be installed within a street right-of-way, the system location, including valve boxes, meter boxes, and fire hydrants and the system construction specifications shall be subject to the approval of the city engineer, and the location of fire hydrants must also be approved by the Los Angeles County Fire Department.

LAS VIRGENES MUNICIPAL WATER DISTRICT

The LVMWD currently has mandatory water use restrictions in effect, which include the following measures applicable to the project (LVMWD 2021e):

- Irrigation is not allowed between the hours of 10 a.m. and 5 p.m.
- Irrigation may not occur during periods of rain or in the 48 hours following measurable rainfall
- Irrigation may not run off the property into streets, gutters or onto adjacent properties.
- Using potable water to wash down sidewalks, parking areas and driveways is not permitted
- A trigger nozzle is required on hoses used for home car washing.
- Fountains or water features must use a recirculating system

Violations of these conservation measures can involve fines, up to \$500, installation of a flow restriction device, or termination of service (LVMWD 2021e).

Wastewater

Federal

CLEAN WATER ACT

The federal Clean Water Act is described above in *Water*.

State and Regional

Standards for wastewater treatment plant effluent are established using State and federal water quality regulations. After treatment, wastewater effluent is either disposed of or reused as recycled water. The RWQCBs set the specific requirements for community and individual wastewater treatment and disposal and reuse facilities through the issuance of Waste Discharge Requirements, required for wastewater treatment facilities under the California Water Code Section 13260.

The treated wastewater discharged from the TWRP is regulated by the Los Angeles RWQCB by the Central Coast RWQCB under the *Waste Discharge Requirements for the Las Virgenes Municipal Water District Tapia Water Reclamation Facility* (Order No. R4-2017-0124, NPDES Permit No. CA0056014). The waste discharge requirements (WDRs) permits the discharge of tertiary treated effluent to two locations along Malibu Creek, one location along Las Virgenes Creek (a tributary to Malibu Creek), and one location along Arroyo Calabasas Creek (a tributary to the Los Angeles River). The WDRs establish effluent limits for each of the four discharge points, including limitations on biochemical oxygen demand, total suspended solids, turbidity, pH, total coliform, *E. Coli*, total nitrogen, total phosphorus chloride, and total dissolved solids. The effluent limitations for total nitrogen, total phosphorous, and nitrite are in the permit are based on and are consistent with the water quality objectives contained in the *Amendment to the Water Quality Control Plan - Los Angeles Region to Incorporate an Implementation Plan for the U.S. EPA-Established Malibu Creek Nutrients TMDL and the U.S. EPA-Established Malibu Creek and Lagoon Sedimentation and Nutrients TMDL to Address Benthic Community Impairments* (2016), the *Los Angeles River Nitrogen and Related Effects TMDL* (2014), the *Malibu Creek & Lagoon TMDL for Sedimentation and Nutrients to Address Benthic Community Impairments* (2013), and the *Malibu Creek Watershed Nutrients TMDL* (2003).

California Code of Regulations Title 22, Division 4, Chapter 3, Sections 60301 through 60355 are used to regulate recycled wastewater and are administered by the RWQCBs. Title 22 contains effluent requirements for four levels of wastewater treatment, from un-disinfected secondary recycled water to disinfected tertiary recycled water. Higher levels of treatment have higher effluent standards, allowing for a greater number of uses under Title 22, including irrigation of freeway landscaping, pasture for milk animals, parks and playgrounds, and vineyards and orchards for disinfected tertiary recycled water.

Local

The current Calabasas General Plan, adopted in 2008, and amended in 2015 via adoption of the City's 5th RHNA cycle Housing Element, lists several policies related to wastewater in Section XII.E (Wastewater Service & Infrastructure) of its Services, Infrastructure & Technology Element. The following policies are applicable to the General Plan Update (City of Calabasas 2015):

- Policy XII-25** Coordinate land development review with the master planning efforts of the LVMWD and TSD to facilitate provision of adequate sewer services and facilities.
- Policy XII-26** Direct new development to areas with adequate existing sewer facilities and services, areas where adequate facilities and services and facilities are committed, or areas where services and facilities can be economically extended consistent with the LVMWD and TSD master plans of area service providers.
- Policy XII-27** Promote the design of wastewater systems that minimize inflow and infiltration.
- Policy XII-28** As appropriate, provide sanitary sewer service in areas of the City where such service is currently lacking through:
- Monitoring of private onsite wastewater systems for operational performance within applicable environmental standards
 - Regular reporting of the results of monitoring to the City Council
 - Extending sanitary sewer service into areas where service is lacking if the provision of sewer service is determined to be technically warranted, economically feasible, and environmentally beneficial.

Stormwater Drainage

Regulations and policies pertaining to stormwater drainage are discussed in Section 4.8, *Hydrology and Water Quality*.

Electric Power and Natural Gas

Federal

ENERGY INDEPENDENCE AND SECURITY ACT OF 2007

The Energy Independence and Security Act of 2007 set energy efficiency standards for lighting (specifically light bulbs) and appliances.

ENERGY STAR PROGRAM

Energy Star is a voluntary labeling program introduced by the United States Environmental Protection Agency (U.S. EPA) to identify and promote energy-efficient products to reduce GHG emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specifications for maximum energy use established under the program are certified to display the Energy Star label. In 1996, the U.S. EPA joined with the Energy Department to expand the program, which now also includes certifying commercial and industrial buildings as well as homes (U.S. EPA 2021).

State

CALIFORNIA ENERGY COMMISSION

As the State's primary energy policy and planning agency, the California Energy Commission (CEC) collaborates with State and federal agencies, utilities, and other stakeholders to develop and implement State energy policies. Since 1975, the CEC has been responsible for reducing the State's

electricity and natural gas demand, primarily by adopting new Building and Appliance Energy Efficiency Standards that have contributed to keeping California's per capita electricity consumption relatively low. The CEC is also responsible for the certification and compliance of thermal power plants 50 megawatts and larger, including all project-related facilities in California (CEC 2021b).

CALIFORNIA PUBLIC UTILITIES COMMISSION

The CPUC regulates investor-owned electric and natural gas utilities operating in California. The energy work responsibilities of the CPUC are derived from the California State Constitution, specifically Article XII, Section 3 and other sections more generally, numerous State legislative enactments and various Federal statutory and administrative requirements. The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from SoCal Gas and other natural gas utilities across California (CPUC 2021a).

ENERGY ACTION PLAN

In 2003, the CEC and CPUC set forth their energy policy vision in the Energy Action Plan. The CEC adopted an update to the Energy Action Plan in February 2008 (EAP II) that supplements the earlier Energy Action Plan and examines the state's ongoing actions in the context of global climate change. The nine major action areas in the Energy Action Plan include energy efficiency, demand response, renewable energy, electricity adequacy/reliability/ infrastructure, electricity market structure, natural gas supply/demand/infrastructure, transportation fuels supply/demand/infrastructure, research/development/demonstration, and climate change (CPUC 2008b).

BIOENERGY ACTION PLAN (EXECUTIVE ORDER S-06-06)

Executive Order (EO) S-06-06 establishes targets for the use and production of biofuels and biopower and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO S-06-06 calls for the state to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies potential barriers and recommends actions to address them so the state can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications
- Create jobs and stimulate economic development, especially in rural regions of the state
- Reduce fire danger, improve air and water quality, and reduce waste

SENATE BILL 350

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires a doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

2017 CLIMATE CHANGE SCOPING PLAN

On December 14, 2017, the California Air Resources Board (CARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the State's 2030 GHG emissions reduction target of 40

percent below 1990 levels. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation. The 2017 Scoping Plan includes a wide variety of goals related to energy efficiency and renewable energy that are intended to help meet the State's 2030 target (CARB 2017).

CALIFORNIA RENEWABLE PORTFOLIO STANDARD AND SENATE BILL 100

Approved by former Governor Brown on September 10, 2018, SB 100 accelerates the state's Renewable Portfolio Standard program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

CALIFORNIA ENERGY EFFICIENCY ACTION PLAN

The CEC is responsible for preparing the California Energy Efficiency Action Plan, which covers issues, opportunities, and savings estimates related to energy efficiency in California's building, industrial, and agricultural sectors. The 2019 California Energy Efficiency Action Plan focuses on three goals:

- Doubling energy efficiency savings by 2030 (SB 350)
- Removing and reducing barriers to energy efficiency in low-income and disadvantaged communities
- Reducing GHG emissions from the building sector

The plan offers several recommendations to advance these goals, including expanding funding sources for energy efficiency programs beyond ratepayer portfolios, improving energy efficiency data, integrating energy efficiency into long-term utility planning, enhancing the energy efficiency workforce, improving demand flexibility, and expanding building decarbonization (CEC 2019b).

CALIFORNIA BUILDING STANDARDS CODE

The California Building Standards Code's standards related to energy use are outlined below.

Part 6 – Building Energy Efficiency Standards/Energy Code

California Code of Regulations, Title 24, Part 6, is California's Energy Efficiency Standards for Residential and Non-residential Buildings. The 2019 Building Energy Efficiency Standards (California Energy Code), adopted on May 9, 2018, became effective on January 1, 2020. The 2019 Standards move toward cutting nonrenewable energy use in new homes by more than 50 percent and require installation of solar photovoltaic systems for single-family homes and multi-family buildings of three stories and less. The 2019 Standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018).

Part 11 – California Green Building Standards

The 2019 CALGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of

residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

Specifically with regard to energy, the 2019 mandatory standards require:

- Inspections of energy systems to ensure optimal working efficiency;
- Dedicated circuitry to facilitate installation of electric vehicle charging stations in newly constructed attached garages for single-family and duplex dwellings; and
- Designation of at least ten percent of parking spaces for multi-family residential developments as electric vehicle charging spaces capable of supporting future electric vehicle supply equipment

The Tier I and Tier II voluntary standards require stricter energy efficiency requirements and cool/solar reflective roofs.

Local

The current Calabasas General Plan, adopted in 2008, and amended in 2015 via adoption of the City's 5th RHNA cycle Housing Element, lists several policies related to electric power and natural gas in Section IV.F (Energy Resources) of its Conservation Element and Section V.E (Development of Affordable Housing) in its Housing Element. The following policies are applicable to the General Plan Update (City of Calabasas 2015 [updated]):

- Policy IV-34** Promote community/neighborhood designs that minimize energy use. For example:
- Identify and implement programs to facilitate safe and pleasant pedestrian circulation.
 - Establish and maintain a communitywide system of bicycle lanes and coordinate the development of a regional bicycle system with neighboring jurisdictions.
 - Promote the development of fueling facilities for alternative fuel vehicles.
 - Promote development and redevelopment of mixed use designs that allow residents to live near where they work and shop.

- Policy IV-35** Promote site designs that minimize energy use. For example:
- Develop building groups or clusters with plazas or open areas that promote exterior accessibility and enjoyment within a protected environment.
 - Construct internal circulation roadways at the minimum widths necessary for safe circulation to minimize solar reflection and heat radiation.
 - Where possible, locate reflective surfaces on the north and east side of buildings to minimize potential heat gain and reflection to adjacent buildings.
 - Use light-colored pavement to reduce the urban "heat island" effect.
 - Orient the maximum amount of non-reflective glass possible toward the south to maximize solar access.
 - Incorporate the use of broad, deciduous trees in landscaping plans, especially near buildings and in and around large expanses of parking lots or other paved areas.

- Policy IV-36** Promote building designs that minimize energy use. For example:
- Use appropriate building shapes and locations to promote maximum feasible solar access to individual units. Design individual buildings to maximize natural internal lighting through the use of court wells, interior patio areas, and building architecture.
 - Promote light colored roofs to reduce the urban heat island effect, unless a passive heating system is incorporated with a darker roof.
 - Use canopies and overhangs to shade windows during summer months while allowing for reflection of direct sunlight during winter months.
 - Install windows and vents in commercial and industrial buildings to provide the opportunity for natural ventilation.
 - Incorporate deciduous vines on walls, trellises and canopies to shade south and west facing walls to cool them in summer months.
- Policy IV-37** Promote the incorporation of feasible energy conservation measures into existing and new developments and structures. Feasible measures may include, but are not limited to, the use of evaporative cooling systems and the incorporation of solar panels.
- Policy IV-39** Promote the use of alternative energy sources such as solar energy, cogeneration, and non-fossil fuels. Ways in which alternative energy can be promoted include, but are not limited to, incorporation of solar panels on structures and provision of fueling stations for alternative fuel vehicles.
- Policy V-16** Encourage use of sustainable and green building design in new and existing housing to reduce energy and water consumption.

Telecommunications

State

The CPUC develops and implements policies for the telecommunication industry. The Communications Division is responsible for licensing, registration and the processing tariffs of local exchange carriers, competitive local carriers, and non-dominant interexchange carriers. It is also responsible for registration of wireless service providers and franchising of video service providers. The Communications Division tracks compliance with commission decisions and monitors consumer protection and service issues and Commission reliability standards for safe and adequate service. The Communications Division is responsible for oversight and implementation of the six public purpose Universal Service Programs (CPUC 2021b).

Local

The current Calabasas General Plan, adopted in 2008, and amended in 2015 via adoption of the City's 5th RHNA cycle Housing Element, lists several policies related to telecommunications in Section XII.G (Technological Infrastructure) of its Services, Infrastructure & Technology Element. The following policies are applicable to the General Plan Update (City of Calabasas 2015):

- Policy XII-35** Encourage citywide access to fast and secure wireless broadband networks.
- Policy XII-37** Encourage technology and communication service providers to develop and maintain a long-term coordinated telecommunications plan to improve bandwidth, reduce costs, and improve system reliability.
- Policy XII-38** Encourage technology service providers to creatively integrate technology facilities into the natural and built environment to minimize the total number of such facilities and associated aesthetic impacts.
- Policy XII-39** Require new residential and commercial development to include infrastructure components necessary to support modern communication technologies.

Solid Waste

Federal

RESOURCE CONSERVATION AND RECOVERY ACT

40 CFR Part 258 (Resource Conservation and Recovery Act, Subtitle D) contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria.

State

ASSEMBLY BILL 939

AB 939 (Public Resources Code 41780) requires cities and counties to prepare integrated waste management plans and to divert 50 percent of solid waste from landfills beginning in calendar year 2000 and each year thereafter. AB 939 also requires cities and counties to prepare source reduction and recycling elements as part of the integrated waste management plans. These elements are designed to develop recycling services to achieve diversion goals, stimulate local recycling in manufacturing, and stimulate the purchase of recycled products. In 2019, the City's solid waste diversion rate was 51.3 percent, which meets the requirement of AB 939 (Issakhani 2021).

ASSEMBLY BILL 341 AND SENATE BILL 1383

The purpose of Assembly Bill (AB) 341 of 2011 (Chapter 476, Statutes of 2011) is to reduce greenhouse gas (GHG) emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California. In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

In addition, SB 1383 of 2016 (Chapter 395, Statutes of 2016) established the following goals: a 50 percent reduction in the level of the statewide disposal of organic waste from 2014 levels by 2020 and a 75 percent reduction in the level of the statewide disposal of organic waste from 2014 levels by 2025. This bill also authorized CalRecycle to adopt regulations, to take effect on or after January 1, 2022, to achieve these targets.

ASSEMBLY BILL 1826

AB 1826 of 2014 (Chapter 727, Statutes of 2014) requires businesses that generate a specified amount of organic waste per week to arrange for recycling services for that waste, and for

jurisdictions to implement a recycling program to divert organic waste from businesses subject to the law, as well as report to CalRecycle on their progress in implementing an organic waste recycling program. As of 2020, businesses that generate two cubic yards or more of organic waste per week must engage in one of the following:

- Source separate organic waste from other waste and participate in a waste recycling service that includes collection and recycling of organic waste
- Recycle organic waste on-site, or self-haul organic waste off-site for recycling
- Subscribe to an organic waste recycling service that may include mixed waste processing that specifically recycles organic waste

SENATE BILL 1016

SB 1016 of 2007 (Chapter 343, Statutes of 2007) requires that the 50 percent solid waste diversion requirement established by AB 939 be expressed in pounds per person per day. SB 1016 changed the CalRecycle review process for each municipality's integrated waste management plan. After an initial determination of diversion requirements in 2006 and establishing diversion rates for subsequent calendar years, the Board reviews a jurisdiction's diversion rate compliance in accordance with a specified schedule. As of January 1, 2018, the Board is required to review a jurisdiction's source reduction and recycling element and hazardous waste element once every two years.

Local

CITY OF CALABASAS GENERAL PLAN

The current Calabasas General Plan, adopted in 2008, and amended in 2015 via adoption of the City's 5th RHNA cycle Housing Element, lists several policies related to solid waste in Section IV.G (Solid Waste Management) of its Conservation Element. The following policies are applicable to the General Plan Update (City of Calabasas 2015):

- Policy IV-41** Continue to meet or exceed state requirements for the diversion of solid waste from landfills.
- Policy IV-42** Adhere to the following hierarchy of integrated solid waste management options:
- Recognize source reduction as the waste management option of choice
 - Exhaust source reduction, recycling, and composting possibilities before resorting to landfilling of solid wastes
- Policy IV-43** To reduce the volume and toxicity of products and packaging, encourage the purchase of products and packaging that: (1) are recyclable and/or are made with recyclable materials; (2) use minimal packaging; and (3) have reduced toxicity.
- Policy IV-44** To change patterns of consumption that produce unnecessary waste generation, encourage the following:
- Replacement of disposable materials and products with reusable materials and products
 - Reduction of yard waste through backyard composting and low maintenance landscaping

- Purchase of products with longer life spans, and products that are easily repairable
- Recycling of construction wastes
- Purchase of products that reduce energy consumption

Policy IV-45 Ensure that adequate landfill capacity is available to meet the City’s future solid waste disposal needs.

CALABASAS MUNICIPAL CODE

All residential and commercial properties are served by the City’s franchise waste hauler, currently Waste Management/G.I. Industries. CMC Chapters 8.16.500(C) and 8.16.500(D) require permitted waste haulers to provide a single-family residential curbside recycling program to every single-family residence (or suitable alternative for walled and gated communities with private streets) and a multi-family residential recycling program to all multi-family complexes. In accordance with CMC Chapter 8.16.500(G), permitted waste haulers are also required to provide an automated or semi-automated green waste collection and recycling program to all residences to which they provide municipal solid waste collection services. All green waste must be delivered to a facility for recycling, mulching, composting, or use as alternative daily cover.

4.14.3 Impact Analysis

Methodology and Significance Thresholds

The assessment of impacts is based on review of site information and conditions, analysis provided in the LVWMD and Metropolitan 2020 UWMPs, and City information regarding utility-related issues, including water supply and facilities, wastewater facilities, storm drainage, electric power, natural gas, telecommunications facilities, and solid waste.

Significance Thresholds

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. The General Plan Update would have a significant impact with respect to utilities and service systems if it would:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects;
2. Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project’s projected demand, in addition to the provider’s existing commitments;
4. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; and/or
5. Conflict with Federal, State, and local management and reduction statutes and regulations related to solid waste.

Threshold 1: Would the General Plan Update require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact UTIL-1 REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE MAY REQUIRE THE RELOCATION OR CONSTRUCTION OF NEW OR EXPANDED WATER, WASTEWATER TREATMENT, STORMWATER DRAINAGE, ELECTRIC POWER, NATURAL GAS, AND TELECOMMUNICATIONS FACILITIES IN THE PLAN AREA. HOWEVER, SUCH RELOCATION AND CONSTRUCTION WOULD NOT CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS BEYOND THOSE ALREADY IDENTIFIED IN THIS EIR. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Water

The Plan Area is served by existing LVMWD potable water facilities. Reasonably foreseeable development facilitated by the General Plan Update may require installation of additional water main lines, lateral connections, and hydrants within the Plan Area. Such facilities would be installed during individual project construction and within the disturbance area of such projects or the rights-of-way of previously disturbed roadways; therefore, the construction of these infrastructure improvements would not substantially increase the project's disturbance area or otherwise cause significant environmental effects beyond those identified throughout this EIR. As described in Impact UTIL-2, below, reasonably foreseeable development facilitated by the General Plan Update would be served by existing and planned LVMWD supplies, which are not anticipated to require major LVMWD treatment or distribution facility improvements.⁷ Furthermore, reasonably foreseeable development would be subject to the City's General Plan policies related to the provision of adequate water services and facilities, such as Policies XII-20 and XII-21. Therefore, the project would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects beyond those already identified throughout this EIR. Impacts would be less than significant.

Wastewater

The Plan Area is served by existing City and LVMWD wastewater conveyance facilities, including local sewer collection lines and trunk sewer lines. Reasonably foreseeable development facilitated by the General Plan Update may require the installation of additional sewer lines and lateral connections within the Plan Area. As with water facilities, sewer line extensions necessary to serve the future development would generally be installed within the already disturbed rights-of-way of existing roads or within the disturbance footprints of such projects. As such, the construction of these infrastructure improvements would not substantially increase the project's disturbance area or otherwise cause significant environmental effects beyond those identified throughout this EIR.

The General Plan Update would result in an increase in wastewater generation relative to existing conditions. Wastewater generated by future development would be treated at the LVMWD TWRP in Calabasas, which has a dry weather capacity of 12 mgd. Based on a wastewater generation rate of 280 gallons per residential unit per day (Joint Powers Authority of LVMWD and TSD 2014), reasonably foreseeable development under the General Plan Update would generate a net increase

⁷ Planned potable water capital improvements for the LVMWD service area (including Calabasas, Agoura Hills, Hidden Hills, Westlake Village, and portions of unincorporated Los Angeles County) include approximately 9.2 miles of distribution pipelines, 6.3 million gallons of storage, and additional standby pumping facilities (Joint Powers Authority of LVMWD and TSD 2014).

of approximately 365,400 gallons, or 0.37 mgd, of wastewater per day (280 gallons per residential unit per day * 1,305 units).⁸ This analysis conservatively assumes all project-generated wastewater would be new wastewater generation and does not account for wastewater generation associated with existing development that would be demolished to accommodate new residential units, such as the Commons Shopping Center, the Agoura Road Offices, the Mureau Office, and the Craftsman’s Corner commercial center. Table 4.14-6 summarizes the available capacity at the TWRP and the percentage used by anticipated project wastewater generation based on average daily flow conditions. As shown therein, the General Plan Update’s net increase in wastewater generation would comprise approximately 14.8 percent of the TWRP’s existing available wastewater treatment capacity. Therefore, the TWRP would have adequate capacity to serve reasonably foreseeable development under the General Plan Update. In addition, reasonably foreseeable development would be responsible for constructing on-site wastewater treatment conveyance systems and paying standard sewer connection fees, as necessary. Furthermore, reasonably foreseeable development would be subject to the City’s General Plan policies related to the provision of adequate wastewater services and facilities, such as Policies XII-25 and XII-26. Therefore, the General Plan Update would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects beyond those already identified throughout this EIR. Impacts would be less than significant.

Table 4.14-6 Wastewater Treatment Plant Capacity

Tapia Water Reclamation Facility	
Average Daily Treatment	9.5 MGD
Capacity ¹	12 MGD
Available Capacity	2.5 MGD
Project Wastewater Generation - Average Flow ²	0.37 MGD
Percent of Available Capacity Used by Project – Average Flow	14.8%

mgd = million gallons per day

¹ The current design treatment capacity of the TWRP is 16 mgd. However, due to permit limitations on nutrients, its current treatment capacity is approximately 12 mgd (LVMWD 2021b).

² Reasonably foreseeable development under the General Plan Update would generate a net increase of approximately 365,400 gallons, or 0.37 mgd, of wastewater per day (280 gallons per residential unit per day * 1,305 units).

Sources: LVMWD 2021b and 2021c

Stormwater Drainage

Reasonably foreseeable development under the General Plan Update would allow for the development of 1,305 housing units, which would potentially require new or modified stormwater drainage facilities in the Plan Area due to the introduction of new impervious surfaces. Specific development under General Plan Update would primarily consist of infill development and development near transportation nodes. This type of future development would not have a substantial effect on stormwater runoff volumes due to the relatively minor change in impervious surface area compared with development on vegetated vacant sites. As with water and wastewater

⁸ The Joint Powers Authority of LVMWD and TSD’s Sanitation Master Plan 2014 Update indicates that approximately 2,644 new dwelling units would generate approximately 0.74 mgd, which is equivalent to 280 gallons per dwelling unit per day (Joint Powers Authority of LVMWD and TSD 2014).

treatment facilities, stormwater drainage infrastructure necessary to serve future development would generally be installed within the already disturbed rights-of-way of existing roads or within the disturbance footprints of such projects. As such, the construction of these infrastructure improvements would not substantially increase the project's disturbance area or otherwise cause significant environmental effects beyond those identified throughout this EIR.

In addition, as described in Section 4.8 *Hydrology and Water Quality*, the City is a permittee under the Los Angeles County MS4 Permit, which requires all new development and redevelopment projects (defined in CMC Chapter 8.28.160[C]) to incorporate LID techniques and stormwater control measures as outlined under CMC Chapter 8.28.160(D-F), including stormwater retention and treatment features. The City's LID control measures aim to conserve natural areas, protect slopes and channels, provide storm drain system stenciling and signage, divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability, and direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability.

Reasonably foreseeable development under the General Plan Update would be required to adhere to existing regulations that instruct stormwater management, including management of rainfall at the source by infiltrating stormwater as close to the source as practicable. Per NPDES requirements, post-construction peak runoff must be maintained at or below pre-project levels. As discussed above under Impact HWQ-1 in Section 4.8, *Hydrology and Water Quality*, the CMC requires implementation of BMPs to control the volume, rate, and potential pollutant load of stormwater runoff from new development and redevelopment projects as a requirement of the MS4 General Permit. The CMC also sets forth requirements and BMPs pertaining to the mitigation of erosion, sediment control and runoff as outlined in Chapter 15.11.100 and Chapter 15.11.08. The City incorporates such requirements in all land use entitlements and construction or building-related permits to be issued relative to such development or redevelopment. Furthermore, the City's LID ordinance outlined in Chapter 8.28.160 aims to specifically reduce the amount of surface runoff and aid in groundwater recharge through techniques such as infiltration, evapotranspiration, bioretention and/or rainfall harvest and additional uses in accordance with the requirements set forth in the MS4 permit and the LID standards manual.

Given compliance with the above regulations and requirements, the General Plan Update would not require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects beyond those already identified throughout this EIR. Impacts would be less than significant.

Electric Power and Natural Gas

The Plan Area is served by existing SCE and SoCalGas transmission and distribution facilities for electricity and natural gas, respectively. Reasonably foreseeable development facilitated by the General Plan Update may require installation of additional electrical and natural gas connections within the Plan Area. Such facilities would be installed during individual project construction and within the disturbance area of such projects or the rights-of-way of previously disturbed roadways; therefore, the construction of these infrastructure improvements would not substantially increase the project's disturbance area or otherwise cause significant environmental effects beyond those identified throughout this EIR. Specific development under the General Plan Update would primarily consist of infill development and development near transportation nodes; therefore, major upgrades to transmission lines and other facilities is not anticipated. Therefore, the General Plan Update would not require or result in the relocation or construction of new or expanded water

facilities, the construction or relocation of which could cause significant environmental effects beyond those already identified throughout this EIR. Impacts would be less than significant.

Telecommunications

No major telecommunications improvements are expected to be required to accommodate reasonably foreseeable development facilitated by the General Plan Update. Future development projects may require minor telecommunications improvements, such as undergrounding or extensions of telephone lines. Such improvements would be minor in nature and would generally occur within the disturbance area of individual projects. Furthermore, reasonably foreseeable development would be subject to the City's General Plan policies related to the provision of adequate telecommunications facilities, such as Policies XII-37 and XII-39. Therefore, the General Plan Update would not require or result in the relocation or construction of new or expanded telecommunications facilities, the construction or relocation of which could cause significant environmental effects beyond those already identified throughout this EIR. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 2: Would the General Plan Update have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact UTIL-2 CONSTRUCTION AND OPERATION OF REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD RESULT IN A NET INCREASE IN WATER DEMAND. HOWEVER, THIS INCREASE IN DEMAND THROUGH 2045 CAN BE SERVED BY LVMWD'S PROJECTED AND REASONABLY AVAILABLE WATER SUPPLIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The General Plan Update would generate both construction-related and operational water demand. The following subsections include discussions of both sources of water demand.

Construction Demand

Water would be required for temporary construction activities in the Plan Area, including dust suppression, grading and grubbing, compaction, construction equipment wheel washing, and concrete mixing and casting. Water consumption by construction workers and cleaning of portable toilets on individual project sites may also account for a small portion of overall construction water demand.

Watering for dust suppression would demand the most water during construction. Pursuant to the requirements of SCAQMD Rule 403 as described in Section 4.2, *Air Quality*, all disturbed unpaved roads and disturbed areas within each housing site would be watered to reduce fugitive dust generation from construction activities. Demolition, site preparation, and grading are the activities anticipated to result in the greatest dust generation and, therefore, the greatest construction-related water demand. Water demand for dust suppression is highly dependent on a number of site-specific variables, including soil properties, antecedent moisture conditions, and other climatic factors. A 2017 analysis prepared by SCAQMD estimated water demand associated with Rule 403 dust suppression requirements for construction sites in SCAQMD jurisdiction at approximately

1,000 gallons per acre per day (SCAQMD 2017). According to the construction schedule used in the CalEEMod run prepared for the project, demolition, site preparation, and grading activities would occur for a total of 95 days. The disturbance area requiring watering for dust control would vary depending on the nature of individual projects and the number of projects occurring simultaneously. According to Section 2, *Project Description*, the largest parcel in the housing sites inventory is approximately 11.5 acres (part of housing site #11 at 4719 Commons Way). Therefore, it was conservatively assumed up to 23 acres of land (two times the largest site acreage) may require site watering over the course of demolition, site preparation, and grading activities for any given development phase. Table 4.12-7 shows estimated construction water demand associated with each phase of development.

Table 4.12-7 Anticipated Construction Water Demand

Construction Phase	Duration of Phase ¹	Projected Construction Water Demand (gallons) ²	Projected Construction Water Demand (AF)
Demolition	30 days	690,000	2.1
Site Preparation	20 days	460,000	1.4
Grading	45 days	1,035,000	3.2
Total	95 days	1,495,690	4.6

AF = acre-feet

¹ Based on demolition, site preparation, and grading activity duration in construction schedule provided by CalEEMod run.

² Assumes up to 23 acres requiring site watering during any given day and a 1,000-gallon per acre per day watering rate (SCAQMD 2017).

Source: CalEEMod outputs (Appendix B), SCAQMD 2017

Note: Totals may not sum precisely due to rounding.

Construction water demand would account for approximately 4.6 AF over the approximately eight-year buildout period, or approximately 0.6 AFY, which would represent approximately 0.002 percent of LVWMD’s annual potable water supply as of 2020 (see Table 4.14-1 in Section 4.14.1, *Water Sources, Supply, Demand, and Distribution*). Construction water demand would be temporary and therefore would not result in a long-term demand on water supplies. Furthermore, LVMWD provides non-potable water for use as dust suppression during construction activities in the Plan Area; therefore, the actual demand on potable water supplies would be even lower than estimated here. Given the temporary and minimal nature of construction water demand, impacts related to construction water consumption would be less than significant.

Operational Demand

Reasonably foreseeable development under the General Plan Update would result in increased demand for potable water supplies for drinking; use by appliances and fixtures including toilets, showers, bathtubs, sinks, washing machines, and dishwashers; and landscape irrigation. Based on the CalEEMod land use-based water demand factors, reasonably foreseeable development would generate a water demand of approximately 333,217 gallons per day (186,359 gallons per day for indoor water use and 146,858 gallons per day for outdoor water use), or 373 AFY. This analysis conservatively assumes all project-generated water demand would be new water demand and does not account for water demand associated with existing development that would be demolished or replaced to accommodate new residential units, such as portions of the Commons Shopping Center, the Agoura Road Offices, the Mureau Office, and the Craftsman’s Corner commercial uses.

As discussed in Section 4.14.1, *Water Sources, Supply, Demand, and Distribution*, the LVMWD has estimated water supply availability for normal, single-dry, and multiple-dry year scenarios from 2025 through 2045 in its 2020 UWMP. For all years and all scenarios, the LVMWD anticipates meeting forecast demand, but does not anticipate any excess supply. Therefore, the analysis of water supply availability focuses on whether or not the General Plan Update is consistent with the water demand projections contained in the LVMWD's 2020 UWMP.

The LVMWD's 2020 UWMP projects future residential water demand through 2045, which roughly corresponds to the approximate buildout timeframe of the General Plan Update. As shown in Table 4.14-1, the LVMWD projects that water supply and demand will increase by approximately 4,602 AFY between 2025 and 2045. Water demand associated with reasonably foreseeable development under the General Plan Update would account for approximately 8.1 percent of this increase. However, the increase in water supplies planned for the period of 2025 through 2045 are intended to serve development forecast using data obtained from City staff prior to the current General Plan Update and only included an estimate of 977 new residential units within Calabasas city limits, which does not include the full 1,069 housing units proposed within Calabasas city limits under the current General Plan Update. (The estimated 236 housing units proposed for housing site #12 at Craftsman's Corner are currently located within unincorporated Los Angeles County and fall within the 2020 UWMP's estimated buildout of 2,746 new residential units for the portion of unincorporated Los Angeles County with LVMWD's service area.) As such, the 2020 UWMP does not fully account for water demands associated with reasonably foreseeable development under the General Plan Update.

Reasonably foreseeable development would be served by imported water from Metropolitan (LVMWD 2021b). Based on the water supply projections contained in the LVMWD's 2020 UWMP, the LVMWD anticipates purchasing up to 17,146 AFY from Metropolitan to meet demand through 2030 (LVMWD 2021b; see Table 4.14-1). Based on the Tier 1 limits described in Metropolitan's 2015 UWMP, the LVMWD would have an annual average Tier 1 maximum amount of 24,358 AFY available from Metropolitan, which represents an additional 7,212 AFY available to serve reasonably foreseeable development during normal, single-dry, and multiple-dry year scenarios. Metropolitan anticipates sufficient supplies to meet expected demand under normal, single-dry, and multiple-dry year conditions through 2040 (Metropolitan 2016). This excess amount of 7,212 AFY would be sufficient to accommodate the estimated increase in water demand of 373 AFY associated with the General Plan Update. Therefore, it is anticipated that sufficient additional imported water supplies will be available from Metropolitan to serve reasonably foreseeable development, which the LVMWD could purchase to meet the increased water demand. In addition, the LVMWD will incorporate the increased population and housing forecast from the General Plan Update into its future water supply planning efforts, such as future updates to the UWMP, to account for the increased water demand. Furthermore, reasonably foreseeable development would be subject to the City's General Plan Policies IV-21, IV-22, IV-23, IV-24, XII-23, and XII-24 related to coordinating development review with the LVMWD to ensure the availability of water supplies, minimizing domestic water use, encouraging the use of drought-tolerant plants and efficient landscape irrigation design, promoting the use of non-potable water for landscape irrigation and other uses, and minimizing the need for new water sources through water conservation. As a result, impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 3: Would the General Plan Update result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact UTIL-3 WASTEWATER GENERATED BY REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD BE TREATED AT THE LVMWD'S TWRP IN CALABASAS. THE PLANT WOULD HAVE ADEQUATE CAPACITY TO SERVE THE ANTICIPATED WASTEWATER GENERATION IN ADDITION TO ITS EXISTING WASTEWATER TREATMENT COMMITMENTS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed under Impact UTIL-1, project-generated wastewater would be adequately served by available capacity at the TWRP in Calabasas. Wastewater generated by the reasonably foreseeable development under the General Plan Update would account for approximately 14.8 percent of the remaining available capacity at the plant, which has approximately 2.5 MGD of excess treatment capacity. As such, the General Plan Update would not result in a determination by the wastewater treatment provider that it does not have adequate capacity to serve the anticipated demand of reasonably foreseeable development in addition to the provider's existing commitments. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 4: Would the General Plan Update generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Threshold 5: Would the General Plan Update comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact UTIL-4 REASONABLY FORESEEABLE DEVELOPMENT UNDER THE GENERAL PLAN UPDATE WOULD NOT GENERATE SOLID WASTE IN EXCESS OF STATE OR LOCAL STANDARDS, OR IN EXCESS OF THE CAPACITY OF LOCAL INFRASTRUCTURE, INCLUDING THE CALABASAS SANITARY LANDFILL. THE GENERAL PLAN UPDATE WOULD NOT IMPAIR THE ATTAINMENT OF SOLID WASTE REDUCTION GOALS, AND REASONABLY FORESEEABLE DEVELOPMENT WOULD COMPLY WITH FEDERAL, STATE, AND APPLICABLE LOCAL STATUTES AND REGULATIONS RELATED TO SOLID WASTE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As described in Section 4.14.1(g), *Solid Waste Collection and Disposal*, solid waste generated in the Plan Area is collected by Waste Management/G.I. Industries, and most solid waste is transported to the Calabasas Sanitary Landfill for disposal. Small quantities of solid waste are transported to other regional landfills, including the Simi Valley Landfill and Recycling Center, H.M. Holloway, Inc., Azusa Land Reclamation Company Landfill, El Sobrante Landfill, and the Sunshine Canyon City/County Landfill (CalRecycle 2021b). The Calabasas Sanitary Landfill currently has an estimated closure date of 2029; however, it has a remaining capacity of 14.5 million cubic yards and an outstanding request to update its closure year to 2042. Therefore, for the purposes of this analysis, it is assumed that solid waste generated by reasonably foreseeable development under the General Plan Update would be disposed of at the Calabasas Sanitary Landfill. An average of 1,624 tons of waste is deposited in the landfill daily; therefore, the average daily surplus is 1,876 tons per day (CalRecycle 2020b).

Construction

Demolition of existing development on several proposed housing sites and potential soil export would result in the generation of construction/demolition debris that would need to be disposed of at area landfills. Approximately 209,415 square feet of existing building area would be demolished and replaced over the course of buildout of the General Plan Update. CalEEMod, which was used to determine emissions from all project construction activities including demolition, employs a conversion factor of 0.046 tons per square foot for building demolition debris, based on an analysis of commercial brick, concrete, and steel building demolition (CAPCOA 2017). Using the same conversion factor, demolition would generate approximately 9,633 tons of debris for off-site disposal, or approximately 321 tons per day when spread over the estimated 30 days of demolition activities anticipated across all construction phases, as estimated in CalEEMod. Consequently, demolition debris would account for approximately 5.8 percent of the permitted daily throughput at the Calabasas Sanitary Landfill during the 30 days of demolition activities. Therefore, the facility would have adequate capacity to serve this phase of construction for reasonably foreseeable development under the General Plan Update.

At this stage of planning, the volume of potential soil export required for reasonably foreseeable development is not known and would be speculative to estimate. Because the proposed housing sites consist of primarily infill sites with existing structures that would be redeveloped, grading for reasonably foreseeable development under the General Plan Update is not anticipated to result in major export of soil. Nevertheless, grading activities may result in export of some soil from individual project construction sites. The Calabasas Landfill accepts construction/demolition waste; therefore, it is likely that exported soil would be disposed of at this location. Grading activities associated with the General Plan Update would not occur all at once, but rather would be spread across multiple projects implemented over the planning horizon of the General Plan Update. Furthermore, exported soil could be transported to other area landfills that accept soil and construction debris in nearby Los Angeles and Ventura counties to further reduce impacts at any single solid waste disposal facility, or used beneficially as landfill cover or imported fill material at other construction sites. Therefore, disposal of soils from grading of the individual project sites would not exceed the capacity of local solid waste disposal facilities.

The handling of all debris and waste generated during construction of reasonably foreseeable development under the General Plan Update would be subject to 2019 CalGreen requirements and the California Integrated Waste Management Act of 1989 (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity. Therefore, impacts related to solid waste generated during construction would be less than significant.

Operation

According to CalEEMod outputs, reasonably foreseeable development under the General Plan Update would generate a net increase of approximately 600 tons of solid waste annually, or approximately 1.6 tons per day. Based on this information, the solid waste generation of reasonably foreseeable development would account for approximately 0.1 percent of the Calabasas Sanitary Landfill's average daily surplus throughput of 1,876 tons per day. Given this small proportion of permitted throughput, the solid waste generated by operation of reasonably foreseeable development under the General Plan Update would be adequately accommodated by existing landfills.

For operational waste, AB 939 requires all cities and counties to divert a minimum of 50 percent of all solid waste from landfills. Reasonably foreseeable development under the General Plan Update would be required to comply with federal, State, and local statutes and regulations related to solid waste, including AB 939; the City's General Plan Policies IV-41, IV-43, IV-44, and IV-45, the City's Resolution No. 2008-1111, and CMC Chapters 8.16.500(C-D, G). Therefore, because reasonably foreseeable development would be served by landfills with sufficient capacity and would comply with applicable regulations related to solid waste, impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.14.4 Cumulative Impacts

Extensions of Utility Facilities – Water, Wastewater, Stormwater, Electric Power, Natural Gas, and Telecommunications

Impacts related to the extension of water supply, wastewater, electric power, natural gas, and telecommunications facilities to reasonably foreseeable development are typically generated in the immediate vicinity of a project. Therefore, cumulative impacts of reasonably foreseeable development in the Plan Area related to extensions of water supply, wastewater, stormwater, electric power, natural gas, and telecommunications facilities to individual projects sites are already addressed under UTIL-1. As discussed therein, cumulative impacts of extensions of utility facilities to individual project sites would be less than significant.

Water Supply

Cumulative development in the LVMWD service area (including Calabasas, Agoura Hills, Westlake Village, Hidden Hills, and portions of unincorporated Los Angeles County) would increase demand for water supplies beyond existing conditions. The project-level impact analysis contained under Impact UTIL-2 is cumulative in nature because it addresses the significance of water demand associated with reasonably foreseeable development under the project in terms of whether this demand is accounted for in the LVMWD's 2020 UWMP, which is a plan that addresses cumulative impacts to water supply. The LVMWD projects that future water supplies will meet cumulative water demand in normal, dry-year, and multiple-dry year scenarios, but does not anticipate any excess supply. As discussed under Impact UTIL-2, it is anticipated that sufficient additional imported water supplies will be available from Metropolitan to serve reasonably foreseeable development, which the LVMWD could purchase to meet the increased water demand associated with greater buildout under the General Plan Update than was anticipated in the 2020 UWMP. Therefore, cumulative impacts to water supply would be less than significant.

Wastewater

The Joint Powers Authority of LVMWD and TSD's Sanitation Master Plan Update 2014 forecast cumulative demand for wastewater treatment based on the City's 2013 Housing Element, which projected an increase of 746 residential units in Calabasas by 2035. Accounting for cumulative development in the LVMWD and TSD service areas, the 2014 Sanitation Master Plan estimated future cumulative demand of 12.59 mgd by 2035, which would exceed the 12 mgd treatment capacity of the TWRP. The General Plan Update would increase this cumulative exceedance of

treatment capacity by 0.37 mgd because it would facilitate construction of 1,305 additional residential units (see discussion under Impact UTIL-1 for calculations).

The Sanitation Master Plan Update 2014 indicates that LVMWD and TSD will need to begin the planning process for increasing the TWRP's capacity once dry weather wastewater flows reach 85 percent of the design maximum (i.e., 10.2 mgd for the TWRP), which is anticipated to occur in 2025. In the meantime, LVWMD has outlined measures in its Capital Improvements Program to address bottlenecks related to nutrient treatment and hydraulic issues during very high flow storm events prior to the TWRP reaching its dry weather capacity in 2035 (Joint Powers Authority of LVMWD and TSD 2014). At this time, it is not known whether the exceedance of the TWRP's design treatment capacity will require expansions or modifications to the existing facility or a new facility on a different site due to the open space and topographical restrictions surrounding the existing TWRP site (Joint Powers Authority of LVMWD and TSD 2014). New and expanded wastewater treatment facilities may result in environmental effects; however, because the location or scale of such future facilities cannot be known at this time, the evaluation of such facilities would be speculative. New or expanded facilities that may result from cumulative growth would require their own environmental analysis pursuant to the requirements of CEQA. At that time, any associated environmental effects would be disclosed and evaluated, and any required mitigation to reduce identified effects would be required through that process. Therefore, cumulative impacts related to wastewater treatment would be less than significant.

Electric Power and Natural Gas

As discussed under Section 4.14.1(d), *Electric Power Supply, Demand, and Infrastructure*, electricity demand in the CPA service area is projected to increase by approximately 2.3 percent annually through 2030 in the mid-energy demand/mid-Additional Achievable Energy Efficiency scenario, which will place additional demands on existing electricity generation facilities (CEC 2020c). Although reasonably foreseeable development under the General Plan Update would be constructed in accordance with the latest iteration of CalGreen, which would minimize energy usage, reasonably foreseeable development would increase electricity demand in comparison to existing conditions and would contribute to the cumulative regional increase in electricity demand. However, as discussed in its Integrated Resource Plan, the CPA has existing plans in place to solicit additional long-term renewable contracts, including conventional and long-duration storage technologies (CPA 2021). New and expanded electric power facilities and infrastructure may result in environmental effects; however, since the location or scale of such future facilities cannot be known at this time, the evaluation of such facilities would be speculative. New or expanded facilities that may result from cumulative development would require their own environmental analysis pursuant to the requirements of CEQA. At that time, any associated environmental effects would be disclosed and evaluated, and any required mitigation to reduce identified effects would be required through that process. Therefore, cumulative impacts related to electric power would be less than significant.

As discussed under Section 4.14.1(e), *Natural Gas Supply, Demand, and Infrastructure*, natural gas demand in the SoCalGas service area is projected to decline at a rate of one percent per year between 2020 and 2035 primarily due to increasing energy efficiency, modest economic growth, increasing building decarbonization, and statewide efforts to reduce greenhouse gas emissions from the electricity generation sector, even when accounting for moderate growth in the adoption of natural gas vehicles (California Gas and Electric Utilities 2020). Therefore, given that cumulative

demand for natural gas is anticipated to decline, new or expanded natural gas facilities would not be required, and no cumulative impact related to natural gas would occur.

Solid Waste

Cumulative development in the watershed of the Calabasas Sanitary Landfill (including Calabasas, Agoura Hills, Malibu, Thousand Oaks, and Westlake Village as well as portions of unincorporated Los Angeles and Ventura counties and the Los Angeles Area Integrated Waste Management Authority) would increase the amount of solid waste generation beyond existing conditions. As stated in Section 4.14.1(g), *Solid Waste Collection and Disposal*, the total capacity of the Calabasas Sanitary Landfill is 69.3 million cubic yards, and the maximum permitted daily throughput is 3,500 tons. An average of 1,624 tons of waste is deposited in the landfill daily; therefore, the average daily surplus is 1,876 tons per day, which means approximately 54% of the maximum permitted daily throughput is available (CalRecycle 2020b). As such, cumulative development in the watershed would have to more than double existing development in order for solid waste generation to exceed the current average daily surplus. Given the current built-out nature of the watershed and topographical and open space restrictions on much of the remaining vacant land, it is unlikely that cumulative development would double existing development such that the average daily surplus in maximum permitted daily throughput would be exceeded. Therefore, there would be no cumulative impact related to the maximum permitted daily throughput at the Calabasas Sanitary Landfill.

As of December 31, 2014, the remaining capacity of the Calabasas Sanitary Landfill was approximately 14.5 million cubic yards (CalRecycle 2021). One cubic yard of compacted municipal solid waste disposed of at a large landfill weighs approximately 1,700 to 2,000 pounds, or 0.85 to 1 ton (United States Environmental Protection Agency 2016). Therefore, as of 2014, the Calabasas Sanitary Landfill had the potential to accommodate an additional approximately 14.5 million tons of municipal solid waste. An average of 1,624 tons of waste is deposited in the landfill daily; at this rate, the remaining lifetime of the landfill is approximately 24 years (14.5 million tons divided by 1,624 tons/per day divided by 365 days/year) from 2014, which means the landfill has the potential to accommodate solid waste until at least 2038. This estimate of the landfill's lifetime is consistent with the current request submitted to CalRecycle to update the landfill's estimated closure year from 2029 to 2042 (CalRecycle 2016). However, if cumulative development were to increase average daily throughput to the maximum permitted daily throughput level of 3,500 tons per day (which would mean cumulative development would have to more than double existing development, as discussed in the prior paragraph), this would shorten the landfill's remaining lifetime to approximately 11 years (14.5 million tons divided by 3,500 tons/per day divided by 365 days/year) from 2014, which means the landfill could potentially close by 2025. This would be within the planning horizon of the General Plan Update. Closure of the Calabasas Sanitary Landfill would result in the re-direction of solid waste disposal from the watershed to other regional landfills such as the Simi Valley Landfill and Recycling Center, H.M. Holloway, Inc., Azusa Land Reclamation Company Landfill, El Sobrante Landfill, and the Sunshine Canyon City/County Landfill. In addition, construction of a new landfill may be necessary, which may result in environmental effects; however, since the location or scale of such a future facility cannot be known at this time, the evaluation of such a facility would be speculative. A new landfill that may be required to accommodate solid waste generation from cumulative development would require its own environmental analysis pursuant to the requirements of CEQA. At that time, any associated environmental effects would be disclosed and evaluated, and any required mitigation to reduce identified effects would be required through that process. Therefore, cumulative impacts related to the remaining lifetime capacity of the Calabasas Sanitary Landfill would be less than significant.

4.15 Wildfire

This section evaluates potential wildfire impacts that could arise from implementation of the General Plan Update, including the 2021-2029 Housing Element along with updated Land Use, Circulation, and Safety Elements. The wildfire analysis consists of a summary of the existing conditions in the Plan Area, the regulatory framework, and a discussion of the potential wildfire impacts from development on candidate housing sites. Analysis throughout this section is supported by the Wildfire Assessment prepared for the General Plan Update by TSS Consultants (Appendix E). The candidate housing sites were evaluated in this EIR at a programmatic level, based on information available to the City, where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Project-specific analysis was not conducted as those projects are not yet known and analysis would be speculative.

4.15.1 Setting

Wildfire Fundamentals

A wildfire is an uncontrolled fire in an area of extensive combustible fuel, including vegetation and structures. Wildfires differ from other fires in that they take place outdoors in areas of grassland, woodlands, brushland, scrubland, peatland, and other wooded areas that act as a source of fuel, or combustible material. Buildings may become involved if a wildfire spreads to adjacent communities. The primary factors that increase an area's susceptibility to wildfire include slope and topography, vegetation type and condition, and weather and atmospheric conditions.

A significant part of western Los Angeles County is developed urban area situated near rugged topography with highly flammable vegetation. The County of Los Angeles experiences wet winters and warm, dry summers that dry out vegetation. During the fall, Santa Ana winds, known for the dry air and high wind speeds originating in the deserts north and east of Los Angeles County, sweep west into the county and further desiccate vegetation. Historically, fires that burn more than 1,000 acres have occurred in the County about every one to three years, with the most recent being the Woolsey Fire (November 2018) which burned 96,949 acres (County of Los Angeles 2019).

The indirect effects of wildland fires can be catastrophic. In addition to stripping the land of vegetation and destroying forest resources, large, intense fires can harm the soil, waterways, and the land itself. Soil exposed to intense heat may lose its capacity to absorb moisture and support life. Regions of dense dry vegetation, particularly in canyon areas and on hillsides, pose the greatest potential for wildfire risks.

Wildfire has three basic elements: how and where its ignition occurred; how and why it moves across a landscape from its point of origin; and what is the fire's nature upon arrival at a location important to the City. In general, a fire's nature is defined by eight characteristics:

1. Direction of the advance of the fire front
2. Speed of the advance of the fire front (rate of spread)
3. Mechanism causing the advance
4. Duration at any one location
5. Structure-related consumption of fuels
6. Flame length

7. Intensity
8. Gaining control

A fire front's direction of travel is primarily determined by direction of prevailing winds, geographic aspect, and condition of the fuels in the advance direction. The speed of a fire front's advance is a result of conditions at the site of the currently burning material and of lands in the advance direction of the fire. As a fire advances the overriding influences determining its speed are prevailing wind speed, terrain slope gradient, dominant fuel size classes, and fuel continuity.

Wildfires advance by two principal mechanisms, combustion resulting from radiant heating, and remote ignition resulting from ember production. Fire stays at one location primarily due to the size class of the material being consumed. Grass formations are dominated by low volumes of very "fine" fuels and, depending on the level of dryness, can be consumed, with the fire advancing, in a matter of minutes. On the other hand, tree-dominated formations have significantly greater volumes of available fuel and a far great amount of larger-sized pieces. Fires can remain at these locations for days, often weeks, and sometimes months (on heavily wooded conifer sites).

Fires burn where fuels are available. Fires in grasslands burn at one level set by the height of the grass, while fires in brushlands can burn surface fuels and typically consume the stems and leafy crowns to the full height of the plants. Fires in tree formations have a much more complex pattern of movement based primarily on the continuity (or "connectedness") of the fuels. In these stands there are typically three distinct layers of fuels, arranged vertically, surface, stems and trunks, and the crown composed of branches, twigs and leaves. The continuity of fuels is important to consider in both horizontal and vertical directions. If a fire enters a stand and is advancing only as a surface fire it will continue this manner of advance if there is high horizontal fuel connectivity. However, if there is also a high degree of vertical continuity (provided by fuels referred to as "ladder fuels") then a fire can move into the crown as well as forward across the surface and fuels in the entire stand structure become involved.

Flame lengths are generally determined by the volume of fuels burning, the amount of time to total consumption, and the height of the species in the composition. Grassland produces flame lengths typically ranging from one to three feet as they are composed of low volumes of fine materials that are consumed quickly. Flame lengths are at their maximum when the material is dry. Brush formations can produce flame lengths from 4 to 10 feet. Native oak-dominated hardwood formations can generate 20- to 40-foot flame lengths and stands of exotics, such as *Eucalyptus globulus* or *E. cinerea*, or dense conifer stands, over 100 feet. Flame length is important as it sets the distance over which radiant heating-related combustion can occur.

The temperature achieved in a wildfire is directly related to the amount of cellulosic material available for consumption. Grasslands have very low amounts and attain lower temperatures but woodland, characterized by large amounts of highly concentrated cellulosic material, can attain temperatures on the order of 1,800 degrees Fahrenheit;

Gaining control over a wildfire's behavioral character is the objective of response efforts. Grassland fires, burning in low fuel volume, rapid consumption, and at a single level are the easiest to bring under control. On the other end, fires that are burning in high fuel volumes, full spectrum size classes, and entire stand structure involvement, can require days, weeks, even months, to bring under complete control.

Wildfire Hazard Designations

In California, State and local agencies share responsibility for wildfire prevention and suppression and federal agencies take part as well. Federal agencies are responsible for federal lands in Federal Responsibility Areas (FRA). The State of California has determined that some non-federal lands in unincorporated areas with watershed value are of statewide interest and have classified those lands as State Responsibility Areas (SRA). CAL FIRE manages SRAs. All incorporated areas and unincorporated lands not in FRAs or SRAs are classified as Local Responsibility Areas (LRA).

While nearly all of California is subject to some degree of wildfire hazard, there are specific features that make certain areas more hazardous. CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (Public Resources Code 4201-4204, California Government Code 51175-89). As described above, the primary factors that increase an area’s susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE maps fire hazards based on zones, referred to as Fire Hazard Severity Zones (FHSZ). There are three levels of severity: 1) Moderate FHSZs; 2) High FHSZs; and 3) Very High FHSZs. Only the Very High FHSZs are mapped for LRAs. Each of the zones influence how people construct buildings and protect property to reduce risk associated with wildland fires. However, none of the fire zones specifically prohibit development or construction. To reduce fire risk under State regulations, areas within Very High FHSZs must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life in those areas. Figure 4.15-1 illustrates the entirety of Calabasas is designated as a Very High FHSZ (City of Calabasas 2015).

CAL FIRE’s Fire and Resource Assessment Program (FRAP) has classified the surrounding areas of Calabasas as being a High and Very High FHSZ within an SRA, as well as Cheseboro and Palo Comado Canyon being within an FRA (CAL FIRE 2020).

Table 4.15-1 Wind Data

Station	Seasonal Period			
	March – October		November – April	
	PWD	AWS (mph)	PWD	AWS (mph)
Simi Valley	East/Northeast	5-10	East	7-10
Malibu Canyon	South	10-20	South	10-20
Calabasas-Stunt Ranch	West/Northwest	2-5	West/Northwest	1-5
Topanga Raws	South	7-15	North	7-10

PWD = wind source direction, AWS = average wind speed, mph = miles per hour

Post-fire Slope Instability and Drainage Pattern Changes

Slope instability from wildfire scarring of the landscape can result in slope instability in the form of more intensive flooding and landslides. These post-fire slope soils and altered drainage patterns can result in soil creep on downslope sides of foundations and reduce lateral support.

The topography of Calabasas contains multiple hillsides, significant ridgelines, as well as vertical slopes and steep canyons (City of Calabasas 2015). Landslides in these areas may result from heavy rain, erosion, removal of vegetation, seismic activity, wildfire, or combinations of these and other factors.

Citywide Conditions

Hillside Slope and Aspect

Calabasas lies at the base of the northern facing slope of the Santa Monica Mountains. The City is located approximately five miles north of the east-west oriented primary ridge line of the mountain range as shown in the topography in Figure 4.15-2. The portions of the City located on the northern-facing slope of the Santa Monica Mountains are characterized by highly dissected branching drainage patterns with a wide range of slopes (0 -90 percent). Elevation changes within the City limits, on a north-to-south trend line, start at approximately 1,000 feet (AMSL) along U.S. 101 to 1,500 feet AMSL along the southern City limits. The soil resource across the City is comprised of five principal soils series: Balcom, Gazos, Linne, Nipolomol, and Topanga. In terms of soil slippage rating the key factor is slope; Balcom silty clay loam, Linne-Los Ossos Association, and Xerorthents-Urban-Balcom, and Xerorthents-Urban-Gazos. Associations are rated as “high” when slopes exceed 30 percent. In addition, there are occurrences of fluvaquents (un-consolidated fluvial deposits) and Xerorthents (soils with a dominantly xeric moisture regime) in and around the Plan Area. The Xerorthents are generally located on low slope classes and have been, historically, the sites of urban development. The City is largely developed and aims to avoid building on hillsides and slopes to prevent wildfire and seismic related hazards (City of Calabasas 2015).

Vegetation

The City of Calabasas includes predominantly developed areas such as commercial and residential buildings, roads, and parking lots, situated among rolling hills and thousands of acres of open space. Eleven different vegetation and existing land use categories are present surrounding the Plan Area and shown in Figure 4.15-3. The two highest land use categories that make up the Plan Area boundary include grassland (approximately 42 percent) and grassland/brush/oak woodland (approximately 27 percent). Each vegetation and existing land use category has different wildfire behaviors characterized by susceptibility to ignition; rates of fire-front advance across surfaces occupied by a particular land use; nature (surface, crown, full structure involvement); intensity; and residence time.

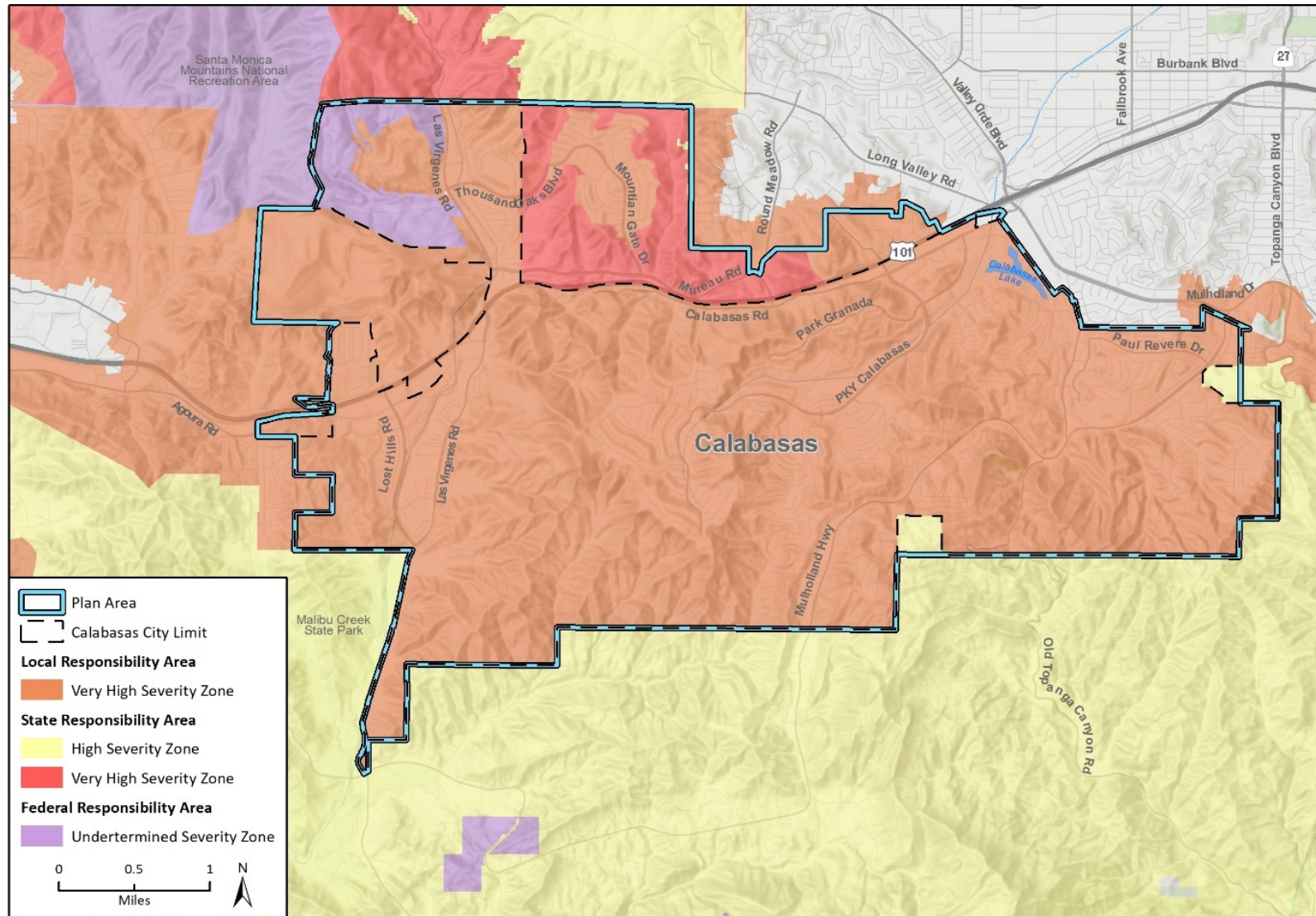
Weather and Atmosphere

The Western Regional Climate Center maintains a weather monitoring station in Thousand Oaks, approximately 10.3 miles west of Calabasas. According to data collected at this weather station, most precipitation is received from November through March, with an average annual rainfall of approximately 16.5 inches (U.S. Climate Data 2021). May through September is the driest part of the year and coincides with what was traditionally considered the fire season in California. However, increasingly persistent drought and climatic changes in the state have resulted in drier winters. Fires during the autumn, winter, and spring months are becoming more common (Western Regional Climate Center 2021).

Wind Patterns

There are four weather stations that provide wind data for Calabasas. The locations of these stations are shown, in relation to the City’s position, on Figure 4.15-4. Table 4.15-1 presents data from the four stations and includes the primary wind source directions (PWD) and average wind speed (AWS). The data has been further broken out into two seasonal periods: March to October (which roughly corresponds to the fire season) and the wetter months between November and April.

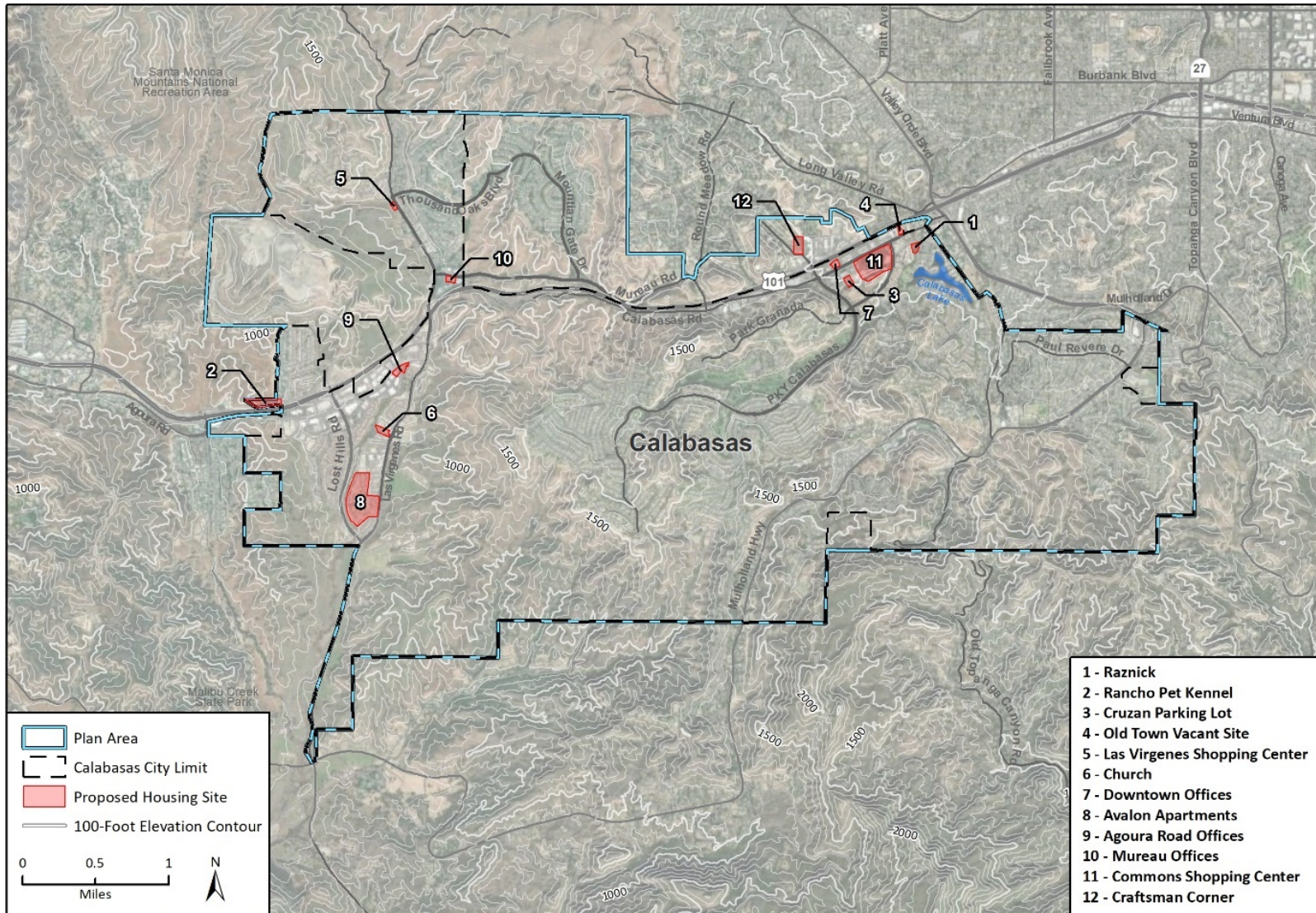
Figure 4.15-1 Calabasas Fire Hazard Severity Zones



Basemap provided by Esri and its licensors © 2021.
 Sources provided by City of Calabasas, 2018; CalFire 2020

Fig. X Wildfire Hazard Severity Zones

Figure 4.15-2 Plan Area Topography



Basemap provided by Esri and its licensors © 2021.
 Additional sources provided by City of Calabasas 2018, 2021; USGS 2021.

Fig1Wdlfrn topo

Figure 4.15-3 Calabasas Vegetation and Existing Land Use Categories

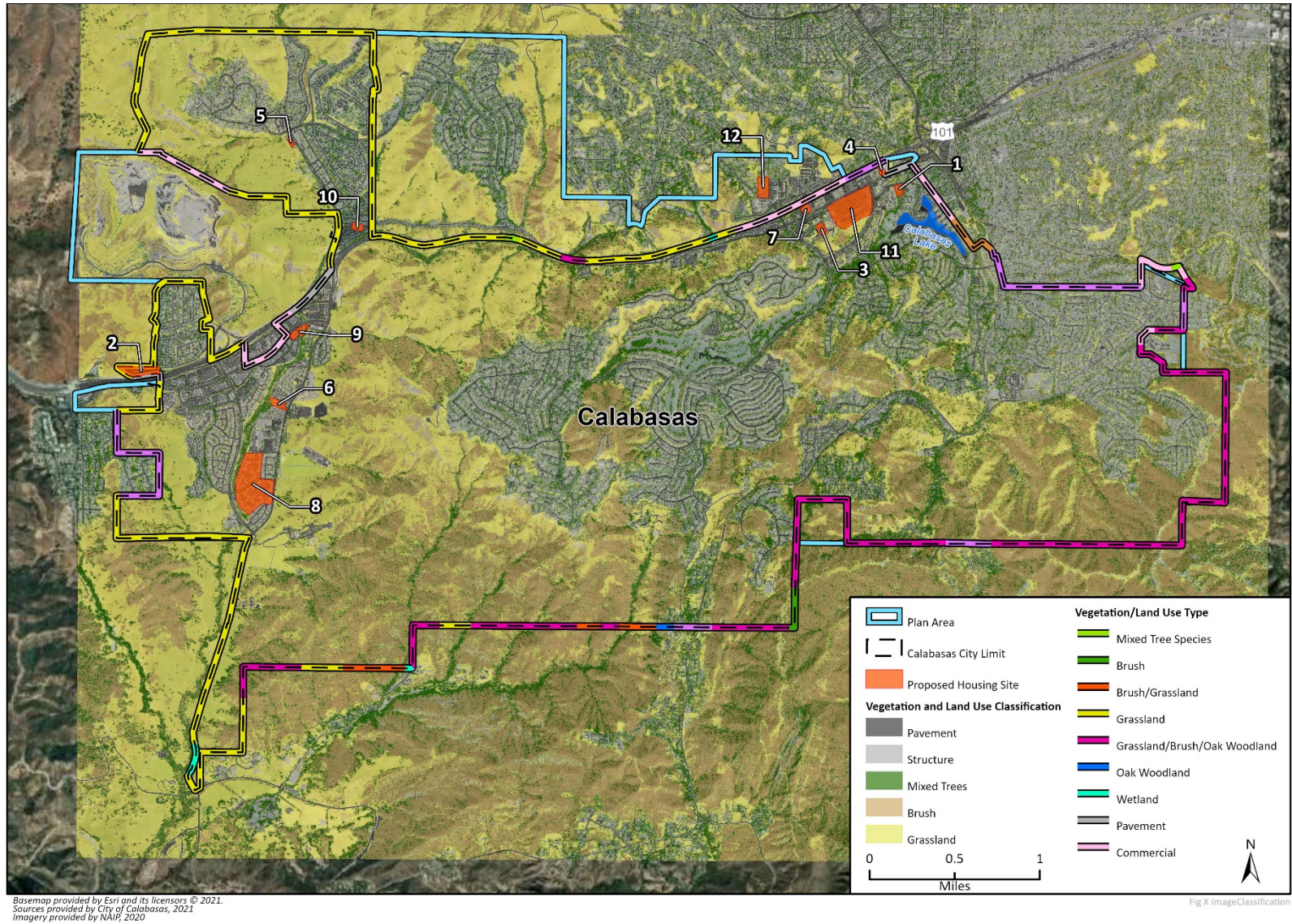
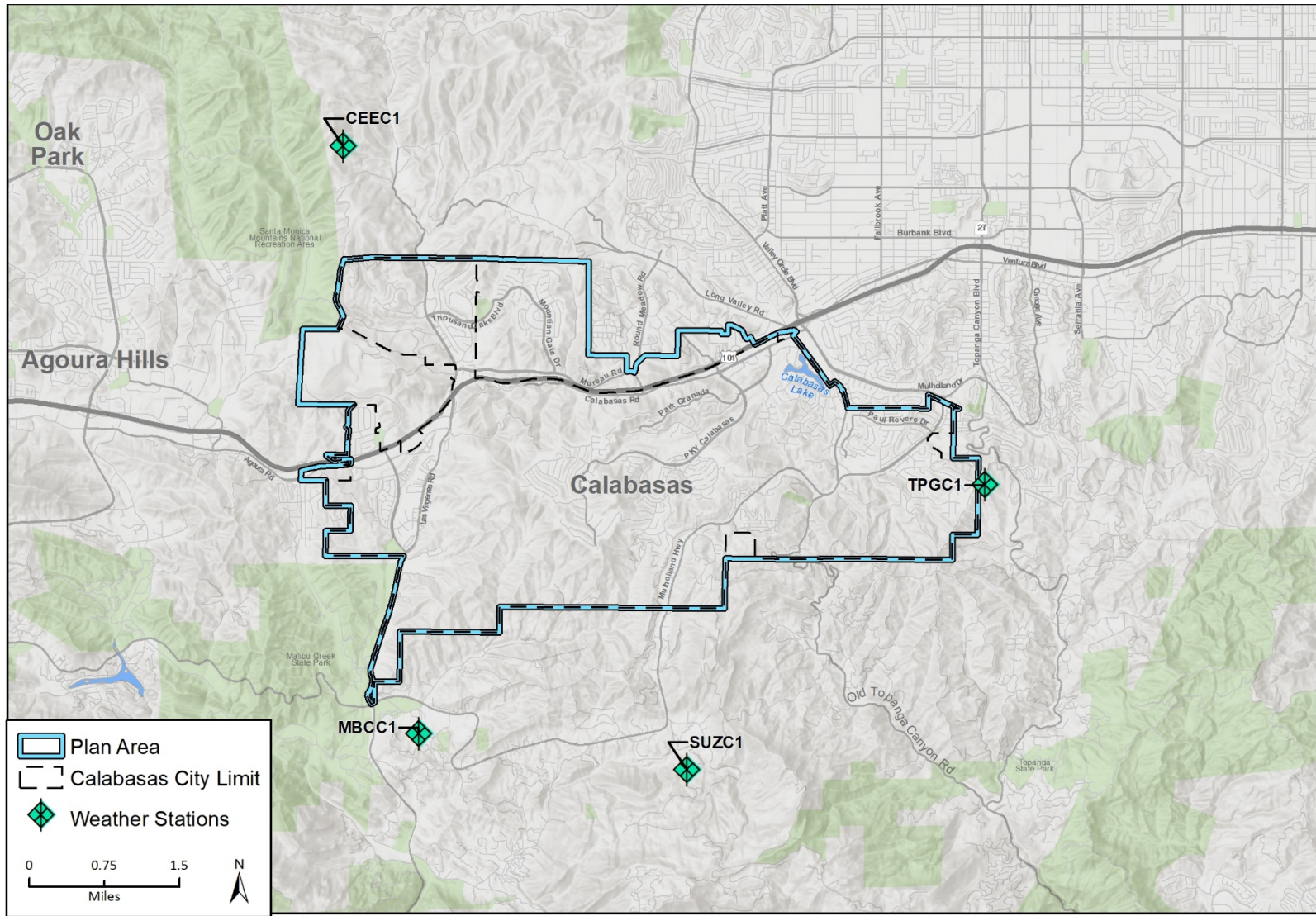


Figure 4.15-4 Weather Stations



Basemap provided by Esri and its licensors © 2021.
Sources provided by City of Calabasas, 2021

Fig X WindStations

4.15.2 Regulatory Setting

Federal

The Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance. There are two different levels of State disaster plans: “Standard” and “Enhanced.” States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Act has also established new requirements for local mitigation plans.

National Fire Plan

The National Fire Plan was developed under Executive Order 11246 in August 2000, following an historic wildland fire season. Its intent was to establish plans for active response to severe wildland fires and their impacts to communities, while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability. The program promotes close coordination among local, State, tribal, and federal firefighting resources by conducting training, purchasing equipment, and providing prevention activities on a cost-share basis. To help protect people and their property from potential catastrophic wildfire, the National Fire Plan directs funding to be provided for projects designed to reduce the fire risks to communities (United States Department of Agriculture [USDA], United States Department of the Interior [DOI]. 2000). High-risk communities identified within the wildland-urban interface, the area where homes and wildlands intermix, were published in the Federal Register in 2001. At the request of Congress, the Federal Register notice only listed those communities neighboring federal lands (USDA, DOI 2002). CAL FIRE incorporates concepts from this plan into State fire planning efforts (CAL FIRE 2018).

State

California Fire and Building Codes (2019)

The California Fire Code is Chapter 9 of California Code of Regulations (CCR) Title 24. It establishes the minimum requirements consistent with nationally recognized good practices to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structure, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The California Fire Code regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The California Fire Code and the California Building Code use a hazard classification system to determine what protective measures are required to ensure fire safety and protect lives. These measures may include construction standards, separations from property lines and specialized equipment. To ensure that these safety measures are met, the California Fire Code employs a permit system based on hazard classification. The provisions of this Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout California.

More specifically, the Fire Code is included in Title 24 of the California Code of Regulations. Title 24, part 9, Chapter 7 addresses fire-resistance-rated construction; California Building Code (Part 2), Chapter 7A addresses materials and construction methods for exterior wildfire exposure; Fire Code Chapter 8 addresses fire related Interior finishes; Fire Code Chapter 9 addresses fire protection systems; and Fire Code Chapter 10 addresses fire-related means of egress, including fire apparatus access road width requirements. Fire Code Section 4906 also contains existing regulations for vegetation and fuel management to maintain clearances around structures. These requirements establish minimum standards to protect buildings in FHSZs within SRAs and wildland-urban interface fire areas. This code includes provisions for ignition-resistant construction standards for new buildings.

California Fire Plan

The Strategic Fire Plan for California (California Fire Plan) is the State's road map for reducing the risk of wildfire. The most recent version of the Plan was finalized in August 2018 and directs each CAL FIRE Unit to prepare a locally specific fire management plan (CAL FIRE 2018). In compliance with the California Fire Plan, individual CAL FIRE units are required to develop fire management plans for their areas of responsibility. These documents assess the fire situation within each of the 21 CAL FIRE units and six contract counties. The plans include stakeholder contributions and priorities and identify strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire problem. The plans are required to be updated annually. With California's extensive wildland-urban interface situation, the list of high-risk communities, including Calabasas, extends beyond just those adjacent to federal lands, discussed above. The California State Forester (CAL FIRE Director) has the responsibility for managing the list of those high-risk communities.

California Disaster Mitigation Act

The California Office of Emergency Services (CalOES) prepares the State of California Multi-Hazard Mitigation Plan (SHMP). The SHMP identifies hazard risks and includes a vulnerability analysis and a hazard mitigation strategy. The SHMP is federally required under the Disaster Mitigation Act of 2000 for the State to receive federal funding. The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance.

California Emergency Response Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Responding to hazardous-materials incidents is one part of this plan. The plan is administered by the California Governor's Office of Emergency Services, which coordinates the responses of other agencies. When the City of Calabasas experiences an emergency, an Emergency Operations Center (EOC) may be opened. In the event an EOC is opened, emergency response team members coordinate efforts and work with local fire and police agencies, emergency medical providers, the California Highway Patrol, CAL FIRE, California Department of Fish and Wildlife (CDFW), and California Department of Transportation (Caltrans).

State Emergency Plan

The foundation of California's emergency planning and response is a statewide mutual aid system designed to ensure adequate resources, facilities, and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation.

The California Disaster and Civil Defense Master Mutual Aid Agreement (California Government Code Sections 8555–8561) requires signatories to prepare operational plans to use within their jurisdiction and outside their area. These plans include fire and non-fire emergencies related to natural, technological, and war contingencies. The State of California, all State agencies, all political subdivisions, and all fire districts signed this agreement in 1950.

Section 8568 of the California Government Code, the “California Emergency Services Act,” states that “the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof.” The Act provides the basic authorities for conducting emergency operations following the proclamations of emergencies by the Governor or appropriate local authority, such as a City Manager. The provisions of the act are further reflected and expanded on by appropriate local emergency ordinances. The Act further describes the function and operations of government at all levels during extraordinary emergencies.

All local emergency plans are extensions of the State of California Emergency Plan. The State Emergency Plan conforms to the requirements of California’s Standardized Emergency Management System (SEMS), the system required by Government Code 8607(a) for managing emergencies that involve multiple jurisdictions and agencies. The SEMS incorporates the functions and principles of the Incident Command System, the Master Mutual Aid Agreement, existing mutual aid systems, the operational area concept, and multi-agency or inter-agency coordination. Local governments must use SEMS to be eligible for funding of their response-related personnel costs under State disaster assistance programs. The SEMS consists of five organizational levels that are activated as necessary, including field response, local government, operational area, regional, and State. The Governor’s Office of Emergency Services divides the state into several mutual aid regions. Calabasas is in Region I, managed by Assistant Chief David Stone (CalOES 2020).

California Building Code

WILDLAND-URBAN INTERFACE BUILDING STANDARDS

On September 20, 2007, the building Standards Commission approved the Office of the State Fire Marshal’s emergency regulations amending the California Code of Regulations, Title 24, Part 2, known as the 2007 California Building Code. These codes include provisions for ignition-resistant construction standards in the wildland-urban interface.

Interface zones are dense housing adjacent to vegetation that can burn and must meet the following criteria:

1. Housing density class 2, 3, or 4
2. In moderate, high, or very high fire hazard severity zone
3. Not dominated by wildland vegetation (lifeform not herbaceous, hardwood, conifer, or shrub)
4. Spatially contiguous groups of 30-meter cells that are 10 acres and larger

Intermix zones are housing development interspersed in an area dominated by wildland vegetation and must meet the following criteria:

1. Not interface
2. Housing density class 2
3. Housing density class 3 or 4, dominated by wildland vegetation

4. In moderate, high, or very high fire hazard severity zone
5. Improved parcels only
6. Spatially contiguous groups of 30-meter cells 25 acres and larger

Influence zones have wildfire-susceptible vegetation up to 1.5 miles from an interface zone or intermix zone (CalFIRE 2019).

California Public Resources Code

The California Public Resources Code (PRC) includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on-site for various types of work in fire-prone areas.

These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC § 4442)
- Appropriate fire suppression equipment would be maintained during the highest fire danger period—from April 1 to December 1 (PRC § 4428)
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain the appropriate fire suppression equipment (PRC § 4427)
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (PRC § 4431)

Senate Bill 1241 (Kehoe) of 2012

Senate Bill 1241 requires cities and counties in SRAs and Very High FHSZs to address fire risk in the safety element of their general plans. The bill also resulted in amendments to the CEQA Guidelines Initial Study checklist to include questions related to fire hazard impacts for projects located in or near lands classified as SRAs and Very High FHSZs. In adopting these Guidelines amendments, OPR recognized that low-density, leapfrog development may create higher wildfire risks than high-density, infill development.

Government Code Section 51182

A person who owns, leases, controls, operates, or maintains an occupied dwelling or occupied structure in, upon, or adjoining a mountainous area, forest-covered land, brush-covered land, grass-covered land, or land that is covered with flammable material, which area or land is in a Very High FHSZ shall at all times do all of the following:

1. Maintain defensible space of 100 feet from each side and from the front and rear of the structure
2. Remove that portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe
3. Maintain a tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood

4. Maintain the roof of a structure free of leaves, needles, or other vegetative materials
5. Prior to constructing a new dwelling or structure that will be occupied or rebuilding an occupied dwelling or occupied structure damaged by a fire in that zone, the construction or rebuilding of which requires a building permit, obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable State and local building standards

California Public Utilities Commission General Orders

GENERAL ORDER 95

The California Public Utilities Commission (CPUC) General Order 95 applies to construction and reconstruction of overhead electric lines in California. The replacement of poles, towers, or other structures is considered reconstruction and requires adherence to all strength and clearance requirements of this order. The CPUC has promulgated various Rules to implement the fire safety requirements of General Order 95, including:

- Rule 18A requires utility companies take appropriate corrective action to remedy Safety Hazards.
- General Order 95 nonconformances requires that each utility company establish an auditable maintenance program.
- Rules 31.2 requires that lines be inspected frequently and thoroughly.
- Rule 35 requires that vegetation management activities be performed in order to establish necessary and reasonable clearances. These requirements apply to all overhead electrical supply and communication facilities that are covered by General Order 95, including facilities on lands owned and maintained by California State and local agencies.
- Rule 38 establishes minimum vertical, horizontal, and radial clearances of wires from other wires.
- Rule 43.2.A.2 requires that for lines located within Tier 2 or Tier 3 zones, the wind loads required in Rule 43.2.A.1 be multiplied by a wind load factor of 1.1. (CPUC 2018)

GENERAL ORDER 165

General Order 165 establishes requirements for the inspection of electric distribution and transmission facilities that are not contained within a substation. Utilities must perform “Patrol” inspections, defined as a simple visual inspection of utility equipment and structures that is designed to identify obvious structural problems and hazards, at least once per year for each piece of equipment and structure. “Detailed” inspections, where individual pieces of equipment and structures are carefully examined, are required every five years for all overhead conductor and cables, transformers, switching/protective devices, and regulators/capacitors. By July 1st of each year, each utility subject to this General Order must submit an annual report of its inspections for the previous year under penalty of perjury (CPUC 2017a).

GENERAL ORDER 166

General Order 166 Standard 1.E requires that investor-owned utilities develop a fire prevention plan which describes measures that the electric utility will implement to mitigate the threat of power-line fires generally. Additionally, this standard requires that IOUs outline a plan to mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag

Warning in a high fire threat area. Fire prevention plans created by IOUs are required to identify specific parts of the utility's service territory where the conditions described above may occur simultaneously. Standard 11 requires that utilities report annually to the CPUC regarding compliance with General Order 166 (CPUC 2017b).

Senate Bill 1028

Senate Bill 1028 (2016) requires each electrical corporation to construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those components, and makes a violation of these provisions by an electrical corporation a crime under State law. The bill also requires each electrical corporation to annually prepare a wildfire mitigation plan and submit to CPUC for review. The plan must include a statement of objectives, a description of preventive strategies and programs that are focused on minimizing risk associated with electric facilities, and a description of the metrics that the electric corporation uses to evaluate the overall wildfire mitigation plan performance and assumptions that underlie the use of the metrics.

Local

City of Calabasas Emergency Preparedness Guide

The City of Calabasas' Emergency Preparedness Guide serves as a handbook for resident's individual awareness, family preparedness, and self-sufficiency for potential catastrophes or emergencies. The guide covers how to develop a family plan for emergencies, what to pack in emergency kits, and basic first aid. To prevent fires and react to wildland fires the Emergency Preparedness Guide outlines fire hazard reduction requirements, brush clearance guidelines, a preparedness checklist for wildfire, and evacuation information. Sector maps include in the Emergency Preparedness Guide indicate first aid unit locations during an emergency (City of Calabasas 2019).

County of Los Angeles All Hazard Mitigation Plan

The All Hazard Mitigation Plan (AHMP), updated in 2019, for the County of Los Angeles assesses risk posed by natural hazards and develops a mitigation action plan for reducing those risks. The AHMP provides an overview of the planning process, outlines public involvement in that planning, and incorporates existing plans. The AHMP identifies the community it impacts before identifying eight hazards, including wildfire, and their given risks. Those hazards and associated risks are addressed in the AHMP's mitigation strategy (County of Los Angeles 2019).

Los Angeles County Fire Department Strategic Plan

The Los Angeles County Fire Department (LACFD) Strategic Plan outlines goals and strategies to improve fire protection throughout Los Angeles. Goals and relating strategies relevant to the management of wildfire risks include:

- **Goal 1: Provide Exceptional Public Safety and Emergency Service**
 - Strategy 3: Improve fire suppression services.
 - Strategy 5: Prepare for large scale disasters.
 - Strategy 6: Ensure and optimal state of readiness focusing on terrorism and disaster preparedness.

County of Los Angeles Disaster Route Maps

Disaster routes in Los Angeles County are defined as freeway, highway or arterial routes pre-identified for use during times of crisis. These routes are utilized to bring in emergency personnel, equipment, and supplies to impacted areas in order to save lives, protect property and minimize impact to the environment. During a disaster, these routes have priority for clearing, repairing and restoration over all other roads. Disaster Routes are not evacuation routes. Although an emergency may warrant a road be used as both a disaster and evacuation route, they are completely different. An evacuation route is used to move the affected population out of an impacted area. Generally, Interstate and State highways are designated as Primary Disaster Routes and major arterials as Secondary Disaster Routes (Los Angeles County Department of Public Works 2008; 2021).

Los Angeles County Operational Area Emergency Response Plan

The County of Los Angeles developed an Emergency Response Plan (ERP) to ensure the most effective allocation of resources for the maximum benefit and protection of the public in time of emergency. The ERP does not address day-to-day emergencies or the well-established and routine procedures used in coping with them. Instead, the operational concepts reflected in the ERP focus on potential large-scale disasters such as emergency situations associated with natural and man-made disasters and technological incidents that can generate unique situations requiring an unusual or extraordinary emergency response. The purpose of the ERP is to incorporate and coordinate all the facilities and personnel of County government, along with the jurisdictional resources of the cities and special districts within the County, into an efficient Operational Area organization capable of responding to any emergency using a Standard Emergency Management System, mutual aid, and other appropriate response procedures. The goal of the ERP is to take effective life safety measures and reduce property loss, provide for the rapid resumption of impacted businesses and community services, and provide accurate documentation and records required for cost-recovery (County of Los Angeles 2012).

Las Virgenes-Malibu Council of Governments Multi-Jurisdictional Hazard Mitigation Plan 2018

The Las Virgenes-Malibu Council of Governments (LVMCOG) developed the Multi-Jurisdictional Hazard Mitigation Plan to ensure a more thorough Hazard Mitigation Plan (HMP) among the cities of Westlake Village, Agoura Hills, Hidden Hills, Calabasas, and Malibu. The HMP provides a framework for pre-emptive planning of hazards by combining efforts, identifying common threats, and establishing regional mitigation strategies that allows for mutual participation and more effective use of resources. The LVMCOG aims to accomplish the HMP's main goal of protecting life, property, and environment through the following:

- Implementing activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to hazards;
- Reducing losses and repetitive damages for chronic hazard events while promoting insurance coverage for catastrophic hazards; and
- Encouraging preventative measures for existing and new development in areas vulnerable to hazards (LVMCOG 2018).

Santa Monica Mountains North Area Plan

The Santa Monica Mountains North Area Plan (SMMNAP) is formulated around the vision to maintain and strengthen that ecosystem, while accommodating development that considers environmental stewardship. Adopted by the Los Angeles County Board of Supervisors in October 2020, the SMMNAP provides focused policy around the protection of biological resources and regulation of development within the unincorporated area of the Santa Monica Mountains west of the City of Los Angeles and north of the Coastal Zone. The guiding principle of the SMMNAP is to “let the land dictate the type of intensity of use” (County of Los Angeles 2021). The SMMNAP includes five elements:

1. Conservation and Natural Resources
2. Safety and Noise
3. Land Use
4. Mobility
5. Public Services and Facilities

Goal SN-5 of the SMMNAP prohibits new development where there exists a potential hazard and its associated risks may be felt by people and their property, such as wildfire prone areas.

SANTA MONICA MOUNTAINS NORTH AREA COMMUNITY STANDARDS DISTRICT

The Santa Monica Mountains North Area Community Standards District (SMMNACSD) was established to implement the goals and policies set out in the SMMNAP. The SMMNACSD is used in conjunction with SMMNAP to direct development, where that development occurs, and how it is designed. Any area that supports biological resources in any habitat of priority will be given protections of the priority level the area was in before any fire occurred (County of Los Angeles 2020).

4.15.3 Impact Analysis

Methodology and Thresholds of Significance

The assessment of impacts related to wildfire hazards and risks were evaluated using fire hazard severity zone mapping for Calabasas (CAL FIRE 2011), aerial imagery, topographic mapping, data collection, and site visits (TSS 2021). A literature review was completed to determine the current conditions and setting of Calabasas as it relates to wildfire risk. These conditions include the following: physical, biological, meteorological, legal, regulatory, and administrative. Following the literature review interpretive studies were conducted for the 12 proposed housing sites and surrounding areas using satellite images and mapping tools. A two-stage interpretive approach was employed because wildfire is both a regional and highly localized phenomenon. Un-controlled wildfire is generally ignited at one location and travels across a landscape using one fairly predictable pathway, to another. The direction and velocity of movement is controlled by regional forces including prevailing winds, diurnal wind flows, terrain, slope gradient, topographic position, patterns of vegetation types across the landscape.

Following an examination of imagery using the two-stage interpretive approach each of the 12 proposed housing sites were visited from June 14 to June 18, 2021. The field visits provided direct in-field verification of the interpretation of the imagery, the ability to record conditions apparent on

the ground but which were not identifiable on the imagery, and the opportunity to document the conditions using terrestrial photography. Results of the field visits are included in Appendix E.

The interpreted and field verified information was then used to generate a wildfire risk index for each proposed housing site. This process was facilitated, and standardized, through the use of a rubric approach¹, as described in detail Appendix E. The basic process involved was modeling the influence as a single parameter, that can be either quantitative or qualitative, used as an input variable and has influence over a resulting change in the level of wildfire risk.

Twelve general categories of settings were identified with a total of 152 individual parameter-related options that comprised the input data set to determine a wildfire risk index. Index values were generated for each of the proposed housing sites. The risk index value is a comparative indication of which project sites have higher, or lower, wildfire risk ratings than the other sites. Thus, the risk index allows the wildfire risk index generated for any one of the sites to be directly comparable with that of the 11 other housing sites. The rubric model and index can be used as a sensitivity tool to identify those parameters whose contributions have the greatest effect on the outcome of each run of the model, whether elevating or lowering wildfire risk. The individual results for all of the proposed housing sites and full descriptions of the process and associated analyses are presented in Appendix E. Table 4.15-2 shows the existing ranked results for the 12 proposed housing sites.

Table 4.15-2 Existing Ranked Wildfire Risk Index for Proposed Housing Sites

Housing Site	Wildfire Risk Index
Rancho Pet Kennels	79.0
Craftsman Corner	65.0
Church in the Canyons	60.0
Raznick Offices	56.0
Old Town Vacant Lot	36.0
Avalon Apartments	36.0
Commons Shopping Center	36.0
Agoura Road Offices	33.5
Las Virgenes Shopping Center	33.0
Cruzan Parking Lot	31.0
Mureau Offices	29.5
Downtown Offices	29.0

Source: TSS Consultants 2021, Appendix E

In addition to determining the wildfire risk index of the proposed housing sites the categories of settings were also used to determine factors that have the greatest influence on wildfire risk in Calabasas. The following factors were found to contribute the most to wildfire risk:

- Water system specifications: adjacency of a particular site to vegetations conditions associated with dangerous fire behavior
- Ignition potential: distance and access routes to an emergency response station

¹ A rubric is a model, generally including mathematical relationships, of the decision-making process.

- Exterior construction specifications: type of construction materials for buildings
- Initial response: potential wildfire incident-related closure of roads for the purposes of emergency response and evacuation
- Vegetation type: on-property vegetation conditions in regard to ignition potential from an off-site, or on-site source
- Ignition type: on-property conditions/uses associated with high ignition potential

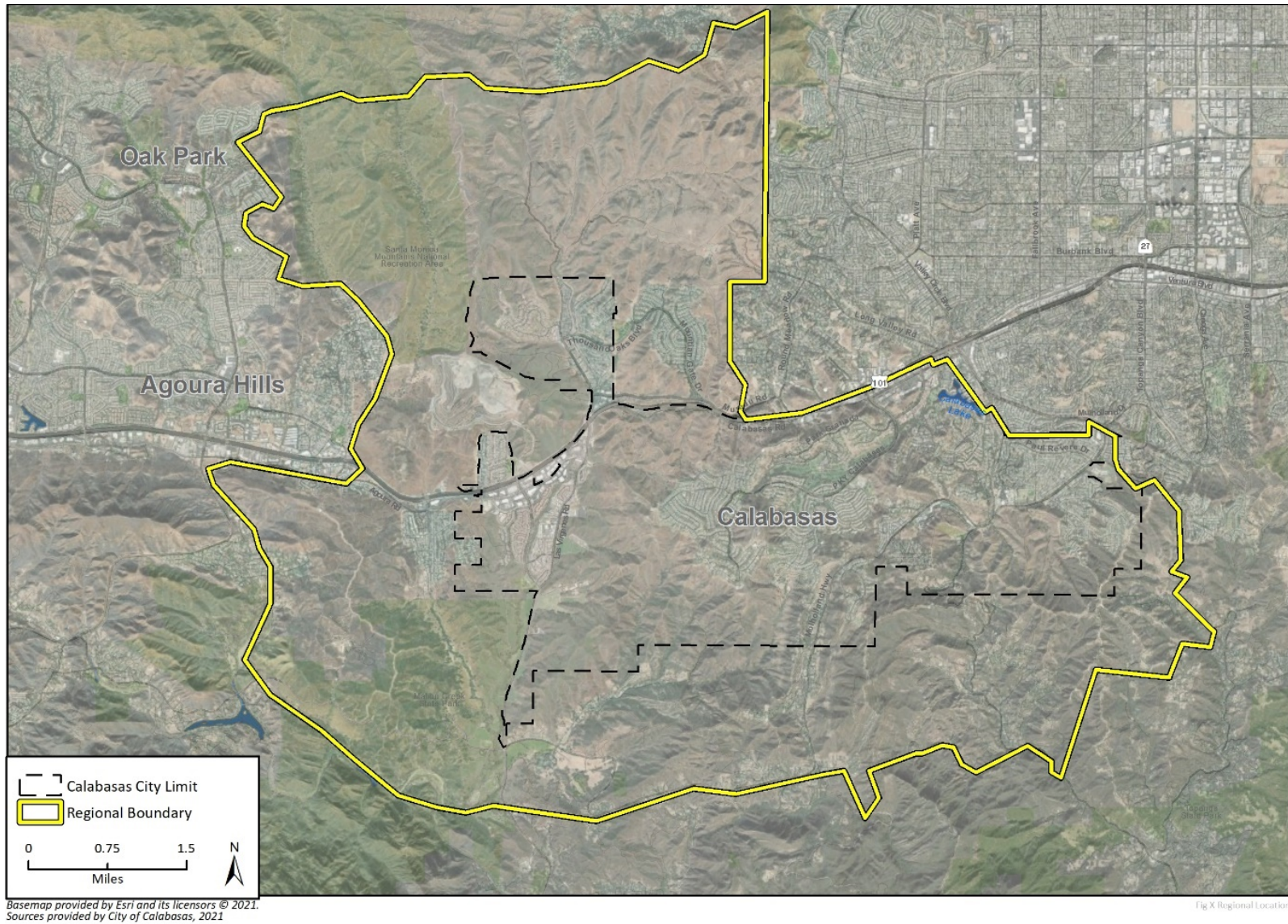
In addition to the analysis of wildfire impacts for the proposed housing sites, a 18,577-acre Regional Planning Area (RPA), as shown in Figure 4.15-5, was analyzed to examine wildfire risk to Calabasas from regional conditions as they relate to fire behavior. The RPA includes lands adjacent to approximately three quarters of the City limits, from a north central location around to the eastern limits. The northeastern quadrant surrounding the City was excluded from analysis because it has been fully developed as part of the City of Los Angeles. The examination was completed using satellite imagery and it was determined that the RPA includes slopes ranging from 5 to 90 percent with an average slope of 25 percent. In addition to slope wind speed and direction, as well as vegetation type, contribute to wildfire risk in Calabasas. Wind direction for Calabasas is north, southwest, northeast, and southeast. Vegetation types surrounding the City susceptible to wildfire include: annual grasses and forbs, chapparal, scrublands, oak dominated woodlands, oak savannah, and mixed tree formations in drainages. For detailed methodology please refer to Appendix E.

Significance Thresholds

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. The General Plan Update would have a significant impact with respect to wildfire if it would:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan
2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment
4. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes
5. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

Figure 4.15-5 Wildfire Regional Planning Area



Threshold 1: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the General Plan Update substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact WFR-1 THE 2030 GENERAL PLAN UPDATE POLICIES ADDRESS EMERGENCY ACCESS, RESPONSE, AND PREPAREDNESS TO MAINTAIN EXISTING EVACUATION AND EMERGENCY RESPONSE PLANS. IN ADDITION, ALL PROPOSED HOUSING SITES ARE LOCATED WITHIN A MILE OF AN EMERGENCY EVACUATION ROUTE AND WOULD NOT ALTER EXISTING EVACUATION SYSTEMS. THEREFORE, DEVELOPMENT FACILITATED BY THE GENERAL PLAN UPDATE WOULD NOT IMPAIR AN EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As shown in Figure 4.15-1 the entire Plan Area is mapped in a VHFHSZ. Calabasas is served by three LACFD stations and the Los Angeles County Sherriff’s Department (LACSD) Malibu/Los Hills Sheriff’s Station, which provide immediate emergency assistance to the Plan Area. In addition, three more LACFD stations are within distance of the Plan Area to provide assistance during a wildfire event. Table 4.15-3 includes a list of emergency response facilities that serve the Plan Area, including their distance to the center of the City, and Figure 4.15-6 shows locations of the facilities.

Table 4.15-3 Emergency Response Facilities Serving Calabasas

Station Number	Physical Address	Distance to Center of City (miles)	Roads Utilized
125	5215 Las Virgenes Road Calabasas	3.0	Las Virgenes Road; VFW; Mureau Road; Calabasas Road
68	24130 Calabasas Road, Calabasas	0.5	Calabasas Road
67	25801 Pluma Road, Calabasas	8.8	Pluma Rd; Las Virgenes Road, VFW, Mureau Road; Calabasas Road
89	29575 Canwood Street, Agoura Hills	7.7	Canwood Street; VFW, Las Virgenes Road; Mureau Road; Calabasas Road
69	401 S. Topanga Boulevard, Topanga	9.0	S. Topanga Canyon Boulevard; Mulholland Drive; Calabasas Road
65	4206 Cornell Road, Agoura Hills	8.1	Cornell Road; Kanan Road; VFW; Las Virgenes Road; Mureau Road; Calabasas Road
LACSD	27050 Agoura Road, Calabasas	4.2	Agoura Road; Las Virgenes Road; VFW; Mureau Road; Calabasas Road

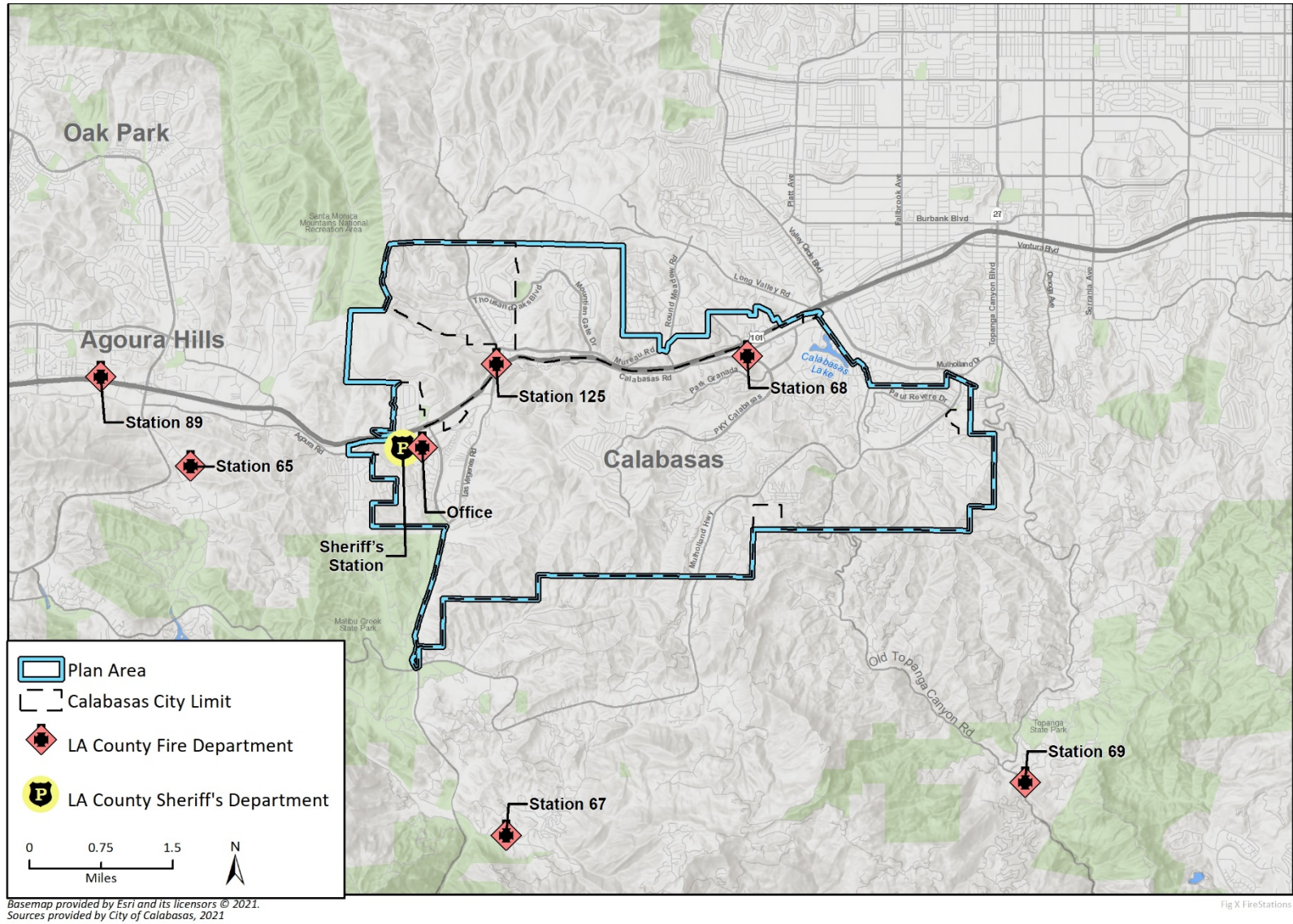
VFW = Ventura Freeway

Source: TSS Consultants 2021, Appendix E

Construction

During construction of development accommodated by the General Plan Update, temporary alternative access points would be put in place, and thus evacuation routes, if present, would be similarly rerouted. Construction of residential development facilitated by the General Plan Update could result in lane or roadway closures throughout the Plan Area. However, temporary alternative access/egress routes would be established and maintained throughout construction. Furthermore, evacuation routes would not be blocked during construction as staging areas are required to be situated in such a way that they avoid designated evacuation zones. Construction-related vehicular

Figure 4.15-6 Emergency Response Facilities Serving Calabasas



traffic would also use designated routes. Therefore, construction impacts related to emergency response/evacuation plan consistency would be less than significant.

Operation

Calabasas disaster preparedness and evacuation planning defines two evacuation routes for the City. First is the Freeway Disaster Route that includes the Ventura Freeway (US-101). Second is the disaster route on City thoroughfares that includes Las Virgenes Road, Mulholland Highway, and Old Topanga Canyon Road.

An Emergency Evaluation Assessment was prepared for the Housing Element Update in July 2021 by Fehr & Peers (Appendix C). The evaluation assessed capacity during an emergency evacuation event assuming complete evacuation of the City, which may occur during a wildfire. Seven roadway segments were analyzed that would be used to access US-101 from the proposed housing sites. The roadway segments included:

- Lost Hills Road from Canwood Street to US-101 Northbound On-Ramp
- Lost Hills Road from Agoura Road to US-101 Southbound On-Ramp
- Las Virgenes Road from Agoura Road to US-101 Southbound On-Ramp
- Parkway Calabasas, North of Ventura Boulevard
- Parkway Calabasas, South of Calabasas Road
- Calabasas Road, Between Parkway Calabasas and Civic Center

Citywide evacuation access was determined by reviewing the vehicle travel demand on each roadway during an evacuation event. It was assumed that access to the south was not available, and that all land uses in the City would need to evacuate toward US-101. The City was further separated into five evacuation areas based on topography and access to day roadways to US-101. The five evacuation areas included:

- Northwest: vehicles would travel southbound on Las Virgenes Road and Lost Hills Road
- Southwest: vehicles would travel northbound on Las Virgenes Road and Lost Hills Road
- Northeast: vehicles would travel southbound on Parkway Calabasas
- Central: vehicles would travel northbound on Parkway Calabasas
- Southeast: vehicles would travel northbound on Mulholland Drive

As described in additional detail in Appendix C, both employee and household evacuation were analyzed for the General Plan Update. Table 4.15-4 shows existing and existing plus General Plan Update evacuation in the five evacuation areas. In addition, Table 4.15-4 shows the net change anticipated from buildout facilitated by the General Plan Update.

Table 4.15-4 Evacuation Land Uses under Existing and Existing Plus General Plan Update

Evacuee Type	Households and Employment in Evacuation Area				
	Northwest	Southwest	Northeast	Central	Southeast
Existing Conditions					
Households	1,830	1,532	32	2,483	2,935
Employees	1,374	6,606	2,1127	7,538	2,595
General Plan Update Conditions					
Households	2,027	1,915	267	2,942	2,966
Employees	1,516	6,485	2,151	7,519	2,595
Change with General Plan Update					
Households	197	383	235	459	31
Employees	-158	-121	24	-19	0

Source: SCAG Travel Demand Forecasting Model data compiled by Fehr & Peers, Appendix C

Using vehicle ownership data from the SCAG travel demand, model evacuation demand was generated for residential uses in the City. Vehicle ownership in Calabasas ranges from one to four or more vehicles per household. Therefore, to estimate travel demand generated by residents, one vehicle trip was assumed to be generated by the one vehicle households, two vehicle trips were assumed to be generated by two vehicle households, and 2.5 vehicle trips were assumed to be generated by three or more vehicle households. For people who work in Calabasas, each employee was assumed to generate one vehicle trip. Using this approach, total vehicle demand for Calabasas was determined to be 40,557 vehicles. The General Plan Update is anticipated to add approximately 2,640 vehicles to City roadways during an evacuation event, which is an approximately seven percent increase from existing (2021) conditions.

The travel demand during an evacuation event was then compared to the roadway capacity for the seven roadway segments that would provide access to US-101. The total evacuation travel demand assumes that two-thirds of the evacuation would occur during a one-hour period based on consultation with public safety experts. The General Plan Update is projected to increase evacuation demand by approximately five percent in the northwest area, seven percent in the southwest area, eight percent in the central area, and 24 percent in the northeast area. None of the proposed housing sites were located in the southeast area, therefore this area was not analyzed. The large percent change in the northeast area is because the existing evacuation demand only accounts for the land uses in the City’s sphere of influence and not the additional development that is located in the north. Please refer to Table 6 of Appendix C for hourly demand in each of the five evaluation areas during the one hour following an evacuation order. Therefore, traffic from buildout of the General Plan Update would be minor compared to existing conditions in the Plan Area. The General Plan Update would not have a significant effect on the transportation system during an evacuation or needed for emergency usage.

Additionally, proposed housing sites would be located close to major arterials. Table 4.15-5 includes the proposed housing sites, the closest arterial that would be used for evacuation, and the distance to the arterial.

Table 4.15-5 Distance to Arterials for Evacuation

Proposed Housing Site	Potential Housing Units	Additional Residents	Closest Arterial	Distance (feet)
Raznick Offices	42	114	MHD	3,619
Rancho Pet Kennel	60	163	VFW	2,677
Cruzan Parking Lot	88	238	VFW	1,916
Old Town Vacant Lot	43	117	MHD	1,417
Las Virgenes Shopping Center	41	111	LVR	0
Church in the Canyons	111	301	LVR	94
Downtown Offices	60	163	VFW	1,201
Avalon Apartments	142	385	LVR	0
Agoura Road Offices	125	339	LVR	1,108
Mureau Offices	64	173	LVR	615
Commons Shopping Center	201	545	VFW	2,534
Craftsman Corner	236	640	VFW	703

VFW = Ventura Freeway, LVR = Las Virgenes Road, MDH = Mulholland Highway
 Source: TSS Consultants 2021, Appendix E

As show in Table 4.15-5, all proposed housing sites are within a mile of an already defined evacuation route included in the City’s evacuation planning documents, as described under Section 4.14.2, *Local Regulations*. In the event of the most dangerous type of wildfires, one occurring from prevailing south winds and approaching the City over the heavily wooded landscapes at the southern edges of the Plan Area, none of the proposed housing sites would be cut off from using the defined evacuation routes and US-101 evacuation system. If all sites were to be evacuated in a single event, instead of phased evacuation to avoid congestion, the General Plan Update would contribute to less than 1,400 vehicle miles traveled (TSS 2021). Policy VII-23 of the General Plan Update would also require designated shelter-in-place zones during a wildfire. These zones would reduce the overall congestion on area roadways during evacuation since some individuals may choose to shelter-in-place. Therefore, buildout associated with the General Plan Update would not substantially alter or otherwise interfere with public rights-of-way and individual projects would provide adequate and multiple internal ingress and egress for necessary emergency response vehicles. In addition, projects facilitated by the General Plan Update would comply with applicable California Fire Code (Title 24, California Code of Regulations, Section 9) requirements, that include stringent building standards including fire suppression systems, materials, and design.

The Safety Element of the 2030 General Plan directs the City to accommodate safety needs when planning and designing, while increasing the resiliency of the City’s residents and businesses to respond to and be prepared for potential emergencies and disasters. The Safety Element Update included as part of the General Plan Update addresses new state requirements pertaining to climate change, wildfire risk, and evacuation routes for residential neighborhoods. Related objectives and policies are listed below.

Objective VII.F. Maintain a system of emergency services and disaster response preparedness that will save lives, protect property, and facilitate recovery with a minimum of social disruption following both minor emergencies and major catastrophic events.

- Policy VII-34** Encourage collaboration and partnership with local and regional partners on future enhancements of alert and notification systems.
- Policy VII-35** Provide bilingual (English and Spanish) public health, emergency preparedness, and evacuation information to citizens through libraries, the City website, radio, and other platforms.
- Policy VII-36** Engage with both homeowners and renters at a block- by -block level to better prepare for wildfire mitigation and protection. Empower the City's Public Safety Commission to serve as the City's Fire Safe Council, or create a separate citizen body for the purpose.
- Policy VII-37** Enhance the Community Emergency Response Training (CERT) program to provide disaster preparedness training to the community at the neighborhood level. Work with the Las Virgenes Unified School District to develop and implement a CERT curriculum.
- Policy VI-38** Increase access to essential resources and facilitate effective communication in the community to accelerate recovery following a disaster.
- Policy VII-39** Maintain and update the City's Emergency Operations Plan every 8 years at a minimum to account for all types of emergencies consistent with the Standardized Emergency Management System (SEMS).
- Policy VII-40** Coordinate with LACFD to include Calabasas in development and maintenance of a County Wildfire Protection Plan, and investigate the possibility of preparing a plan component specific to the Calabasas community.
- Policy VII-41** Staff performing emergency preparedness and response duties will be trained as necessary to fulfill their obligations; such training to include (but not be limited to): damage assessment protocols, EOC operations, SEMS, and Incident Command System protocols and operations.
- Policy VII-42** Establish and maintain mutual aid agreements with [federal, State, and local police, fire, and emergency response agencies], including for disaster response and evacuation assistance.
- Policy VII-43** Regularly evaluate the availability and anticipated demand for community facilities to serve as evacuation centers or designated cooling or smoke relief center during emergencies. Designate such facilities and regularly maintain them to comply with industry standards.
- Policy VII-44** Establish and maintain community fire breaks and fuel modification/reduction zones, including public and private road clearance. **Objective VII.C** Minimize the potential for loss of life, physical injury, property damage, and social disruption resulting from urban and wildland fires.

- Policy VII-16** Actively collaborate with regional, state and Federal fire agencies to coordinate and implement wildfire mitigation measures and fuel load modifications including load clearing, prescribed burns, and other mitigation activities for areas proximal to the city, particularly potential wildfire approach pathways.
- Policy VII-17** Develop and maintain a GIS-based land inventory to identify fuel reduction status and points of contact in order to inform load reduction activities.
- Policy VII-18** Incorporate wildfire risk reduction measures, including healthy hillside management, load clearing, and brush management into plans, operations and maintenance procedures for public access roads, parks, trails, open space, critical roads, and critical infrastructure.
- Policy VII-19** Develop and maintain building and landscaping requirements and protocols that integrate Cal Fire and LACFD regulations and procedures for retrofits and future development.
- Policy VII-20** Encourage existing businesses and residents to adopt drought tolerant and fire-resistant landscaping practices.
- Policy VII-21** Update the City's development standards to be in conformance with title 14, CCR, division 1.5, chapter 7, subchapter 2, articles 1-5 (commencing with section 1270) (SRA Fire Safe Regulations) and title 14, CCR, division 1.5, chapter 7, subchapter 3, article 3 (commencing with section 1299.01) (Fire Hazard Reduction Around Buildings and Structures Regulations).
- Policy VII-22** Discourage development and encourage sensitive siting of structures within hazardous fire areas as higher priorities than attempting to implement fuel modification techniques that would adversely affect significant biological resources.
- Policy VII-23** Update requirements and guidelines regarding landscaping design, species preferences, installation, and maintenance to reduce vulnerability to ember ignition, and generally, wildfire impacts.
- Policy VII-24** To reduce vulnerability of structures to ember ignition and wildfire impacts, review current building code standards and other applicable statutes, regulations, requirements, and guidelines regarding construction, and specifically the use and maintenance of non-flammable materials (both residential and commercial).
- Policy VII-25** Conduct a City-wide survey of vegetation conditions in drainage corridors and similarly well vegetated areas that could provide opportunities for wildfire to approach valued assets, and specify recommended actions to reduce wildfire risks in these locations.

Buildout associated with the General Plan Update would be guided by existing and future planning strategies, including those concerning public safety. Given the full breadth of the hazard and evacuation plans available, and the robust design/review process currently in place, development under the General Plan Update would not produce direct or indirect effects that would substantially impair an adopted emergency response plan or emergency evacuation plan. With adherence to General Plan Update objectives and policies, as well as compliance with the California Fire Code, impacts related to emergency response/evacuation plan consistency would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 2:	If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the General Plan Update due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
Threshold 5:	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the General Plan Update expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact WFR-2 DEVELOPMENT FACILITATED BY THE GENERAL PLAN UPDATE WOULD INCREASE THE DENSITY OF DEVELOPMENT IN CALABASAS. NEW BUILDINGS WOULD BE REQUIRED TO BE CONSTRUCTED ACCORDING TO THE LATEST FIRE CODE AND SAFETY STANDARDS AND POLICIES IN THE GENERAL PLAN UPDATE. COMPLIANCE WITH GOALS AND POLICIES OF THE SAFETY ELEMENT WOULD FURTHER REDUCE RISK FROM UNCONTROLLED SPREAD OF WILDFIRE UNDER EXTREME WEATHER CONDITIONS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The General Plan Update concentrates the forecasted development in urban areas and corridors of the Plan Area where the risk of wildfire is less than in more rural areas where fuels are more abundant. However, as evidenced by the 2018 Woolsey Fire, urban areas are also susceptible to wildfires, despite the lower abundancy of typical wildfire fuels.

The Plan Area is subject to Santa Ana winds, which are strong dry offshore winds that affect southern California in autumn and winter. They can range from hot to cold, depending on the prevailing temperatures in the source regions, the Great Basin, and upper Mojave Desert (Tufts University 2018). The winds are known for the hot dry weather (often the hottest of the year) that often in the fall and are infamous for fanning regional wildfires. Wildfire smoke produced from combustion of natural biomass contains thousands of individual compounds, including particulate matter, carbon dioxide, water vapor, carbon monoxide, hydrocarbons and other organic chemicals, nitrogen oxides, and trace minerals that can be carried in the wind. As shown in Table 4.15-1, prevailing winds from west to east and east to northeast could push a potential wildfire and wildfire smoke through areas of low fuel volumes and to areas with substantial development.

The western Plan Area boundary is dominated with grassland, medium to high density residential development, commercial/institutional development, and transportation infrastructure as shown on Figure 4.15-3. The proposed housing sites to the western boundaries of the Plan Area have a moderate risk of uncontrolled wildfire because surrounding vegetation and development pose a natural barrier to the uncontrolled spread of wildfire. However, in the event of prevailing west to east winds, all five of the proposed housing sites in the western portion of the Plan Area could be affected by the uncontrolled spread of wildfire.

The northern portion of the RPA is dominated by annual grassland, which is capable of generating dangerous fuel behavior, especially with southwest wind patterns. Specifically, the drainages associated with the western and eastern branches of Cheseboro Canyon Road would result in higher wildfire risk. However, wildfire advance would be slowed by the downslope burns needed to reach the City. The northern portion of the RPA would thus result in low to moderate wildfire risk. See Appendix E for additional details and analysis. At locations in the northern portions of the Plan Area,

specifically the Craftsman Corner, and lands adjacent to the northern portion of the Plan Area, there is low risk of significantly adverse wildfire related impacts on the proposed housing sites. The prevailing west-to-east and east-to-northeast winds would push a potential wildfire through areas of low fuel volumes (primarily grasslands) and residential and commercial zone developments where there are inherent barriers to uncontrolled spread.

The southern portion of the RPA is dominated by grass/forbes, chapparal, scrub, and heavily wooded strands of mixed hardwood. The elevation and slope changes are higher than in the northern portion of the PRA and there are more avenues for a fire to follow toward the City. The influence of northerly winds combined with topography and vegetation type show that a wildfire is most likely to approach south toward the western portion of the City, which would have moderate to high wildfire risk. See Appendix E for additional details and analysis. Additionally, portions of the eastern and entire southern boundary of the Plan Area are dominated by mixed hardwood, shrub/hardwood mixes, pure shrublands, and grasslands. These conditions continue on into the Plan Area for approximately half a mile in the southwestern and southeastern corners of the Plan Area. The woody types, tree and brush formations, are generally associated, especially under extreme fire weather conditions, with rapid fire front advance, high burn intensities, longer duration at a given location, and generation of airborne embers. The combination of the presence of heavier fuel types to the south of the Plan Area and the prevailing wind directions shown in Table 4.15-1, could result in the advance of a primary fire front, ember flows, and smoke plumes toward all locations within the Plan Area. These conditions could result in significantly adverse impacts on occupants of the following proposed housing sites: Avalon Apartments, Church in the Canyon, Agoura Road Offices, Rancho Pet Kennels, Mureau Offices, and Las Virgenes Shopping Center. The following policies included in the proposed Safety Element of the General Plan Update would reduce risks from wildfire pollutants:

- Policy VII-43** Regularly evaluate the availability and anticipated demand for community facilities to serve as evacuation centers or designated cooling or smoke relief center during emergencies. Designate such facilities and regularly maintain them to comply with industry standards.
- Policy VII-44** Establish and maintain community fire breaks and fuel modification/reduction zones, including public and private road clearance.
- Policy VII-45** Ensure that the LACFD has complete access to all locations in the City, including gated communities and critical infrastructure.
- Policy VII-47** Establish and maintain a Disaster Recovery Plan that includes critical needs, such as debris removal and evaluation of post-disaster re-development options.

None of the proposed housing sites are associated with topographic positions, regional slope tendencies, on-site slopes, or areas of immediately adjacent high slopes, such that there would be an expected, unreasonable vulnerability to wildfire ignition or spread. The proposed housing sites are not located on slopes that exceed eight percent. Four of the proposed housing sites are located with a moderate adjacency to terrain with slopes ranging from 30 to 40 percent: Cruzan Parking Lot, Commons Shopping Center, Las Virgenes Shopping Center, and Rancho Pet Kennels. However, these four sites are located at positions lower than any point in the adjacent terrain, thus lessening the influence of terrain on spread rates (fire spread rates, under constant wind conditions, are faster moving uphill, and conversely slower going downhill). It is not reasonably expected that any of the 12 proposed housing sites would experience increased wildfire risk levels attributable to topographic influences (see Appendix E for further detail). In addition, development on these sites

would be constructed in accordance with LACFD and City of Calabasas building standards designed to reduce wildfire risk, as described below.

The LACFD enforces fire and building codes related to development in VHFHSZs. Individual development projects under the General Plan Update would thus be required to comply with LACFD regulatory programs and standards that reduce wildfire risk. Standards include vegetation management, pre-fire management and planning, fuel modification, and brush clearance. The LACFD has access requirements for single family residential uses built in VHFHSZs, with access for all other uses on a case-by-case basis. Fuel modification plans are also required for projects within a VHFHSZ.

Development under the General Plan Update would also be required to adhere to state and federal regulations related to wildfire. This includes approval of plans and specifications to verify compliance with applicable codes, including the following:

- Title 24, CCR, Building Regulations
- Uniform Fire Code
- National Fire Codes of the National Fire Protection Association
- Title 19, CCR, Public Safety
- Title 8, CCR, Occupational Safety
- California Health and Safety Code

The California Fire Code includes safety measures that minimize the threat of fire, including ignition-resistant construction with exterior walls of noncombustible or ignition resistant material from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves and vents to prevent intrusion by flame or embers. Development would also be required to meet California Building Code requirements, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure. CCR Title 14 sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent loss of structures or life by reducing wildfire hazards risk. Compliance with these regulations and building standards would reduce the potential for the projects implemented under the General Plan Update from contributing to the exposure to pollutants of persons in or near the project components.

Further, as described in Impact WRF-1 above, Objective VII.C and associated policies in the Safety Element of the 2030 General Plan are intended to reduce the risk of wildfire throughout the Plan Area.

Compliance with codes, regulations, and proposed polices would reduce the risk of loss, injury, or death from wildfire for new developments implemented by the General Plan Update. Adherence to these requirements would make structures more fire resistant and less vulnerable to loss in the event of a wildfire, and exposure impacts would be reduced to the extent possible by following existing State regulations and local safety procedures. Compliance with codes, regulations, and proposed polices would not produce direct, or indirect effects that would result in changes to the Plan Area with regard to wildfire risk. Additionally, proposed housing sites are not located in areas associated with adjacent high slopes or other factors that would exacerbate wildfire risk. Therefore, future development on proposed housing sites would improve risks from an uncontrolled wildfire compared to existing conditions. Although risk from wildfire are inherent to Calabasas and cannot be fully avoided impacts would be less than significant because the General Plan Update would not

increase exposure of occupants to pollutant concentrations from a wildfire, uncontrolled spread of wildfire, or exposure of significant risk of loss, injury or death involving wildland fire.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 3: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the General Plan Update require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact WFR-3 THE GENERAL PLAN UPDATE POLICIES ADDRESS INSTALLATION AND MAINTENANCE OF INFRASTRUCTURE ASSOCIATED WITH BUILDOUT OF THE GENERAL PLAN UPDATE, SUCH AS UNDERGROUNDING UTILITIES. THEREFORE, INSTALLATION AND MAINTENANCE OF INFRASTRUCTURE ASSOCIATED WITH THE GENERAL PLAN UPDATE WOULD NOT EXACERBATE FIRE RISK. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The General Plan Update would facilitate growth in Calabasas, specifically by 1,305 new residential dwelling units. This growth would occur primarily as infill and redevelopment within the vacant and urbanized areas of Calabasas. Therefore, the majority of roads and utility infrastructure required for growth would be existing or would occur in currently developed areas, resulting in negligible temporary or ongoing environmental impacts. New infrastructure would be installed according to building codes and safety standards, as outlined in Section 4.14.2, *Regulatory Setting*. Specifically, multiple avenues of ingress and egress would be established for proposed housing sites and projects would connect to existing municipal emergency water supply systems. Structures would also be required to use building materials that reduce overall flammability and lower vulnerability to ember source ignitions per Title 24, Part 2, Chapter 7A. New electrical power lines would be installed underground and would not contribute to increased fire risk. In addition, objectives and policies from the Safety Element update, shown under Impact 2, would further reduce impacts from installation or maintenance of infrastructure needed for future development proposed under the General Plan Update. Specifically, Policy VII-45 would ensure new development, including associated infrastructure, is designed to facilitate access by firefighting equipment. Policy VII-49 would require adequate water pressure for reliable fire flows for new development and Policy VII-52 would prioritize undergrounding of all utilities for designated routes to make them more reliable. Adherence to the rigorous development review process and requirements by Calabasas and LACFD installation and/or maintenance of infrastructure associated with proposed housing sites would not result in adverse direct or indirect effects from exacerbated fire risk. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

Threshold 4: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the General Plan Update expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact WFR-4 PROPOSED HOUSING SITES ARE NOT LOCATED IN AREAS EXPOSED TO DOWNSLOPES OR DOWNSTREAM FLOODING OR LANDSLIDES FOLLOWING A WILDFIRE. POLICIES PROPOSED IN THE GENERAL PLAN UPDATE WOULD FURTHER STABILIZE SLOPES AND FLOOD CHANNELS THROUGHOUT THE CITY. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The City of Calabasas has an average rainfall of 13.6 inches and the watercourse systems can experience high volume short duration watercourse flows (TSS 2021). Severe wildfires damage the forest or shrub canopy, the plants below, as well as the soil. This can result in increased runoff after intense rainfall, which can put residences and other structures below a burned area at risk of localized floods and landslides. Slopes at risk of wildfire are located throughout Calabasas, specifically near proposed housing sites in the western portion of the City. If a severe wildfire were to occur in the hillside area of Calabasas, structures downslope would be at risk of flooding or landslides.

Landslides

The dissected uplands in Calabasas are all classified as a landslide zone and 25 landslides have been recorded in the City (TSS 2021). The majority of these landslides were clustered in three locations: open quarry area off Las Virgenes Road north of U.S. 101; uplands east of Las Virgenes Road south of U.S. 101; and in the developed Greater Mulwood area. None of the proposed housing sites are near areas that have historically experienced landslides. Additionally, severely sloped terrain does not occur adjacent to the proposed housing sites. Observations at several of the subject sites showed slope stabilization and retention actions and there were no indications that adjacent sites would be at risk of a landslide. Therefore, development under General Plan Update would not expose people or structures to landslides or post-fire instability following a wildfire.

Flooding

Seven of the proposed housing sites are not associated with a defined drainage or wet area. Therefore, these sites would not be at risk from flooding following a wildfire. The Raznick Offices site is located immediately adjacent to Calabasas Creek. Calabasas Creek historically does not have high flows and has a small gradient. Therefore, flooding following a wildfire would not occur at the Raznick Offices site. Three of the proposed housing sites, Las Virgenes Shopping Center, Mureau Road Offices, and Agora Road Offices, are adjacent to Las Virgenes Creek. However, the three sites are protected from potential flooding with existing artificial channeling, channels that allow adequate high-water flows, and containment berms. Additionally, stream hydrographic data that monitored conditions following the 2005 wildfire showed no significant increase in flow volumes at Las Virgenes Creek. Therefore, development under General Plan Update would not expose people or structures to flooding or drainages changes following a wildfire.

In addition, as described in Impact WRF-1 above, Objective VII.C and associated policies in the Safety Element of the General Plan Update are intended to reduce the risk of wildfire throughout the Plan Area as it relates to both landslides and flooding following a wildfire event.

Compliance with proposed polices would reduce the risk of landslides and flooding following a wildfire for developments implemented by the General Plan Update. Adherence to these policies

would evaluate critical needs, such as slope instability, following a wildfire and require wildfire risk reduction measures, such as healthy hillside management. Additionally, proposed housing sites are not located in areas associated with landslides and flooding. Development under the General Plan Update would not expose people or structures to landslides or flooding following a wildfire and impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant. Therefore, mitigation is not required.

4.15.4 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative wildfire impacts is Los Angeles County. This geographic scope is appropriate for wildfire, because wildfires can cause impacts to large areas. However, this cumulative analysis focuses on development on and proximate to Calabasas and includes buildout of the cities of Agoura Hills, Hidden Hills, and Woodland Hills (a portion of Los Angeles City) and projects in unincorporated Los Angeles County, south of the Plan Area.

Wildfire Hazards

Most land surrounding Calabasas to the north and east is suburban use and open space areas south and west of the city are classified as VHFHSZ. Cumulative wildfire-related impacts could be significant if cumulative development would occur in rural or high fire hazard areas that could exacerbate risks due to location on steep slopes, in high-wind areas, or areas of historical wildfire burn areas. Cumulative development in Agoura Hills, Hidden Hills, Woodland Hills, and unincorporated Los Angeles County would increase the density of development in urban areas that would help reduce wildfire risk. Cumulative development and infrastructure would be subject to Statewide standards for fire safety in the California Fire Code. However, existing codes and regulations cannot fully prevent wildfires from damaging structures or populations, and cumulative wildfire impacts would be significant. Mitigation is not available for such cumulative impacts, as it is not possible to prevent a significant risk of wildfires or fully protect people and structures associated with cumulative development from the risks of wildfires within Los Angeles County. Thus, there would be a significant and unavoidable cumulative impact.

The General Plan Update could result in a net increase in development of approximately 1,305 new residential units in Calabasas, all of which would be located in high fire hazard zones. Compliance with state, regional, and local codes, regulations, and proposed polices would reduce the risk of loss, injury, or death from wildfire by making structures more resilient to wildfire. Therefore, future development envisioned under the General Plan Update would reduce overall risk of wildfire compared to existing conditions. Cumulative impacts related to exposure of occupants to pollutant concentrations from a wildfire or uncontrolled spread of wildfire, or exposure of significant risk of loss, injury or death involving wildland fire would be less than significant.

Wildfire-Related Emergency/Evacuation Response

Cumulative development in Agoura Hills, Hidden Hills, Woodland Hills, and unincorporated Los Angeles County, including development under the General Plan Update, would comply with local

emergency response plans, which coordinate efforts among agencies and local entities in the event of a wildfire. Specifically, Calabasas is part of the Las Virgenes-Malibu Multi-Jurisdictional Hazard Mitigation Plan that includes the cities of Agoura Hills, Hidden Hills, Westlake, and Malibu. This plan ensures coordinating evacuation procedures for residents and businesses in the region. In addition, the Los Angeles County Fire Department provides fire services to these jurisdictions, which would result in coordinated efforts for emergency access and evacuation response. With adherence to local plans and procedures, the cumulative impact related to emergency and evacuation response relative to wildfire events would be less than significant.

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4.16 Effects Found Not to be Significant

Section 15128 of the CEQA Guidelines requires an EIR to briefly describe any possible effects that were determined not to be significant and were therefore not discussed in detail. This section addresses the potential environmental effects of the General Plan Update that were determined not to be significant. The topics listed below that were found not to be significantly affected by the General Plan Update are drawn from the environmental checklist form included in Appendix G of the CEQA Guidelines. Any items not addressed in this section are included in Sections 4.1 through 4.15 of this EIR.

4.16.1 Agriculture and Forestry Resources

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. Accordingly, the General Plan Update would have a significant impact with respect to population and housing if it would:

- a. *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;*
- b. *Conflict with existing zoning for agricultural use or a Williamson Act contract;*
- c. *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g));*
- d. *Result in the loss of forest land or conversion of forest land to non-forest use;*
- e. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.*

The California Important Farmland Finder Map indicates that the City is mapped to have Prime Farmland and Unique Farmland in some areas (California Department of Conservation [DOC] 2016). These areas include portions of the Plan Area that are already developed and where agriculture is not practiced within the Plan Area. According to the DOC, there are no Williamson Act contracts in the city (DOC 2016). There are no General Plan or Zoning designations that would support farming in Calabasas. No impacts would occur from the implementation of the General Plan Update on agricultural resources.

The Plan Area has no portions of land that are classified as forestland. Furthermore, housing under the General Plan Update would primarily be located in infill areas that are previously developed. Therefore, implementation of the General Plan Update would not lead to the loss or conversion of farmland, forest land, or timberland, and would not produce changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impacts associated with farmland, forest land, or timberland would occur.

4.16.2 Energy

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. Accordingly, the General Plan Update would have a significant impact with respect to population and housing if it would:

- a) *Wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation;*
- b) *Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.*

Reasonably foreseeable development under the General Plan Update is anticipated to require site preparation and grading, including hauling material off-site; pavement and asphalt installation; building construction; architectural coating; and landscaping and hardscaping. During construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site.

Energy use during construction would be temporary in nature and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Furthermore, per applicable regulatory requirements such as 2019 CALGreen, development under the General Plan Update would comply with construction waste management practices to divert a minimum of 65 percent of construction debris. These practices would result in efficient use of energy necessary to construct reasonably foreseeable development under the General Plan Update. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Overall, construction for development under the General Plan Update would be temporary and typical of that associated with development throughout the region. Therefore, reasonably foreseeable development under the General Plan Update would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.

Operation of reasonably foreseeable development under the General Plan Update would contribute to regional energy demand by consuming electricity, natural gas, and gasoline and diesel fuels. Natural gas and electricity would be used for heating and cooling systems, lighting, and appliances among other purposes. Gasoline and diesel consumption would be associated with vehicle trips generated by customers and employees.

All new development under the General Plan Update would be required to comply with all standards set in the latest iteration of the California Building Standards Code (California Code of Regulations Title 24), which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. California's CALGreen standards (California Code of Regulations Title 24, Part 11) require implementation of energy-efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building Energy Efficiency Standards (California Code of Regulations Title 24, Part 6) require newly constructed buildings to meet energy performance standards set by the CEC. These standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy.

Furthermore, the proposed land use changes under the General Plan Update would increase housing density and encourage mixed-use development in close proximity to existing commercial uses and existing transit stops, which would facilitate the use of transit and alternative transportation modes such as walking and biking. As discussed in Section 4.13, *Transportation*, per capita vehicles miles traveled (VMT) associated with reasonably foreseeable development under the General Plan Update would be less than existing (baseline) conditions, and the proposed Circulation Element update includes policies for individual projects to reduce VMT. Therefore, implementation of the General Plan Update would not result in the wasteful, inefficient, or unnecessary consumption of vehicle fuels. Therefore, operation would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy.

Compliance with regulations and implementation of proposed policies included in the General Plan Update would minimize potential conflicts with adopted energy conservation plans. Therefore, the General Plan Update would result in no impact related to an inconsistency with adopted energy conservation plans.

4.16.3 Mineral Resources

The following thresholds of significance were developed based on the CEQA Guidelines, specifically, Appendix G. Accordingly, the General Plan Update would have a significant impact with respect to population and housing if it would:

- a. *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;*
- b. *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.*

According to the DOC California Geological Survey, the Plan Area contains areas identified as MRZ-3, which are areas that contain mineral deposits for which the significance cannot be evaluated (DOC 2021). However, the Plan Area is a primarily residential developed community; therefore, resource extraction would not be compatible with existing and planned land uses. Proposed development under the General Plan Update would not consist of any uses that would require mineral extraction. Further, Policy IV-45 of the General Plan Conservation Element prohibits the extraction of mineral extraction operations that could result in significant environmental impacts. Development under the General Plan Update would be required to comply with the above mineral conservation policy. Therefore, no impacts relating to mineral resource extraction would occur.

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5 Other CEQA Sections

This section discusses growth-inducing impacts and irreversible environmental impacts resulting from the General Plan Update.

5.1 Growth Inducement

Section 15126.2(e) of the CEQA Guidelines requires consideration of growth inducing impacts of a proposed project. Growth inducing impacts are characteristics of a project that could “foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” According to the CEQA Guidelines, such projects include those that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant). In addition, as set forth in the CEQA Guidelines, increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Generally, a project may result in growth inducing effects if it involves one of the following:

- The removal of a regulatory obstacle to growth (e.g., an annexation or up-zoning), thus indirectly inducing population and/or employment growth
- Extension of infrastructure (sewer, water, etc.) to an area currently undeveloped and/or lacking adequate infrastructure, thus removing an obstacle to growth; and/or

The CEQA Guidelines state that it must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

Therefore, the General Plan Update’s growth inducing effect is considered a significant environmental impact only if one of the above listed effects results in a significant physical effect in one or more of the issue areas analyzed in Section 4 of this EIR.

5.1.1 Population Growth

As discussed in Section 4.11, *Population and Housing*, the General Plan Update would facilitate development of new housing units in already urbanized areas of the Plan Area. The General Plan Update would accommodate up to 1,305 new residential units to meet the City’s RHNA, which is determined by SCAG to quantify the need for housing within each jurisdiction based on anticipated growth. New residential units developed under the Housing Element Update could directly increase the population of the city if they were occupied by people currently residing in other cities or regions.

The purpose of the General Plan Update is to address the City’s fair share of the regional housing need and specific State statutory requirements. As of March 2021, SCAG determined a final RHNA allocation of 354 units for the City, of which 203 must be affordable to lower-income households. To meet the objectives of the RHNA and provide sufficient capacity for housing development, the Housing Element specifies sites for residential development, identifies rezoning of sites to increase permitted residential densities to meet affordability requirements, creates an AHO Zone, and continues implementation of the ADU program.

Therefore, the General Plan Update would align with SCAG’s RHNA determination and the State statutory requirements, which are established based on anticipated growth within the city.

As discussed in Section 4.11, *Population and Housing*, the population growth under the General Plan Update would exceed SCAG’s population growth forecast by approximately 13.4 percent and the housing growth forecast under the General Plan Update would exceed SCAG’s forecast by approximately 11.5 percent.

The General Plan Update would be consistent with State requirements for the RHNA. Although the General Plan Update would facilitate development beyond what is forecast in both the 2030 General Plan and SCAG’s 2020 RTP/SCS, it would bring the forecasts for the City’s General Plan and the RTP/SCS into consistency since the RTP/SCS will be updated to reflect new forecasts for each city in the region. The additional units under the General Plan Update would further assist in addressing the existing crisis and meeting the housing needs of the city. Furthermore, the Housing Element Update (as part of the General Plan Update) would first be submitted to the HCD for review and approval to ensure that it would adequately address the housing needs and demands of the city. Approval by the HCD would ensure that population and housing growth under the General Plan Update would not be substantial or unplanned.

The increase in affordable housing units would provide housing opportunities in proximity to jobs for those employed in the city that meet these household income categories. As the city is job-rich and the majority of those employed in the city commute from other jurisdictions, affordable housing units would provide opportunities for a better balance of jobs and housing that reduces regional VMT and associated impacts related to transportation, air quality, and GHG emissions.

Additionally, the future housing development facilitated by the General Plan Update is intended to be dispersed throughout the community to create managed levels of growth in specific areas. The types of housing units anticipated under the General Plan Update would generally fall into the following categories of development projects: multi-family residential and/or mixed-use development on vacant sites, redevelopment of existing nonresidential and residential sites that would allow residential use or higher density residential use, and ADUs. The proposed sites would be in areas with existing services and infrastructure and the General Plan Update does not propose new roads or infrastructure extensions. Therefore, the General Plan Update would not induce substantial unplanned population growth in the city by identifying future actions to increase capacity for the future development of new dwelling units, as necessary to meet State housing law requirements.

5.1.2 Economic Growth

Implementation of the General Plan Update would generate temporary employment opportunities during construction of individual buildings and projects. Because construction workers would be expected to be drawn from the existing regional work force, construction of development facilitated by the General Plan Update would not be considered growth-inducing.

As discussed in Section 4.11, *Population and Housing*, the city is job-rich and the majority of those employed in the city commute from other jurisdictions. Affordable housing units would provide opportunities for a better balance of jobs and housing that reduces regional VMT, and associated impacts related to transportation, air quality, and GHG emissions.

5.1.3 Removal of Obstacles to Growth

The city is primarily urbanized and contains developed communities with existing serving infrastructure, including roads, water supply, sewers, and storm drains. The city's existing roadway network would accommodate reasonably foreseeable development under the General Plan Update. In the event that roadway upgrades are required to serve specific future development, such upgrades would likely be minor (e.g., lane reconfiguration or restriping) and are not anticipated to include the construction of new roads. Although new residential development under the General Plan Update may require minor utility upgrades or expansion (e.g., water line connections, site drainage design) on a project-by-project basis, such upgrades would be intended to accommodate the growth planned under the General Plan Update within the city and would not induce growth outside of the city. As discussed in Section 4.14, *Utilities and Service Systems*, such upgrades would likely occur within existing utility easements and would not result in new areas of disturbance. Furthermore, existing wastewater treatment plants serving the city have adequate capacity to treat project-generated sewage and the treatment requirements of the Tapia Water Reclamation Facility would not be exceeded; therefore, the project would not necessitate construction of a new wastewater treatment facility. Generally, the General Plan Update is specifically intended to concentrate new housing development in areas that are already served by infrastructure in order to ensure that infrastructure is utilized efficiently and in a manner that reduces the environmental impacts of development.

Concentrating development in the urbanized areas of the Plan Area where existing transportation centers occur would generally avoid impacts to sensitive environmental conditions, such as agricultural, biological, and mineral resources, and minimize impacts since new development built to current standards would generally improve some existing conditions, such storm water runoff, surface water quality and reduce the potential for substantial seismic damage. The General Plan Update would not result in unplanned growth, but rather would ensure that projected growth is accommodated. The General Plan Update is anticipated to satisfy the anticipated population growth in the region in an efficient manner consistent with State, regional, and City policies. Therefore, the General Plan Update would aim to efficiently utilize existing infrastructure, reduce regional congestion, and improve air quality.

5.2 Significant and Unavoidable Adverse Impacts

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. No impacts are considered significant and unavoidable; that is, feasible mitigation is available to reduce all impacts to a less-than-significant level.

5.3 Significant and Irreversible Environmental Changes

Section 15126.2(d) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Specifically, Section 15126.2(d) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to

similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if any of the following would occur:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The project involves the wasteful use of resources.

Resources that would be consumed as a result of construction and operation of reasonably foreseeable development under the General Plan Update include water, electricity, natural gas, and fossil fuels. However, as discussed in Section 4.14, *Utilities and Services Systems*, and in the *Energy* portion Section 4.16, *Effects Found Not to be Significant*, of this EIR, the amount and rate of consumption of these resources would not result in significant environmental impacts related to the unnecessary, inefficient, or wasteful use of resources.

Construction activities related to the reasonably expected and foreseeable development would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobile and construction equipment. However, as discussed in the *Energy* portion of Section 4.16, *Effects Found Not to be Significant*, of this EIR, use of such resources by construction activities associated with residential development under the General Plan Update would not be unusual as compared to other construction projects and would not substantially affect the availability of such resources.

With respect to operational activities, compliance with all applicable energy and building codes would ensure that natural resources are conserved or recycled to the maximum extent feasible. New development under the General Plan Update would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6 of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings), the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations), and the Calabasas Green Building Code (CMC Title 17, Chapter 34). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. This Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances and provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls, and ceilings. The Code emphasizes saving energy at peak periods and seasons and improving the quality of installation of energy efficiency measures.

The California Green Building Standards Code sets targets for energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills; and use of environmentally sensitive materials in construction and design, including ecofriendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels. New developments would also be required to comply with the Calabasas Building Code, which contains mandatory measures for residential and non-residential uses, particularly those

related to energy efficiency (i.e., renewable energy, indoor and outdoor water use, and water reuse systems). While consumption of natural resources in the city would increase with implementation of the General Plan Update due to development and associated population increases, it is also likely that in response to GHG reduction mandates, new technologies or systems will emerge, or will become more cost-effective or user-friendly, that will further reduce the city's reliance upon nonrenewable natural resources. Therefore, the General Plan Update would not occur in a wasteful or inefficient manner use of natural resources.

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6 Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this EIR examines a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives (stated in Section 2.0 of this EIR) but would avoid or substantially lessen the significant adverse impacts.

As discussed in Section 2.0, *Project Description*, the objectives for the General Plan Update, are as follows:

- Meet State required RHNA for 6th RHNA planning cycle of 2021-2029
- Bring the General Plan into conformance with recently enacted State laws
- Identify future housing sites with a collective capacity to meet the City's RHNA, including the requisite buffer capacity
- Locate future housing sites in existing urban areas, in close proximity to transit and commercial services, and to avoid placement of new housing in open space areas

Included in this analysis are three alternatives, including the CEQA-required "no project" alternative, that involve changes to the project that may reduce the project-related environmental impacts as identified in this EIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the General Plan Update.

The following alternatives are evaluated in this EIR:

- Alternative 1: No Project (continuation of the current General Plan)
- Alternative 2: Avalon Apartments with Affordable Housing Overlay Alternative
- Alternative 3: Rezoned Sites Alternative

As required by CEQA, this section includes a discussion of the "environmentally superior alternative" among those studied (see Section 6.3).

Section 15126.6(a) of the *CEQA Guidelines* states the following:

"An EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."

The City of Calabasas, in its role as lead agency, has determined that the alternatives analyzed in this section of the EIR represent a reasonable range of alternatives to the General Plan Update.

Table 6-1 provides a summary comparison of the proposed General Plan Update and each of the alternatives considered. Detailed descriptions of the alternatives are included in the impact analysis for each alternative. The potential environmental impacts of each alternative are analyzed in Sections 6.1 through 6.3. Section 6.4 of this EIR includes a discussion of alternatives considered but rejected by the lead agency because they either did not meet the objectives of the project, were considered infeasible, or would not avoid or substantially lessen one or more significant effects of the General Plan Update.

Table 6-1 Comparison of Project Alternative Buildout Scenarios

	Proposed General Plan Update	Alternative 1: No Project ¹	Alternative 2: Avalon Apartments with Affordable Housing Overlay	Alternative 3: Rezoned Sites
Total Allowable Dwelling Units Under Alternative (Number of Units)	1,305	650	1,682	1,387 to 1,559
Change in Population Potential (Number of Residents) ²	+3,357	+1,762	+4,558	+3,759 to 4,225
Total Additional Residents Under Alternative (Number of Residents) ³	29,653	28,502	30,674	29,875 to 30,341

¹ The number of units calculated for the No Project Alternative are the difference between the 2030 General Plan projections (10,287 units) and the number of existing units the Plan Area (9,637 housing units: the City's 9,230 housing units plus 407 housing units in unincorporated areas in the Plan Area but outside the City limits).

² Calculations based on 2.71 people per dwelling unit (California Department of Finance 2020) except for the No Project Alternative. The population and housing methodology for the 2030 General Plan is included in the General Plan EIR (City of Calabasas 2015).

³ Existing Plan Area population of 26,116 (see Section 4.11, *Population and Housing*, for details).

6.1 Alternative 1: No Project Alternative (Continuation of Existing General Plan)

6.1.1 Description

The “No Project” alternative involves continued implementation of the City’s current General Plan. This alternative assumes that the City’s existing General Plan policies would continue to facilitate development in accordance with existing land use designations. Alternative 1 would continue to facilitate development in the same pattern as is currently seen in the City.

Under Alternative 1, new development would generally result from re-use of properties and conversion of uses in response to market demand (e.g., commercial or office to mixed use). While new development under Alternative 1 would also result from re-use of properties and conversion of uses in response to market demand, this alternative would not adjust the permitted density for the CMU and RM-16/20 zones to a range of 20 to 24 du/acre, and would not include the affordable housing overlay (AHO) on select sites to allow an increase in density up to 45 du/acre plus the applicable density bonus allowed by State law. Therefore, Alternative 1 would not fulfill any project objectives listed above and in Section 2, *Project Description*, and would fail to meet California General Plan law, such as the requirement to adopt an updated Housing Element for the 2021-2029 planning period and an updated Safety Element consistent with State regulations.

6.1.2 Impact Analysis

Overall, ground disturbing activities would be similar to the General Plan Update, as some of the 13 identified sites are already fully or partially developed with uses consistent with the existing zoning and land use designations of the sites. However, if these sites were redeveloped under Alternative 1, they would be redeveloped with less residential intensity than the proposed General Plan Update. Less intensity would result in fewer potential environmental impacts related to both construction and operation, particularly for traffic, air quality, noise, utilities and service systems, and wildfire than the General Plan Update. Regional VMT, however, would increase due to the need for employees to commute into the Plan Area from other areas with more housing opportunities, particularly affordable housing.

Alternative 1 would result in fewer new residential units than the General Plan Update, which would be inconsistent with the RHNA goals for the City. Alternative 1 would result in a smaller increase in population or housing than the General Plan Update due to limited new residential development. The limited increase in population and housing would reduce the demand for public services, parks and recreation facilities, energy, water, and wastewater treatment compared to the General Plan Update. Overall, impacts would generally be less than under the General Plan Update but due to the reduced density would not result in as many affordable units and would not meet the project objectives.

6.2 Alternative 2: Avalon Apartments with Affordable Housing Overlay Alternative

6.2.1 Description

Alternative 2 would include an Affordable Housing Overlay (AHO) zone on the Avalon Apartments site and would increase the permitted density on that site from 20-24 du/acre to 40 du/acre. The allowable development of new units would increase at that site from 132 under the General Plan Update to 620 under this alternative. This alternative would also remove the church site from the sites inventory, and thus would not accommodate development of potentially 111 residential units on that site. Therefore, there would be a net increase of 377 units compared to the General Plan Update, and one fewer site where residential development would occur.

6.2.2 Impact Analysis

Aesthetics

Under Alternative 2, buildout of the General Plan would occur, similar to the General Plan Update; however, one fewer site would accommodate residential development and more total residential units would be developed. The potential massing and building heights of the Avalon Apartments site may be larger upon redevelopment under Alternative 2 than with the General Plan Update. However, development and redevelopment that would occur under Alternative 2, similar to the General Plan Update, would be governed by General Plan policies and the regulations in the Development Code that concern aesthetics. Impacts on scenic vistas, scenic resources, visual character or quality, and light and glare would be the same, and impacts would be less than significant, same as the General Plan Update.

Air Quality

Under Alternative 2, a greater total of residential units would be developed, which would result in a larger anticipated population increase. However, like the General Plan Update, Alternative 2 would also promote re-use and infill development and require the use of VMT standards when evaluating new development projects, thereby promoting reductions in VMT and associated air pollutant emissions, which would be consistent with one of the overarching purposes of the AQMP to reduce mobile source emissions. The construction and operational air quality emissions from the Avalon Apartments site would increase compared to the General Plan Update, but Alternative 2 would provide more housing in the Plan Area that would be affordable or could accommodate low or moderate income households, resulting in fewer commute trips into the Plan Area by employees who may otherwise need to reside in other jurisdictions with more affordable housing opportunities.

Like the General Plan Update, development under Alternative 2 would not include substantial toxic air contaminants (TAC) sources and would be consistent with California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) guidelines, it would not result in the exposure of off-site sensitive receptors to significant amounts of carcinogenic or TACs. Overall, air quality impacts under Alternative 2 would be slightly higher than under the General Plan Update and would be less than significant.

Biological Resources

Development accommodated by Alternative 2, same as the General Plan Update, would be required to adhere to General Plan policies, City development requirements, federal and State regulations, and mitigation measures proposed in this EIR to reduce impacts to biological resources to a less than significant level. Development under Alternative 2 would occur at one fewer site with a partially vacant lot adjacent to the Las Virgenes Creek with freshwater forested shrub, which would decrease the likelihood of potential impacts than under the General Plan Update. Biological resource impacts would be slightly less than the General Plan Update and would be less than significant with mitigation incorporated.

Cultural and Tribal Cultural Resources

Development accommodated by Alternative 2, same as the General Plan Update, would be required to adhere to General Plan policies, City development requirements, federal and State regulations, and mitigation measures proposed in this EIR to reduce impacts to cultural, historic, and Tribal cultural resources. Development under Alternative 2 would occur at one fewer site with a building potentially eligible for listing as a historic resource. Therefore, Alternative 2 would decrease the likelihood of potential impacts than under the General Plan Update, and potential impacts would also be less than significant with mitigation incorporated.

Geology and Soils

Alternative 2 would result in potential development at one fewer site than the General Plan Update. Development under Alternative 2 would be required to adhere to General Plan policies, City development requirements, and federal and State regulations that govern grading and building, and mitigation measures proposed in this EIR to reduce impacts to paleontological resources. Geology and soils impacts would be generally the same and would be less than significant with mitigation incorporated.

Greenhouse Gas Emissions

Under Alternative 2, a greater total of residential units would be developed, which would result in a larger anticipated population increase. However, like the General Plan Update, Alternative 2 would also promote re-use and infill development and would result in similar home-based VMT per capita, as shown in Table 6-2. The construction and operational GHG emissions from the Avalon Apartments site would increase compared to the General Plan Update, but Alternative 2 would provide more housing in the City that would be affordable or could accommodate low or moderate income households, resulting in fewer commute trips into the City by employees who may otherwise need to reside in other jurisdictions with more housing opportunities. GHG emissions impacts would be generally the same compared to the General Plan Update and would be less than significant.

Hazards and Hazardous Materials

Future development under Alternative 2 would be required to store and handle hazardous materials in accordance with applicable federal, State, and local regulations. Impacts to emergency evacuation would be similar to the General Plan Update. Hazardous materials impacts would be generally the same compared to the General Plan Update and would be less than significant.

Hydrology and Water Quality

Alternative 2 would result in potential development at one fewer site than the General Plan Update. Overall, development under Alternative 2 would be required to adhere to General Plan policies, City development requirements, and federal and State regulations that govern stormwater runoff, water quality, and other hydrology-related impacts. Hydrology and water quality impacts would be generally the same as the General Plan Update and would be less than significant.

Land Use and Planning

Alternative 2 would result in potential development at one fewer site than the General Plan Update and additional units at the Avalon Apartments site. Alternative 2 would still be consistent with housing policies and RHNA goals for the City and would not divide an established community, and would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Overall, land use and planning impacts under Alternative 2 would be similar to the General Plan Update and be less than significant.

Noise

Since a greater number of residential units may be developed under Alternative 2 than the General Plan Update, construction and vibration noise would be greater than the General Plan Update. Operational noise would be slightly higher under Alternative 2 due to the difference in intensity of use from increased vehicle trips and mechanical equipment noise. Development under Alternative 2 would be required to adhere to General Plan policies, City development requirements, and federal and State regulations that govern construction and operational noise, and mitigation measures proposed in this EIR to reduce potential noise impacts. However, Alternative 2 may result in an increase of traffic volumes along roadways near the Avalon Apartments site, such as Lost Hills Road and Las Virgenes Road, which may result in a noticeable increase in roadway noise but would adhere to the same mitigation as the General Plan Update to reduce noise impacts. Overall, noise

impacts under Alternative 2 would be slightly greater than the General Plan Update but would be less than significant with mitigation incorporated.

Population and Housing

Alternative 2 would result in potential development at one fewer site than the General Plan Update and additional units at the Avalon Apartments site. Alternative 2 would be consistent with housing policies and RHNA goals for the City and although it would result in a slight increase in population with a net increase of 377 housing units, it would not result in substantial unplanned population or housing growth or result in displacement. It is anticipated that the City's review processes would adequately mitigate potential environmental impacts relating to the development of new or redeveloped parkland, open space, or other recreational facilities; therefore, impacts associated with parks and recreation facilities would be less than significant under Alternative 2 similar to the General Plan Update. Overall, population and housing impacts under Alternative 2 would be similar to the General Plan Update and less than significant.

Public Services and Recreation

Alternative 2 would result in a greater population increase than the General Plan Update but would not increase the service area of Los Angeles County Sheriff's Department (LACSD), Los Angeles County Fire Department (LACFD), or Las Virgenes School District (LVSD), and would be unlikely to result in new or expanded police, fire, school, or parks and recreation facilities that would result in substantial adverse environmental impacts. Overall, public services and recreation impacts under Alternative 2 would be slightly greater than the General Plan Update but would still be less than significant.

Transportation

Alternative 2 would result in potential development at one fewer site than the General Plan Update and additional units at the Avalon Apartments site. As noted in Table 6-2, the home-based VMT per capita under Alternative 2 would be similar to the General Plan Update and more than the threshold of 15 percent below the baseline VMT per capita. Similar to the General Plan Update, three sites would generate VMT that is not 15 percent below the baseline and may require future VMT mitigation at the time of City review and approval. Potential impacts to bicycle, pedestrian, and transit facilities would be similar to the General Plan Update, and potential geometric hazards and traffic safety impacts would also be similar to the General Plan Update. Impacts to emergency evacuation would be similar to the General Plan Update. Overall, traffic impacts under Alternative 2 would be generally similar to the General Plan Update.

Utilities and Service Systems

Alternative 2 would result in potential development at one fewer site than the General Plan Update and additional units at the Avalon Apartments site. Alternative 2 would require a slight increase in the consumption of water, wastewater, stormwater, electricity, natural gas, and telecommunications services than the General Plan Update, and would likely result in additional infrastructure installation and extensions. However, the residences would be developed at a site with existing infrastructure and would not result in significant impacts due to installation. Senate Bill 610 requires a Water Supply Assessment would be required for development over 500 units, and potential impacts would be assessed upon development review. The Las Virgenes Municipal Water District (LVMWD) would incorporate the increased population and housing forecast from

Alternative 2 into its future water supply planning efforts, such as future updates to the Urban Water Management Plan (UWMP), to account for the increased water demand. Furthermore, reasonably foreseeable development under Alternative 2 would be subject to the City's General Plan Policies related to coordinating development review with the LVMWD to ensure the availability of water supplies and minimizing domestic water use, similar to the General Plan Update. Overall, utilities and service system impacts under Alternative 2 would be slightly greater than the General Plan Update but would still be less than significant.

Wildfire

Alternative 2 would reduce overall impacts to wildfire risk compared to the General Plan Update since it would not accommodate development on the church site, which is identified as having a wildfire risk index of 60.0 (see Appendix E). The church site is adjacent to the vegetated area surrounding Las Virgenes Creek. The Avalon Apartments site, in contrast, is identified as having a wildfire risk index of 36.0. Impacts to emergency evacuation would be similar to the General Plan Update. Wildfire impacts under Alternative 2 would be slightly less than the General Plan Update and would also be less than significant.

Cumulative Impacts

Based on the analysis herein, Alternative 2 would have lesser impacts to biological resources, cultural resources, and wildfire than the proposed General Plan Update. Impacts to aesthetics, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, population and housing, public services, and transportation would be similar to the General Plan Update. Impacts related to air quality, noise, public services and recreation, and utilities and service systems would be slightly greater than the General Plan Update. Because impacts under Alternative 2 would be lesser, similar to, or slightly greater than the General Plan Update, and the General Plan Update's contribution to cumulative impacts for these resource areas was determined not to be cumulatively considerable, Alternative 2 would also not be cumulatively considerable.

6.3 Alternative 3: Rezoned Sites Alternative

6.3.1 Description

Alternative 3 would replace site #2 (Rancho Pet Kennels), #6 (church property), and #8 (Avalon Apartments) in the sites inventory with the following three sites, as described:

- A. An existing shopping center at the northwest corner of Thousand Oaks Boulevard and Las Virgenes Road in the northern section of the Plan Area near Malibu Canyon. This site would be rezoned from commercial retail (CR) to commercial mixed use (CMU) with an AHO of 45 dwelling units per acre (du/acre) maximum¹. Six existing one-story commercial office buildings currently occupy the property, three of which are commercial retail buildings, and the other three are office buildings. The three office buildings had originally been entitled to allow for two-stories of office space, but they were constructed as only one story due to insufficient office demand. The three office buildings could potentially be repurposed and increased in size

¹ This EIR analyzes a potential of 45 units per acre maximum density under the AHO to fully encompass the worst case scenario" of possible environmental impacts. The actual proposed maximum allowable density for the AHO presented in the draft Housing Element is 40 units per acre.

(into three-story buildings and/or with larger footprints). Redevelopment could occur under multiple scenarios – either by incorporating all or part of the existing retail structure or by way of a complete tear-down and subsequent new construction. Depending on the development proposed, this site would allow 98-117 new residential units.

- B. An existing shopping center at the southwest corner of Agoura Road and Las Virgenes Road in the central portion of the Plan Area south of US-101. This 2.5-acre site would be rezoned from CR to CMU with an AHO of 45 du/acre maximum. The existing primary commercial building on the property was constructed in 1989 and currently houses a mixture of underperforming retail uses on the first floor, and similarly underperforming office uses on the second floor. One existing building could be demolished, and the site potentially redeveloped with as many as 112 new residential units.
- C. Five contiguous lots along Las Virgenes Road south of Agoura Road in the western side of the Plan Area south of US-101. These five parcels total 7.3-acres with three existing single-family housing units on three lots and with two undeveloped sliver properties making up the balance. This site could be rezoned from residential single-family (RS) to residential multifamily (MF) or CMU with an AHO of 45 du/acre maximum. One of the existing residential dwellings has been identified through a resources survey as potentially having historic value sufficient for local landmark designation. This site is surrounded by multifamily and commercial uses. Rezoning would allow for as many as 328 new residential units. If the AHO is not applied, the site could be rezoned to allow a maximum of 24 du/acre, upon which case the allowable maximum number of new units would be 175.

Altogether, these rezoned sites could accommodate development with a range of 385 to 557 new residential units. With the elimination of 303 units from the sites inventory from the Rancho Pet Kennel, church, and Avalon Apartments sites, the net difference would be an increase of 82 to 254 allowable units developed over the eight-year planning period compared to the proposed General Plan Update.

6.3.2 Impact Analysis

Aesthetics

Under Alternative 3, buildout of the General Plan would occur, similar to the General Plan Update; however, more total residential units would be developed on three different sites. The potential massing of the redevelopment on these replacement sites may be larger upon redevelopment under Alternative 3 than under the General Plan Update. However, development and redevelopment that would occur under Alternative 3, similar to the General Plan Update, would be governed by General Plan policies and the regulations in the Development Code that concern aesthetics. Impacts on scenic vistas, scenic resources, visual character or quality, and light and glare would be the same, and impacts would be less than significant, same as the General Plan Update.

Air Quality

Under Alternative 3, a greater total of residential units would be developed, which would result in a larger anticipated population increase. However, like the General Plan Update, Alternative 3 would also promote re-use and infill development and require the use of VMT standards when evaluating new development projects, thereby promoting reductions from the baseline VMT and associated air pollutant emissions, which would be consistent with one of the overarching purposes of the AQMP to reduce mobile source emissions. The construction and operational air quality emissions from the

development on the three replacement sites, since there would be more housing units developed, would increase compared to the General Plan Update, but Alternative 3 would provide more housing in the Plan Area that would be affordable or could accommodate low or moderate income households, resulting in fewer commute trips into the Plan Area by employees who may otherwise need to reside in other jurisdictions with more housing opportunities.

Like the General Plan Update, development under Alternative 3 would not include substantial toxic air contaminants (TAC) sources and would be consistent with California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) guidelines, it would not result in the exposure of off-site sensitive receptors to significant amounts of carcinogenic or TACs. Overall, air quality impacts under Alternative 3 would be higher than under the General Plan Update and would be less than significant.

Biological Resources

Development accommodated by Alternative 3, same as the General Plan Update, would be required to adhere to General Plan policies, City development requirements, federal and State regulations, and mitigation measures proposed in this EIR to reduce impacts to biological resources to a less than significant level. Development under Alternative 3 would replace two partially vacant lots (church site and Rancho Pet Kennels site) with two sites that are not vacant or undeveloped (sites A and B in the Alternative 3), which would decrease the likelihood of potential impacts than under the General Plan Update. However, Alternative 3 site C contains oak trees, which are protected trees under City ordinance, which may be directly or indirectly impacted, but development would adhere to the City's regulations regarding protected trees. Overall, biological resource impacts would be slightly less than the General Plan Update and less than significant with mitigation incorporated.

Cultural and Tribal Cultural Resources

Development accommodated by Alternative 3, same as the General Plan Update, would be required to adhere to General Plan policies, City development requirements, federal and State regulations, and mitigation measures proposed in this EIR to reduce impacts to cultural resources. Development under Alternative 3 would not occur at the church site, which has one building that is potentially eligible for listing as a historic resource. Under the General Plan Update, however, that building is not anticipated to be demolished.

Alternative 3 would accommodate development at one site (site C) potentially having historic value sufficient for local landmark designation. Therefore, Alternative 3 would increase the likelihood of potential impacts than under the General Plan Update; however, impacts would be reduced with mitigation. Impacts to historic, cultural, and Tribal cultural resources would be less than significant with mitigation incorporated.

Geology and Soils

Alternative 3 would result in potential development at three different sites than the General Plan Update. Development under Alternative 3 would be required to adhere to General Plan policies, City development requirements, and federal and State regulations that govern grading and building, and mitigation measures proposed in this EIR to reduce impacts to paleontological resources. Geology and soils impacts would be generally the same and would be less than significant with mitigation incorporated.

Greenhouse Gas Emissions

Under Alternative 3, a greater total of residential units would be developed than the General Plan Update, which would result in a larger anticipated population increase. Like the General Plan Update, Alternative 3 would also promote re-use and infill development and would result in a slightly higher home-based VMT per capita, as shown in Table 6-2, which would still be a more than 15 percent decrease from baseline. The construction and operational GHG emissions would increase compared to the General Plan Update, but Alternative 2 would provide more housing in the City that would be affordable or could accommodate low or moderate income households, resulting in fewer commute trips into the City by employees who may otherwise need to reside in other jurisdictions with more housing opportunities. GHG emissions impacts would be slightly greater compared to the General Plan Update and would be less than significant.

Hazards and Hazardous Materials

Future development under Alternative 3 would be required to store and handle hazardous materials in accordance with applicable federal, State, and local regulations. Impacts to emergency evacuation would be slightly greater than the General Plan Update but still less than significant. Overall, hazardous materials impacts would be generally the same compared to the General Plan Update and would still be less than significant.

Hydrology and Water Quality

Development under Alternative 3 would be required to adhere to General Plan policies, City development requirements, and federal and State regulations that govern stormwater runoff, water quality, and other hydrology-related impacts. Hydrology and water quality impacts would be generally the same as the General Plan Update and would still be less than significant.

Land Use and Planning

Alternative 3 would result in potential development at three different sites than the General Plan Update and an overall greater number of units. Alternative 3 would still be consistent with housing policies and RHNA goals for the City and would not divide an established community, and would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Overall, land use and planning impacts under Alternative 3 would be similar to the General Plan Update and would be less than significant.

Noise

Since a greater number of residential units may be developed under Alternative 3 than the General Plan Update, overall construction and vibration noise would be greater than the General Plan Update. Operational noise would be slightly higher under Alternative 3 due to the difference in intensity of use from increased vehicle trips and mechanical equipment noise. Development under Alternative 3 would be required to adhere to General Plan policies, City development requirements, and federal and State regulations that govern construction and operational noise, and mitigation measures proposed in this EIR to reduce potential noise impacts. However, Alternative 3 may result in an increase of traffic volumes along roadways near the replacement sites, such as Agoura Road and Las Virgenes Road, which may result in a noticeable increase in roadway noise. Overall noise impacts under Alternative 3 would be slightly greater than the General Plan Update and would

require the same mitigation measures as the General Plan Update to reduce impacts to a less than significant level.

Population and Housing

Alternative 3 would result in additional residential units than the General Plan Update (see Table 6-1). Alternative 3 would be consistent with housing policies and RHNA goals for the City and although this alternative would increase the number of housing units and population, it would not result in substantial unplanned population or housing growth or result in displacement. Overall, population and housing impacts under Alternative 3 would be similar to the General Plan Update and would still be less than significant.

Public Services and Recreation

Alternative 3 would result in a greater population increase than the General Plan Update but would not increase the service area of LACSD, LACFD, or LVSD. However, buildout of the higher range of development intensity of the three replacement sites may result in the need for new or expanded LACSD, LACFD, or school facilities, the environmental impacts of which would be speculative. It is anticipated that the City's review processes would adequately mitigate potential environmental impacts relating to the development of new or redeveloped parkland, open space, or other recreational facilities; therefore, impacts associated with parks and recreation facilities would be less than significant under Alternative 3 similar to the General Plan Update. Overall, public services and recreation impacts under Alternative 3 would be greater than the General Plan Update but still less than significant.

Transportation

As noted in Table 6-2, the home-based VMT per capita under Alternative 3 would be slightly higher than the proposed General Plan Update but still more than the threshold of 15 percent below the baseline VMT per capita. Similar to the General Plan Update, three sites would generate VMT that is not 15 percent below the baseline and may require future VMT mitigation at the time of City review and approval. Potential impacts to bicycle, pedestrian, and transit facilities would be similar to the General Plan Update, and potential geometric hazards and traffic safety impacts would also be similar to the General Plan Update. Impacts to emergency evacuation would be slightly greater than the General Plan Update but still less than significant. Overall, traffic impacts under Alternative 3 would be generally similar to the General Plan Update.

Utilities and Service Systems

Alternative 3 would require greater consumption of water, wastewater, stormwater, electricity, natural gas, and telecommunications services than the General Plan Update, and would likely result in additional infrastructure installation and extensions. However, the residences would be developed at sites with existing infrastructure and would not result in significant impacts due to installation. The LVMWD would incorporate the increased population and housing forecast from Alternative 3 into its future water supply planning efforts, such as future updates to the UWMP, to account for the increased water demand. Furthermore, reasonably foreseeable development under Alternative 3 would be subject to the City's General Plan Policies related to coordinating development review with the LVMWD to ensure the availability of water supplies and minimizing domestic water use, similar to the General Plan Update. Overall, utilities and service system impacts

under Alternative 3 would be greater than the General Plan Update but would still be less than significant.

Wildfire

Alternative 3 would not accommodate development on the Rancho Pet Kennels or church site which have a high wildfire index (see Appendix E), but would add two sites (B and C) which are also adjacent to vegetated areas along Las Virgenes Creek. Impacts to emergency evacuation would be slightly greater than the General Plan Update but still less than significant. Overall, wildfire impacts under Alternative 3 would be similar to the General Plan Update and would still be less than significant.

Cumulative Impacts

Based on the analysis herein, Alternative 3 would have lesser impacts to biological resources than the proposed General Plan Update. Impacts to aesthetics, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, population and housing, transportation, and wildfire would be similar to the General Plan Update. Impacts related to air quality, cultural resources, greenhouse gas emissions, noise, public services and recreation, and utilities and service systems would be slightly greater than the General Plan Update. Because impacts under Alternative 3 would be lesser, similar to, or slightly greater than the General Plan Update, and the General Plan Update’s contribution to cumulative impacts for these resource areas was determined not to be cumulatively considerable, Alternative 3 would also not be cumulatively considerable.

Table 6-2 Alternatives 2 and 3 – VMT Comparison

	Home-Based VMT per Capita (2029)	Difference (percent) from Citywide Baseline of 20.6	Difference (percent) from General Plan Update	More than 15 Percent Below Baseline (2021) Per Capita VMT?
General Plan Update (2029)	16.8	-18	-	Yes
Alternative 2 (2029)	16.8	-18	0	Yes
Alternative 3 (2029) ¹	17.4	-16	+2	Yes

VMT = vehicle miles traveled

¹The highest range of allowable units under Alternative 3 was used.

Source: VMT Alternatives Analysis in Appendix C

6.4 Alternatives Considered but Rejected

The City considered an alternative as suggested by commenters during the scoping period (see Table 1-1), and other alternatives suggested by staff. The following summarizes the alternative considered, but ultimately rejected for inclusion in this Program EIR analysis as it would not meet most of the project objectives and did not substantially reduce impacts compared to the proposed General Plan Update.

The alternative that was considered but rejected was the Option B Sites Inventory Alternative, which removed Avalon Apartments from the sites inventory and added vacant sites along Mulholland Highway, and would rezone these sites from rural residential (RR) and Hillside/Mountainous (HM) to residential multifamily (RM-16). The Planning Commission

unanimously stated a preference for Option A (the General Plan Update which is analyzed in this EIR), due to the desire to focus housing sites in areas that were already developed and avoid development on vacant sites, which may result in potentially more significant environmental impacts than the proposed General Plan Update.

6.5 Environmentally Superior Alternative

CEQA requires identification of the environmentally superior alternative among the alternatives to the proposed project. The environmentally superior alternative must be an alternative that reduces some of the General Plan Update's environmental impacts, regardless of the financial costs associated. Identification of the environmentally superior alternative is an informational procedure and the alternative identified as the environmentally superior alternative may not be that which best meets the goals or needs of the proposed project. Table 6-3 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed General Plan Update for each of the issue areas studied.

Based on the analysis of alternatives in this section, the No Project Alternative is the environmentally superior alternative as it would either avoid or lessen the severity of most impacts of the General Plan Update. Because the No Project Alternative would not generate new population within the Plan Area above existing buildout projections, impacts related to air quality, land use, noise, population and housing, public services and recreation, utilities and service systems, and wildfire would be reduced compared to the project. However, this alternative would not meet the project objectives, as it would not increase the opportunities or encourage the development of housing in the City, and it would not update the Housing Element to be consistent with State law.

If the No Project Alternative is determined to avoid or reduce more impacts than any other alternative, CEQA requires that the EIR identify an environmentally superior alternative among the other alternatives (*CEQA Guidelines* Section 15126.6[e]). Of the other alternatives evaluated in this EIR, Alternative 2 (Avalon Apartments with Affordable Housing Overlay) would be environmentally superior. Because this alternative would result in development at one fewer site, impacts to biological resources, cultural resources, and wildfire would also be reduced compared to the General Plan Update and would have fewer overall impacts than Alternative 3. Furthermore, this alternative would achieve the project objectives similar to the proposed General Plan Update, as it would accommodate an increased number of affordable housing development opportunities.

Table 6-3 Impact Comparison of Alternatives to Proposed General Plan Update

Issue	General Plan Update Impact Classification	Alternative 1: No Project/Continuation of existing General Plan	Alternative 2: Avalon Apartments with Affordable Housing Overlay	Alternative 3: Rezoned Sites
Aesthetics	Less Than Significant	=	=	=
Air Quality	Less Than Significant	-	+	+
Biological Resources	Less than Significant with Mitigation Incorporated	=	-	-
Cultural Resources	Less than Significant with Mitigation Incorporated	=	-	+
Geology and Soils	Less Than Significant	=	=	=
Greenhouse Gas	Less Than Significant	+	=	+
Hazards and Hazardous Materials	Less Than Significant	=	=	=
Hydrology and Water Quality	Less Than Significant	=	=	=
Land Use and Planning	Less Than Significant	-	=	=
Noise	Less than Significant with Mitigation Incorporated	-	+	+
Population and Housing	Less Than Significant	-	=	=
Public Services and Recreation	Less Than Significant	-	+	+
Transportation and Traffic	Less than Significant	-	=	=
Utilities and Service Systems	Less Than Significant	-	+	+
Wildfire	Less Than Significant	-	-	=

+ Greater level of impact than the General Plan Update
 - Decreased level of impact than the General Plan Update
 = Similar level of impact to the General Plan Update

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7.2 List of Preparers

This EIR was prepared by the City of Calabasas, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

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Jenna Shaw, Environmental Planner
Destiny Timms, Environmental Planner
Rachel Irvine, Environmental Planner
Debra Jane Seltzer, Lead Formatting and Production Specialist

Appendix A

Notice of Preparation and Scoping Comment Letters



CITY of CALABASAS

Community Development Department
Planning Division
100 Civic Center Way
Calabasas, California 91302
T: (818) 224-1600

www.cityofcalabasas.com

Notice of Preparation

DATE: FEBRUARY 8, 2021
TO: RESPONSIBLE AND TRUSTEE AGENCIES AND INTERESTED PARTIES
SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE 2021-2029 HOUSING ELEMENT UPDATE

NOTICE IS HEREBY GIVEN that the City of Calabasas will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the 2021-2029 Housing Element update and associated updates to the Land Use, Safety, and Circulation Elements of the General Plan, as described below. This Notice of Preparation has been issued to provide an opportunity for responsible and trustee agencies and interested parties to submit comments on the scope of the EIR, relative to the attached Project Summary. Agencies should comment on such information as it relates to their statutory responsibilities in connection with the proposed project. The City made the determination to prepare an EIR following preliminary review of the project. Pursuant to CEQA Guidelines Section 15063(a), because an EIR is needed, an initial study has not been prepared. Probable environmental effects of the project are described in the attached Project Summary.

Project Name: City of Calabasas 2021-2029 Housing Element Update EIR

Project Location: City of Calabasas (citywide) in the County of Los Angeles (see Figure 1 attached).

Public Comment Period: The City of Calabasas welcomes and will consider all written comments regarding potential environmental impacts of the project and issues to be addressed in the Draft EIR. The public review period begins on February 8, 2021 and ends on March 9, 2021 at 5:00 p.m. Please direct your comments to:

Mail: Michael Klein, AICP, Senior Planner
Community Development Department
100 Civic Center Way
Calabasas, California 91302

Email: mklein@cityofcalabasas.com

Please include your name, phone number and email or postal address.

Scoping Meeting: The City of Calabasas will host a scoping meeting to solicit input on the content of the environmental analysis that will be included in the Draft EIR.

Date and Time: February 22, 2021 at 6:00 p.m. via Zoom

Participants using a phone line:

- Phone Numbers: (669) 900-9128 or (346) 248-7799 or (253) 215-8782 or (312) 626-6799 or (646) 558-8656 or (301) 715-8592
- Webinar ID: 882 3778 7957 (Password: 240110)
- To request to speak, press #9

Participants using a computer, tablet or smartphone:

- Access the webinar at this link:
<https://us02web.zoom.us/j/88237787957?pwd=Y1M4WmFMaFkrS1R2cHY0N1EwWVh2dz09> (Password 240110)
- To request to speak, select “Raise Hand”

The City of Calabasas, in compliance with the Americans with Disabilities Act, requests individuals who require special accommodations to access, attend and/or participate in the City meeting due to disability, to please contact the City Clerk’s Office, (818) 224-1600, at least one business day prior to the scheduled meeting to ensure that we may assist you.



CITY of CALABASAS

Consulting Firm Retained to Prepare Draft EIR

Firm Name: Rincon Consultants, Inc.
Address: 180 North Ashwood Avenue, Ventura, California 93003
Contact: Reema Shakra, AICP, Senior Planner

Date: February 8, 2021

Signature: 

Michael Klein, AICP

Title: Senior Planner, City of Calabasas

Phone: (818) 224-1710

Project Summary

Project Location and Setting

The project applies to the entire City of Calabasas (citywide). Calabasas is located in western Los Angeles County and is approximately 13.3 square miles in size (see Figure 1). Land uses are regulated under the City of Calabasas’ General Plan, which was comprehensively updated in 2008. Existing land uses in the city consist of residential at varying densities, commercial, mixed use, institutional public facilities, and open space. Nearby natural open space areas include Cheseboro and Palo Comado Canyon and Upper Las Virgenes Canyon Open Space Preserve to the north, Summit Valley Edmund D. Edelman Park to the east, and Topanga State Park and Malibu Creek State Park to the south. Adjacent cities include Agoura Hills to the west, Hidden Hills to the north, and Los Angeles to the east. Unincorporated Los Angeles County is located to the south, west and north of Calabasas. Major roadway access to the city is provided by U.S. Highway 101.

Project Description

The project consists of a comprehensive update to the Housing Element and related updates to the Land Use Element and Land Use Map of the City of Calabasas’ General Plan. The project also includes updates to the Safety Element and Circulation Element in compliance with new State rules.

Housing Element Update

The City of Calabasas, along with all cities and counties in California, is mandated by California State law to prepare a Housing Element update for State certification every eight years. The Housing Element is a state-mandated part of the City’s General Plan and includes goals, policies, programs and objectives to further the development, improvement and preservation of housing in Calabasas in a manner that is aligned with community desires, as well as regional growth objectives and State law. Local governments must adequately plan to meet the existing and projected housing needs of all economic segments of the community. Specifically, State Government Code Section 65583 requires the Housing Element to identify and analyze existing and projected housing needs, and establish goals, policies, and actions to address these housing needs, including adequate provisioning of affordable and special-needs housing (e.g., agricultural workers, homeless people, seniors, single-parent households, large families, and persons with disabilities). State law requires local jurisdictions to identify available sites that have the appropriate land use and zoning to accommodate estimated housing growth projections.

In 2013, the City of Calabasas General Plan was updated to incorporate the 2014-2021 Housing Element as Chapter 5, “2014-2021 Housing Element.” It included the provision of sufficient land for the construction of the housing units that the City of Calabasas must accommodate according to the Regional Housing Needs Allocation (RHNA) by 2021. The 2014-2021 allocation equaled 330 new housing units.

The RHNA quantifies the need for housing in every region throughout the state and is determined by the California Department of Housing and Community Development. The RHNA is mandated by state law and is meant to inform the local planning process by addressing existing and future housing need resulting from estimated growth in population, employment, and households. The Southern California Association of



Governments (SCAG) is responsible for allocating the RHNA to each city and county in its region, which includes Calabasas.

In August 2019, the California Department of Housing and Community Development (HCD) issued its final Regional Housing Need Determination to SCAG, stating that the minimum regional housing need for the SCAG region is 1.34 million new housing units. HCD then directed SCAG to develop a methodology to allocate all 1.34 million units throughout the region, based on statutory guidelines for housing needs and development.

SCAG developed a methodology and distributed a draft RHNA allocation to all the cities and counties in its region, including the City of Calabasas, for the 2021-2029 Housing Element planning period. The City’s total draft RHNA for the 2021-2029 planning period is 353 units, allocated to specific income groups as shown in Table 1.

Table 1 City of Calabasas Regional Housing Needs Allocation (Draft)

	Income Category (% of Los Angeles County Area Median Income)				Total RHNA
	Very Low (31-50%)	Low (51-80%)	Moderate (81-120%)	Above Moderate (120% or more)	
Housing units needed	131	70	70	82	353

One of the important steps in the Housing Element update process is to identify sites that can accommodate the housing units assigned to Calabasas per the above RHNA allocation table, at all income levels. Site selection is conducted based on an analysis of site-specific constraints, including zoning, access to utilities, location, development potential, density and whether or not the site is identified in a previous Housing Element. In order to count toward the RHNA allocation, sites must be in a zoning category that meets a minimum residential density standard, have a minimum lot size, and are either vacant or underutilized. Underutilized sites are sites that have not been developed to the maximum capacity allowed by the zoning category and thus provide the potential for more residential homes on a site. When a local jurisdiction cannot demonstrate that there are enough vacant or underutilized sites to adequately meet their RHNA allocation, a ‘rezoning program’ must be put into place. A rezoning program ensures that there are enough sites with sufficient densities to address the housing need identified through the RHNA.

The 2021 Housing Element Update will also address any changes that have occurred since adoption of the current Housing Element. These changes include updated demographic information, housing needs data, and analysis of any potential housing constraints. The Housing Element map of available housing sites will be updated to identify sites that could accommodate the City’s RHNA allocation for the 2021-2029 planning period.

For more information on the Housing Element update, please go to:

<https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update>

Land Use Element

The Land Use Element of the General Plan will be updated to reflect new housing sites identified in the Housing Element. This will include minor changes to the land use table and map to accommodate residential land uses on the sites identified to meet the RHNA allocation.

Safety Element

The Safety Element is also part of the City of Calabasas General Plan and will be updated to include new information about natural and human-related hazards. The Safety Element currently includes policies to address the following types of hazards: geology and seismicity, stormwater management and flooding, fire hazards, radon gas, hazardous materials, and disaster response. The Safety Element update will focus on ensuring alignment with other City plans such as the Las Virgenes-Malibu Council of Governments Multi-Jurisdictional Hazard Mitigation Plan and addressing new state requirements pertaining to climate change, wildfire risk, and evacuation routes for residential neighborhoods.



Circulation Element

The Circulation Element is another chapter of the City of Calabasas General Plan that will be updated as part of this project. Changes to the Circulation Element will include removing references to adopted level of service thresholds. Level of service is a measure to describe how well roadway intersections and other transportation facilities operate for drivers. Level of service thresholds were used as a metric to evaluate environmental impacts of proposed projects. These thresholds will be replaced with vehicle miles traveled. Vehicle miles traveled evaluates the number of miles traveled by each vehicle. This shift in standard is mandated by the State as part of Senate Bill 375 in keeping with the State's goals to reduce greenhouse gas emissions, encourage infill development and improve public health through active transportation (e.g., bicycling and walking).

Environmental and Social Justice Policies

Update of the housing, land use, safety, and circulation elements will also consider the addition of environmental and social justice policies that promote fair housing and economic opportunities and avoid discrimination for all socio-economic groups, consistent with the Affirmatively Furthering Fair Housing (AFFH) requirements under Housing Element Law.

Required Approvals

Actions to be taken by the City include:

- Certification of the EIR prepared for the project;
- Adoption of the General Plan amendments to update the Housing Element
- Adoption of the General Plan Land Use Map to re-designate land uses for certain selected housing sites;
- Adoption of General Plan amendments to the Safety Element; and
- Adoption of General Plan amendments to the Circulation Element.

After adoption, the updated Housing Element will be submitted to the California Department of Housing and Community Development for certification.

Probable Environmental Effects

The EIR will evaluate whether implementing the proposed project would potentially result in one or more significant environmental effects. The following issue areas will be addressed in the EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire



CITY of CALABASAS

Issues Scoped Out from Analysis in the EIR

The City anticipates that the project would have less than significant or no impacts on the following environmental issue areas. These areas will not be discussed in the EIR for the reasons discussed below.

Agriculture and Forestry Resources

No forestry resources or timberlands are located within the city, nor does the city (or surrounding communities) contain agricultural land in active production. Therefore, this issue will not be discussed in the EIR.

Mineral Resources

No significant mineral resources have been identified in the city, as stated in the City's General Plan. None of the candidate housing sites are used for mineral extraction, nor are any of the sites designated as an important mineral recovery site. Therefore, there would be no impact on mineral resources and this issue will not be discussed in the EIR.




CITY of CALABASAS

Figure 1 City of Calabasas Vicinity Map



Imagery provided by Esri and its licensors © 2020.

 City of Calabasas

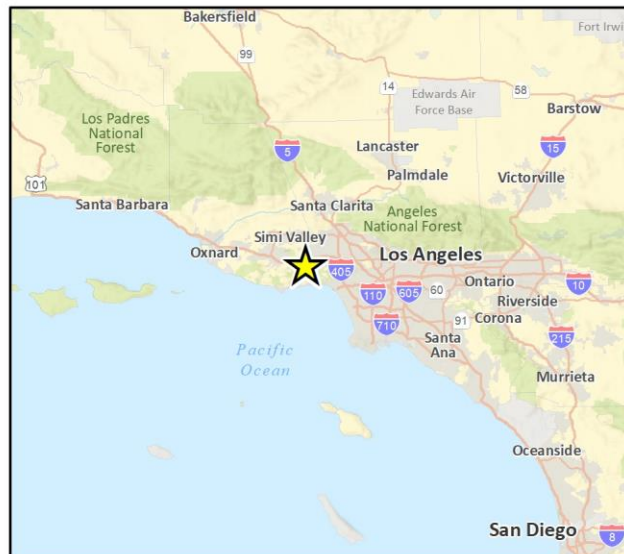


Fig 1 Regional Location



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



March 4, 2021

Michael Klein
City of Calabasas
100 Civic Center Way
Calabasas, CA 91302
MKlein@cityofcalabasas.com

Subject: Notice of Preparation of a Draft Environmental Impact Report for the City of Calabasas 2021-2029 Housing Element EIR Project, SCH #2021020150, City of Calabasas, Los Angeles County

Dear Mr. Klein:

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the City of Calabasas (City; Lead Agency) for the City of Calabasas 2021-2029 Housing Element EIR (Project). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect State fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 *et seq.*). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Conserving California's Wildlife Since 1870

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Project Description and Summary

Objective: The Project involves a comprehensive update to the Housing Element and related updates to the Land Use Element and Land Use Map of the City of Calabasas' General Plan. The Project also includes updates to the Safety Element and Circulation Element in compliance with new State rules.

- Housing Element Update is mandated by California State law to prepare a Housing Element update for State certification every eight years. The Housing Element includes goals, policies, programs, and objectives to further the development, improvement, and preservation of housing in Calabasas in a manner that is aligned with community desires, as well as regional growth objectives and State law. Local governments must adequately plan to meet the existing and projected housing needs of all economic segments of the community.
- The Land Use Element of the General Plan will be updated to reflect new housing sites identified in the Housing Element.
- The Safety Element is also part of the City of Calabasas General Plan and will be updated to include new information about natural and human-related hazards. The Safety Element currently includes policies to address the following types of hazards: geology and seismicity, stormwater management and flooding, fire hazards, radon gas, hazardous materials, and disaster response. The Safety Element update will focus on ensuring alignment with other City plans and addressing new State requirements pertaining to climate change, wildfire risk, and evacuation routes for residential neighborhoods.
- The Circulation Element will include removing references to adopted level of service thresholds. Level of service is a measure to describe how well roadway intersections and other transportation facilities operate for drivers. Level of service thresholds were used as a metric to evaluate environmental impacts of proposed projects. These thresholds will be replaced with vehicle miles traveled.

Location: The Project would apply to the entire City of Calabasas, located in western Los Angeles County, and is approximately 13.3 square miles in size. Nearby natural open space areas include Cheseboro and Palo Comado Canyon and Upper Las Virgenes Canyon Open Space Preserve to the north; Summit Valley Edmund D. Edelman Park to the east; and Topanga State Park and Malibu Creek State Park to the south. Adjacent cities include Agoura Hills to the west, Hidden Hills to the north, and Los Angeles to the east. Unincorporated Los Angeles County is located to the south, west, and north of Calabasas.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the City in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources.

Specific Comments

- 1) Adequate Sites Inventory. CDFW recommends the City prepare a map of the following areas if present within or adjacent to the City boundary. In addition, the City should consider

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the Project's potential impacts on the following areas if present within or adjacent to the Project boundary:

- a) Conservation easements or mitigation lands;
- b) U.S. Fish and Wildlife Service [Threatened & Endangered Species Active Critical Habitat](#) (USFWS 2020);
- c) Wildlife Corridors [see Comment #2 (Impacts on Wildlife Corridors and Wildlife)];
- d) Sensitive Natural Communities, including (but not limited to) California walnut groves (*Juglans californica* Alliance), Coast live oak woodland (*Quercus agrifolia* Alliance), Valley Oak woodland (*Quercus lobata* Alliance) [see General Comment #3 (Biological Baseline Assessment)];
- e) Aquatic and riparian resources including (but not limited to) rivers, channels, streams, wetlands, and vernal pools, and associated natural plant communities; and
- f) Urban forests, particularly areas with dense and large trees [see Specific Comment #4 (Loss of Bird and Raptor Nesting Habitat)].

CDFW recommends the City avoid sites that may have a direct or indirect impact on conservation easements or lands set aside as mitigation. CDFW recommends the DEIR include measures where future housing development facilitated by the Project mitigate (avoid if feasible) for impacts on biological resources occurring within SEAs and critical habitat, as well as mitigate for impacts on wildlife corridors, sensitive natural communities, aquatic and riparian resources, and urban forests.

- 2) Impacts on Wildlife Corridors and Wildlife. The [South Coast Missing Linkages Project](#) is an inter-agency effort to identify and conserve the highest-priority linkages in the south coast ecoregion (SCW 2017). Based on review aerial photography, the City's open space and undeveloped areas may overlap with wildlife corridors and linkages identified by the South Coast Missing Linkages Project. CDFW is concerned that the Project would impact wildlife corridors. Additionally, development occurring adjacent to natural habitat areas such as wildlife corridors could have direct or indirect impacts on wildlife. Impacts could result from increased human presence, traffic, noise, and artificial lighting. Increased human-wildlife interactions could lead to injury or mortality of wildlife. For instance, as human population and communities expand into wildland areas, there has been a commensurate increase in direct and indirect interaction between mountain lions and people (CDFW 2013). As a result, the need to relocate or humanely euthanize mountain lions (depredation kills) may increase for public safety.

CDFW recommends the DEIR include measures where future housing development facilitated by the Project thoroughly analyze whether the project may impact wildlife corridors. Impacts include habitat loss and fragmentation, narrowing of a wildlife corridor, and introduction of barriers to wildlife movement. Additionally, CDFW recommends future development projects thoroughly analyze whether the project may have direct and indirect impacts wildlife resulting from increased human presence, traffic, noise, and artificial lighting.

- 3) Nesting Birds. CDFW recommends the DEIR include measures where future housing development facilitated by the Project avoids potential impacts to nesting birds. Project activities occurring during the bird and raptor breeding and nesting season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment.

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- a) Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). It is unlawful to take, possess, or needlessly destroy the nest or eggs of any raptor.
 - b) CDFW recommends that measures be taken to fully avoid impacts to nesting birds and raptors. Ground-disturbing activities (e.g., mobilizing, staging, drilling, and excavating) and vegetation removal should occur outside of the avian breeding season which generally runs from February 15 through August 31 (as early as January 1 for some raptors) to avoid take of birds, raptors, or their eggs.
 - c) If impacts to nesting birds and raptors cannot be avoided, CDFW recommends the DEIR include measures where future housing development facilitated by the Project mitigates for impacts. CDFW recommends surveys by a qualified biologist with experience conducting breeding bird and raptor surveys. Surveys are needed to detect protected native birds and raptors occurring in suitable nesting habitat that may be disturbed and any other such habitat within 300 feet of the project disturbance area, to the extent allowable and accessible. For raptors, this radius should be expanded to 500 feet and 0.5 mile for special status species, if feasible. Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.
- 4) Loss of Bird and Raptor Nesting Habitat. The biggest threat to birds is habitat loss and conversion of natural vegetation into another land use such as development (e.g., commercial, residential, industrial). In the greater Los Angeles, urban forests and street trees, both native and some non-native species, provide habitat for a high diversity of birds (Wood and Esaian 2020). Some species of raptors have adapted to and exploited urban areas for breeding and nesting (Cooper et al. 2020). For example, raptors (*Accipitridae*, *Falconidae*) such as red-tailed hawks (*Buteo jamaicensis*) and Cooper's hawks (*Accipiter cooperii*) can nest successfully in urban sites. Red-tailed hawks commonly nest in ornamental vegetation such as eucalyptus (Cooper et al. 2020). According to iNaturalist, there are multiple observations of red-tailed hawks and Copper's hawks within the City.
- a) CDFW recommends the DEIR provide measures where future housing development facilitated by the Project avoids removal of any native trees, large and dense-canopied native and non-native trees, and trees occurring in high density (Wood and Esaian 2020). CDFW also recommends avoiding impacts to trees protected by the City's Heritage Tree Program and Tree Ordinance. CDFW also recommends avoiding impacts to understory vegetation (e.g., ground cover, subshrubs, shrubs, and trees).
 - b) If impacts to trees cannot be avoided, trees should be replaced to compensate for the temporal or permanent loss habitat within a project site. Depending on the status of the bird or raptor species impacted, replacement habitat acres should increase with the occurrence of a California Species of Special Concern. Replacement habitat acres should further increase with the occurrence of a CESA-listed threatened or endangered species.

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- c) CDFW recommends planting native tree species preferred by birds. This includes coast live oak (*Quercus agrifolia*) and California sycamore (*Platanus racemosa*) (Wood and Esaian 2020). CDFW recommends Audubon Society's [Plants for Birds](#) for more information on selecting native plants and trees beneficial to birds (Audubon Society 2020).
- 5) **Bats.** Numerous bat species are known to roost in trees and structures throughout Los Angeles County (Remington and Cooper 2014). In urbanized areas, bats use trees and man-made structures for daytime and nighttime roosts. Accordingly, CDFW recommends the DEIR provide measures where future housing development facilitated by the Project avoids potential impacts to bats.
- a) Bats are considered non-game mammals and are afforded protection by state law from take and/or harassment (Fish & G. Code, § 4150; Cal. Code of Regs., § 251.1). Project construction and activities, including (but not limited to) ground disturbance, vegetation removal, and any activities leading to increased noise levels may have direct and/or indirect impacts on bats and roosts.
 - b) CDFW recommends a project-level biological resources survey provide a thorough discussion and adequate disclosure of potential impacts to bats and roosts from project construction and activities including (but not limited to) ground-disturbing activities (e.g., mobilizing, staging, drilling, and excavating) and vegetation removal. If necessary, to reduce impacts to less than significant, a project-level environmental document should provide bat-specific avoidance and/or mitigation measures [CEQA Guidelines, § 15126.4(a)(1)].

General Comments

- 1) **Disclosure.** An environmental document should provide an adequate, complete, and detailed disclosure about the effect which a proposed project is likely to have on the environment (Pub. Resources Code, § 20161; CEQA Guidelines, §15151). Adequate disclosure is necessary so CDFW may provide comments on the adequacy of proposed avoidance, minimization, or mitigation measures, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).
- 2) **Mitigation Measures.** Public agencies have a duty under CEQA to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of feasible alternatives or mitigation measures [CEQA Guidelines, §§ 15002(a)(3), 15021]. Pursuant to CEQA Guidelines section 15126.4, an environmental document shall describe feasible measures which could mitigate for impacts below a significant level under CEQA.
 - a) **Level of Detail.** Mitigation measures must be feasible, effective, implemented, and fully enforceable/imposed by the lead agency through permit conditions, agreements, or other legally binding instruments (Pub. Resources Code, § 21081.6(b); CEQA Guidelines, §§ 15126.4, 15041). A public agency shall provide the measures that are fully enforceable through permit conditions, agreements, or other measures (Pub. Resources Code, § 21081.6). CDFW recommends that the City prepare mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions,

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location), and clear in order for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). Adequate disclosure is necessary so CDFW may provide comments on the adequacy and feasibility of proposed mitigation measures.

- b) Disclosure of Impacts. If a proposed mitigation measure would cause one or more significant effects, in addition to impacts caused by the Project as proposed, the environmental document should include a discussion of the effects of proposed mitigation measures [CEQA Guidelines, § 15126.4(a)(1)]. In that regard, the environmental document should provide an adequate, complete, and detailed disclosure about a project's proposed mitigation measure(s). Adequate disclosure is necessary so CDFW may assess the potential impacts of proposed mitigation measures.
- 3) Biological Baseline Assessment. An adequate biological resources assessment should provide a complete assessment and impact analysis of the flora and fauna within and adjacent to a project site and where a project may result in ground disturbance. The assessment and analysis should place emphasis upon identifying endangered, threatened, sensitive, regionally, and locally unique species, and sensitive habitats. Impact analysis will aid in determining any direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW recommends avoiding any sensitive natural communities found on or adjacent to a project. CDFW also considers impacts to Species of Special Concern a significant direct and cumulative adverse effect without implementing appropriate avoid and/or mitigation measures. A project-level environmental document should include the following information:
 - a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. An environmental document should include measures to fully avoid and otherwise protect Sensitive Natural Communities from project-related impacts. CDFW considers these communities as threatened habitats having both regional and local significance. Plant communities, alliances, and associations with a state-wide ranking of S1, S2, S3 and S4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by visiting [Vegetation Classification and Mapping Program - Natural Communities](#) webpage (CDFWa 2020);
 - b) A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018). Adjoining habitat areas should be included where project construction and activities could lead to direct or indirect impacts off site;
 - c) Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at a project site and within the neighboring vicinity. The [Manual of California Vegetation](#) (MCV), second edition, should also be used to inform this mapping and assessment (Sawyer et al. 2009). Adjoining habitat areas should be included in this assessment where project activities could lead to direct or indirect impacts off site. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

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- d) A complete, recent, assessment of the biological resources associated with each habitat type on site and within adjacent areas that could also be affected by a project. CDFW's [California Natural Diversity Database](#) (CNDDDB) in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat (CDFWb 2020). An assessment should include a nine-quadrangle search of the CNDDDB to determine a list of species potentially present at a project site. A lack of records in the CNDDDB does not mean that rare, threatened, or endangered plants and wildlife do not occur in the project site. Field verification for the presence or absence of sensitive species is necessary to provide a complete biological assessment for adequate CEQA review [CEQA Guidelines, § 15003(i)];
 - e) A complete, recent, assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California Species of Special Concern, and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of a project site should also be addressed such as wintering, roosting, nesting, and foraging habitat. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, may be required if suitable habitat is present. See CDFW's [Survey and Monitoring Protocols and Guidelines](#) for established survey protocol for select species (CDFWc 2020). Acceptable species-specific survey procedures may be developed in consultation with CDFW and the U.S. Fish and Wildlife Service; and,
 - f) A recent wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of a proposed project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame or in phases.
 - g) A biological resources survey should include identification and delineation of any rivers, streams, and lakes and their associated natural plant communities/habitats. This includes any culverts, ditches, storm channels that may transport water, sediment, pollutants, and discharge into rivers, streams, and lakes.
- 4) Data. CEQA requires that information developed in environmental impact reports be incorporated into a database which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species and natural communities detected by completing and submitting [CNDDDB Field Survey Forms](#) (CDFW 2020d). The City should ensure data collected at a project-level has been properly submitted, with all data fields applicable filled out. The data entry should also list pending development as a threat and then update this occurrence after impacts have occurred.
- 5) Biological Direct, Indirect, and Cumulative Impacts. CDFW recommends providing a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. The DEIR should address the following:

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- a) A discussion regarding Project-related indirect impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands [e.g., preserve lands associated with a Natural Community Conservation Plan (NCCP, Fish & G. Code, § 2800 et. seq.)]. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;
 - b) A discussion of both the short-term and long-term effects to species population distribution and concentration and alterations of the ecosystem supporting the species impacted [CEQA Guidelines, § 15126.2(a)];
 - c) A discussion of potential adverse impacts from lighting, noise, temporary and permanent human activity, and exotic species, and identification of any mitigation measures;
 - d) A discussion on Project-related changes on drainage patterns; the volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and, post-Project fate of runoff from the Project sites. The discussion should also address the potential water extraction activities and the potential resulting impacts on the habitat (if any) supported by the groundwater. Mitigation measures proposed to alleviate such Project impacts should be included;
 - e) An analysis of impacts from proposed changes to land use designations and zoning, and existing land use designation and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR; and,
 - f) A cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant and wildlife species, habitat, and vegetation communities. If the City determines that the Project would not have a cumulative impact, the environmental document should indicate why the cumulative impact is not significant. The City's conclusion should be supported by facts and analyses [CEQA Guidelines, § 15130(a)(2)].
- 6) Project Description and Alternatives. To enable CDFW to adequately review and comment on the proposed Project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the DEIR:
- a) A complete discussion of the purpose and need for, and description of, the proposed Project;
 - b) CEQA Guidelines section 15126.6(a) states that an environmental document shall describe a reasonable range of potentially feasible alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project. CEQA Guidelines section 15126.6(f)(2) states if the Lead Agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion

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and should include reasons in the environmental document; and,

- c) A range of feasible alternatives to Project component location and design features to avoid or otherwise minimize direct and indirect impacts to sensitive biological resources and wildlife movement areas. CDFW recommends the City consider configuring Project construction and activities, as well as the development footprint, in such a way as to fully avoid impacts to sensitive and special status plants and wildlife species, habitat, and sensitive vegetation communities. CDFW also recommends the City consider establishing appropriate setbacks from sensitive and special status biological resources. Setbacks should not be impacted by ground disturbance or hydrological changes for the duration of the Project and from any future development. As a general rule, CDFW recommends reducing or clustering the development footprint to retain unobstructed spaces for vegetation and wildlife and provide connections for wildlife between properties and minimize obstacles to open space.

Project alternatives should be thoroughly evaluated, even if an alternative would impede, to some degree, the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6).

- d) Where the Project may impact aquatic and riparian resources, CDFW recommends the City consider alternatives that would fully avoid impacts to such resources. CDFW also recommends alternatives that would allow not impede, alter, or otherwise modify existing surface flow; watercourse and meander; and water-dependent ecosystems and vegetation communities. Project-related designs should consider elevated crossings to avoid channelizing or narrowing of streams. Any modifications to a river, creek, or stream may cause or magnify upstream bank erosion, channel incision, and drop in water level and cause the stream to alter its course of flow.
- 7) CESA. CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. As to CESA, take of any endangered, threatened, candidate species, or CESA-listed plant species that results from the Project is prohibited, except as authorized by state law (Fish & G. Code §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). Consequently, if the Project or any Project-related activity during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) or a consistency determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.
- 8) Jurisdictional Waters. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the

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bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream, or use material from a streambed. For any such activities, the project applicant (or "entity") must provide written notification to CDFW pursuant to Fish and Game Code Section 1600 *et seq.*

- a) CDFW's issuance of a Lake and Streambed Alteration (LSA) Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the environmental document of the local jurisdiction (Lead Agency) for the project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the environmental document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA Agreement. Please visit CDFW's [Lake and Streambed Alteration Program](#) webpage for information about LSA Notification (CDFW 2020).
 - b) In the event the project area may support aquatic, riparian, and wetland habitats; a preliminary delineation of the streams and their associated riparian habitats should be included in the environmental document. The delineation should be conducted pursuant to the U.S. Fish and Wildlife Service (USFWS) wetland definition adopted by CDFW (Cowardin et al. 1970). Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water Quality Control Board Section 401 Certification.
 - c) In project areas which may support ephemeral or episodic streams, herbaceous vegetation, woody vegetation, and woodlands also serve to protect the integrity of these resources and help maintain natural sedimentation processes; therefore, CDFW recommends effective setbacks be established to maintain appropriately-sized vegetated buffer areas adjoining ephemeral drainages.
 - d) Project-related changes in upstream and downstream drainage patterns, runoff, and sedimentation should be included and evaluated in the environmental document.
 - e) As part of the LSA Notification process, CDFW requests a hydrological evaluation of the 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions. CDFW recommends the environmental document evaluate the results and address avoidance, minimization, and/or mitigation measures that may be necessary to reduce potential significant impacts.
- 9) Wetland Resources. CDFW, as described in Fish and Game Code section 703(a), is guided by the Fish and Game Commission's (Commission) policies. The [Wetlands Resources](#) policy the Commission "...seek[s] to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California (CFGF 2020). Further, it is the policy of the Fish and Game Commission to strongly discourage development in or conversion of wetlands. It opposes, consistent with its legal authority, any development or conversion that would result in a reduction of wetland acreage or wetland habitat values. To that end, the Commission opposes wetland development proposals unless, at a minimum, project mitigation assures there will be 'no net loss' of either wetland habitat values or

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acreage. The Commission strongly prefers mitigation which would achieve expansion of wetland acreage and enhancement of wetland habitat values.”

- a) The Wetlands Resources policy provides a framework for maintaining wetland resources and establishes mitigation guidance. CDFW encourages avoidance of wetland resources as a primary mitigation measure and discourages the development or type conversion of wetlands to uplands. CDFW encourages activities that would avoid the reduction of wetland acreage, function, or habitat values. Once avoidance and minimization measures have been exhausted, a project must include mitigation measures to assure a “no net loss” of either wetland habitat values, or acreage, for unavoidable impacts to wetland resources. Conversions include, but are not limited to, conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks, which preserve the riparian and aquatic values and functions for the benefit to on-site and off-site wildlife populations. CDFW recommends mitigation measures to compensate for unavoidable impacts be included in an environmental document and these measures should compensate for the loss of function and value.
 - b) The Fish and Game Commission’s Water policy guides CDFW on the quantity and quality of the waters of this State that should be apportioned and maintained respectively so as to produce and sustain maximum numbers of fish and wildlife; to provide maximum protection and enhancement of fish and wildlife and their habitat; encourage and support programs to maintain or restore a high quality of the waters of this State; prevent the degradation thereof caused by pollution and contamination; and, endeavor to keep as much water as possible open and accessible to the public for the use and enjoyment of fish and wildlife. CDFW recommends avoidance of water practices and structures that use excessive amounts of water, and minimization of impacts that negatively affect water quality, to the extent feasible (Fish & G. Code, § 5650).
- 10) Translocation/Salvage of Plants and Animal Species. Translocation and transplantation is the process of moving an individual from a project site and permanently moving it to a new location. CDFW generally does not support the use of, translocation or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant or animal species. Studies have shown that these efforts are experimental and the outcome unreliable. CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants and animals and their habitats.
- 11) Compensatory Mitigation. An environmental document should include mitigation measures for adverse Project related direct or indirect impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of project-related impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code, section 65967, the Lead Agency

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must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves.

- 12) Long-term Management of Mitigation Lands. For proposed preservation and/or restoration, an environmental document should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.

Conclusion

We appreciate the opportunity to comment on the NOP for the City of Calabasas 2021-2029 Housing Element EIR Project to assist the City of Calabasas in identifying and mitigating Project impacts on biological resources. If you have any questions or comments regarding this letter, please contact Felicia Silva, Environmental Scientist, at Felicia.Silva@wildlife.ca.gov.

Sincerely,

DocuSigned by:

Erinn Wilson-Olgin

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Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

ec: CDFW

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CALIFORNIA NATIVE PLANT SOCIETY

Los Angeles / Santa Monica Mountains Chapter

15811 Leadwell Street Van Nuys, CA 91406-3113

March 9, 2021

Michael Klein, Senior Planner
Community Development Department
100 Civic Center Way
Calabasas, CA 91302

Sent electronically to: mklein@cityofcalabasas.com

RE: Scoping Comments on City of Calabasas 2021-2029 Housing Element Update EIR

Dear Mr. Klein,

Thank you for the opportunity to provide scoping comments on the preparation of the upcoming EIR for the 2021-2029 Housing Element Update for the City of Calabasas.

The California Native Plant Society (“CNPS”) is a science and policy-based interest group, with more than 50 years experience in the environmental field and numerous local chapters. Our organization protects California's native plant heritage and works to preserve it for future generations. We accomplish this goal through engagement on projects, laws, and other actions that pose risk to plant habitat or flora itself. Because we are a scientific organization at heart, we promote and maintain clear, empirically-driven methodologies for land use and management decisions. We have published our guidance and protocols in the *Online Rare*

Plant Inventory and our reference book: *Manual of California Vegetation*, 2nd Edition, both of which are the most advanced resources available for identifying and managing critical habitat in California.

The Los Angeles / Santa Monica Mountains Chapter, which is submitting this public comment, has over 400 members. Our chapter and many of its members have direct experience with the proposed project area and environs. Such activities include: (1) 30 years of restoration in State Parks, the Santa Monica Mountains, and the biologically-connected corridors to the Simi Hills, (2) field studies of rare, threatened, endangered native plants and habitats in the region, and (3) ongoing native plant hikes through the Santa Monica Mountains, Simi Hills and other natural areas around the San Fernando Valley. Because of this expertise, we are confident that the following information will be helpful in your preparation of the Housing Update DEIR.

1. Consideration of Wildfire Risk

CNPS strongly encourages the City to consider and appropriately address issues of wildfire as it relates to not only the safety of the proposed planning changes, but also as a fundamental element of the planning process itself. To that end, we respectfully disagree with the City's position that fire issues are not planning issues, but safety considerations. This implies that planning decisions do not meaningfully affect wildfire risk. Instead, we agree with the view that "land use planning should be considered an important component to fire risk management and that consistently applied policies based on residential pattern may provide substantial benefits for future risk reduction."¹ By relegating wildfire concerns to the domain of safety, rather than planning, planners underutilize their ability to develop a land use regime that appropriately recognizes the threat of wildfire on the urban-wildland interface and designs around it.

In a fire regime where human activities and infrastructure overwhelmingly are culpable for fire starts, spreads, and destruction, separating planning decisions and wildfire risk analysis seems imprudent. Current fire science strongly shows that most urban-adjacent wildfires in California start in the urban-wildland

¹ Syphard AD, Bar Massada A, Butsic V, Keeley JE (2013) Land Use Planning and Wildfire: Development Policies Influence Future Probability of Housing Loss. PLoS ONE 8(8): e71708. <https://doi.org/10.1371/journal.pone.0071708>

interface, and that certain corridors are more likely to burn than others.² Accordingly, to argue that the City can set such concerns aside, only to take them up later as safety considerations, fundamentally misunderstands the wildfire paradigm here in Southern California. While good city planning does not necessarily preclude the risk of wildfire, it can (and, in our estimation, does) have a meaningful effect on the likelihood of fire starts and human exposure to wildfire.³

Calabasas, where all City areas outside the urban center have been designated by the state government as a “Very High Fire Severity Zone,” is certainly not an exception to this paradigm. Thus, as the City repurposes and rezones its jurisdiction as part of the Housing Update, we ask that it include consideration of wildfire risk as a fundamental *planning* issue, intrinsic to the process itself, rather than something to be considered *post-hoc* as a safety concern. By doing so, the City can design an urban-wildland interface that will not only result in fewer fires, but also suffer far less exposure to the wildfires that otherwise occur.

Another consideration is fire clearance requirements: Los Angeles County requires, on average, a 1/3 acre take of native vegetation surrounding typical Calabasas homes (4000sq.ft., w/ garage) in open space areas. This kind of clearance generally results in type conversion from more typical Californian brush (sage scrub, chapparal, etc) to easily flammable non-native grasses, which creates further wildfire risk and also damages native vegetation. We ask that changes to the Housing Update consider the effects of such clearance requirements on local habitat.

2. Rezoning and Repurposing Existing Zones/Buildings

CNPS also recommends that the City strongly consider the rezoning and repurposing of vacant, or underutilized, commercial and light industrial buildings/areas, changing their designation to include residential purposes. As you know, vacancy rates have continued to climb due to lowered retail demand since the Great Recession, as informed by an increase in online shopping and the more recent effects of the

² See <https://www.nrs.fs.fed.us/news/release/wui-interface-intermix>

³ See *generally* Menka Bihari, Elisabeth M. Hamin, Robert L. Ryan, "Understanding the Role of Planners in Wildfire Preparedness and Mitigation", *International Scholarly Research Notices*, vol. 2012, Article ID 253028, 12 pages, 2012. <https://doi.org/10.5402/2012/253028>

COVID-19 pandemic.⁴ Accordingly, we recommend that DEIR drafters carefully consider opportunities for infill development within these potentially underutilized spaces, seeking first to develop vertically within already-built areas rather than expanding into open space. By prioritizing infill development rather than encouraging further expansion into adjacent open space, Calabasas can reduce the above-mentioned risk of wildfire in its wildland-urban interface and preserve its surrounding native plant habitat (including, but limited to, oak savanna and woodland).

3. Protection of Existing Open Space

Calabasas touts its environmental 'values' and considers itself a “green” city that prioritizes open space, natural habitats, and its oak trees.⁵ We encourage it to own up to that promise in this Housing Update by actively working to conserve its dwindling open space in the Santa Monica Mountains and focusing developmental plans on urban infill. We also call on the City of Calabasas to strictly adhere to its protected tree ordinances and be vocal about that commitment.

In conclusion, please note that our chapter representatives and scientists are available to work with the City of Calabasas, to advise best planning and safety elements as well as best management practices pertinent to native vegetation in conjunction for this Housing Update. Thank you again for the opportunity to comment at this stage of the EIR process.

Sincerely,

Joseph Farewell

Conservation Chair

California Native Plant Society – Los Angeles / Santa Monica Mountains Chapter

⁴ See <https://www.politico.com/news/2020/10/18/next-economic-crisis-empty-retail-space-429994>

⁵ See <https://www.cityofcalabasas.com/government/community-development/planning-division/environment>



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FOURTH DISTRICT

KATHRYN BARGER
FIFTH DISTRICT

March 2, 2021

Michael Klein, Senior Planner
City of Calabasas
Community Development Department
100 Civic Center Way
Calabasas, CA 91302

Dear Mr. Klein:

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT, "2021-2029 HOUSING ELEMENT UPDATE," CONSISTS OF A COMPREHENSIVE UPDATE TO THE HOUSING ELEMENT AND RELATED UPDATE TO THE LAND USE ELEMENT AND LAND USE MAP OF THE CITY OF CALABASAS' GENERAL PLAN, THE PROJECT ALSO INCLUDES UPDATES TO THE SAFETY ELEMENT AND CIRCULATION ELEMENT IN COMPLIANCE WITH NEW STATE RULES, CALABASAS, FFER 2021001332

The Notice of Preparation of a Draft Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

The following are their comments:

PLANNING DIVISION:

We will reserve our comments for the draft EIR.

For any questions regarding this response, please contact Loretta Bagwell, Planning Analyst, at (323) 881-2404 or Loretta.Bagwell@fire.lacounty.gov.

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS
ARTESIA
AZUSA
BALDWIN PARK
BELL
BELL GARDENS
BELLFLOWER
BRADBURY
CALABASAS

CARSON
CERRITOS
CLAREMONT
COMMERCE
COVINA
CUDAHY
DIAMOND BAR
DUARTE

EL MONTE
GARDENA
GLEN DORA
HAWAIIAN GARDENS
HAWTHORNE
HERMOSA BEACH
HIDDEN HILLS
HUNTINGTON PARK
INDUSTRY

INGLEWOOD
IRWINDALE
LA CANADA-FLINTRIDGE
LA HABRA
LA MIRADA
LA PUENTE
LAKEWOOD
LANCASTER

LAWNDALE
LOMITA
LYNWOOD
MALIBU
MAYWOOD
NORWALK
PALMDALE
PALOS VERDES ESTATES
PARAMOUNT

PICO RIVERA
POMONA
RANCHO PALOS VERDES
ROLLING HILLS
ROLLING HILLS ESTATES
ROSEMEAD
SAN DIMAS
SANTA CLARITA

SIGNAL HILL
SOUTH EL MONTE
SOUTH GATE
TEMPLE CITY
VERNON
WALNUT
WEST HOLLYWOOD
WESTLAKE VILLAGE
WHITTIER

Michael Klein, Senior Planner

March 2, 2021

Page 2

LAND DEVELOPMENT UNIT:

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants.

Specific fire and life safety requirements for the construction phase will be addressed at the Fire Department building plan check review. There may be additional fire and life safety requirements during this time.

Properties located within the areas described by the Fire Department as a Fire Hazard Severity Zone will require the submittal of a "Fuel Modification Plan" for review by the Fuel Modification Unit prior to the issuance of a building permit. Please contact the Department's Fuel Modification Unit for details. The Fuel Modification Plan Review Unit is located at 605 North Angeleno Avenue in the City of Azusa, CA 91702-2904. They may be reached at (626) 969-5205 or visit <https://www.fire.lacounty.gov/forestry-division/forestry-fuel-modification>

The County of Los Angeles Fire Department's Land Development Unit appreciates the opportunity to comment on this project. Should any questions arise, please contact Wally Collins at (323) 890-4243 or Wally.Collins@fire.lacounty.gov.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

Under the Los Angeles County Oak tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured 4 1/2 feet above mean natural grade.

If Oak trees are known to exist in the proposed project area further field studies should be conducted to determine the presence of this species on the project site.

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

For any questions regarding this response, please contact Forestry Assistant, Joseph Brunet at (818) 890-5719.

Michael Klein, Senior Planner
March 2, 2021
Page 3

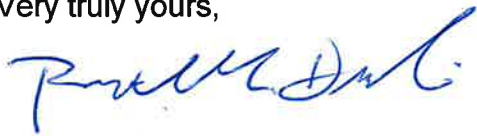
HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments or requirements for the project at this time.

Please contact HHMD senior typist-clerk, Perla Garcia at (323) 890-4035 or Perla.garcia@fire.lacounty.gov if you have any questions.

If you have any additional questions, please contact this office at (323) 890-4330

Very truly yours,



RONALD M. DURBIN, CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

RMD:ac



NATIVE AMERICAN HERITAGE COMMISSION

February 10, 2021

Michael Klein
City of Calabasas
100 Civic Center Way
Calabasas, CA 91302

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NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Re: 2021020150, City of Calabasas 2021-2029 Housing Element Update EIR Project, Los Angeles County

Dear Mr. Klein:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1 (b)).

 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
 - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i.** Protecting the cultural character and integrity of the resource.
 - ii.** Protecting the traditional use of the resource.
 - iii.** Protecting the confidentiality of the resource.
 - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

- b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.
- 3.** Contact the NAHC for:
- a.** A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b.** A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
- 4.** Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
- a.** Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code § 7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:

Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:

March 9, 2021

mklein@cityofcalabasas.com

Michael Klein, AICP, Senior Planner
City of Calabasas, Community Development Department
100 Civic Center Way
Calabasas, California 91302

Notice of Preparation of a Draft Environmental Impact Report for the 2021-2029 Housing Element Update (Proposed Project)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. Our comments are recommendations on the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send a copy of the Draft EIR upon its completion and public release directly to South Coast AQMD as copies of the Draft EIR submitted to the State Clearinghouse are not forwarded. **In addition, please send all appendices and technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all emission calculation spreadsheets, and air quality modeling and health risk assessment input and output files (not PDF files). Any delays in providing all supporting documentation for our review will require additional review time beyond the end of the comment period.**

CEQA Air Quality Analysis

Staff recommends that the Lead Agency use South Coast AQMD's CEQA Air Quality Handbook and website¹ as guidance when preparing the air quality and greenhouse gas analyses. It is also recommended that the Lead Agency use the CalEEMod² land use emissions software, which can estimate pollutant emissions from typical land use development and is the only software model maintained by the California Air Pollution Control Officers Association.

South Coast AQMD has developed both regional and localized significance thresholds. South Coast AQMD staff recommends that the Lead Agency quantify criteria pollutant emissions and compare the emissions to South Coast AQMD's CEQA regional pollutant emissions significance thresholds³ and localized significance thresholds (LSTs)⁴ to determine the Proposed Project's air quality impacts. The localized analysis can be conducted by either using the LST screening tables or performing dispersion modeling.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips, and hauling trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers and air pollution control devices), area sources (e.g., solvents and coatings), and

¹ South Coast AQMD's CEQA Handbook and other resources for preparing air quality analyses can be found at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

² CalEEMod is available free of charge at: www.caleemod.com.

³ South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

⁴ South Coast AQMD's guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment⁵.

The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective*⁶ is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process with additional guidance on strategies to reduce air pollution exposure near high-volume roadways available in CARB's technical advisory⁷.

The South Coast AQMD's *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*⁸ includes suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. It is recommended that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions.

Mitigation Measures

In the event that the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. Several resources to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project include South Coast AQMD's CEQA Air Quality Handbook¹, South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2016 Air Quality Management Plan⁹, and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy¹⁰.

South Coast AQMD staff is available to work with the Lead Agency to ensure that air quality, greenhouse gas, and health risk impacts from the Proposed Project are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at lsun@aqmd.gov.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

LS

LAC210209-05

Control Number

⁵ South Coast AQMD's guidance for performing a mobile source health risk assessment can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

⁶ CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>.

⁷ CARB's technical advisory can be found at: <https://www.arb.ca.gov/ch/landuse.htm>.

⁸ South Coast AQMD. 2005. *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*. Available at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

⁹ South Coast AQMD's 2016 Air Quality Management Plan can be found at: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf> (starting on page 86).

¹⁰ Southern California Association of Governments' 2020-2045 RTP/SCS can be found at: https://www.connectsocial.org/Documents/PEIR/certified/Exhibit-A_ConnectSoCal_PEIR.pdf.

Appendix B

Air Quality and Greenhouse Gas

Calabasas Housing Element Update - 2021-2029 - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Calabasas Housing Element Update - 2021-2029

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	1,305.00	Dwelling Unit	34.34	1,305,000.00	3732

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2029
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Electricity emissions calculated separately to account for both CPA and SCE

Land Use -

Trips and VMT -

Demolition - Estimated based on anticipated redevelopment of sites 1, 2, 5, 7, 9, 10, and 12.

Grading - Assuming 1 level of subterranean parking for all sites

Architectural Coating - SCAQMD Rule 1113

Woodstoves - SCAQMD Rule 445

Area Coating - SCAQMD Rule 1113

Water And Wastewater - No septic tanks proposed, no facultative lagoon treatment at Tapia Water Reclamation Facility

Solid Waste -

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Calabasas Housing Element Update - 2021-2029 - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Energy Mitigation - 2019 Building Energy Efficiency Standards

Water Mitigation - Compliance with CALGreen requirements

Waste Mitigation -

Vehicle Trips - Based on Fehr and Peers VMT analysis

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	55.00	35.00
tblConstructionPhase	NumDays	740.00	500.00
tblConstructionPhase	NumDays	50.00	30.00
tblConstructionPhase	NumDays	75.00	45.00
tblConstructionPhase	NumDays	55.00	35.00
tblConstructionPhase	NumDays	30.00	20.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	1,109.25	1,035.00
tblFireplaces	NumberNoFireplace	130.50	115.00
tblFireplaces	NumberWood	65.25	0.00
tblGrading	MaterialExported	0.00	1,387,255.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	8.83
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

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tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	65.25	0.00
tblWoodstoves	NumberNoncatalytic	65.25	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.9418	17.9843	8.7537	0.0672	3.0187	0.2630	3.2817	0.8722	0.2479	1.1201	0.0000	6,564.921 1	6,564.921 1	0.4189	0.8837	6,838.721 2
2023	0.6052	2.8564	6.3740	0.0183	1.4555	0.1025	1.5580	0.3892	0.0964	0.4855	0.0000	1,687.599 4	1,687.599 4	0.1095	0.0739	1,712.367 4
2024	4.2772	0.9762	2.1536	5.9300e-003	0.4588	0.0357	0.4945	0.1226	0.0335	0.1561	0.0000	548.6311	548.6311	0.0430	0.0213	556.0660
Maximum	4.2772	17.9843	8.7537	0.0672	3.0187	0.2630	3.2817	0.8722	0.2479	1.1201	0.0000	6,564.921 1	6,564.921 1	0.4189	0.8837	6,838.721 2

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.9418	17.9843	8.7537	0.0672	2.6968	0.2630	2.9598	0.7563	0.2479	1.0042	0.0000	6,564.920 6	6,564.920 6	0.4189	0.8837	6,838.720 8
2023	0.6052	2.8564	6.3740	0.0183	1.4555	0.1025	1.5580	0.3892	0.0964	0.4855	0.0000	1,687.599 0	1,687.599 0	0.1095	0.0739	1,712.367 0
2024	4.2772	0.9762	2.1536	5.9300e-003	0.4588	0.0357	0.4945	0.1226	0.0335	0.1561	0.0000	548.6309	548.6309	0.0430	0.0213	556.0658
Maximum	4.2772	17.9843	8.7537	0.0672	2.6968	0.2630	2.9598	0.7563	0.2479	1.0042	0.0000	6,564.920 6	6,564.920 6	0.4189	0.8837	6,838.720 8

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	6.52	0.00	6.03	8.37	0.00	6.58	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-3-2022	4-2-2022	6.2179	6.2179
2	4-3-2022	7-2-2022	10.1944	10.1944
3	7-3-2022	10-2-2022	0.9733	0.9733
4	10-3-2022	1-2-2023	0.9921	0.9921
5	1-3-2023	4-2-2023	0.8614	0.8614
6	4-3-2023	7-2-2023	0.8519	0.8519
7	7-3-2023	10-2-2023	0.8617	0.8617
8	10-3-2023	1-2-2024	0.8800	0.8800
9	1-3-2024	4-2-2024	0.8237	0.8237
10	4-3-2024	7-2-2024	2.9666	2.9666
11	7-3-2024	9-30-2024	1.4306	1.4306
		Highest	10.1944	10.1944

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.5527	0.3695	13.5366	2.0800e-003		0.0920	0.0920		0.0920	0.0920	0.0000	270.5254	270.5254	0.0258	4.5600e-003	272.5286
Energy	0.0785	0.6705	0.2853	4.2800e-003		0.0542	0.0542		0.0542	0.0542	0.0000	776.4570	776.4570	0.0149	0.0142	781.0711
Mobile	2.9151	3.2263	29.4165	0.0666	8.1670	0.0451	8.2121	2.1797	0.0420	2.2217	0.0000	6,476.6318	6,476.6318	0.4023	0.2744	6,568.4608
Waste						0.0000	0.0000		0.0000	0.0000	121.8555	0.0000	121.8555	7.2015	0.0000	301.8918
Water						0.0000	0.0000		0.0000	0.0000	30.0823	0.0000	30.0823	0.1035	0.0654	52.1658
Total	8.5462	4.2663	43.2384	0.0730	8.1670	0.1913	8.3582	2.1797	0.1881	2.3678	151.9378	7,523.6141	7,675.5519	7.7480	0.3586	7,976.1181

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.5527	0.3695	13.5366	2.0800e-003		0.0920	0.0920		0.0920	0.0920	0.0000	270.5254	270.5254	0.0258	4.5600e-003	272.5286
Energy	0.0785	0.6705	0.2853	4.2800e-003		0.0542	0.0542		0.0542	0.0542	0.0000	776.4570	776.4570	0.0149	0.0142	781.0711
Mobile	2.9151	3.2263	29.4165	0.0666	8.1670	0.0451	8.2121	2.1797	0.0420	2.2217	0.0000	6,476.6318	6,476.6318	0.4023	0.2744	6,568.4608
Waste						0.0000	0.0000		0.0000	0.0000	121.8555	0.0000	121.8555	7.2015	0.0000	301.8918
Water						0.0000	0.0000		0.0000	0.0000	24.0659	0.0000	24.0659	0.0828	0.0523	41.7326
Total	8.5462	4.2663	43.2384	0.0730	8.1670	0.1913	8.3582	2.1797	0.1881	2.3678	145.9213	7,523.6141	7,669.5355	7.7273	0.3455	7,965.6849

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.96	0.00	0.08	0.27	3.65	0.13

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2022	2/11/2022	5	30	
2	Site Preparation	Site Preparation	2/12/2022	3/11/2022	5	20	
3	Grading	Grading	3/12/2022	5/13/2022	5	45	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	5/14/2022	4/12/2024	5	500
5	Paving	Paving	4/13/2024	5/31/2024	5	35
6	Architectural Coating	Architectural Coating	6/1/2024	7/19/2024	5	35

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 2,642,625; Residential Outdoor: 880,875; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	953.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	173,408.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	940.00	140.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	188.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1031	0.0000	0.1031	0.0156	0.0000	0.0156	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0396	0.3858	0.3089	5.8000e-004		0.0186	0.0186		0.0173	0.0173	0.0000	50.9853	50.9853	0.0143	0.0000	51.3434
Total	0.0396	0.3858	0.3089	5.8000e-004	0.1031	0.0186	0.1217	0.0156	0.0173	0.0329	0.0000	50.9853	50.9853	0.0143	0.0000	51.3434

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9900e-003	0.0783	0.0179	2.9000e-004	8.2000e-003	6.2000e-004	8.8200e-003	2.2500e-003	6.0000e-004	2.8500e-003	0.0000	28.7005	28.7005	1.5400e-003	4.5600e-003	30.0968
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.1000e-004	7.9800e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	2.0089	2.0089	6.0000e-005	5.0000e-005	2.0263
Total	2.7500e-003	0.0789	0.0259	3.1000e-004	0.0107	6.4000e-004	0.0113	2.9100e-003	6.1000e-004	3.5200e-003	0.0000	30.7094	30.7094	1.6000e-003	4.6100e-003	32.1231

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0464	0.0000	0.0464	7.0200e-003	0.0000	7.0200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0396	0.3858	0.3089	5.8000e-004		0.0186	0.0186		0.0173	0.0173	0.0000	50.9853	50.9853	0.0143	0.0000	51.3433
Total	0.0396	0.3858	0.3089	5.8000e-004	0.0464	0.0186	0.0650	7.0200e-003	0.0173	0.0244	0.0000	50.9853	50.9853	0.0143	0.0000	51.3433

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9900e-003	0.0783	0.0179	2.9000e-004	8.2000e-003	6.2000e-004	8.8200e-003	2.2500e-003	6.0000e-004	2.8500e-003	0.0000	28.7005	28.7005	1.5400e-003	4.5600e-003	30.0968
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.1000e-004	7.9800e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	2.0089	2.0089	6.0000e-005	5.0000e-005	2.0263
Total	2.7500e-003	0.0789	0.0259	3.1000e-004	0.0107	6.4000e-004	0.0113	2.9100e-003	6.1000e-004	3.5200e-003	0.0000	30.7094	30.7094	1.6000e-003	4.6100e-003	32.1231

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7098
Total	0.0317	0.3308	0.1970	3.8000e-004	0.1966	0.0161	0.2127	0.1010	0.0148	0.1159	0.0000	33.4394	33.4394	0.0108	0.0000	33.7098

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.9000e-004	6.3900e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6071	1.6071	4.0000e-005	4.0000e-005	1.6210
Total	6.0000e-004	4.9000e-004	6.3900e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6071	1.6071	4.0000e-005	4.0000e-005	1.6210

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0885	0.0000	0.0885	0.0455	0.0000	0.0455	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7097
Total	0.0317	0.3308	0.1970	3.8000e-004	0.0885	0.0161	0.1046	0.0455	0.0148	0.0603	0.0000	33.4394	33.4394	0.0108	0.0000	33.7097

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.9000e-004	6.3900e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6071	1.6071	4.0000e-005	4.0000e-005	1.6210
Total	6.0000e-004	4.9000e-004	6.3900e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6071	1.6071	4.0000e-005	4.0000e-005	1.6210

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2855	0.0000	0.2855	0.0941	0.0000	0.0941	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0816	0.8740	0.6534	1.4000e-003		0.0368	0.0368		0.0338	0.0338	0.0000	122.7029	122.7029	0.0397	0.0000	123.6950
Total	0.0816	0.8740	0.6534	1.4000e-003	0.2855	0.0368	0.3223	0.0941	0.0338	0.1279	0.0000	122.7029	122.7029	0.0397	0.0000	123.6950

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.3621	14.2505	3.2576	0.0525	1.4923	0.1132	1.6055	0.4097	0.1083	0.5180	0.0000	5,222.3484	5,222.3484	0.2803	0.8291	5,476.4149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	1.2200e-003	0.0160	4.0000e-005	4.9400e-003	3.0000e-005	4.9700e-003	1.3100e-003	3.0000e-005	1.3400e-003	0.0000	4.0178	4.0178	1.1000e-004	1.1000e-004	4.0526
Total	0.3636	14.2517	3.2736	0.0525	1.4972	0.1132	1.6104	0.4111	0.1083	0.5194	0.0000	5,226.3661	5,226.3661	0.2804	0.8292	5,480.4675

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3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1285	0.0000	0.1285	0.0423	0.0000	0.0423	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0816	0.8740	0.6534	1.4000e-003		0.0368	0.0368		0.0338	0.0338	0.0000	122.7027	122.7027	0.0397	0.0000	123.6948
Total	0.0816	0.8740	0.6534	1.4000e-003	0.1285	0.0368	0.1653	0.0423	0.0338	0.0762	0.0000	122.7027	122.7027	0.0397	0.0000	123.6948

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.3621	14.2505	3.2576	0.0525	1.4923	0.1132	1.6055	0.4097	0.1083	0.5180	0.0000	5,222.3484	5,222.3484	0.2803	0.8291	5,476.4149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	1.2200e-003	0.0160	4.0000e-005	4.9400e-003	3.0000e-005	4.9700e-003	1.3100e-003	3.0000e-005	1.3400e-003	0.0000	4.0178	4.0178	1.1000e-004	1.1000e-004	4.0526
Total	0.3636	14.2517	3.2736	0.0525	1.4972	0.1132	1.6104	0.4111	0.1083	0.5194	0.0000	5,226.3661	5,226.3661	0.2804	0.8292	5,480.4675

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3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1408	1.2883	1.3500	2.2200e-003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1733	191.1733	0.0458	0.0000	192.3183
Total	0.1408	1.2883	1.3500	2.2200e-003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1733	191.1733	0.0458	0.0000	192.3183

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0208	0.5640	0.1872	2.2100e-003	0.0728	5.6300e-003	0.0785	0.0210	5.3800e-003	0.0264	0.0000	215.5457	215.5457	7.2100e-003	0.0313	225.0463
Worker	0.2604	0.2103	2.7513	7.5000e-003	0.8508	5.1800e-003	0.8560	0.2260	4.7700e-003	0.2307	0.0000	692.3920	692.3920	0.0190	0.0186	698.3969
Total	0.2813	0.7743	2.9385	9.7100e-003	0.9237	0.0108	0.9345	0.2470	0.0102	0.2571	0.0000	907.9376	907.9376	0.0263	0.0498	923.4432

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3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1408	1.2883	1.3500	2.2200e-003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1731	191.1731	0.0458	0.0000	192.3181
Total	0.1408	1.2883	1.3500	2.2200e-003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1731	191.1731	0.0458	0.0000	192.3181

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0208	0.5640	0.1872	2.2100e-003	0.0728	5.6300e-003	0.0785	0.0210	5.3800e-003	0.0264	0.0000	215.5457	215.5457	7.2100e-003	0.0313	225.0463
Worker	0.2604	0.2103	2.7513	7.5000e-003	0.8508	5.1800e-003	0.8560	0.2260	4.7700e-003	0.2307	0.0000	692.3920	692.3920	0.0190	0.0186	698.3969
Total	0.2813	0.7743	2.9385	9.7100e-003	0.9237	0.0108	0.9345	0.2470	0.0102	0.2571	0.0000	907.9376	907.9376	0.0263	0.0498	923.4432

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0197	0.6933	0.2640	3.3200e-003	0.1148	3.8600e-003	0.1186	0.0331	3.6900e-003	0.0368	0.0000	323.9084	323.9084	0.0109	0.0469	338.1654
Worker	0.3811	0.2930	3.9983	0.0114	1.3407	7.6900e-003	1.3484	0.3561	7.0800e-003	0.3631	0.0000	1,062.3448	1,062.3448	0.0270	0.0270	1,071.0636
Total	0.4008	0.9864	4.2623	0.0148	1.4555	0.0116	1.4670	0.3892	0.0108	0.4000	0.0000	1,386.2532	1,386.2532	0.0378	0.0739	1,409.2291

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0197	0.6933	0.2640	3.3200e-003	0.1148	3.8600e-003	0.1186	0.0331	3.6900e-003	0.0368	0.0000	323.9084	323.9084	0.0109	0.0469	338.1654
Worker	0.3811	0.2930	3.9983	0.0114	1.3407	7.6900e-003	1.3484	0.3561	7.0800e-003	0.3631	0.0000	1,062.3448	1,062.3448	0.0270	0.0270	1,071.0636
Total	0.4008	0.9864	4.2623	0.0148	1.4555	0.0116	1.4670	0.3892	0.0108	0.4000	0.0000	1,386.2532	1,386.2532	0.0378	0.0739	1,409.2291

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0552	0.5041	0.6063	1.0100e-003		0.0230	0.0230		0.0216	0.0216	0.0000	86.9434	86.9434	0.0206	0.0000	87.4574
Total	0.0552	0.5041	0.6063	1.0100e-003		0.0230	0.0230		0.0216	0.0216	0.0000	86.9434	86.9434	0.0206	0.0000	87.4574

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5400e-003	0.2009	0.0749	9.4000e-004	0.0331	1.1100e-003	0.0342	9.5500e-003	1.0700e-003	0.0106	0.0000	92.0921	92.0921	3.1300e-003	0.0134	96.1523
Worker	0.1028	0.0755	1.0763	3.2000e-003	0.3867	2.1300e-003	0.3889	0.1027	1.9600e-003	0.1047	0.0000	299.8609	299.8609	7.0500e-003	7.2500e-003	302.1966
Total	0.1083	0.2764	1.1512	4.1400e-003	0.4199	3.2400e-003	0.4231	0.1123	3.0300e-003	0.1153	0.0000	391.9530	391.9530	0.0102	0.0206	398.3489

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0552	0.5041	0.6063	1.0100e-003		0.0230	0.0230		0.0216	0.0216	0.0000	86.9433	86.9433	0.0206	0.0000	87.4573
Total	0.0552	0.5041	0.6063	1.0100e-003		0.0230	0.0230		0.0216	0.0216	0.0000	86.9433	86.9433	0.0206	0.0000	87.4573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5400e-003	0.2009	0.0749	9.4000e-004	0.0331	1.1100e-003	0.0342	9.5500e-003	1.0700e-003	0.0106	0.0000	92.0921	92.0921	3.1300e-003	0.0134	96.1523
Worker	0.1028	0.0755	1.0763	3.2000e-003	0.3867	2.1300e-003	0.3889	0.1027	1.9600e-003	0.1047	0.0000	299.8609	299.8609	7.0500e-003	7.2500e-003	302.1966
Total	0.1083	0.2764	1.1512	4.1400e-003	0.4199	3.2400e-003	0.4231	0.1123	3.0300e-003	0.1153	0.0000	391.9530	391.9530	0.0102	0.0206	398.3489

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3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0173	0.1667	0.2560	4.0000e-004		8.2000e-003	8.2000e-003		7.5400e-003	7.5400e-003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0173	0.1667	0.2560	4.0000e-004		8.2000e-003	8.2000e-003		7.5400e-003	7.5400e-003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.6000e-004	8.0200e-003	2.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	1.0000e-005	7.8000e-004	0.0000	2.2330	2.2330	5.0000e-005	5.0000e-005	2.2504
Total	7.7000e-004	5.6000e-004	8.0200e-003	2.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	1.0000e-005	7.8000e-004	0.0000	2.2330	2.2330	5.0000e-005	5.0000e-005	2.2504

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3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0173	0.1667	0.2560	4.0000e-004		8.2000e-003	8.2000e-003		7.5400e-003	7.5400e-003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0173	0.1667	0.2560	4.0000e-004		8.2000e-003	8.2000e-003		7.5400e-003	7.5400e-003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.6000e-004	8.0200e-003	2.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	1.0000e-005	7.8000e-004	0.0000	2.2330	2.2330	5.0000e-005	5.0000e-005	2.2504
Total	7.7000e-004	5.6000e-004	8.0200e-003	2.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	1.0000e-005	7.8000e-004	0.0000	2.2330	2.2330	5.0000e-005	5.0000e-005	2.2504

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.0860	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5900e-003	7.0500e-003	0.1005	3.0000e-004	0.0361	2.0000e-004	0.0363	9.5900e-003	1.8000e-004	9.7700e-003	0.0000	27.9870	27.9870	6.6000e-004	6.8000e-004	28.2050
Total	9.5900e-003	7.0500e-003	0.1005	3.0000e-004	0.0361	2.0000e-004	0.0363	9.5900e-003	1.8000e-004	9.7700e-003	0.0000	27.9870	27.9870	6.6000e-004	6.8000e-004	28.2050

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.0829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.0860	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5900e-003	7.0500e-003	0.1005	3.0000e-004	0.0361	2.0000e-004	0.0363	9.5900e-003	1.8000e-004	9.7700e-003	0.0000	27.9870	27.9870	6.6000e-004	6.8000e-004	28.2050
Total	9.5900e-003	7.0500e-003	0.1005	3.0000e-004	0.0361	2.0000e-004	0.0363	9.5900e-003	1.8000e-004	9.7700e-003	0.0000	27.9870	27.9870	6.6000e-004	6.8000e-004	28.2050

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.9151	3.2263	29.4165	0.0666	8.1670	0.0451	8.2121	2.1797	0.0420	2.2217	0.0000	6,476.6318	6,476.6318	0.4023	0.2744	6,568.4608
Unmitigated	2.9151	3.2263	29.4165	0.0666	8.1670	0.0451	8.2121	2.1797	0.0420	2.2217	0.0000	6,476.6318	6,476.6318	0.4023	0.2744	6,568.4608

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	7,099.20	6,407.55	5337.45	21,691,178	21,691,178
Total	7,099.20	6,407.55	5,337.45	21,691,178	21,691,178

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	8.83	0.00	0.00	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.538241	0.064314	0.187895	0.126318	0.023840	0.006817	0.012727	0.009020	0.000821	0.000475	0.025329	0.000761	0.003441

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0785	0.6705	0.2853	4.2800e-003		0.0542	0.0542		0.0542	0.0542	0.0000	776.4570	776.4570	0.0149	0.0142	781.0711
NaturalGas Unmitigated	0.0785	0.6705	0.2853	4.2800e-003		0.0542	0.0542		0.0542	0.0542	0.0000	776.4570	776.4570	0.0149	0.0142	781.0711

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.45503e+007	0.0785	0.6705	0.2853	4.2800e-003		0.0542	0.0542		0.0542	0.0542	0.0000	776.4570	776.4570	0.0149	0.0142	781.0711
Total		0.0785	0.6705	0.2853	4.2800e-003		0.0542	0.0542		0.0542	0.0542	0.0000	776.4570	776.4570	0.0149	0.0142	781.0711

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.45503e+007	0.0785	0.6705	0.2853	4.2800e-003		0.0542	0.0542		0.0542	0.0542	0.0000	776.4570	776.4570	0.0149	0.0142	781.0711
Total		0.0785	0.6705	0.2853	4.2800e-003		0.0542	0.0542		0.0542	0.0542	0.0000	776.4570	776.4570	0.0149	0.0142	781.0711

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	5.00315e+006	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.5527	0.3695	13.5366	2.0800e-003		0.0920	0.0920		0.0920	0.0920	0.0000	270.5254	270.5254	0.0258	4.5600e-003	272.5286
Unmitigated	5.5527	0.3695	13.5366	2.0800e-003		0.0920	0.0920		0.0920	0.0920	0.0000	270.5254	270.5254	0.0258	4.5600e-003	272.5286

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4083					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.7156					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0251	0.2146	0.0913	1.3700e-003		0.0174	0.0174		0.0174	0.0174	0.0000	248.5419	248.5419	4.7600e-003	4.5600e-003	250.0189
Landscaping	0.4037	0.1549	13.4453	7.1000e-004		0.0746	0.0746		0.0746	0.0746	0.0000	21.9834	21.9834	0.0211	0.0000	22.5097
Total	5.5527	0.3695	13.5366	2.0800e-003		0.0920	0.0920		0.0920	0.0920	0.0000	270.5254	270.5254	0.0258	4.5600e-003	272.5286

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4083					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.7156					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0251	0.2146	0.0913	1.3700e-003		0.0174	0.0174		0.0174	0.0174	0.0000	248.5419	248.5419	4.7600e-003	4.5600e-003	250.0189
Landscaping	0.4037	0.1549	13.4453	7.1000e-004		0.0746	0.0746		0.0746	0.0746	0.0000	21.9834	21.9834	0.0211	0.0000	22.5097
Total	5.5527	0.3695	13.5366	2.0800e-003		0.0920	0.0920		0.0920	0.0920	0.0000	270.5254	270.5254	0.0258	4.5600e-003	272.5286

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	24.0659	0.0828	0.0523	41.7326
Unmitigated	30.0823	0.1035	0.0654	52.1658

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	85.026 / 53.6033	30.0823	0.1035	0.0654	52.1658
Total		30.0823	0.1035	0.0654	52.1658

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	68.0208 / 53.6033	24.0659	0.0828	0.0523	41.7326
Total		24.0659	0.0828	0.0523	41.7326

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	121.8555	7.2015	0.0000	301.8918
Unmitigated	121.8555	7.2015	0.0000	301.8918

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	600.3	121.8555	7.2015	0.0000	301.8918
Total		121.8555	7.2015	0.0000	301.8918

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	600.3	121.8555	7.2015	0.0000	301.8918
Total		121.8555	7.2015	0.0000	301.8918

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Appendix C

VMT Memorandum and Evacuation Analysis

Memorandum

Date: July 26, 2021
To: Reema Shakra, Rincon Consultants
From: Rachel Om and Sarah Brandenburg
Subject: **Vehicle Miles Traveled Analysis for Calabasas Housing Element Update**

LA20-3212

Fehr & Peers completed a Vehicle Miles Traveled (VMT) analysis for the City of Calabasas 2021 – 2029 Housing Element Update (Project). The Housing Element includes goals, policies, programs, and objectives that plan for housing growth in alignment with city and regional growth objectives. The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) responsible for issuing the Regional Housing Needs Allocation (RHNA) to each city in its region, which includes Calabasas. The RHNA for the 6th Cycle Housing Element identified 353 housing units for Calabasas, and the City has identified 1,305 housing units across 12 opportunity sites. The housing opportunity sites include a range of very low income/low income, moderate income, and above moderate income housing units.

On September 27, 2013, Governor Jerry Brown signed SB 743 into law, which initiated a process to change transportation impact analyses completed in support of CEQA documentation. SB 743 eliminates level of service (LOS) as a basis for determining significant transportation impacts under CEQA and provides a new performance metric, vehicle miles traveled (VMT). As a result, the State is shifting from measuring a project's impact to drivers (LOS) to measuring the impact of driving (VMT) as it relates to achieving State goals of reducing greenhouse gas (GHG) emissions, encouraging infill development, and improving public health through active transportation. To help lead agencies with SB 743 implementation, the Governor's Office of Planning and Research (OPR) produced a *Technical Advisory*¹. This VMT analysis completed for the Housing Element follows OPR guidance.

¹ Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA*, 2018.



Baseline VMT

The Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) trip-based model is a travel demand model with socioeconomic and transportation network inputs, such as population, employment and the regional and local roadway network. The model outputs several travel behavior metrics, such as vehicle trips and trip lengths, that can be used to calculate VMT. The SCAG RTP/SCS trip-based model was used to estimate the baseline VMT for the City of Calabasas. The current 2016 SCAG model has 2012 as the base year and 2040 as the forecast year.

This baseline VMT methodology includes vehicle trips within the SCAG model to generate the following metrics that are applicable to the Housing Element Update:

1. Total VMT per Service Population: The total VMT to and from all zones in the city are divided by the total service population, which includes population and employment, to get the efficiency metric of VMT per service population.
2. Home-based VMT per Capita: Home-based vehicle trips are traced back to the residence of the trip-maker (non-home-based trips are excluded) and then divided by the residential population within the city. This metric is used to estimate VMT for residential land uses.

Table 1 presents the City’s baseline VMT for each metric. The baseline year of 2021 corresponds to the date of the NOP publication.

Table 1: City of Calabasas Baseline VMT (2021)

VMT Metrics		Baseline VMT
		Year 2021
Total VMT	Baseline VMT per Service Population	42.8
Home-Based VMT	Baseline Home-Based VMT per Capita	20.6

VMT Impact Thresholds

The City of Calabasas has prepared Local Transportation Study Guidelines regarding VMT impact analysis but has not yet formally adopted a VMT impact threshold to determine if proposed projects would have a VMT impact. For the purposes of this analysis, the City of Calabasas identified a threshold boundary of 15% reduction from baseline VMT as an appropriate threshold to apply to the Project. If the Project would generate VMT higher than the threshold, then it would be expected to have a VMT impact, and if the Project would generate VMT lower than the threshold, then it would not be expected to have a VMT impact. Table 2 presents the City’s baseline VMT and VMT impact thresholds.



Table 2: City of Calabasas Baseline VMT (2021) and VMT Impact Thresholds

VMT Metrics		Year 2021	
		Baseline VMT	VMT Impact Threshold*
Total VMT	Baseline VMT per Service Population	42.8	36.4
Home-Based VMT	Baseline Home-Based VMT per Capita	20.6	17.5

* The VMT Impact Threshold for each VMT metric is 15% below the respective Baseline VMT.

Project VMT Analysis

Fehr & Peers utilized the SCAG RTP/SCS model to estimate the Project VMT for the Housing Element Update. The number of new housing units for each of the 12 opportunity sites along with the corresponding population growth was added to the base year (2012) and future year (2040) versions of the SCAG model. The SCAG model inputs were also updated to account for the change in land use that would occur on each opportunity site. For each site, the amount and type of commercial uses with the Housing Element were compared to the existing land uses and any increase or decrease of commercial square footage and employment were accounted for in the SCAG model runs. The SCAG model outputs were used to estimate the Project VMT for the Housing Element’s horizon year of 2029.

Given that the primary change in land use with the Housing Element Update is the addition of new housing units in the city, the VMT analysis results first focused on the residential home-based VMT per capita for each opportunity site. Table 3 shows the home-based VMT per capita estimate for each housing site. Of the 12 opportunity sites, nine of the housing sites are in a low VMT area, which is defined as an area with residential VMT per capita that is 15% or more below the City baseline. The nine housing sites include 86% of the total number housing units, which means 86% of housing units in the Housing Element Update are in a low residential home-based VMT area. Figure 1 also illustrates the low VMT areas in the city in relation to the location of the opportunity sites proposed in the Housing Element Update.

Table 3: Calabasas Housing Element - Residential VMT by Project TAZ

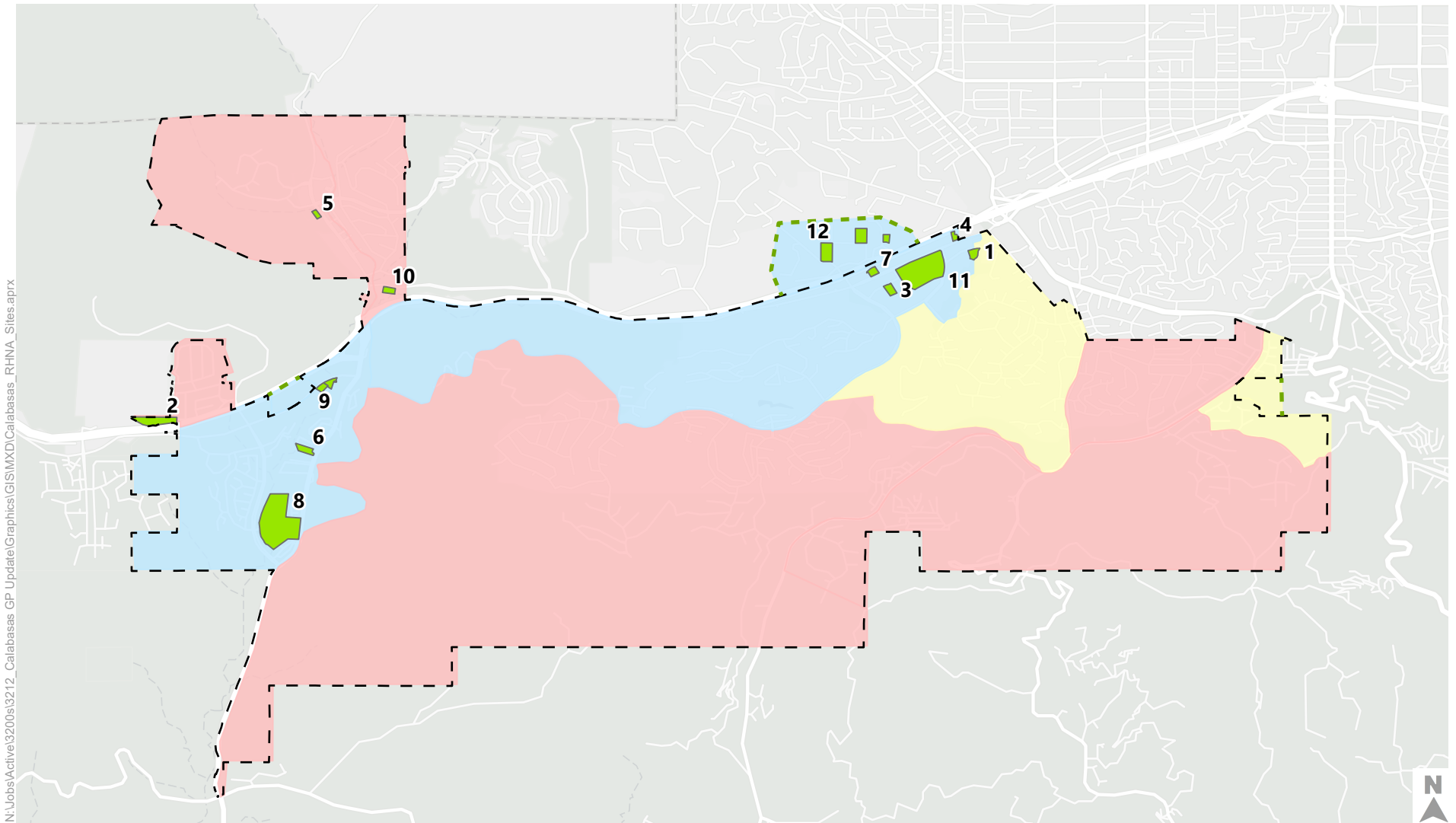
Site ID	Site Name	APN	Address	New Housing Units	VMT per Capita		
					VMT Estimate (2029)	Citywide Baseline (2021)	15% or More Below City Baseline?
1	Raznick	2068005012	23480 Park Sorrento	42	15.0	20.6	Yes
2	Rancho Pet Kennel	2052013036	27201 Canwood Street	60	21.9	20.6	No
3	Cruzan Parking Lot	2068003034	Civic Center Way	88	15.0	20.6	Yes
4	Old Town Vacant Site	2068002023	25600 Calabasas Rd	43	15.0	20.6	Yes
5	Las Virgenes Shopping Center	2052005034	5657 Las Virgenes Rd	41	26.1	20.6	No
6	Church	2064003141	4235 Las Virgenes Rd	111	16.9	20.6	Yes
7	Downtown Offices	2068002029	23945 Calabasas Rd	60	15.0	20.6	Yes
8	Avalon Apartments	2063034037	3848 Lupine	132	16.9	20.6	Yes
		2063034038	3909 Ceanothus Pl				
9	Agoura Road Offices	2064020007	26540 Agoura Rd	125	16.9	20.6	Yes
		2064020023	26520 Agoura Rd				
10	Mureau Office	2052043015	26050 Mureau Rd	72	23.6	20.6	No
11	Commons Shopping Center	2068003020	4799 Commons Way	200	15.0	20.6	Yes
		2068003023	4776 Commons Way				
		2068003021	4719 Commons Way				
		2068003022	4710 Commons Way				
		2068003028	APN 2068003028				
		2068003024	4798 Commons Way				
12	Craftsman Corner	2049021053	5034 Parkway Calabasas	235	15.0	20.6	Yes
		2049022040	APN 2049022040				
		2049019028	5124 Douglas Fir				

Total Number of Housing Units: 1,209
Number of Housing Units in Low VMT Area: 1,036
Percent of Housing Units in Low VMT Area: 86%

Notes:

See Attachment A for detailed VMT calculations.

TAZ = Traffic Analysis Zone; refers to a zone in SCAG RTP/SCS model used to define land use and socio-economic data in an area.



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- Home-Based VMT per Capita Comparison
 - 15% or More Below City Average
 - 0 to 15% Below City Average
 - Higher than City Average
- Housing Element Sites
- City Boundary
- City Sphere of Influence

Figure 1



Calabasas Housing Element Update Sites: Baseline (2021) Residential Home-Based VMT per Capita



Since the Housing Element Update is a long-term plan being analyzed programmatically, the total amount of home-based VMT per capita generated collectively for all 12 opportunity sites was also estimated. While three of the sites are not located in areas that would generate home-based VMT that is 15% or more below the City baseline, the total amount of home-based VMT per capita generated by all sites can be calculated and then compared to the City baseline VMT. Table 4 shows the residential home-based VMT per capita results for all 12 opportunity sites. As shown, the housing sites proposed in the Housing Element Update are expected to generate 16.8 home-based VMT per capita, which is 18% below the citywide baseline of 20.6 home-based VMT per capita. Therefore, the new housing units would collectively generate home-based VMT per capita that is more than 15% below the City baseline. Attachment A provides detailed VMT data for each housing site in comparison to the City baseline.

Table 4: Calabasas Housing Element – Total Residential VMT for Twelve Opportunity Sites

Total New Housing Units	Housing Element Update Home-Based VMT (2029)		City Baseline Home-Based VMT (2021)	Housing Element and City Comparison
	Total VMT	VMT per Capita	VMT per Capita	VMT per Capita
1,209	55,170	16.8	20.6	-18%

Cumulative VMT Analysis

In addition to a project-level analysis, Fehr & Peers conducted a cumulative analysis that estimates VMT in 2029 without and with the Housing Element Update. Since the housing sites include new residential units and changes in commercial and employment uses in the city, the cumulative VMT analysis results estimate the change in total VMT, represented through the metric of total VMT per service population. The cumulative VMT estimates also reflect the potential development of 96 accessory dwelling units (ADUs) in the city.

Table 5 compares the City’s baseline VMT to the VMT forecast for Year 2029 with and without the proposed Housing Element Update. The total VMT per service population in 2029 with the Housing Element Update decreases in comparison to the city baseline (2021) and decreases in comparison to the future year (2029) without the Project. Given that the total VMT per service population is forecasted to decrease with the Housing Element Update, the additional housing units and changes in land uses being proposed will help the city to decrease VMT generated on a per capita basis over time.



Table 5: Cumulative VMT Analysis Results

VMT Metric		Baseline (2021)	Future Year (2029)		Future plus Housing Element % Change	
		Citywide	No Project	With Housing Element	From Baseline (2021)	From No Project (2029)
Total VMT	VMT per Service Population	42.8	42.3	41.3	-4%	-2%

According to OPR guidance, a project that is below the VMT impact thresholds and therefore does not have a VMT impact under baseline conditions would also not have a cumulative impact as long as it is aligned with long-term State environmental goals, such as reducing greenhouse gas emissions, and relevant plans, such as the SCAG RTP/SCS. Therefore, since the Housing Element Update opportunity sites would generate home-based VMT per capita that is more than 15% below the city baseline, reduce total VMT per service population in the city, and provide the housing required to meet State and regional needs, the Housing Element Update is not expected to result in a significant VMT impact under cumulative conditions.

VMT Mitigation Opportunities

Although the new housing units will collectively generate home-based VMT per capita that is more than 15% below the City baseline, the VMT generated by each site will need to be reviewed at the time a development application is submitted for City review and consideration. Development sites that are not located in low-VMT areas would require further VMT analysis and may be required to reduce their VMT through mitigation measures. The types of mitigation that affect VMT are those that reduce the number of single-occupant vehicles generated by the site. This can be accomplished by modifying the land uses being proposed or by implementing transportation demand management (TDM) strategies. TDM strategies are reductions to a project’s trip generation based on certain types of project site modifications, programming, and operational changes (see Table 6 for a listing of TDM examples).

Research documented in the 2010 California Air Pollution Control Officers Association (CAPCOA) publication, *Quantifying Greenhouse Gas Mitigation Measures*, offers TDM methodologies based on preferred literature, along with methodology based on alternative literature, to estimate the effectiveness of each strategy².

Specific mitigation strategies need to be tailored to the project characteristics and their effectiveness needs to be analyzed and documented as part of the environmental review process to determine if impacts could be adequately mitigated or if they would remain significant and

² California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures*, August 2010 <http://www.capcoa.org/wp-content/uploads/downloads/2010/09/CAPCOA-Quantification-Report-9-14-Final.pdf>.



unavoidable. Given that research on the effectiveness of TDM strategies is continuing to evolve, feasible mitigation measures should be considered based on the best data available at the time a project is being considered by the City.

The strategies described below in Table 6 are a sample of the mitigation options most effective in areas like Calabasas.

Table 6: VMT Reduction Strategies

Strategy	Description	VMT Benefit	Range of CAPCOA VMT Reductions	City of Calabasas Range of VMT Reduction
Increase Diversity of Developments (Mixed Use)	Includes mixed uses within Projects or in consideration of surrounding area.	Minimizes number and length of vehicle trips.	9% - 30%	5% - 20%
Provide Pedestrian Network Improvements	Creates pedestrian network within projects and connects to nearby destinations. Could also occur through impact fee program for active transportation improvements.	Encourages people to walk within and to project.	0% - 2%	2%
Provide Traffic Calming Measures and Low-Stress Bicycle Network Improvements	Creates networks with low vehicle speeds and volumes that support walking and bicycling. Could also occur through impact fee program for active transportation improvements.	Encourages people to bicycle, especially for shorter trips.	0.25% - 1%	1%
Implement Car-Sharing and Ride-Sharing Programs	Shared fleet of vehicles accessible on-site for residents or employees. Can serve as a first/last-mile solution to connect with transit.	Reduce the need to own a vehicle or the number of household vehicles.	Car-Sharing: 0.4% - 0.7% Ride-Sharing: 1% - 15%	Car-Sharing: 0.5% Ride-Sharing: 3% - 12%



Strategy	Description	VMT Benefit	Range of CAPCOA VMT Reductions	City of Calabasas Range of VMT Reduction
Encourage telecommuting and Alternative Work Schedules	Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered start times, flexible schedules, or compressed work weeks.	Reduces the number of days employees need to work and/or shifts commute time outside of peak periods to avoid adding congestion.	0.07% - 5.5%	1% - 5%
Commute Trip Reduction Programs	Projects can implement a voluntary Commute Trip Reduction program with employers to discourage single-occupancy vehicle trips and encourage alternative modes of transportation. Alternatively, a jurisdiction can implement a Commute Trip Reduction Ordinance with the intent of reducing drive-alone travel mode share.	Encourages alternatives to commuting in single-occupancy vehicles.	Varies based on selected programs	Varies based on selected programs



Strategy	Description	VMT Benefit	Range of CAPCOA VMT Reductions	City of Calabasas Range of VMT Reduction
Limit Parking Supply	Projects can change parking requirements and types of supply within the Project site to encourage "smart growth" development and alternative transportation choices by project residents and employees.	Encourages alternatives to the use of single-occupancy vehicles.	5% - 12.5%	5%
Unbundle Parking Costs from Property Cost	Unbundling separates parking from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost from the property cost.	Encourages alternatives to the use of single-occupancy vehicles.	2.6% - 13%	5%

Attachment A: Residential VMT for Twelve Opportunity Sites

Site ID	Site Name	APN	Address	New Housing Units	Net Change in Employees	New Population	Home-Based VMT per Capita			
							Project Home-Based VMT (2029)	Project VMT per Capita (2029)	Citywide Baseline (2021)	Project (2029) and Baseline (2021) Comparison
1	Raznick	2068005012	23480 Park Sorrento	42	5	114	1,714	15.0	20.6	-27%
2	Rancho Pet Kennel	2052013036	27201 Canwood Street	60	0	163	3,577	21.9	20.6	7%
3	Cruzan Parking Lot	2068003034	Civic Center Way	88	30	238	3,579	15.0	20.6	-27%
4	Old Town Vacant Site	2068002023	25600 Calabastas Rd	43	15	117	1,760	15.0	20.6	-27%
5	Las Virgenes Shopping Center	2052005034	5657 Las Virgenes Rd	41	-10	111	2,903	26.1	20.6	27%
6	Church	2064003141	4235 Las Virgenes Rd	111	0	301	5,085	16.9	20.6	-18%
7	Downtown Offices	2068002029	23945 Calabastas Rd	60	-173	162	2,436	15.0	20.6	-27%
8	Avalon Apartments	2063034037	3848 Lupine	132	0	358	6,047	16.9	20.6	-18%
		2063034038	3909 Ceanothus Pl							
9	Agoura Road Offices	2064020007	26540 Agoura Rd	125	-121	339	5,727	16.9	20.6	-18%
		2064020023	26520 Agoura Rd							
10	Mureau Office	2052043015	26050 Mureau Rd	72	-148	195	4,610	23.6	20.6	15%
11	Commons Shopping Center	2068003020	4799 Commons Way	200	104	542	8,151	15.0	20.6	-27%
		2068003023	4776 Commons Way							
		2068003021	4719 Commons Way							
		2068003022	4710 Commons Way							
		2068003028	APN 2068003028							
		2068003024	4798 Commons Way							
12	Craftsman Corner	2049021053	5034 Parkway Calabastas	235	24	637	9,580	15.0	20.6	-27%
		2049022040	APN 2049022040							
		2049019028	5124 Douglas Fir							
Total				1,209	-274	3,277	55,169	16.8	20.6	-18%

**Calabasas 2021-2029 Housing Element Update
Vehicle Miles Traveled (VMT) Summary**

VMT Metrics		2021 Baseline	2029 Future with Housing Element Project	Change	Percent Change
Socioeconomic Data	Population	27,354	30,613	3,259	12%
	Employment	21,451	21,383	-68	0%
	Service Population	48,805	51,996	3,191	7%
Vehicle Trips	Total Vehicle Trips	148,870	153,572	4,702	3%
	Home Based Vehicle Trips	41,757	46,902	5,145	12%
	Home Based Work Vehicle Trips	26,939	24,899	-2,040	-8%
	Total Vehicle Trips per Service Population	3.1	3.0	-0.1	-3%
	Home-Based Vehicle Trips per Capita	1.5	1.5	0.0	0%
	Home-Based Work Vehicle Trips per Employee	1.3	1.2	-0.1	-7%
VMT	Total VMT	2,087,252	2,145,201	57,949	3%
	Home-Based VMT	563,483	640,820	77,337	14%
	Home-Based Work VMT	524,487	475,920	-48,566	-9%
	Total VMT per Service Population	42.8	41.3	-1.5	-4%
	Home-Based VMT per Capita	20.6	20.9	0.3	2%
	Home-Based Work VMT per Employee	24.5	22.3	-2.2	-9%
Average Trip Length	Average Trip Length: Total Trips	14.0	14.0	-0.1	0%
	Average Trip Length: Home-Based Trips	13.5	13.7	0.2	1%
	Average Trip Length: Home-Based Work Trips	19.5	19.1	-0.4	-2%

Alternative 2 VMT per Capita

Site ID	Site Name	APN	Address	New Housing Units	Net Change in Employees	New Population	Home-Based VMT per Capita			
							Project Home-Based VMT (2029)	Project VMT per Capita (2029)	Citywide Baseline (2021)	Project (2029) and Baseline (2021) Comparison
1	Raznick	2068005012	23480 Park Sorrento	42	5	114	1,714	15.0	20.6	-27%
2	Rancho Pet Kennel	2052013036	27201 Canwood Street	60	0	163	3,577	21.9	20.6	7%
3	Cruzan Parking Lot	2068003034	Civic Center Way	88	30	238	3,579	15.0	20.6	-27%
4	Old Town Vacant Site	2068002023	25600 Calabasas Rd	43	15	117	1,760	15.0	20.6	-27%
5	Las Virgenes Shopping Center	2052005034	5657 Las Virgenes Rd	41	-10	111	2,903	26.1	20.6	27%
6	Church	2064003141	4235 Las Virgenes Rd							
7	Downtown Offices	2068002029	23945 Calabasas Rd	60	-173	162	2,436	15.0	20.6	-27%
8	Avalon Apartments	2063034037	3848 Lupine	620	0	1,680	28,383	16.9	20.6	-18%
		2063034038	3909 Ceanothus Pl							
9	Agoura Road Offices	2064020007	26540 Agoura Rd	125	-121	339	5,727	16.9	20.6	-18%
		2064020023	26520 Agoura Rd							
10	Mureau Office	2052043015	26050 Mureau Rd	72	-148	195	4,610	23.6	20.6	15%
11	Commons Shopping Center	2068003020	4799 Commons Way	200	104	542	8,151	15.0	20.6	-27%
		2068003023	4776 Commons Way							
		2068003021	4719 Commons Way							
		2068003022	4710 Commons Way							
		2068003028	APN 2068003028							
		2068003024	4798 Commons Way							
12	Craftsman Corner	2049021053	5034 Parkway Calabasas	235	24	637	9,580	15.0	20.6	-27%
		2049022040	APN 2049022040							
		2049019028	5124 Douglas Fir							
Total				1,586	-274	4,298	72,420	16.8	20.6	-18%

Alternative 3 VMT per Capita

Site ID	Site Name	APN	Address	New Housing Units	Net Change in Employees	New Population	Home-Based VMT per Capita			
							Project Home-Based VMT (2029)	Project VMT per Capita (2029)	Citywide Baseline (2021)	Project (2029) and Baseline (2021) Comparison
1	Raznick	2068005012	23480 Park Sorrento	42	5	114	1,714	15.0	20.6	-27%
2	Rancho Pet Kennel	2052013036	27201 Canwood Street							
3	Cruzan Parking Lot	2068003034	Civic Center Way	88	30	238	3,579	15.0	20.6	-27%
4	Old Town Vacant Site	2068002023	25600 Calabasas Rd	43	15	117	1,760	15.0	20.6	-27%
5	Las Virgenes Shopping Center	2052005034	5657 Las Virgenes Rd	41	-10	111	2,903	26.1	20.6	27%
6	Church	2064003141	4235 Las Virgenes Rd							
7	Downtown Offices	2068002029	23945 Calabasas Rd	60	-173	162	2,436	15.0	20.6	-27%
8	Avalon Apartments	2063034037	3848 Lupine							
		2063034038	3909 Ceanothus Pl							
9	Agoura Road Offices	2064020007	26540 Agoura Rd	125	-121	339	5,727	16.9	20.6	-18%
		2064020023	26520 Agoura Rd							
10	Mureau Office	2052043015	26050 Mureau Rd	72	-148	195	4,610	23.6	20.6	15%
11	Commons Shopping Center	2068003020	4799 Commons Way	200	104	542	8,151	15.0	20.6	-27%
		2068003023	4776 Commons Way							
		2068003021	4719 Commons Way							
		2068003022	4710 Commons Way							
		2068003028	APN 2068003028							
		2068003024	4798 Commons Way							
12	Craftsman Corner	2049021053	5034 Parkway Calabasas	235	24	637	9,580	15.0	20.6	-27%
		2049022040	APN 2049022040							
		2049019028	5124 Douglas Fir							
3-A	Mixed-Use Office and Residential		NW Corner of Thousand Oaks Blvd & Las Virgenes Rd	117	--	317	8,291	26.1	20.6	27%
3-B	Mixed-Use Residential and Commercial		SW Corner of Agoura Rd & Las Virgenes Rd	112	--	304	5,127	16.9	20.6	-18%
3-C	Multifamily Residential		Along Las Virgenes Rd, south of Agoura Rd	328	--	889	15,015	16.9	20.6	-18%
Total				1,463	-274	3,964	68,893	17.4	20.6	-16%

Memorandum

Date: July 28, 2021
To: Reema Shakra, Rincon Consultants
From: Rachel Om and Sarah Brandenburg
Subject: Calabasas Housing Element Update Emergency Evacuation Assessment

LA20-3212

Fehr & Peers has completed an assessment of the effect that the City of Calabasas 2021 – 2029 Housing Element Update may have on emergency evacuation travel demand in the city. A capacity assessment was performed for an emergency evacuation event that requires complete evacuation of the city with all City residents and employees needing to exit the city limits. This assessment is being conducted in consideration of the new Assembly Bill 747 (AB 747) which is a requirement for Safety Element Updates that occur after January 2022 and requires that Safety Elements be reviewed and updated to identify evacuation routes and their capacity, safety, and viability. Fehr & Peers did not include an assessment for Senate Bill 99 (SB 99) as the Calabasas Housing Element Update project team has already prepared a map that shows constrained neighborhoods with single access points, and therefore, our assistance was not needed.

This document is intended to provide an assessment of roadway capacity under an evacuation event in the City of Calabasas. Please note that emergency evacuation can occur due to any number of events. Additionally, fire and other hazard movement is unpredictable as is individual behavior related to evacuation events. As such, this assessment is intended to provide the City with a broad “planning level” assessment of the capacity of the transportation system during an evacuation scenario; it does not provide guarantees as to the adequacy of the system nor can it guarantee that the findings are applicable to any or all situations.

Moreover, as emergency evacuation assessment is an emerging field, there is no established standard methodology. We have adopted existing methodologies in transportation planning that, in our knowledge and experience, we believe are the most appropriate. Nevertheless, such methodologies are necessarily also limited by our scope of work and by the current state of practice in this emerging area.



Background

AB 747 requires that the Safety Element be reviewed and updated to identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. This will be a requirement for all safety elements or updates to a hazard mitigation plans completed after January of 2022. As this is a future requirement that has not yet gone into effect, there is no established standard methodology. Therefore, this study is intended to provide the City with a broad planning level assessment of the capacity of the transportation system during a citywide evacuation event.

Approach

Since the City of Calabasas is located in the foothills of the Santa Monica Mountains, the city is bound by topography with a limited number of evacuation routes to the US-101 freeway. Fehr & Peers reviewed evacuation routes identified on the City of Calabasas Public Safety & Emergency Preparedness web page¹. These routes are described below (see **Appendix A** for the City's Evacuation Route Map):

- Las Virgenes Road is a north-south road that connects the western portion of the city from Mulholland Highway on the southern end of the city to the US-101 and northern city limits.
- Mulholland Drive is a north-south road that connects the eastern half of the city from Mulholland Highway and Topanga Canyon Boulevard on the southern end of the city to the US-101 and northern city limits.
- The US-101 is a freeway that runs through the city limits and serves as the primary evacuation route for vehicles traveling southeast towards the City of Los Angeles or northwest towards Ventura County.

Seven roadway segments were analyzed as key roadways to access the US-101 freeway from the twelve opportunity sites identified in the Housing Element Update during an evacuation event (see **Figure 1**):

- 1) Lost Hills Road from Canwood Street to US-101 Northbound (NB) On-Ramp
- 2) Lost Hills Road from Agoura Road to US-101 Southbound (SB) On-Ramp
- 3) Las Virgenes Road from Agoura Road to US-101 SB On-ramp
- 4) Las Virgenes Road from Mureau Road to US-101 NB On-ramp
- 5) Parkway Calabasas, North of Ventura Boulevard
- 6) Parkway Calabasas, South of Calabasas Road
- 7) Calabasas Road, Between Parkway Calabasas and Civic Center

¹ City of Calabasas, Evacuation Route Maps, <https://www.cityofcalabasas.com/government/public-safety-emergency-preparedness/evacuation-route-maps>.



This assessment was completed under existing (2021) conditions with and without the Housing Element Update opportunity sites. To compare evacuation travel demand to typical peak hour traffic volumes on the seven study roadway segments, historic weekday traffic counts were obtained from StreetLight, a big data vendor that uses anonymized location data to generate a broad range of travel pattern and traffic volume data. Given abnormal travel conditions due to the COVID-19 pandemic, the existing weekday traffic counts are from Fall 2019 and represent average traffic volumes on Tuesday, Wednesday, and Thursday from September to November 2019.

Citywide evacuation access was assessed by reviewing the vehicle travel demand on each roadway during an evacuation event. To estimate evacuation travel demand for each study segment, land use and socioeconomic data were aggregated by transportation analysis zones (TAZs) from the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) travel demand model. The SCAG travel demand model is a useful starting point for estimating travel demand as it provides socioeconomic information, such as population and number of vehicles per households, and the TAZs represent distinct areas of the city that can be used to estimate vehicle travel demand along each study roadway segment during an evacuation event. The process for developing the evacuation travel demand estimates is explained in further detail below.

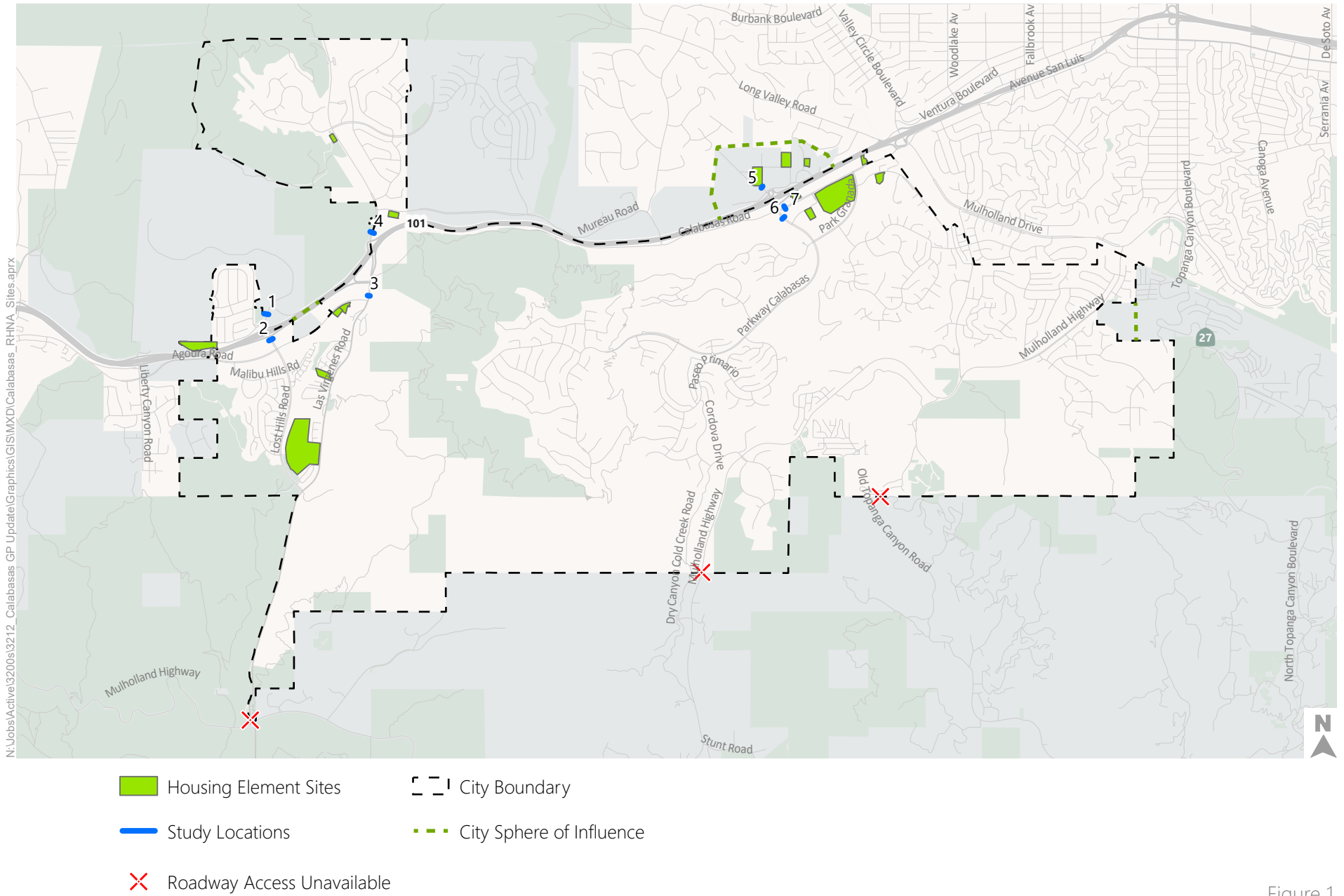


Figure 1



Calabasas Housing Element Sites and Roadway Network



Evacuation Assessment

A capacity assessment was performed for an emergency evacuation scenario that required complete evacuation of the city with all residents and employees needing to exit the city limits. For this assessment, it was assumed that access to the south was not available, and all land uses in the city would need to evacuate towards the US-101 freeway. In addition, it was assumed that only land uses in the City of Calabasas would be under an evacuation order.

The first step in the evacuation assessment was to estimate the number of households, population, and employment in the City, including the sphere of influence (SOI) areas, under existing conditions and with the Housing Element update. The number of residents, households, and employees in the area were compiled based on data contained in the SCAG travel demand model to estimate the number of vehicles that would need to evacuate during a citywide evacuation scenario. **Table 1** summarizes land use information under Existing (2021) conditions and with the Housing Element Update. The Housing Element Update would add up to 1,305 new housing units in the city and result in a slight decrease in employment due to redevelopment of existing commercial sites to provide housing.

Table 1: Citywide Evacuation Land Use Summary

Land Use	Existing (2021) Conditions	With Housing Element Update	Change with Housing Element
Households	8,810	10,115	1,305
Population	24,000	27,535	3,535
Employment	20,540	20,265	-275

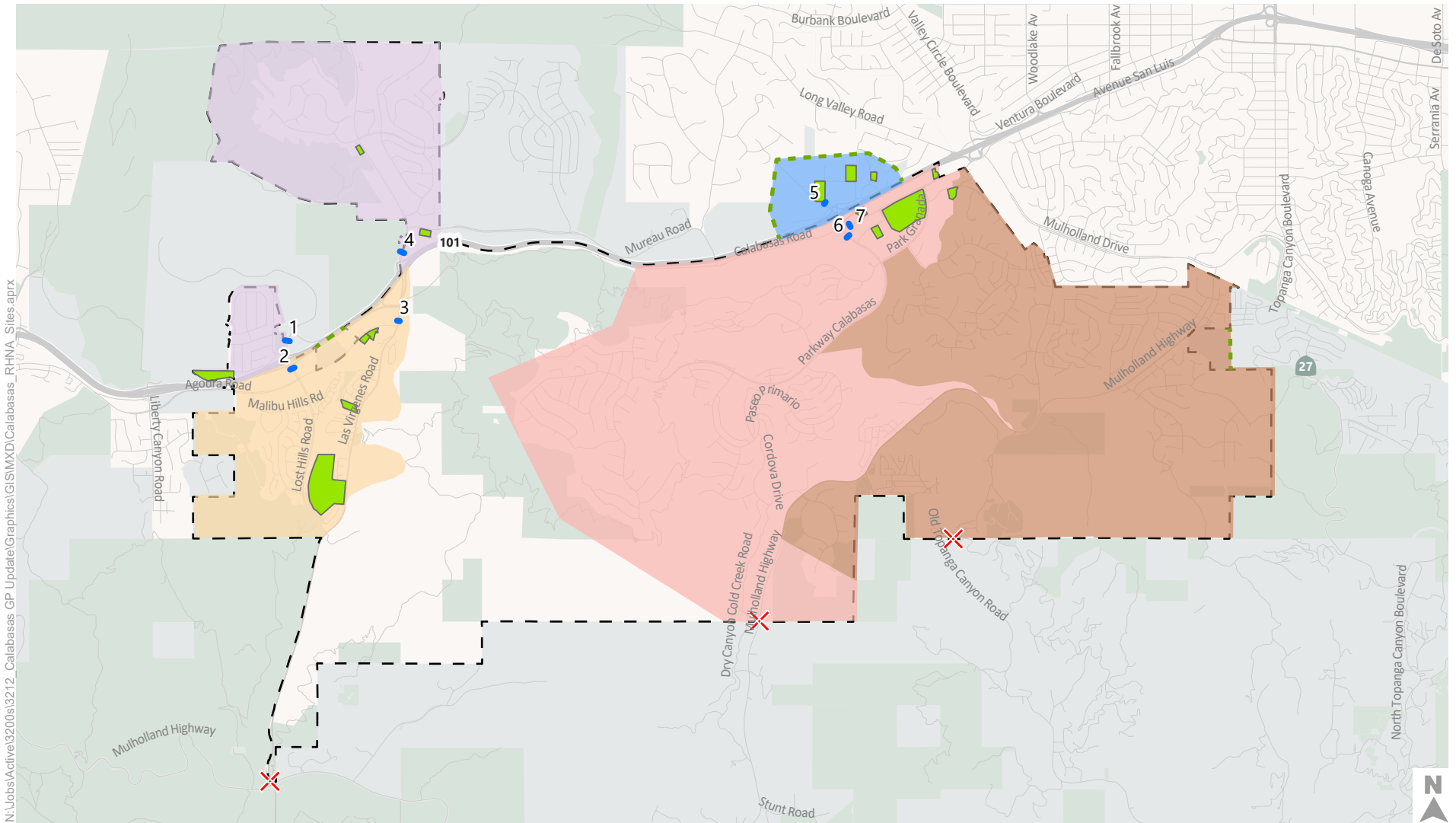
Source: SCAG Travel Demand Forecasting Model data compiled by Fehr & Peers, 2021.

Note: The maximum density assumed for the emergency evacuation demand is higher than the maximum density included in the Housing Element update in order to encompass the actual allowable range of densities.

The second step in the evacuation assessment was to separate the land uses in the city into evacuation areas based on the roadway network that would provide access to the US-101 during an evacuation event. The evacuation areas were identified for the purpose of distributing vehicles to the roadway network and are not intended as official or designated evacuation zones. The city was separated into five evacuation areas based on topography and access to key roadways to the US-101 (see **Figure 2**):

- Northwest: Vehicles would travel southbound on Las Virgenes Road and Lost Hills Road.
- Southwest: Vehicles would travel northbound on Las Virgenes Road and Lost Hills Road.
- Northeast: Vehicles would travel southbound on Parkway Calabasas.
- Central: Vehicles would travel northbound on Parkway Calabasas.
- Southeast: Vehicles would travel northbound on Mulholland Drive.

The area between the Southwest and the Central evacuation areas was not assigned to an evacuation area as it is primarily unpopulated with mountainous terrain.



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- | | | |
|--|--|--|
| Evacuation Area | Housing Element Sites | City Boundary |
| Northwest | Study Locations | City Sphere of Influence |
| Southwest | X Roadway Access Unavailable | |
| Central | | |
| Northeast | | |
| Southeast | | |



Figure 2

Calabasas Housing Element Sites and Evacuation Areas



Table 2 summarizes land use information under Existing (2021) conditions and with the Housing Element Update for each of the five evacuation areas. The growth with the Housing Element Update (1,305 units) reflects the twelve opportunity sites (1,209 units) and the potential growth in accessory dwelling units (ADUs, 96 units).

Table 2: Evacuation Land Uses under Existing Conditions and With Housing Element Update

Evacuee Type	Households and Employment in Evacuation Areas				
	Northwest	Southwest	Northeast	Central	Southeast
<i>Existing Conditions</i>					
Households	1,830	1,532	32	2,483	2,935
Employees	1,674	6,606	2,127	7,538	2,595
<i>With Housing Element Conditions</i>					
Households	2,027	1,915	267	2,942	2,966
Employees	1,516	6,485	2,151	7,519	2,595
<i>Change with Housing Element</i>					
Households	197	383	235	459	31
Employees	-158	-121	24	-19	0

Source: SCAG Travel Demand Forecasting Model data compiled by Fehr & Peers, 2021.

The next step in the evacuation assessment was to estimate vehicle travel demand during a citywide evacuation event. Vehicle ownership data was compiled from the SCAG travel demand model to estimate the evacuation demand generated by the residential uses in the city. As shown in **Table 3**, vehicle ownership ranges from one vehicle per household to four or more vehicles per household. To estimate travel demand generated by residents, one vehicle trip was assumed to be generated by the one vehicle households, two vehicle trips were assumed to be generated by two vehicle households, and 2.5 vehicle trips were assumed to be generated by three or more vehicle households. For people who work in the city, each employee was assumed to generate one vehicle trip.



Table 3: Existing Evacuation Demand (Vehicles)

Evacuee Type	Average Evacuation Vehicles per HH or Emp	Vehicle Demand in Evacuation Areas				
		Northwest	Southwest	Northeast	Central	Southeast
One Vehicle Households	1.0	68	76	3	64	64
Two Vehicle Households	2.0	1,470	1,362	24	1,642	1,918
Three Vehicle Households	2.5	1,845	1,458	30	2,853	3,253
Four or More Vehicle Households	2.5	723	480	13	1,143	1,528
Employees	1.0	1,674	6,606	2,127	7,538	2,595
Total Vehicle Demand per Evacuation Area		5,780	9,982	2,197	13,240	9,358
Total Vehicle Demand Citywide						40,557

Source: SCAG Travel Demand Forecasting Model data compiled by Fehr & Peers, 2021.

The Housing Element Update opportunity sites and potential ADUs were then added to the existing evacuation demand to estimate the additional number of vehicles that would be traveling on the roadways during an evacuation event. As shown in **Table 4**, the Housing Element Update is estimated to add approximately 2,640 vehicles to the roadways during an evacuation event, which is a 7% increase from existing conditions citywide.

Table 4: Evacuation Demand with Housing Element (Vehicles)

Evacuee Type	Average Evacuation Vehicles per HH or Emp	Vehicle Demand in Evacuation Zones				
		Northwest	Southwest	Northeast	Central	Southeast
One Vehicle Households	1.0	74	95	26	79	64
Two Vehicle Households	2.0	1,624	1,698	194	1,984	1,936
Three Vehicle Households	2.5	2,048	1,818	245	3,328	3,288
Four or More Vehicle Households	2.5	805	610	115	1,350	1,548
Employees	1.0	1,516	6,485	2,151	7,519	2,595
Total Vehicle Demand per Evacuation Area		6,067	10,706	2,731	14,260	9,431
Change With Housing Element		287	724	534	1,020	73
Percentage Change With Housing Element		5%	7%	24%	8%	1%
Total Vehicle Demand Citywide				43,195		
Change With Housing Element				2,638		
Percentage Change With Housing Element				7%		

Source: SCAG Travel Demand Forecasting Model data compiled by Fehr & Peers, 2021.

Note: The maximum density assumed for the emergency evacuation demand is higher than the maximum density included in the Housing Element update in order to encompass the actual allowable range of densities.



The *Highway Capacity Manual (6th Ed)* was utilized to estimate roadway capacity during an evacuation event. Ideal saturation flow on a roadway is 1,900 vehicles per lane per hour. The per lane capacity applied in this assessment is based on a capacity of 950 vehicles per hour per lane to account for constraints at intersections due to typical weekday traffic signal timings and vehicle turning movements. The roadway capacities are shown in **Table 5**.

Table 5: Evacuation Capacity

Roadway	Outbound Lanes	Outbound Capacity (vehicles per hour)
<i>Northwest Evacuation Area</i>		
Lost Hills Road from Canwood Street to US-101 NB On-ramp	2	1,900
Las Virgenes Road from Mureau Road to US-101 NB On-ramp	2	1,900
Total	4	3,800
<i>Southwest Evacuation Area</i>		
Lost Hills Road from Agoura Road to US-101 SB On-ramp	2	1,900
Las Virgenes Road from Agoura Road to US-101 SB On-ramp	2	1,900
Total	4	3,800
<i>Central Evacuation Area</i>		
Parkway Calabasas, South of Calabasas Road	3	2,850
Calabasas Road, Between Parkway Calabasas and Civic Center	2	1,900
Total	5	4,750
<i>Northeast Evacuation Area</i>		
Parkway Calabasas, North of Ventura Boulevard	1	950
Total	1	950
<i>Southeast Evacuation Area</i>		
Mulholland Drive	2	1,900
Total	2	1,900

Source: Highway Capacity Manual 6th Edition, Transportation Research Board, 2016.

The final step in the evacuation assessment was to compare the travel demand during an evacuation event to the roadway capacity for the study roadway segments that would provide access to the US-101 for vehicles exiting the City. The roadway capacity, typical peak hour traffic volumes, and estimated evacuation demand were combined to compare the evacuation demand and volume-to-capacity ratio (V/C) for each study roadway segment without and with the Housing Element Update. The total evacuation travel demand assumes that two-thirds (67%) will occur during a one-hour period based on consultation with public safety experts. The results of the evacuation analysis are shown in **Table 6**.

Table 6: Evacuation Analysis

Roadway	Roadway Capacity	Existing Conditions			With Housing Element		Existing vs. Housing Element		
		Typical Weekday Peak Hour Volume*	Evacuation Demand (vehicles per hour)	Evacuation Roadway Operations (V/C)	Evacuation Demand (vehicles per hour)	Evacuation Roadway Operations (V/C)	Change in Evacuation Demand (vehicles per hour)	Percent Change in Evacuation Demand	Change in Evacuation Roadway Operations (V/C)
<i>Northwest Evacuation Area</i>									
Lost Hills Road from Canwood Street to US-101 NB On-ramp	1,900	810	1,501	0.79	1,601	0.84	101	7%	0.05
Las Virgenes Road from Mureau Road to US-101 NB On-ramp	1,900	1,480	2,372	1.25	2,464	1.30	92	4%	0.05
Total	3,800	2,290	3,873	1.02	4,065	1.07	192	5%	0.05
<i>Southwest Evacuation Area</i>									
Lost Hills Road from Agoura Road to US-101 SB On-ramp	1,900	990	3,344	1.76	3,587	1.89	243	7%	0.13
Las Virgenes Road from Agoura Road to US-101 SB On-ramp	1,900	2,070	3,344	1.76	3,587	1.89	243	7%	0.13
Total	3,800	3,060	6,688	1.76	7,173	1.89	485	7%	0.13
<i>Central Evacuation Area</i>									
Parkway Calabasas, South of Calabasas Road	2,850	900	8,342	2.93	8,959	3.14	618	7%	0.21
Calabasas Road, Between Parkway Calabasas and Civic Center	1,900	750	1,058	0.56	1,189	0.63	131	12%	0.07
Total	4,750	1,650	9,399	1.98	10,148	2.14	749	8%	0.16
<i>Northeast Evacuation Area</i>									
Parkway Calabasas, North of Ventura Boulevard	950	250	1,472	1.55	1,830	1.93	358	24%	0.38
Total	950	250	1,472	1.55	1,830	1.93	358	24%	0.38
<i>Southeast Evacuation Area</i>									
Mulholland Drive, South of Avenue San Luis**									

*The peak hour count for each segment reflects the highest observed volume in a 24-hour period for a typical weekday in Fall 2019 (Source: StreetLight Data).

** Mulholland Drive was not analyzed as this roadway is outside of the City of Calabasas. There are no Housing Element Update sites located in the Southeast Evacuation Area so an analysis of the Housing Element was not applicable.



As shown in **Table 6**, the Housing Element Update is projected to increase evacuation demand by approximately 5% in the Northwest area, 7% in the Southwest area, 8% in the Central area, and 24% in the Northeast area. It should be noted that the large percent change in the Northeast area is because the existing evacuation demand only accounts for the land uses in the City's SOI and not the additional development that is located to the north. None of the housing opportunity sites identified in the Housing Element Update are located in the Southeast area, and therefore, the change in evacuation demand was not analyzed.

With the Housing Element Update, the increased evacuation demand would increase the V/C for the study roadways by 0.05 in the Northwest area, 0.13 in the Southwest area, between 0.07 and 0.21 in the Central area, and 0.38 in the Northeast area. Roadway segments that exceed a V/C of 1.0 indicate that the evacuation demand would exceed the roadway capacity, and therefore, it would take vehicles more than one hour to evacuate.

The assessment assumes evacuation traffic would be evenly distributed across each evacuation roadway. However, emergency scenarios are often unpredictable and driver behavior can be disorderly. Additionally, evacuation events are not linear in nature (e.g., even distribution during the evacuation time period), and it is anticipated that evacuees would vacate at a rate that more closely resembles a bell curve from the time that the evacuation order is issued. These are conditions which would affect the total evacuation operations estimated in our assessment that are beyond the scope of this study. There is also general unpredictability in operational issues such as traffic signal synchronization issues between City intersections and/or Caltrans ramps, power issues that would trigger traffic signals to operate in "red flash", or congestion along the US-101 that could further impede traffic flows.

Recommendations

Given the topographic constraints, the City has limited options to manage evacuation demand during an emergency scenario. The housing opportunity sites with the Housing Element Update are generally located in close proximity to the US-101 freeway with access to key roadways in the city that provide freeway access during an evacuation event. As the City continues to prepare for emergency events, special considerations can be taken to facilitate emergency evacuation. Some considerations are provided below:

- Future roadway design, especially in areas that have less accessibility and on key evacuation routes, should consider evacuation capacity and consider design treatments such as painted medians (instead of raised medians) or other treatments that could assist in creating reversible lanes and facilitate additional capacity in an evacuation event scenario.
 - In evacuation events, painted medians could operate as additional egress lanes. For example, a four-lane roadway could operate with three egress lanes and one ingress lane (for emergency vehicles).



- In the assessment above, the capacity for Lost Hills Road from Canwood Street to the US-101 could be approximately doubled with this approach.
- Evacuation event signal timing should be periodically reviewed and updated to provide additional evacuation capacity.
 - In the assessment above, the roadway capacities are based on typical traffic signal operations and green time allocation in the city. Implementing a traffic signal timing and coordination plan that prioritizes green time for the evacuation of vehicles to the US-101 freeway would provide additional roadway capacity and improve the V/C results reported in Table 6.
 - The City has an Emergency Operations Center and separate communications room where staff coordinate emergency activities with the Lost Hills Sheriff's Station and the LA County Office of Emergency Management through the Emergency Management Information System Operational Area Response and Recovery System (OARRS). Since intersections near freeway on and off-ramps may be under the jurisdiction of Caltrans, the City could incorporate Caltrans in their emergency operations center protocol to develop emergency evacuation signal timing.
- Continue coordinating with nearby jurisdictions and the Las Virgenes-Malibu Council of Governments (LVMCOG) as most people will be using the US-101 freeway as the main evacuation route and freeway congestion will limit the speed at which people in Calabasas can evacuate the city. The LVMCOG has a Multi-Jurisdictional Hazard Mitigation Plan that identifies regional mitigation strategies and facilitates coordination between its member cities.
- Consider the needs of vulnerable populations in the city, such as senior housing facilities and schools, and others without access to a personal vehicle in City evacuation plans.



Attachment A

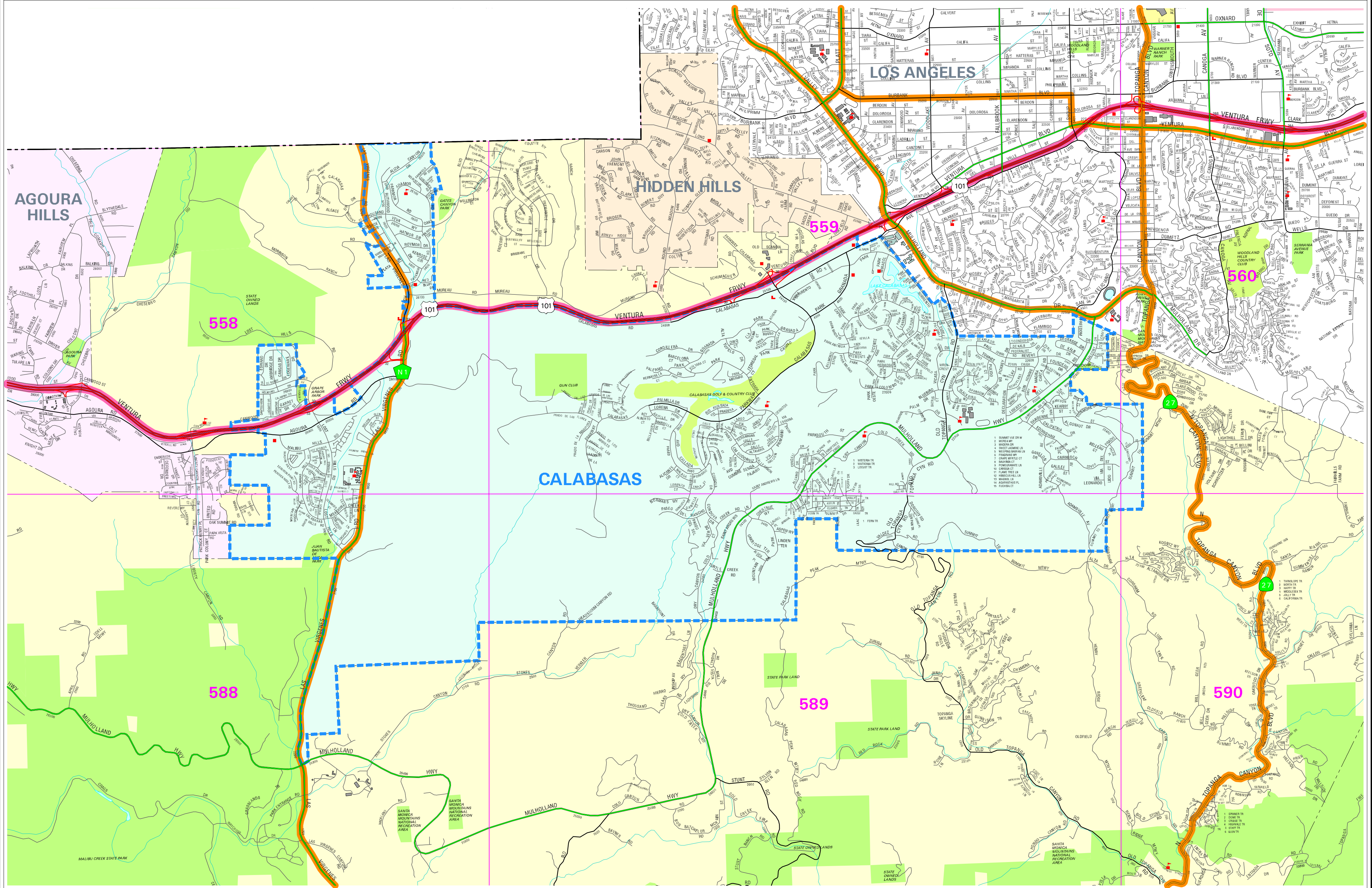
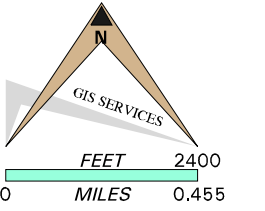
City of Calabasas Public Safety & Emergency Preparedness Evacuation Route Map

- City Boundary
- Freeway Disaster Route
- Disaster Route
- Thomas Guide Page Grid

CITY OF CALABASAS

(Map Size: 22" x 17")

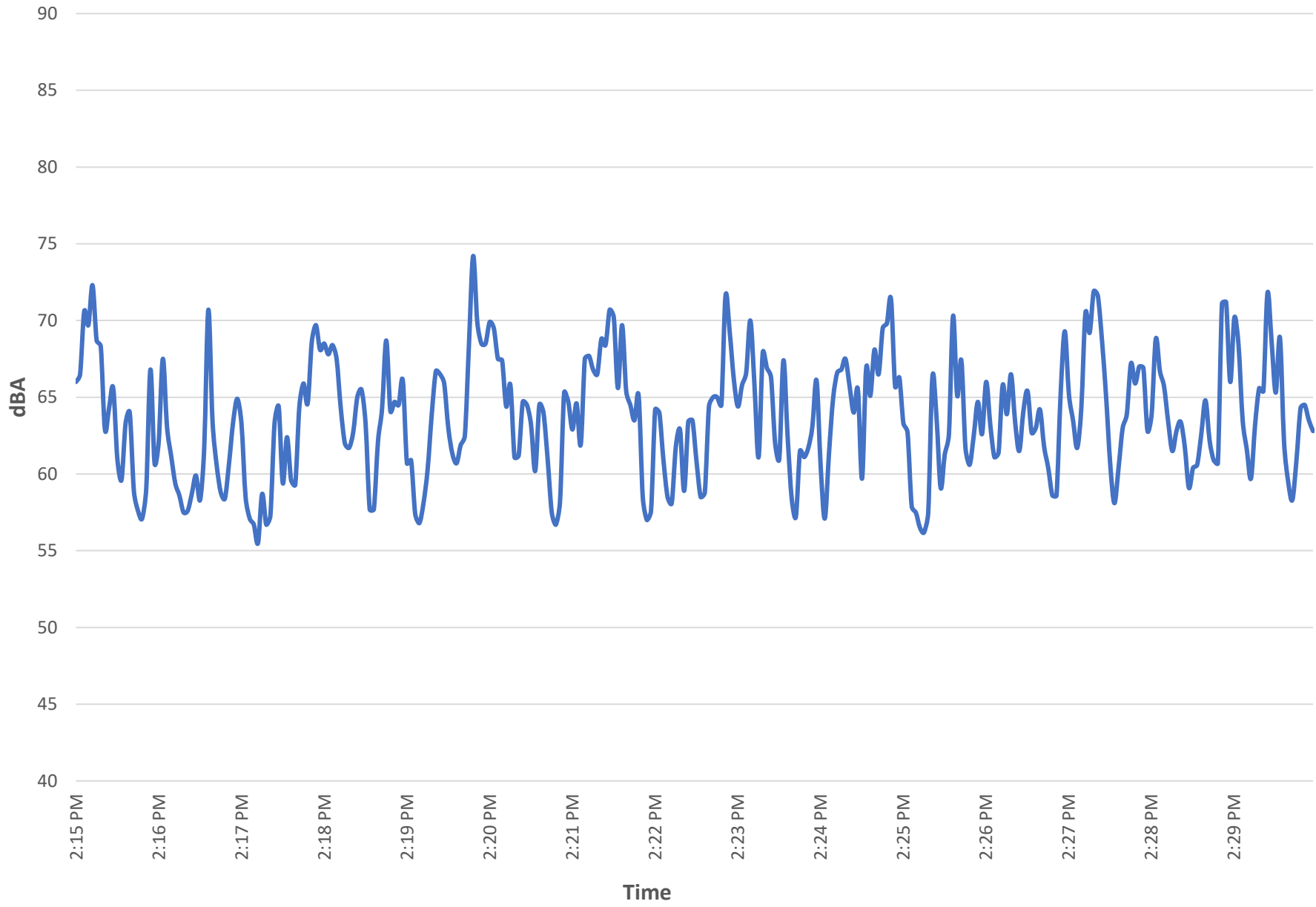
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Appendix D

Noise Measurements

Noise Measurement 1 - Commons Shopping Center (Housing Site 11) - May 13, 2021



Noise Measurement 1 - Commons Shopping Center (Housing Site 11)

Data Logger 2
 Duration (seconds) 3
 Weighting A
 Response SLOW
 Range 40-100
 L05 69.8
 L10 68.6
 L50 63.7
 L90 58.3
 L95 57.3
 Lmax 75.2
 Time 5/13/2021 14:15
 SEL 94.8
 Leq **65.4**

No.s	Date Time	Time	dB	Sound Energy
1	5/13/2021 14:15	2:15 PM	66	11943215.12
2	5/13/2021 14:15	2:15 PM	66.5	13400507.76
3	5/13/2021 14:15	2:15 PM	70.6	34444608.64
4	5/13/2021 14:15	2:15 PM	69.7	27997629.02
5	5/13/2021 14:15	2:15 PM	72.3	50947309.57
6	5/13/2021 14:15	2:15 PM	68.7	22239307.24
7	5/13/2021 14:15	2:15 PM	68.3	20282489.26
8	5/13/2021 14:15	2:15 PM	62.9	5849533.799
9	5/13/2021 14:15	2:15 PM	64.3	8074604.412
10	5/13/2021 14:15	2:15 PM	65.6	10892341.64
11	5/13/2021 14:15	2:15 PM	61	3776776.235
12	5/13/2021 14:15	2:15 PM	59.6	2736032.518
13	5/13/2021 14:15	2:15 PM	63.3	6413886.269
14	5/13/2021 14:15	2:15 PM	64	7535659.295
15	5/13/2021 14:15	2:15 PM	58.9	2328741.35
16	5/13/2021 14:15	2:15 PM	57.6	1726319.812
17	5/13/2021 14:15	2:15 PM	57.1	1538584.152
18	5/13/2021 14:15	2:15 PM	59.1	2438491.548
19	5/13/2021 14:15	2:15 PM	66.8	14358902.77
20	5/13/2021 14:15	2:15 PM	60.7	3524692.665
21	5/13/2021 14:16	2:16 PM	62.1	4865430.292
22	5/13/2021 14:16	2:16 PM	67.5	16870239.76
23	5/13/2021 14:16	2:16 PM	63.1	6125213.834
24	5/13/2021 14:16	2:16 PM	61.2	3954770.216
25	5/13/2021 14:16	2:16 PM	59.4	2612890.77
26	5/13/2021 14:16	2:16 PM	58.6	2173307.88
27	5/13/2021 14:16	2:16 PM	57.5	1687023.976
28	5/13/2021 14:16	2:16 PM	57.6	1726319.812

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30	5/13/2021 14:16	2:16 PM	59.9	2931711.663
31	5/13/2021 14:16	2:16 PM	58.3	2028248.926
32	5/13/2021 14:16	2:16 PM	61.7	4437325.165
33	5/13/2021 14:16	2:16 PM	70.7	35246926.65
34	5/13/2021 14:16	2:16 PM	63.5	6716163.416
35	5/13/2021 14:16	2:16 PM	60.6	3444460.864
36	5/13/2021 14:16	2:16 PM	58.8	2275732.725
37	5/13/2021 14:16	2:16 PM	58.4	2075492.913
38	5/13/2021 14:16	2:16 PM	60.7	3524692.665
39	5/13/2021 14:16	2:16 PM	63.4	6563284.872
40	5/13/2021 14:16	2:16 PM	64.9	9270886.298
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53	5/13/2021 14:17	2:17 PM	59.6	2736032.518
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61	5/13/2021 14:18	2:18 PM	68.5	21238373.53
62	5/13/2021 14:18	2:18 PM	67.8	18076787.58
63	5/13/2021 14:18	2:18 PM	68.4	20754929.13
64	5/13/2021 14:18	2:18 PM	67.5	16870239.76
65	5/13/2021 14:18	2:18 PM	64.3	8074604.412
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73	5/13/2021 14:18	2:18 PM	57.7	1766530.966
74	5/13/2021 14:18	2:18 PM	62.1	4865430.292
75	5/13/2021 14:18	2:18 PM	64.3	8074604.412

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81	5/13/2021 14:19	2:19 PM	60.7	3524692.665
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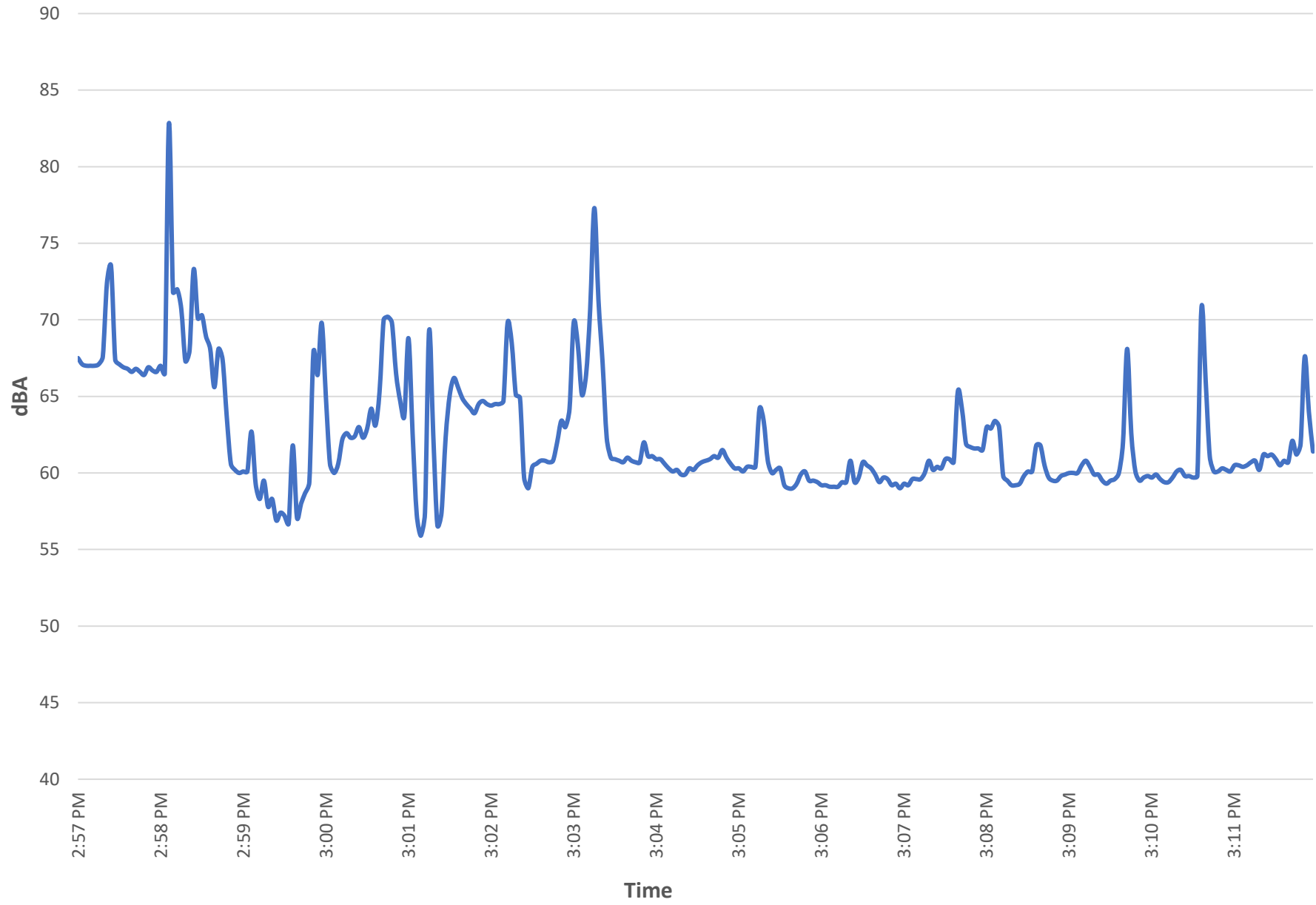
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153	5/13/2021 14:22	2:22 PM	58.8	2275732.725
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179	5/13/2021 14:23	2:23 PM	63.1	6125213.834
180	5/13/2021 14:23	2:23 PM	66.1	12221408.33
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182	5/13/2021 14:24	2:24 PM	57.1	1538584.152
183	5/13/2021 14:24	2:24 PM	61.3	4046888.648
184	5/13/2021 14:24	2:24 PM	64.9	9270886.298
185	5/13/2021 14:24	2:24 PM	66.6	13712645.69
186	5/13/2021 14:24	2:24 PM	66.8	14358902.77
187	5/13/2021 14:24	2:24 PM	67.5	16870239.76
188	5/13/2021 14:24	2:24 PM	65.7	11146056.87
189	5/13/2021 14:24	2:24 PM	64	7535659.295
190	5/13/2021 14:24	2:24 PM	65.5	10644401.68
191	5/13/2021 14:24	2:24 PM	59.7	2799762.902
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194	5/13/2021 14:24	2:24 PM	68.1	19369626.87
195	5/13/2021 14:24	2:24 PM	66.5	13400507.76
196	5/13/2021 14:24	2:24 PM	69.5	26737528.14
197	5/13/2021 14:24	2:24 PM	69.8	28649777.58
198	5/13/2021 14:24	2:24 PM	71.4	41411527.94
199	5/13/2021 14:24	2:24 PM	65.7	11146056.87
200	5/13/2021 14:24	2:24 PM	66.3	12797385.56
201	5/13/2021 14:25	2:25 PM	63.3	6413886.269
202	5/13/2021 14:25	2:25 PM	62.7	5586261.41
203	5/13/2021 14:25	2:25 PM	57.9	1849785.006
204	5/13/2021 14:25	2:25 PM	57.5	1687023.976
205	5/13/2021 14:25	2:25 PM	56.5	1340050.776
206	5/13/2021 14:25	2:25 PM	56.2	1250608.15
207	5/13/2021 14:25	2:25 PM	57.5	1687023.976
208	5/13/2021 14:25	2:25 PM	66.3	12797385.56
209	5/13/2021 14:25	2:25 PM	63.7	7032686.446
210	5/13/2021 14:25	2:25 PM	59.1	2438491.548
211	5/13/2021 14:25	2:25 PM	61.3	4046888.648
212	5/13/2021 14:25	2:25 PM	62.6	5459102.576
213	5/13/2021 14:25	2:25 PM	70.3	32145579.16
214	5/13/2021 14:25	2:25 PM	65.1	9707809.708
215	5/13/2021 14:25	2:25 PM	67.4	16486226.22
216	5/13/2021 14:25	2:25 PM	61.7	4437325.165

217	5/13/2021 14:25	2:25 PM	60.6	3444460.864
218	5/13/2021 14:25	2:25 PM	62.5	5334838.23
219	5/13/2021 14:25	2:25 PM	64.7	8853627.68
220	5/13/2021 14:25	2:25 PM	62.6	5459102.576
221	5/13/2021 14:26	2:26 PM	66	11943215.12
222	5/13/2021 14:26	2:26 PM	63.2	6267888.393
223	5/13/2021 14:26	2:26 PM	61.1	3864748.655
224	5/13/2021 14:26	2:26 PM	61.4	4141152.794
225	5/13/2021 14:26	2:26 PM	65.8	11405681.89
226	5/13/2021 14:26	2:26 PM	63.9	7364126.747
227	5/13/2021 14:26	2:26 PM	66.5	13400507.76
228	5/13/2021 14:26	2:26 PM	63.4	6563284.872
229	5/13/2021 14:26	2:26 PM	61.5	4237612.634
230	5/13/2021 14:26	2:26 PM	64.1	7711187.348
231	5/13/2021 14:26	2:26 PM	65.4	10402105.51
232	5/13/2021 14:26	2:26 PM	62.7	5586261.41
233	5/13/2021 14:26	2:26 PM	63	5985786.945
234	5/13/2021 14:26	2:26 PM	64.2	7890803.976
235	5/13/2021 14:26	2:26 PM	61.8	4540683.745
236	5/13/2021 14:26	2:26 PM	60.4	3289434.588
237	5/13/2021 14:26	2:26 PM	58.6	2173307.88
238	5/13/2021 14:26	2:26 PM	58.6	2173307.88
239	5/13/2021 14:26	2:26 PM	65.2	9933933.644
240	5/13/2021 14:26	2:26 PM	69.3	25534141.15
241	5/13/2021 14:27	2:27 PM	65.2	9933933.644
242	5/13/2021 14:27	2:27 PM	63.5	6716163.416
243	5/13/2021 14:27	2:27 PM	61.7	4437325.165
244	5/13/2021 14:27	2:27 PM	64.3	8074604.412
245	5/13/2021 14:27	2:27 PM	70.5	33660553.63
246	5/13/2021 14:27	2:27 PM	69.2	24952913.13
247	5/13/2021 14:27	2:27 PM	71.9	46464498.57
248	5/13/2021 14:27	2:27 PM	71.6	43363193.12
249	5/13/2021 14:27	2:27 PM	68.7	22239307.24
250	5/13/2021 14:27	2:27 PM	65	9486832.981
251	5/13/2021 14:27	2:27 PM	60.6	3444460.864
252	5/13/2021 14:27	2:27 PM	58.1	1936962.687
253	5/13/2021 14:27	2:27 PM	60.4	3289434.588
254	5/13/2021 14:27	2:27 PM	63	5985786.945
255	5/13/2021 14:27	2:27 PM	63.9	7364126.747
256	5/13/2021 14:27	2:27 PM	67.2	15744223.81
257	5/13/2021 14:27	2:27 PM	65.9	11671354.35
258	5/13/2021 14:27	2:27 PM	67	15035617.01
259	5/13/2021 14:27	2:27 PM	66.9	14693364.58
260	5/13/2021 14:27	2:27 PM	62.8	5716382.154
261	5/13/2021 14:28	2:28 PM	63.9	7364126.747
262	5/13/2021 14:28	2:28 PM	68.8	22757327.25
263	5/13/2021 14:28	2:28 PM	66.7	14032054.24

264	5/13/2021 14:28	2:28 PM	65.7	11146056.87
265	5/13/2021 14:28	2:28 PM	63.4	6563284.872
266	5/13/2021 14:28	2:28 PM	61.5	4237612.634
267	5/13/2021 14:28	2:28 PM	62.8	5716382.154
268	5/13/2021 14:28	2:28 PM	63.4	6563284.872
269	5/13/2021 14:28	2:28 PM	61.8	4540683.745
270	5/13/2021 14:28	2:28 PM	59.1	2438491.548
271	5/13/2021 14:28	2:28 PM	60.4	3289434.588
272	5/13/2021 14:28	2:28 PM	60.6	3444460.864
273	5/13/2021 14:28	2:28 PM	62.6	5459102.576
274	5/13/2021 14:28	2:28 PM	64.8	9059855.161
275	5/13/2021 14:28	2:28 PM	62.2	4978760.722
276	5/13/2021 14:28	2:28 PM	60.9	3690806.312
277	5/13/2021 14:28	2:28 PM	60.7	3524692.665
278	5/13/2021 14:28	2:28 PM	71.1	38647486.55
279	5/13/2021 14:28	2:28 PM	71.2	39547702.16
280	5/13/2021 14:28	2:28 PM	66	11943215.12
281	5/13/2021 14:29	2:29 PM	70.2	31413856.44
282	5/13/2021 14:29	2:29 PM	68.4	20754929.13
283	5/13/2021 14:29	2:29 PM	63.5	6716163.416
284	5/13/2021 14:29	2:29 PM	61.6	4336319.312
285	5/13/2021 14:29	2:29 PM	59.7	2799762.902
286	5/13/2021 14:29	2:29 PM	63.2	6267888.393
287	5/13/2021 14:29	2:29 PM	65.6	10892341.64
288	5/13/2021 14:29	2:29 PM	65.4	10402105.51
289	5/13/2021 14:29	2:29 PM	71.8	45406837.45
290	5/13/2021 14:29	2:29 PM	68.6	21733078.8
291	5/13/2021 14:29	2:29 PM	65.3	10165324.68
292	5/13/2021 14:29	2:29 PM	68.9	23287413.5
293	5/13/2021 14:29	2:29 PM	62.1	4865430.292
294	5/13/2021 14:29	2:29 PM	59.5	2673752.814
295	5/13/2021 14:29	2:29 PM	58.3	2028248.926
296	5/13/2021 14:29	2:29 PM	60.9	3690806.312
297	5/13/2021 14:29	2:29 PM	64.3	8074604.412
298	5/13/2021 14:29	2:29 PM	64.5	8455148.794
299	5/13/2021 14:29	2:29 PM	63.5	6716163.416
300	5/13/2021 14:29	2:29 PM	62.8	5716382.154

Noise Measurement 2 - Craftsman Corner (Housing Site 12) - May 13, 2021



Noise Measurement 2 - Craftsman Corner (Housing Site 12)

Data Logger 2

Duration (seconds)		3
Weighting	A	
Response	SLOW	
Range	40-100	
L05		69.6
L10		67.2
L50		60.7
L90		59.3
L95		58
Lmax		84.7
Time	5/13/2021 14:58	
SEL		94.7
Leq		65.2

No.s	Date Time	Time	dB	Sound Energy
1	5/13/2021 14:57	2:57 PM	67.5	16870239.76
2	5/13/2021 14:57	2:57 PM	67.1	15385841.52
3	5/13/2021 14:57	2:57 PM	67	15035617.01
4	5/13/2021 14:57	2:57 PM	67	15035617.01
5	5/13/2021 14:57	2:57 PM	67	15035617.01
6	5/13/2021 14:57	2:57 PM	67.1	15385841.52
7	5/13/2021 14:57	2:57 PM	67.6	17263198.12
8	5/13/2021 14:57	2:57 PM	72.4	52134024.86
9	5/13/2021 14:57	2:57 PM	73.5	67161634.16
10	5/13/2021 14:57	2:57 PM	67.4	16486226.22
11	5/13/2021 14:58	2:58 PM	67.1	15385841.52
12	5/13/2021 14:58	2:58 PM	66.9	14693364.58
13	5/13/2021 14:58	2:58 PM	66.8	14358902.77
14	5/13/2021 14:58	2:58 PM	66.6	13712645.69
15	5/13/2021 14:58	2:58 PM	66.8	14358902.77
16	5/13/2021 14:58	2:58 PM	66.6	13712645.69
17	5/13/2021 14:58	2:58 PM	66.4	13095474.97
18	5/13/2021 14:58	2:58 PM	66.9	14693364.58
19	5/13/2021 14:58	2:58 PM	66.7	14032054.24
20	5/13/2021 14:58	2:58 PM	66.6	13712645.69
21	5/13/2021 14:58	2:58 PM	67	15035617.01
22	5/13/2021 14:58	2:58 PM	66.5	13400507.76
23	5/13/2021 14:58	2:58 PM	82.8	571638215.4
24	5/13/2021 14:58	2:58 PM	71.8	45406837.45
25	5/13/2021 14:58	2:58 PM	72	47546795.77
26	5/13/2021 14:58	2:58 PM	70.7	35246926.65
27	5/13/2021 14:58	2:58 PM	67.3	16110953.89
28	5/13/2021 14:58	2:58 PM	68	18928720.33

29	5/13/2021 14:58	2:58 PM	73.3	64138862.69
30	5/13/2021 14:58	2:58 PM	70.1	30698789.77
31	5/13/2021 14:59	2:59 PM	70.3	32145579.16
32	5/13/2021 14:59	2:59 PM	68.9	23287413.5
33	5/13/2021 14:59	2:59 PM	68.1	19369626.87
34	5/13/2021 14:59	2:59 PM	65.6	10892341.64
35	5/13/2021 14:59	2:59 PM	68.1	19369626.87
36	5/13/2021 14:59	2:59 PM	67.4	16486226.22
37	5/13/2021 14:59	2:59 PM	63.7	7032686.446
38	5/13/2021 14:59	2:59 PM	60.6	3444460.864
39	5/13/2021 14:59	2:59 PM	60.2	3141385.644
40	5/13/2021 14:59	2:59 PM	60	3000000
41	5/13/2021 14:59	2:59 PM	60.1	3069878.977
42	5/13/2021 14:59	2:59 PM	60.1	3069878.977
43	5/13/2021 14:59	2:59 PM	62.7	5586261.41
44	5/13/2021 14:59	2:59 PM	59.3	2553414.115
45	5/13/2021 14:59	2:59 PM	58.3	2028248.926
46	5/13/2021 14:59	2:59 PM	59.5	2673752.814
47	5/13/2021 14:59	2:59 PM	57.8	1807678.758
48	5/13/2021 14:59	2:59 PM	58.3	2028248.926
49	5/13/2021 14:59	2:59 PM	56.9	1469336.458
50	5/13/2021 14:59	2:59 PM	57.4	1648622.622
51	5/13/2021 15:00	3:00 PM	57.2	1574422.381
52	5/13/2021 15:00	3:00 PM	56.7	1403205.424
53	5/13/2021 15:00	3:00 PM	61.8	4540683.745
54	5/13/2021 15:00	3:00 PM	57.1	1538584.152
55	5/13/2021 15:00	3:00 PM	58	1892872.033
56	5/13/2021 15:00	3:00 PM	58.7	2223930.724
57	5/13/2021 15:00	3:00 PM	59.4	2612890.77
58	5/13/2021 15:00	3:00 PM	67.9	18497850.06
59	5/13/2021 15:00	3:00 PM	66.4	13095474.97
60	5/13/2021 15:00	3:00 PM	69.8	28649777.58
61	5/13/2021 15:00	3:00 PM	65	9486832.981
62	5/13/2021 15:00	3:00 PM	60.6	3444460.864
63	5/13/2021 15:00	3:00 PM	60	3000000
64	5/13/2021 15:00	3:00 PM	60.6	3444460.864
65	5/13/2021 15:00	3:00 PM	62.2	4978760.722
66	5/13/2021 15:00	3:00 PM	62.6	5459102.576
67	5/13/2021 15:00	3:00 PM	62.3	5094730.957
68	5/13/2021 15:00	3:00 PM	62.4	5213402.486
69	5/13/2021 15:00	3:00 PM	63	5985786.945
70	5/13/2021 15:00	3:00 PM	62.3	5094730.957
71	5/13/2021 15:01	3:01 PM	62.9	5849533.799
72	5/13/2021 15:01	3:01 PM	64.2	7890803.976
73	5/13/2021 15:01	3:01 PM	63.1	6125213.834
74	5/13/2021 15:01	3:01 PM	65.3	10165324.68
75	5/13/2021 15:01	3:01 PM	70	3000000

76	5/13/2021 15:01	3:01 PM	70.2	31413856.44
77	5/13/2021 15:01	3:01 PM	69.8	28649777.58
78	5/13/2021 15:01	3:01 PM	66.5	13400507.76
79	5/13/2021 15:01	3:01 PM	64.7	8853627.68
80	5/13/2021 15:01	3:01 PM	63.7	7032686.446
81	5/13/2021 15:01	3:01 PM	68.8	22757327.25
82	5/13/2021 15:01	3:01 PM	62.6	5459102.576
83	5/13/2021 15:01	3:01 PM	57.3	1611095.389
84	5/13/2021 15:01	3:01 PM	55.9	1167135.435
85	5/13/2021 15:01	3:01 PM	57.4	1648622.622
86	5/13/2021 15:01	3:01 PM	69.3	25534141.15
87	5/13/2021 15:01	3:01 PM	62.5	5334838.23
88	5/13/2021 15:01	3:01 PM	56.6	1371264.569
89	5/13/2021 15:01	3:01 PM	57.4	1648622.622
90	5/13/2021 15:01	3:01 PM	62.3	5094730.957
91	5/13/2021 15:02	3:02 PM	65.1	9707809.708
92	5/13/2021 15:02	3:02 PM	66.2	12506081.5
93	5/13/2021 15:02	3:02 PM	65.6	10892341.64
94	5/13/2021 15:02	3:02 PM	64.9	9270886.298
95	5/13/2021 15:02	3:02 PM	64.5	8455148.794
96	5/13/2021 15:02	3:02 PM	64.2	7890803.976
97	5/13/2021 15:02	3:02 PM	63.9	7364126.747
98	5/13/2021 15:02	3:02 PM	64.5	8455148.794
99	5/13/2021 15:02	3:02 PM	64.7	8853627.68
100	5/13/2021 15:02	3:02 PM	64.5	8455148.794
101	5/13/2021 15:02	3:02 PM	64.4	8262686.11
102	5/13/2021 15:02	3:02 PM	64.5	8455148.794
103	5/13/2021 15:02	3:02 PM	64.5	8455148.794
104	5/13/2021 15:02	3:02 PM	64.7	8853627.68
105	5/13/2021 15:02	3:02 PM	69.8	28649777.58
106	5/13/2021 15:02	3:02 PM	68.5	21238373.53
107	5/13/2021 15:02	3:02 PM	65.1	9707809.708
108	5/13/2021 15:02	3:02 PM	64.9	9270886.298
109	5/13/2021 15:02	3:02 PM	59.7	2799762.902
110	5/13/2021 15:02	3:02 PM	59	2382984.704
111	5/13/2021 15:03	3:03 PM	60.4	3289434.588
112	5/13/2021 15:03	3:03 PM	60.6	3444460.864
113	5/13/2021 15:03	3:03 PM	60.8	3606793.304
114	5/13/2021 15:03	3:03 PM	60.8	3606793.304
115	5/13/2021 15:03	3:03 PM	60.7	3524692.665
116	5/13/2021 15:03	3:03 PM	60.8	3606793.304
117	5/13/2021 15:03	3:03 PM	62	4754679.577
118	5/13/2021 15:03	3:03 PM	63.4	6563284.872
119	5/13/2021 15:03	3:03 PM	63	5985786.945
120	5/13/2021 15:03	3:03 PM	64.2	7890803.976
121	5/13/2021 15:03	3:03 PM	69.8	28649777.58
122	5/13/2021 15:03	3:03 PM	68.4	20754929.13

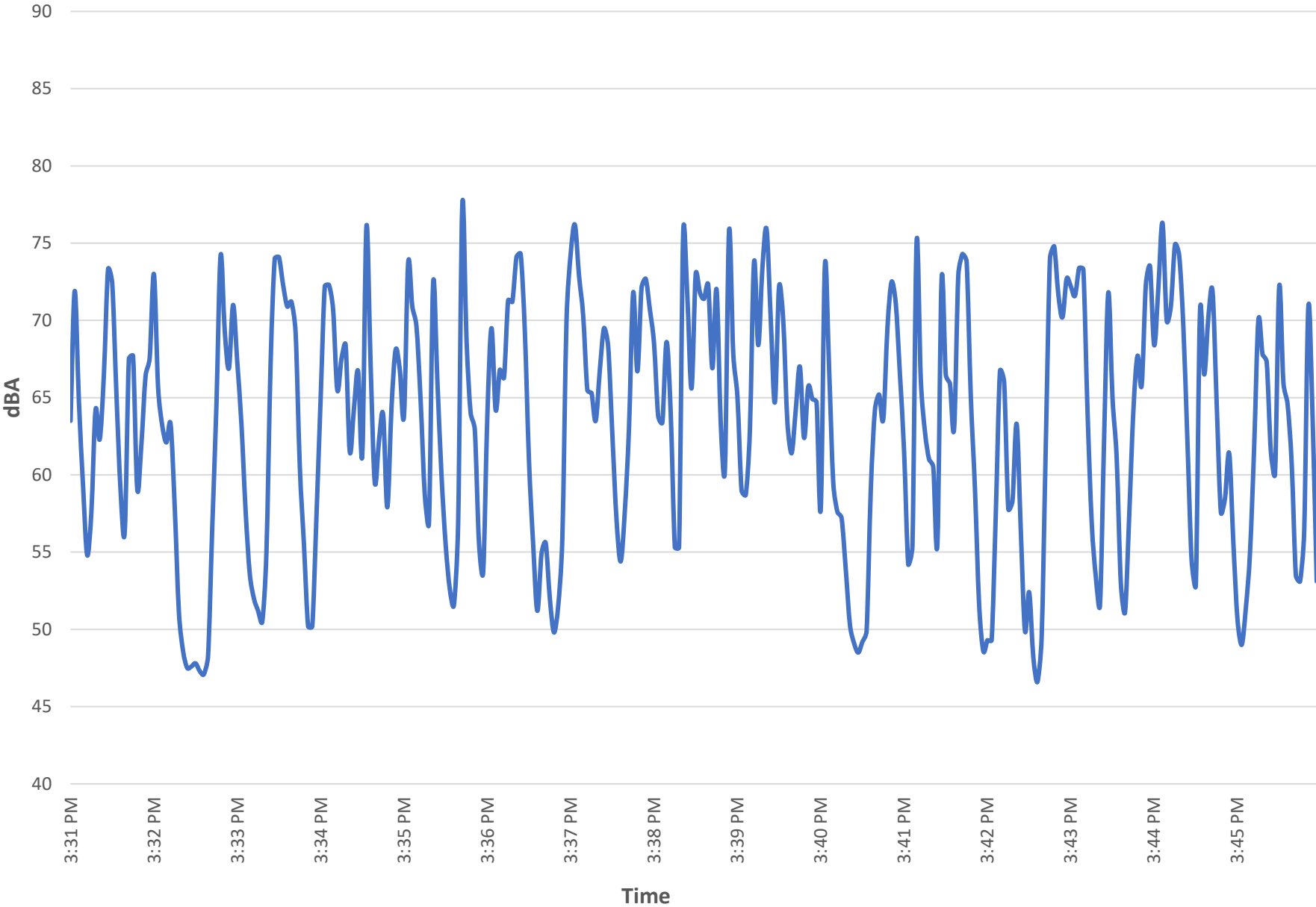
123	5/13/2021 15:03	3:03 PM	65.1	9707809.708
124	5/13/2021 15:03	3:03 PM	66.4	13095474.97
125	5/13/2021 15:03	3:03 PM	70.7	35246926.65
126	5/13/2021 15:03	3:03 PM	77.3	161109538.9
127	5/13/2021 15:03	3:03 PM	71.3	40468886.48
128	5/13/2021 15:03	3:03 PM	67.2	15744223.81
129	5/13/2021 15:03	3:03 PM	62.3	5094730.957
130	5/13/2021 15:03	3:03 PM	61	3776776.235
131	5/13/2021 15:04	3:04 PM	60.9	3690806.312
132	5/13/2021 15:04	3:04 PM	60.8	3606793.304
133	5/13/2021 15:04	3:04 PM	60.7	3524692.665
134	5/13/2021 15:04	3:04 PM	61	3776776.235
135	5/13/2021 15:04	3:04 PM	60.8	3606793.304
136	5/13/2021 15:04	3:04 PM	60.7	3524692.665
137	5/13/2021 15:04	3:04 PM	60.7	3524692.665
138	5/13/2021 15:04	3:04 PM	62	4754679.577
139	5/13/2021 15:04	3:04 PM	61.1	3864748.655
140	5/13/2021 15:04	3:04 PM	61.1	3864748.655
141	5/13/2021 15:04	3:04 PM	60.9	3690806.312
142	5/13/2021 15:04	3:04 PM	60.9	3690806.312
143	5/13/2021 15:04	3:04 PM	60.6	3444460.864
144	5/13/2021 15:04	3:04 PM	60.3	3214557.916
145	5/13/2021 15:04	3:04 PM	60.1	3069878.977
146	5/13/2021 15:04	3:04 PM	60.2	3141385.644
147	5/13/2021 15:04	3:04 PM	59.9	2931711.663
148	5/13/2021 15:04	3:04 PM	59.9	2931711.663
149	5/13/2021 15:04	3:04 PM	60.3	3214557.916
150	5/13/2021 15:04	3:04 PM	60.2	3141385.644
151	5/13/2021 15:05	3:05 PM	60.5	3366055.363
152	5/13/2021 15:05	3:05 PM	60.7	3524692.665
153	5/13/2021 15:05	3:05 PM	60.8	3606793.304
154	5/13/2021 15:05	3:05 PM	60.9	3690806.312
155	5/13/2021 15:05	3:05 PM	61.1	3864748.655
156	5/13/2021 15:05	3:05 PM	61	3776776.235
157	5/13/2021 15:05	3:05 PM	61.5	4237612.634
158	5/13/2021 15:05	3:05 PM	61	3776776.235
159	5/13/2021 15:05	3:05 PM	60.6	3444460.864
160	5/13/2021 15:05	3:05 PM	60.3	3214557.916
161	5/13/2021 15:05	3:05 PM	60.3	3214557.916
162	5/13/2021 15:05	3:05 PM	60.1	3069878.977
163	5/13/2021 15:05	3:05 PM	60.4	3289434.588
164	5/13/2021 15:05	3:05 PM	60.4	3289434.588
165	5/13/2021 15:05	3:05 PM	60.4	3289434.588
166	5/13/2021 15:05	3:05 PM	64.2	7890803.976
167	5/13/2021 15:05	3:05 PM	63.4	6563284.872
168	5/13/2021 15:05	3:05 PM	60.8	3606793.304
169	5/13/2021 15:05	3:05 PM	60	3000000

170	5/13/2021 15:05	3:05 PM	60.2	3141385.644
171	5/13/2021 15:06	3:06 PM	60.3	3214557.916
172	5/13/2021 15:06	3:06 PM	59.2	2495291.313
173	5/13/2021 15:06	3:06 PM	59	2382984.704
174	5/13/2021 15:06	3:06 PM	59	2382984.704
175	5/13/2021 15:06	3:06 PM	59.3	2553414.115
176	5/13/2021 15:06	3:06 PM	59.9	2931711.663
177	5/13/2021 15:06	3:06 PM	60.1	3069878.977
178	5/13/2021 15:06	3:06 PM	59.5	2673752.814
179	5/13/2021 15:06	3:06 PM	59.5	2673752.814
180	5/13/2021 15:06	3:06 PM	59.4	2612890.77
181	5/13/2021 15:06	3:06 PM	59.2	2495291.313
182	5/13/2021 15:06	3:06 PM	59.2	2495291.313
183	5/13/2021 15:06	3:06 PM	59.1	2438491.548
184	5/13/2021 15:06	3:06 PM	59.1	2438491.548
185	5/13/2021 15:06	3:06 PM	59.1	2438491.548
186	5/13/2021 15:06	3:06 PM	59.4	2612890.77
187	5/13/2021 15:06	3:06 PM	59.4	2612890.77
188	5/13/2021 15:06	3:06 PM	60.8	3606793.304
189	5/13/2021 15:06	3:06 PM	59.4	2612890.77
190	5/13/2021 15:06	3:06 PM	59.7	2799762.902
191	5/13/2021 15:07	3:07 PM	60.7	3524692.665
192	5/13/2021 15:07	3:07 PM	60.5	3366055.363
193	5/13/2021 15:07	3:07 PM	60.3	3214557.916
194	5/13/2021 15:07	3:07 PM	59.9	2931711.663
195	5/13/2021 15:07	3:07 PM	59.4	2612890.77
196	5/13/2021 15:07	3:07 PM	59.7	2799762.902
197	5/13/2021 15:07	3:07 PM	59.6	2736032.518
198	5/13/2021 15:07	3:07 PM	59.2	2495291.313
199	5/13/2021 15:07	3:07 PM	59.3	2553414.115
200	5/13/2021 15:07	3:07 PM	59	2382984.704
201	5/13/2021 15:07	3:07 PM	59.3	2553414.115
202	5/13/2021 15:07	3:07 PM	59.2	2495291.313
203	5/13/2021 15:07	3:07 PM	59.6	2736032.518
204	5/13/2021 15:07	3:07 PM	59.6	2736032.518
205	5/13/2021 15:07	3:07 PM	59.6	2736032.518
206	5/13/2021 15:07	3:07 PM	60	3000000
207	5/13/2021 15:07	3:07 PM	60.8	3606793.304
208	5/13/2021 15:07	3:07 PM	60.2	3141385.644
209	5/13/2021 15:07	3:07 PM	60.4	3289434.588
210	5/13/2021 15:07	3:07 PM	60.3	3214557.916
211	5/13/2021 15:08	3:08 PM	60.9	3690806.312
212	5/13/2021 15:08	3:08 PM	60.9	3690806.312
213	5/13/2021 15:08	3:08 PM	60.7	3524692.665
214	5/13/2021 15:08	3:08 PM	65.3	10165324.68
215	5/13/2021 15:08	3:08 PM	64.2	7890803.976
216	5/13/2021 15:08	3:08 PM	61.9	4646449.857

217	5/13/2021 15:08	3:08 PM	61.7	4437325.165
218	5/13/2021 15:08	3:08 PM	61.6	4336319.312
219	5/13/2021 15:08	3:08 PM	61.6	4336319.312
220	5/13/2021 15:08	3:08 PM	61.5	4237612.634
221	5/13/2021 15:08	3:08 PM	63	5985786.945
222	5/13/2021 15:08	3:08 PM	62.9	5849533.799
223	5/13/2021 15:08	3:08 PM	63.4	6563284.872
224	5/13/2021 15:08	3:08 PM	63	5985786.945
225	5/13/2021 15:08	3:08 PM	59.8	2864977.758
226	5/13/2021 15:08	3:08 PM	59.5	2673752.814
227	5/13/2021 15:08	3:08 PM	59.2	2495291.313
228	5/13/2021 15:08	3:08 PM	59.2	2495291.313
229	5/13/2021 15:08	3:08 PM	59.3	2553414.115
230	5/13/2021 15:08	3:08 PM	59.8	2864977.758
231	5/13/2021 15:09	3:09 PM	60.1	3069878.977
232	5/13/2021 15:09	3:09 PM	60.1	3069878.977
233	5/13/2021 15:09	3:09 PM	61.8	4540683.745
234	5/13/2021 15:09	3:09 PM	61.8	4540683.745
235	5/13/2021 15:09	3:09 PM	60.5	3366055.363
236	5/13/2021 15:09	3:09 PM	59.7	2799762.902
237	5/13/2021 15:09	3:09 PM	59.5	2673752.814
238	5/13/2021 15:09	3:09 PM	59.5	2673752.814
239	5/13/2021 15:09	3:09 PM	59.8	2864977.758
240	5/13/2021 15:09	3:09 PM	59.9	2931711.663
241	5/13/2021 15:09	3:09 PM	60	3000000
242	5/13/2021 15:09	3:09 PM	60	3000000
243	5/13/2021 15:09	3:09 PM	60	3000000
244	5/13/2021 15:09	3:09 PM	60.5	3366055.363
245	5/13/2021 15:09	3:09 PM	60.8	3606793.304
246	5/13/2021 15:09	3:09 PM	60.4	3289434.588
247	5/13/2021 15:09	3:09 PM	59.9	2931711.663
248	5/13/2021 15:09	3:09 PM	59.9	2931711.663
249	5/13/2021 15:09	3:09 PM	59.5	2673752.814
250	5/13/2021 15:09	3:09 PM	59.3	2553414.115
251	5/13/2021 15:10	3:10 PM	59.5	2673752.814
252	5/13/2021 15:10	3:10 PM	59.6	2736032.518
253	5/13/2021 15:10	3:10 PM	60	3000000
254	5/13/2021 15:10	3:10 PM	62	4754679.577
255	5/13/2021 15:10	3:10 PM	68.1	19369626.87
256	5/13/2021 15:10	3:10 PM	62.6	5459102.576
257	5/13/2021 15:10	3:10 PM	60.1	3069878.977
258	5/13/2021 15:10	3:10 PM	59.5	2673752.814
259	5/13/2021 15:10	3:10 PM	59.7	2799762.902
260	5/13/2021 15:10	3:10 PM	59.8	2864977.758
261	5/13/2021 15:10	3:10 PM	59.7	2799762.902
262	5/13/2021 15:10	3:10 PM	59.9	2931711.663
263	5/13/2021 15:10	3:10 PM	59.6	2736032.518

264	5/13/2021 15:10	3:10 PM	59.4	2612890.77
265	5/13/2021 15:10	3:10 PM	59.4	2612890.77
266	5/13/2021 15:10	3:10 PM	59.7	2799762.902
267	5/13/2021 15:10	3:10 PM	60.1	3069878.977
268	5/13/2021 15:10	3:10 PM	60.2	3141385.644
269	5/13/2021 15:10	3:10 PM	59.8	2864977.758
270	5/13/2021 15:10	3:10 PM	59.8	2864977.758
271	5/13/2021 15:11	3:11 PM	59.7	2799762.902
272	5/13/2021 15:11	3:11 PM	59.8	2864977.758
273	5/13/2021 15:11	3:11 PM	70.8	36067933.04
274	5/13/2021 15:11	3:11 PM	66.1	12221408.33
275	5/13/2021 15:11	3:11 PM	61.1	3864748.655
276	5/13/2021 15:11	3:11 PM	60.1	3069878.977
277	5/13/2021 15:11	3:11 PM	60.1	3069878.977
278	5/13/2021 15:11	3:11 PM	60.3	3214557.916
279	5/13/2021 15:11	3:11 PM	60.2	3141385.644
280	5/13/2021 15:11	3:11 PM	60.1	3069878.977
281	5/13/2021 15:11	3:11 PM	60.5	3366055.363
282	5/13/2021 15:11	3:11 PM	60.5	3366055.363
283	5/13/2021 15:11	3:11 PM	60.4	3289434.588
284	5/13/2021 15:11	3:11 PM	60.5	3366055.363
285	5/13/2021 15:11	3:11 PM	60.7	3524692.665
286	5/13/2021 15:11	3:11 PM	60.8	3606793.304
287	5/13/2021 15:11	3:11 PM	60.2	3141385.644
288	5/13/2021 15:11	3:11 PM	61.2	3954770.216
289	5/13/2021 15:11	3:11 PM	61.1	3864748.655
290	5/13/2021 15:11	3:11 PM	61.2	3954770.216
291	5/13/2021 15:12	3:12 PM	60.9	3690806.312
292	5/13/2021 15:12	3:12 PM	60.5	3366055.363
293	5/13/2021 15:12	3:12 PM	60.8	3606793.304
294	5/13/2021 15:12	3:12 PM	60.7	3524692.665
295	5/13/2021 15:12	3:12 PM	62.1	4865430.292
296	5/13/2021 15:12	3:12 PM	61.2	3954770.216
297	5/13/2021 15:12	3:12 PM	61.9	4646449.857
298	5/13/2021 15:12	3:12 PM	67.6	17263198.12
299	5/13/2021 15:12	3:12 PM	64	7535659.295
300	5/13/2021 15:12	3:12 PM	61.4	4141152.794

Noise Measurement 3 - Las Virgenes Shopping Center (Housing Site 5) - May 13, 2021



Noise Measurement 3 - Las Virgenes Shopping Center (Housing Site 5)

Data Logger 2

Duration (seconds) 3

Weighting A

Response SLOW

Range 40-100

L05 74.1

L10 72.7

L50 64.2

L90 51.1

L95 49

Lmax 78.4

Time 5/13/2021 15:36

SEL 97.8

Leq **68.3**

No.s	Date Time	Time	dB	Sound Energy
1	5/13/2021 15:31	3:31 PM	63.5	6716163.416
2	5/13/2021 15:31	3:31 PM	71.9	46464498.57
3	5/13/2021 15:31	3:31 PM	64.8	9059855.161
4	5/13/2021 15:31	3:31 PM	59.3	2553414.115
5	5/13/2021 15:31	3:31 PM	54.8	905985.5161
6	5/13/2021 15:32	3:32 PM	57.6	1726319.812
7	5/13/2021 15:32	3:32 PM	64.2	7890803.976
8	5/13/2021 15:32	3:32 PM	62.3	5094730.957
9	5/13/2021 15:32	3:32 PM	66.5	13400507.76
10	5/13/2021 15:32	3:32 PM	73.3	64138862.69
11	5/13/2021 15:32	3:32 PM	72.4	52134024.86
12	5/13/2021 15:32	3:32 PM	65.3	10165324.68
13	5/13/2021 15:32	3:32 PM	59	2382984.704
14	5/13/2021 15:32	3:32 PM	56.3	1279738.556
15	5/13/2021 15:32	3:32 PM	67.5	16870239.76
16	5/13/2021 15:32	3:32 PM	67.7	17665309.66
17	5/13/2021 15:32	3:32 PM	59.1	2438491.548
18	5/13/2021 15:32	3:32 PM	62	4754679.577
19	5/13/2021 15:32	3:32 PM	66.4	13095474.97
20	5/13/2021 15:32	3:32 PM	67.6	17263198.12
21	5/13/2021 15:32	3:32 PM	73	59857869.45
22	5/13/2021 15:32	3:32 PM	65.7	11146056.87
23	5/13/2021 15:32	3:32 PM	63.2	6267888.393
24	5/13/2021 15:32	3:32 PM	62.1	4865430.292
25	5/13/2021 15:32	3:32 PM	63.3	6413886.269
26	5/13/2021 15:33	3:33 PM	57.9	1849785.006
27	5/13/2021 15:33	3:33 PM	51.1	386474.8655
28	5/13/2021 15:33	3:33 PM	48.6	217330.788

29	5/13/2021 15:33	3:33 PM	47.5	168702.3976
30	5/13/2021 15:33	3:33 PM	47.6	172631.9812
31	5/13/2021 15:33	3:33 PM	47.8	180767.8758
32	5/13/2021 15:33	3:33 PM	47.3	161109.5389
33	5/13/2021 15:33	3:33 PM	47.1	153858.4152
34	5/13/2021 15:33	3:33 PM	48.3	202824.8926
35	5/13/2021 15:33	3:33 PM	56.6	1371264.569
36	5/13/2021 15:33	3:33 PM	64.5	8455148.794
37	5/13/2021 15:33	3:33 PM	74.2	78908039.76
38	5/13/2021 15:33	3:33 PM	69.3	25534141.15
39	5/13/2021 15:33	3:33 PM	66.9	14693364.58
40	5/13/2021 15:33	3:33 PM	71	37767762.35
41	5/13/2021 15:33	3:33 PM	67.3	16110953.89
42	5/13/2021 15:33	3:33 PM	63.3	6413886.269
43	5/13/2021 15:33	3:33 PM	57.7	1766530.966
44	5/13/2021 15:33	3:33 PM	53.6	687260.2958
45	5/13/2021 15:33	3:33 PM	52	475467.9577
46	5/13/2021 15:34	3:34 PM	51.2	395477.0216
47	5/13/2021 15:34	3:34 PM	50.5	336605.5363
48	5/13/2021 15:34	3:34 PM	55	948683.2981
49	5/13/2021 15:34	3:34 PM	67.2	15744223.81
50	5/13/2021 15:34	3:34 PM	74	75356592.95
51	5/13/2021 15:34	3:34 PM	74.1	77111873.48
52	5/13/2021 15:34	3:34 PM	72.3	50947309.57
53	5/13/2021 15:34	3:34 PM	70.9	36908063.12
54	5/13/2021 15:34	3:34 PM	71.2	39547702.16
55	5/13/2021 15:34	3:34 PM	69.2	24952913.13
56	5/13/2021 15:34	3:34 PM	60.6	3444460.864
57	5/13/2021 15:34	3:34 PM	55.5	1064440.168
58	5/13/2021 15:34	3:34 PM	50.2	314138.5644
59	5/13/2021 15:34	3:34 PM	50.2	314138.5644
60	5/13/2021 15:34	3:34 PM	57.3	1611095.389
61	5/13/2021 15:34	3:34 PM	64.9	9270886.298
62	5/13/2021 15:34	3:34 PM	72.2	49787607.22
63	5/13/2021 15:34	3:34 PM	72.3	50947309.57
64	5/13/2021 15:34	3:34 PM	70.7	35246926.65
65	5/13/2021 15:34	3:34 PM	65.5	10644401.68
66	5/13/2021 15:35	3:35 PM	67.5	16870239.76
67	5/13/2021 15:35	3:35 PM	68.4	20754929.13
68	5/13/2021 15:35	3:35 PM	61.5	4237612.634
69	5/13/2021 15:35	3:35 PM	64.3	8074604.412
70	5/13/2021 15:35	3:35 PM	66.7	14032054.24
71	5/13/2021 15:35	3:35 PM	61.3	4046888.648
72	5/13/2021 15:35	3:35 PM	76.1	122214083.3
73	5/13/2021 15:35	3:35 PM	67.1	15385841.52
74	5/13/2021 15:35	3:35 PM	59.5	2673752.814
75	5/13/2021 15:35	3:35 PM	62.2	4978760.722

76	5/13/2021 15:35	3:35 PM	63.9	7364126.747
77	5/13/2021 15:35	3:35 PM	57.9	1849785.006
78	5/13/2021 15:35	3:35 PM	64.3	8074604.412
79	5/13/2021 15:35	3:35 PM	68.1	19369626.87
80	5/13/2021 15:35	3:35 PM	66.8	14358902.77
81	5/13/2021 15:35	3:35 PM	63.8	7196498.757
82	5/13/2021 15:35	3:35 PM	73.7	70326864.46
83	5/13/2021 15:35	3:35 PM	70.9	36908063.12
84	5/13/2021 15:35	3:35 PM	69.6	27360325.18
85	5/13/2021 15:35	3:35 PM	64.8	9059855.161
86	5/13/2021 15:36	3:36 PM	58.7	2223930.724
87	5/13/2021 15:36	3:36 PM	56.9	1469336.458
88	5/13/2021 15:36	3:36 PM	72.4	52134024.86
89	5/13/2021 15:36	3:36 PM	66.2	12506081.5
90	5/13/2021 15:36	3:36 PM	60	3000000
91	5/13/2021 15:36	3:36 PM	55.5	1064440.168
92	5/13/2021 15:36	3:36 PM	52.6	545910.2576
93	5/13/2021 15:36	3:36 PM	51.6	433631.9312
94	5/13/2021 15:36	3:36 PM	56.9	1469336.458
95	5/13/2021 15:36	3:36 PM	77.5	168702397.6
96	5/13/2021 15:36	3:36 PM	68.8	22757327.25
97	5/13/2021 15:36	3:36 PM	64	7535659.295
98	5/13/2021 15:36	3:36 PM	62.9	5849533.799
99	5/13/2021 15:36	3:36 PM	55.6	1089234.164
100	5/13/2021 15:36	3:36 PM	53.7	703268.6446
101	5/13/2021 15:36	3:36 PM	63.8	7196498.757
102	5/13/2021 15:36	3:36 PM	69.5	26737528.14
103	5/13/2021 15:36	3:36 PM	64.2	7890803.976
104	5/13/2021 15:36	3:36 PM	66.8	14358902.77
105	5/13/2021 15:36	3:36 PM	66.3	12797385.56
106	5/13/2021 15:37	3:37 PM	71.3	40468886.48
107	5/13/2021 15:37	3:37 PM	71.2	39547702.16
108	5/13/2021 15:37	3:37 PM	74.1	77111873.48
109	5/13/2021 15:37	3:37 PM	74.3	80746044.12
110	5/13/2021 15:37	3:37 PM	69.3	25534141.15
111	5/13/2021 15:37	3:37 PM	60.9	3690806.312
112	5/13/2021 15:37	3:37 PM	55.5	1064440.168
113	5/13/2021 15:37	3:37 PM	51.2	395477.0216
114	5/13/2021 15:37	3:37 PM	54.9	927088.6298
115	5/13/2021 15:37	3:37 PM	55.6	1089234.164
116	5/13/2021 15:37	3:37 PM	52	475467.9577
117	5/13/2021 15:37	3:37 PM	49.8	286497.7758
118	5/13/2021 15:37	3:37 PM	51.5	423761.2634
119	5/13/2021 15:37	3:37 PM	55.9	1167135.435
120	5/13/2021 15:37	3:37 PM	70	30000000
121	5/13/2021 15:37	3:37 PM	74.3	80746044.12
122	5/13/2021 15:37	3:37 PM	76.2	125060815

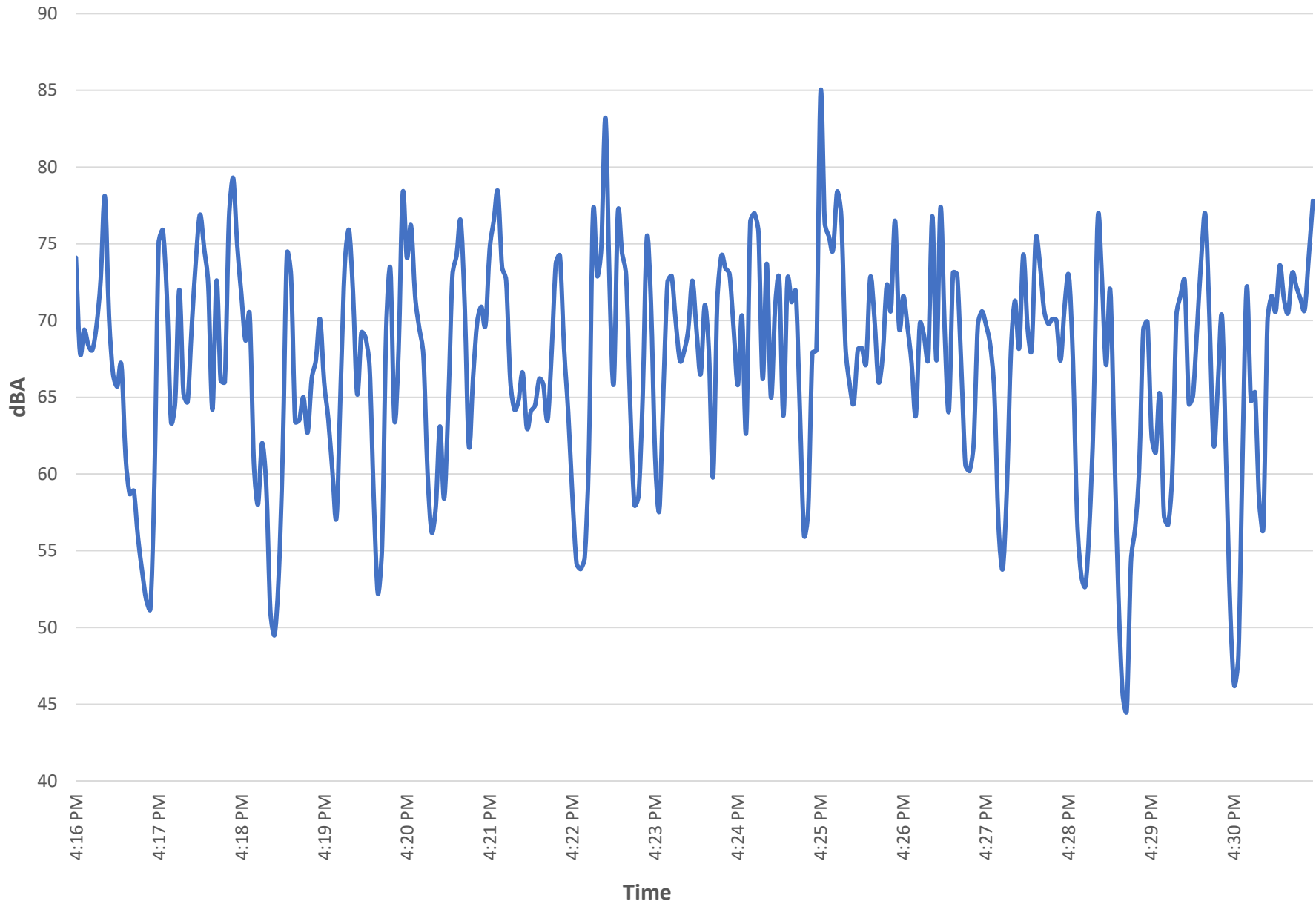
123	5/13/2021 15:37	3:37 PM	72.9	58495337.99
124	5/13/2021 15:37	3:37 PM	70.3	32145579.16
125	5/13/2021 15:37	3:37 PM	65.5	10644401.68
126	5/13/2021 15:38	3:38 PM	65.3	10165324.68
127	5/13/2021 15:38	3:38 PM	63.5	6716163.416
128	5/13/2021 15:38	3:38 PM	66.8	14358902.77
129	5/13/2021 15:38	3:38 PM	69.5	26737528.14
130	5/13/2021 15:38	3:38 PM	68.3	20282489.26
131	5/13/2021 15:38	3:38 PM	62.6	5459102.576
132	5/13/2021 15:38	3:38 PM	57.1	1538584.152
133	5/13/2021 15:38	3:38 PM	54.4	826268.611
134	5/13/2021 15:38	3:38 PM	57.7	1766530.966
135	5/13/2021 15:38	3:38 PM	63.1	6125213.834
136	5/13/2021 15:38	3:38 PM	71.8	45406837.45
137	5/13/2021 15:38	3:38 PM	66.7	14032054.24
138	5/13/2021 15:38	3:38 PM	72.1	48654302.92
139	5/13/2021 15:38	3:38 PM	72.7	55862614.1
140	5/13/2021 15:38	3:38 PM	70.7	35246926.65
141	5/13/2021 15:38	3:38 PM	68.5	21238373.53
142	5/13/2021 15:38	3:38 PM	63.8	7196498.757
143	5/13/2021 15:38	3:38 PM	63.4	6563284.872
144	5/13/2021 15:38	3:38 PM	68.6	21733078.8
145	5/13/2021 15:38	3:38 PM	64	7535659.295
146	5/13/2021 15:39	3:39 PM	55.3	1016532.468
147	5/13/2021 15:39	3:39 PM	55.3	1016532.468
148	5/13/2021 15:39	3:39 PM	75.7	111460568.7
149	5/13/2021 15:39	3:39 PM	71.5	42376126.34
150	5/13/2021 15:39	3:39 PM	65.6	10892341.64
151	5/13/2021 15:39	3:39 PM	73	59857869.45
152	5/13/2021 15:39	3:39 PM	71.8	45406837.45
153	5/13/2021 15:39	3:39 PM	71.4	41411527.94
154	5/13/2021 15:39	3:39 PM	72.3	50947309.57
155	5/13/2021 15:39	3:39 PM	66.9	14693364.58
156	5/13/2021 15:39	3:39 PM	72	47546795.77
157	5/13/2021 15:39	3:39 PM	63.4	6563284.872
158	5/13/2021 15:39	3:39 PM	60.3	3214557.916
159	5/13/2021 15:39	3:39 PM	75.8	114056818.9
160	5/13/2021 15:39	3:39 PM	67.9	18497850.06
161	5/13/2021 15:39	3:39 PM	65.1	9707809.708
162	5/13/2021 15:39	3:39 PM	59	2382984.704
163	5/13/2021 15:39	3:39 PM	58.7	2223930.724
164	5/13/2021 15:39	3:39 PM	62.9	5849533.799
165	5/13/2021 15:39	3:39 PM	73.8	71964987.57
166	5/13/2021 15:40	3:40 PM	68.4	20754929.13
167	5/13/2021 15:40	3:40 PM	73.4	65632848.72
168	5/13/2021 15:40	3:40 PM	75.9	116713543.5
169	5/13/2021 15:40	3:40 PM	70.1	30698789.77

170	5/13/2021 15:40	3:40 PM	64.7	8853627.68
171	5/13/2021 15:40	3:40 PM	72.2	49787607.22
172	5/13/2021 15:40	3:40 PM	70	30000000
173	5/13/2021 15:40	3:40 PM	63.4	6563284.872
174	5/13/2021 15:40	3:40 PM	61.4	4141152.794
175	5/13/2021 15:40	3:40 PM	64.2	7890803.976
176	5/13/2021 15:40	3:40 PM	67	15035617.01
177	5/13/2021 15:40	3:40 PM	62.4	5213402.486
178	5/13/2021 15:40	3:40 PM	65.7	11146056.87
179	5/13/2021 15:40	3:40 PM	64.9	9270886.298
180	5/13/2021 15:40	3:40 PM	64.7	8853627.68
181	5/13/2021 15:40	3:40 PM	57.8	1807678.758
182	5/13/2021 15:40	3:40 PM	73.6	68726029.58
183	5/13/2021 15:40	3:40 PM	66.9	14693364.58
184	5/13/2021 15:40	3:40 PM	59.5	2673752.814
185	5/13/2021 15:40	3:40 PM	57.6	1726319.812
186	5/13/2021 15:41	3:41 PM	57.2	1574422.381
187	5/13/2021 15:41	3:41 PM	53.9	736412.6747
188	5/13/2021 15:41	3:41 PM	50.3	321455.7916
189	5/13/2021 15:41	3:41 PM	49.1	243849.1548
190	5/13/2021 15:41	3:41 PM	48.5	212383.7353
191	5/13/2021 15:41	3:41 PM	49.2	249529.1313
192	5/13/2021 15:41	3:41 PM	49.9	293171.1663
193	5/13/2021 15:41	3:41 PM	59	2382984.704
194	5/13/2021 15:41	3:41 PM	64.2	7890803.976
195	5/13/2021 15:41	3:41 PM	65.2	9933933.644
196	5/13/2021 15:41	3:41 PM	63.6	6872602.958
197	5/13/2021 15:41	3:41 PM	69.5	26737528.14
198	5/13/2021 15:41	3:41 PM	72.5	53348382.3
199	5/13/2021 15:41	3:41 PM	71.1	38647486.55
200	5/13/2021 15:41	3:41 PM	66.5	13400507.76
201	5/13/2021 15:41	3:41 PM	61.5	4237612.634
202	5/13/2021 15:41	3:41 PM	54.2	789080.3976
203	5/13/2021 15:41	3:41 PM	55.4	1040210.551
204	5/13/2021 15:41	3:41 PM	75.1	97078097.08
205	5/13/2021 15:41	3:41 PM	66.2	12506081.5
206	5/13/2021 15:42	3:42 PM	62.8	5716382.154
207	5/13/2021 15:42	3:42 PM	61	3776776.235
208	5/13/2021 15:42	3:42 PM	60.5	3366055.363
209	5/13/2021 15:42	3:42 PM	55.6	1089234.164
210	5/13/2021 15:42	3:42 PM	72.7	55862614.1
211	5/13/2021 15:42	3:42 PM	66.5	13400507.76
212	5/13/2021 15:42	3:42 PM	65.9	11671354.35
213	5/13/2021 15:42	3:42 PM	63	5985786.945
214	5/13/2021 15:42	3:42 PM	72.9	58495337.99
215	5/13/2021 15:42	3:42 PM	74.3	80746044.12
216	5/13/2021 15:42	3:42 PM	73.8	71964987.57

217	5/13/2021 15:42	3:42 PM	65.1	9707809.708
218	5/13/2021 15:42	3:42 PM	59.1	2438491.548
219	5/13/2021 15:42	3:42 PM	51.6	433631.9312
220	5/13/2021 15:42	3:42 PM	48.6	217330.788
221	5/13/2021 15:42	3:42 PM	49.3	255341.4115
222	5/13/2021 15:42	3:42 PM	49.3	255341.4115
223	5/13/2021 15:42	3:42 PM	57.5	1687023.976
224	5/13/2021 15:42	3:42 PM	66.7	14032054.24
225	5/13/2021 15:42	3:42 PM	66	11943215.12
226	5/13/2021 15:43	3:43 PM	57.8	1807678.758
227	5/13/2021 15:43	3:43 PM	58.3	2028248.926
228	5/13/2021 15:43	3:43 PM	63.3	6413886.269
229	5/13/2021 15:43	3:43 PM	56.4	1309547.497
230	5/13/2021 15:43	3:43 PM	49.9	293171.1663
231	5/13/2021 15:43	3:43 PM	52.4	521340.2486
232	5/13/2021 15:43	3:43 PM	48.2	198208.0344
233	5/13/2021 15:43	3:43 PM	46.6	137126.4569
234	5/13/2021 15:43	3:43 PM	49.5	267375.2814
235	5/13/2021 15:43	3:43 PM	62	4754679.577
236	5/13/2021 15:43	3:43 PM	74	75356592.95
237	5/13/2021 15:43	3:43 PM	74.8	90598551.61
238	5/13/2021 15:43	3:43 PM	71.7	44373251.65
239	5/13/2021 15:43	3:43 PM	70.2	31413856.44
240	5/13/2021 15:43	3:43 PM	72.7	55862614.1
241	5/13/2021 15:43	3:43 PM	72.2	49787607.22
242	5/13/2021 15:43	3:43 PM	71.6	43363193.12
243	5/13/2021 15:43	3:43 PM	73.4	65632848.72
244	5/13/2021 15:43	3:43 PM	73.3	64138862.69
245	5/13/2021 15:43	3:43 PM	64.2	7890803.976
246	5/13/2021 15:44	3:44 PM	57	1503561.701
247	5/13/2021 15:44	3:44 PM	53.4	656328.4872
248	5/13/2021 15:44	3:44 PM	51.6	433631.9312
249	5/13/2021 15:44	3:44 PM	62.5	5334838.23
250	5/13/2021 15:44	3:44 PM	71.8	45406837.45
251	5/13/2021 15:44	3:44 PM	65	9486832.981
252	5/13/2021 15:44	3:44 PM	61.1	3864748.655
253	5/13/2021 15:44	3:44 PM	53	598578.6945
254	5/13/2021 15:44	3:44 PM	51.1	386474.8655
255	5/13/2021 15:44	3:44 PM	57.3	1611095.389
256	5/13/2021 15:44	3:44 PM	64.1	7711187.348
257	5/13/2021 15:44	3:44 PM	67.7	17665309.66
258	5/13/2021 15:44	3:44 PM	65.8	11405681.89
259	5/13/2021 15:44	3:44 PM	72.3	50947309.57
260	5/13/2021 15:44	3:44 PM	73.5	67161634.16
261	5/13/2021 15:44	3:44 PM	68.4	20754929.13
262	5/13/2021 15:44	3:44 PM	72.1	48654302.92
263	5/13/2021 15:44	3:44 PM	76.3	127973855.6

264	5/13/2021 15:44	3:44 PM	70	30000000
265	5/13/2021 15:44	3:44 PM	70.9	36908063.12
266	5/13/2021 15:45	3:45 PM	74.9	92708862.98
267	5/13/2021 15:45	3:45 PM	74.2	78908039.76
268	5/13/2021 15:45	3:45 PM	69.6	27360325.18
269	5/13/2021 15:45	3:45 PM	62	4754679.577
270	5/13/2021 15:45	3:45 PM	54.4	826268.611
271	5/13/2021 15:45	3:45 PM	52.9	584953.3799
272	5/13/2021 15:45	3:45 PM	70.6	34444608.64
273	5/13/2021 15:45	3:45 PM	66.5	13400507.76
274	5/13/2021 15:45	3:45 PM	70.2	31413856.44
275	5/13/2021 15:45	3:45 PM	71.9	46464498.57
276	5/13/2021 15:45	3:45 PM	64.6	8652094.509
277	5/13/2021 15:45	3:45 PM	57.6	1726319.812
278	5/13/2021 15:45	3:45 PM	58.5	2123837.353
279	5/13/2021 15:45	3:45 PM	61.4	4141152.794
280	5/13/2021 15:45	3:45 PM	55.6	1089234.164
281	5/13/2021 15:45	3:45 PM	50.6	344446.0864
282	5/13/2021 15:45	3:45 PM	49	238298.4704
283	5/13/2021 15:45	3:45 PM	51.4	414115.2794
284	5/13/2021 15:45	3:45 PM	55	948683.2981
285	5/13/2021 15:45	3:45 PM	61.9	4646449.857
286	5/13/2021 15:46	3:46 PM	70	30000000
287	5/13/2021 15:46	3:46 PM	67.8	18076787.58
288	5/13/2021 15:46	3:46 PM	67.3	16110953.89
289	5/13/2021 15:46	3:46 PM	61.5	4237612.634
290	5/13/2021 15:46	3:46 PM	60.1	3069878.977
291	5/13/2021 15:46	3:46 PM	72.2	49787607.22
292	5/13/2021 15:46	3:46 PM	66	11943215.12
293	5/13/2021 15:46	3:46 PM	64.6	8652094.509
294	5/13/2021 15:46	3:46 PM	60.7	3524692.665
295	5/13/2021 15:46	3:46 PM	53.5	671616.3416
296	5/13/2021 15:46	3:46 PM	53.1	612521.3834
297	5/13/2021 15:46	3:46 PM	56.4	1309547.497
298	5/13/2021 15:46	3:46 PM	70.9	36908063.12
299	5/13/2021 15:46	3:46 PM	63.8	7196498.757
300	5/13/2021 15:46	3:46 PM	53.1	612521.3834

Noise Measurement 4 - Avalon Apartments (Housing Site 8) - May 13, 2021



Noise Measurement 4 - Avalon Apartments (Housing Site 8)

Data Logger 2

Duration (seconds)		3
Weighting	A	
Response	SLOW	
Range	40-100	
L05		76.6
L10		75.2
L50		68.1
L90		56.5
L95		53
Lmax		85
Time	5/13/2021 16:25	
SEL		99.5
Leq		71.4

No.s	Date Time	Time	dB	Sound Energy
1	5/13/2021 16:16	4:16 PM	74.1	77111873.48
2	5/13/2021 16:16	4:16 PM	67.9	18497850.06
3	5/13/2021 16:16	4:16 PM	69.4	26128907.7
4	5/13/2021 16:16	4:16 PM	68.4	20754929.13
5	5/13/2021 16:16	4:16 PM	68.1	19369626.87
6	5/13/2021 16:16	4:16 PM	69.7	27997629.02
7	5/13/2021 16:16	4:16 PM	72.7	55862614.1
8	5/13/2021 16:16	4:16 PM	78.1	193696268.7
9	5/13/2021 16:16	4:16 PM	70.3	32145579.16
10	5/13/2021 16:16	4:16 PM	66.5	13400507.76
11	5/13/2021 16:17	4:17 PM	65.7	11146056.87
12	5/13/2021 16:17	4:17 PM	67.1	15385841.52
13	5/13/2021 16:17	4:17 PM	61.2	3954770.216
14	5/13/2021 16:17	4:17 PM	58.7	2223930.724
15	5/13/2021 16:17	4:17 PM	58.9	2328741.35
16	5/13/2021 16:17	4:17 PM	55.9	1167135.435
17	5/13/2021 16:17	4:17 PM	53.7	703268.6446
18	5/13/2021 16:17	4:17 PM	51.8	454068.3745
19	5/13/2021 16:17	4:17 PM	51.2	395477.0216
20	5/13/2021 16:17	4:17 PM	59.7	2799762.902
21	5/13/2021 16:17	4:17 PM	75	94868329.81
22	5/13/2021 16:17	4:17 PM	75.9	116713543.5
23	5/13/2021 16:17	4:17 PM	71.5	42376126.34
24	5/13/2021 16:17	4:17 PM	63.4	6563284.872
25	5/13/2021 16:17	4:17 PM	64.7	8853627.68
26	5/13/2021 16:17	4:17 PM	72	47546795.77
27	5/13/2021 16:17	4:17 PM	65.3	10165324.68
28	5/13/2021 16:17	4:17 PM	64.7	8853627.68

29	5/13/2021 16:17	4:17 PM	69.6	27360325.18
30	5/13/2021 16:17	4:17 PM	73.9	73641267.47
31	5/13/2021 16:18	4:18 PM	76.9	146933645.8
32	5/13/2021 16:18	4:18 PM	74.7	88536276.8
33	5/13/2021 16:18	4:18 PM	72.3	50947309.57
34	5/13/2021 16:18	4:18 PM	64.2	7890803.976
35	5/13/2021 16:18	4:18 PM	72.6	54591025.76
36	5/13/2021 16:18	4:18 PM	66.1	12221408.33
37	5/13/2021 16:18	4:18 PM	66	11943215.12
38	5/13/2021 16:18	4:18 PM	76.6	137126456.9
39	5/13/2021 16:18	4:18 PM	79.3	255341411.5
40	5/13/2021 16:18	4:18 PM	74.9	92708862.98
41	5/13/2021 16:18	4:18 PM	71.7	44373251.65
42	5/13/2021 16:18	4:18 PM	68.7	22239307.24
43	5/13/2021 16:18	4:18 PM	70.4	32894345.88
44	5/13/2021 16:18	4:18 PM	60.8	3606793.304
45	5/13/2021 16:18	4:18 PM	58	1892872.033
46	5/13/2021 16:18	4:18 PM	62	4754679.577
47	5/13/2021 16:18	4:18 PM	59.3	2553414.115
48	5/13/2021 16:18	4:18 PM	51.1	386474.8655
49	5/13/2021 16:18	4:18 PM	49.5	267375.2814
50	5/13/2021 16:18	4:18 PM	53.2	626788.8393
51	5/13/2021 16:19	4:19 PM	61.5	4237612.634
52	5/13/2021 16:19	4:19 PM	74.3	80746044.12
53	5/13/2021 16:19	4:19 PM	72.9	58495337.99
54	5/13/2021 16:19	4:19 PM	63.4	6563284.872
55	5/13/2021 16:19	4:19 PM	63.5	6716163.416
56	5/13/2021 16:19	4:19 PM	65	9486832.981
57	5/13/2021 16:19	4:19 PM	62.7	5586261.41
58	5/13/2021 16:19	4:19 PM	66.2	12506081.5
59	5/13/2021 16:19	4:19 PM	67.4	16486226.22
60	5/13/2021 16:19	4:19 PM	70.1	30698789.77
61	5/13/2021 16:19	4:19 PM	66	11943215.12
62	5/13/2021 16:19	4:19 PM	63.6	6872602.958
63	5/13/2021 16:19	4:19 PM	60.2	3141385.644
64	5/13/2021 16:19	4:19 PM	57.2	1574422.381
65	5/13/2021 16:19	4:19 PM	65.7	11146056.87
66	5/13/2021 16:19	4:19 PM	73.7	70326864.46
67	5/13/2021 16:19	4:19 PM	75.9	116713543.5
68	5/13/2021 16:19	4:19 PM	71.7	44373251.65
69	5/13/2021 16:19	4:19 PM	65.2	9933933.644
70	5/13/2021 16:19	4:19 PM	69.2	24952913.13
71	5/13/2021 16:20	4:20 PM	68.9	23287413.5
72	5/13/2021 16:20	4:20 PM	66.9	14693364.58
73	5/13/2021 16:20	4:20 PM	58.4	2075492.913
74	5/13/2021 16:20	4:20 PM	52.2	497876.0722
75	5/13/2021 16:20	4:20 PM	55.3	1016532.468

76	5/13/2021 16:20	4:20 PM	69.4	26128907.7
77	5/13/2021 16:20	4:20 PM	73.4	65632848.72
78	5/13/2021 16:20	4:20 PM	63.5	6716163.416
79	5/13/2021 16:20	4:20 PM	68.1	19369626.87
80	5/13/2021 16:20	4:20 PM	78.3	202824892.6
81	5/13/2021 16:20	4:20 PM	74.1	77111873.48
82	5/13/2021 16:20	4:20 PM	76.2	125060815
83	5/13/2021 16:20	4:20 PM	71.6	43363193.12
84	5/13/2021 16:20	4:20 PM	69.5	26737528.14
85	5/13/2021 16:20	4:20 PM	67.7	17665309.66
86	5/13/2021 16:20	4:20 PM	60.1	3069878.977
87	5/13/2021 16:20	4:20 PM	56.2	1250608.15
88	5/13/2021 16:20	4:20 PM	57.9	1849785.006
89	5/13/2021 16:20	4:20 PM	63.1	6125213.834
90	5/13/2021 16:20	4:20 PM	58.4	2075492.913
91	5/13/2021 16:21	4:21 PM	64.4	8262686.11
92	5/13/2021 16:21	4:21 PM	72.9	58495337.99
93	5/13/2021 16:21	4:21 PM	74.2	78908039.76
94	5/13/2021 16:21	4:21 PM	76.5	134005077.6
95	5/13/2021 16:21	4:21 PM	70.8	36067933.04
96	5/13/2021 16:21	4:21 PM	61.8	4540683.745
97	5/13/2021 16:21	4:21 PM	66.3	12797385.56
98	5/13/2021 16:21	4:21 PM	69.9	29317116.63
99	5/13/2021 16:21	4:21 PM	70.9	36908063.12
100	5/13/2021 16:21	4:21 PM	69.7	27997629.02
101	5/13/2021 16:21	4:21 PM	74.6	86520945.09
102	5/13/2021 16:21	4:21 PM	76.5	134005077.6
103	5/13/2021 16:21	4:21 PM	78.4	207549291.3
104	5/13/2021 16:21	4:21 PM	73.5	67161634.16
105	5/13/2021 16:21	4:21 PM	72.6	54591025.76
106	5/13/2021 16:21	4:21 PM	66.1	12221408.33
107	5/13/2021 16:21	4:21 PM	64.2	7890803.976
108	5/13/2021 16:21	4:21 PM	64.8	9059855.161
109	5/13/2021 16:21	4:21 PM	66.6	13712645.69
110	5/13/2021 16:21	4:21 PM	63	5985786.945
111	5/13/2021 16:22	4:22 PM	64.1	7711187.348
112	5/13/2021 16:22	4:22 PM	64.5	8455148.794
113	5/13/2021 16:22	4:22 PM	66.2	12506081.5
114	5/13/2021 16:22	4:22 PM	65.8	11405681.89
115	5/13/2021 16:22	4:22 PM	63.5	6716163.416
116	5/13/2021 16:22	4:22 PM	68	18928720.33
117	5/13/2021 16:22	4:22 PM	73.7	70326864.46
118	5/13/2021 16:22	4:22 PM	74.2	78908039.76
119	5/13/2021 16:22	4:22 PM	68.2	19820803.44
120	5/13/2021 16:22	4:22 PM	64	7535659.295
121	5/13/2021 16:22	4:22 PM	58.6	2173307.88
122	5/13/2021 16:22	4:22 PM	54.2	789080.3976

123	5/13/2021 16:22	4:22 PM	53.8	719649.8757
124	5/13/2021 16:22	4:22 PM	54.6	865209.4509
125	5/13/2021 16:22	4:22 PM	61.4	4141152.794
126	5/13/2021 16:22	4:22 PM	77	150356170.1
127	5/13/2021 16:22	4:22 PM	72.9	58495337.99
128	5/13/2021 16:22	4:22 PM	74.8	90598551.61
129	5/13/2021 16:22	4:22 PM	83.2	626788839.3
130	5/13/2021 16:22	4:22 PM	72.3	50947309.57
131	5/13/2021 16:23	4:23 PM	65.9	11671354.35
132	5/13/2021 16:23	4:23 PM	77	150356170.1
133	5/13/2021 16:23	4:23 PM	74.4	82626861.1
134	5/13/2021 16:23	4:23 PM	72.9	58495337.99
135	5/13/2021 16:23	4:23 PM	64.3	8074604.412
136	5/13/2021 16:23	4:23 PM	58	1892872.033
137	5/13/2021 16:23	4:23 PM	58.6	2173307.88
138	5/13/2021 16:23	4:23 PM	65.1	9707809.708
139	5/13/2021 16:23	4:23 PM	75.4	104021055.1
140	5/13/2021 16:23	4:23 PM	71.1	38647486.55
141	5/13/2021 16:23	4:23 PM	61.2	3954770.216
142	5/13/2021 16:23	4:23 PM	57.6	1726319.812
143	5/13/2021 16:23	4:23 PM	65.4	10402105.51
144	5/13/2021 16:23	4:23 PM	72.5	53348382.3
145	5/13/2021 16:23	4:23 PM	72.9	58495337.99
146	5/13/2021 16:23	4:23 PM	69.9	29317116.63
147	5/13/2021 16:23	4:23 PM	67.4	16486226.22
148	5/13/2021 16:23	4:23 PM	68	18928720.33
149	5/13/2021 16:23	4:23 PM	69.4	26128907.7
150	5/13/2021 16:23	4:23 PM	72.6	54591025.76
151	5/13/2021 16:24	4:24 PM	69.4	26128907.7
152	5/13/2021 16:24	4:24 PM	66.5	13400507.76
153	5/13/2021 16:24	4:24 PM	71	37767762.35
154	5/13/2021 16:24	4:24 PM	68	18928720.33
155	5/13/2021 16:24	4:24 PM	59.8	2864977.758
156	5/13/2021 16:24	4:24 PM	71.1	38647486.55
157	5/13/2021 16:24	4:24 PM	74.2	78908039.76
158	5/13/2021 16:24	4:24 PM	73.4	65632848.72
159	5/13/2021 16:24	4:24 PM	73	59857869.45
160	5/13/2021 16:24	4:24 PM	69.4	26128907.7
161	5/13/2021 16:24	4:24 PM	65.8	11405681.89
162	5/13/2021 16:24	4:24 PM	70.3	32145579.16
163	5/13/2021 16:24	4:24 PM	62.7	5586261.41
164	5/13/2021 16:24	4:24 PM	76.4	130954749.7
165	5/13/2021 16:24	4:24 PM	77	150356170.1
166	5/13/2021 16:24	4:24 PM	75.7	111460568.7
167	5/13/2021 16:24	4:24 PM	66.2	12506081.5
168	5/13/2021 16:24	4:24 PM	73.7	70326864.46
169	5/13/2021 16:24	4:24 PM	65	9486832.981

170	5/13/2021 16:24	4:24 PM	70.8	36067933.04
171	5/13/2021 16:25	4:25 PM	72.7	55862614.1
172	5/13/2021 16:25	4:25 PM	63.8	7196498.757
173	5/13/2021 16:25	4:25 PM	72.7	55862614.1
174	5/13/2021 16:25	4:25 PM	71.2	39547702.16
175	5/13/2021 16:25	4:25 PM	71.9	46464498.57
176	5/13/2021 16:25	4:25 PM	64.1	7711187.348
177	5/13/2021 16:25	4:25 PM	56	1194321.512
178	5/13/2021 16:25	4:25 PM	57.6	1726319.812
179	5/13/2021 16:25	4:25 PM	67.9	18497850.06
180	5/13/2021 16:25	4:25 PM	68.1	19369626.87
181	5/13/2021 16:25	4:25 PM	84.9	927088629.8
182	5/13/2021 16:25	4:25 PM	76.4	130954749.7
183	5/13/2021 16:25	4:25 PM	75.5	106444016.8
184	5/13/2021 16:25	4:25 PM	74.6	86520945.09
185	5/13/2021 16:25	4:25 PM	78.4	207549291.3
186	5/13/2021 16:25	4:25 PM	76.8	143589027.7
187	5/13/2021 16:25	4:25 PM	68.4	20754929.13
188	5/13/2021 16:25	4:25 PM	65.9	11671354.35
189	5/13/2021 16:25	4:25 PM	64.6	8652094.509
190	5/13/2021 16:25	4:25 PM	68.1	19369626.87
191	5/13/2021 16:26	4:26 PM	68.2	19820803.44
192	5/13/2021 16:26	4:26 PM	67.2	15744223.81
193	5/13/2021 16:26	4:26 PM	72.8	57163821.54
194	5/13/2021 16:26	4:26 PM	70.2	31413856.44
195	5/13/2021 16:26	4:26 PM	66	11943215.12
196	5/13/2021 16:26	4:26 PM	67.7	17665309.66
197	5/13/2021 16:26	4:26 PM	72.3	50947309.57
198	5/13/2021 16:26	4:26 PM	70.7	35246926.65
199	5/13/2021 16:26	4:26 PM	76.5	134005077.6
200	5/13/2021 16:26	4:26 PM	69.5	26737528.14
201	5/13/2021 16:26	4:26 PM	71.6	43363193.12
202	5/13/2021 16:26	4:26 PM	69.6	27360325.18
203	5/13/2021 16:26	4:26 PM	67.2	15744223.81
204	5/13/2021 16:26	4:26 PM	63.8	7196498.757
205	5/13/2021 16:26	4:26 PM	69.8	28649777.58
206	5/13/2021 16:26	4:26 PM	69	23829847.04
207	5/13/2021 16:26	4:26 PM	67.5	16870239.76
208	5/13/2021 16:26	4:26 PM	76.8	143589027.7
209	5/13/2021 16:26	4:26 PM	67.4	16486226.22
210	5/13/2021 16:26	4:26 PM	77.4	164862262.2
211	5/13/2021 16:27	4:27 PM	69.3	25534141.15
212	5/13/2021 16:27	4:27 PM	64.1	7711187.348
213	5/13/2021 16:27	4:27 PM	73.1	61252138.34
214	5/13/2021 16:27	4:27 PM	73	59857869.45
215	5/13/2021 16:27	4:27 PM	67	15035617.01
216	5/13/2021 16:27	4:27 PM	60.6	3444460.864

217	5/13/2021 16:27	4:27 PM	60.2	3141385.644
218	5/13/2021 16:27	4:27 PM	62	4754679.577
219	5/13/2021 16:27	4:27 PM	69.7	27997629.02
220	5/13/2021 16:27	4:27 PM	70.6	34444608.64
221	5/13/2021 16:27	4:27 PM	69.7	27997629.02
222	5/13/2021 16:27	4:27 PM	68.4	20754929.13
223	5/13/2021 16:27	4:27 PM	65.3	10165324.68
224	5/13/2021 16:27	4:27 PM	56.7	1403205.424
225	5/13/2021 16:27	4:27 PM	53.8	719649.8757
226	5/13/2021 16:27	4:27 PM	58.9	2328741.35
227	5/13/2021 16:27	4:27 PM	68	18928720.33
228	5/13/2021 16:27	4:27 PM	71.3	40468886.48
229	5/13/2021 16:27	4:27 PM	68.2	19820803.44
230	5/13/2021 16:27	4:27 PM	74.3	80746044.12
231	5/13/2021 16:28	4:28 PM	69.6	27360325.18
232	5/13/2021 16:28	4:28 PM	68.1	19369626.87
233	5/13/2021 16:28	4:28 PM	75.3	101653246.8
234	5/13/2021 16:28	4:28 PM	73.7	70326864.46
235	5/13/2021 16:28	4:28 PM	70.7	35246926.65
236	5/13/2021 16:28	4:28 PM	69.8	28649777.58
237	5/13/2021 16:28	4:28 PM	70.1	30698789.77
238	5/13/2021 16:28	4:28 PM	70	30000000
239	5/13/2021 16:28	4:28 PM	67.4	16486226.22
240	5/13/2021 16:28	4:28 PM	71	37767762.35
241	5/13/2021 16:28	4:28 PM	72.9	58495337.99
242	5/13/2021 16:28	4:28 PM	67.3	16110953.89
243	5/13/2021 16:28	4:28 PM	57.2	1574422.381
244	5/13/2021 16:28	4:28 PM	53.4	656328.4872
245	5/13/2021 16:28	4:28 PM	52.7	558626.141
246	5/13/2021 16:28	4:28 PM	56.8	1435890.277
247	5/13/2021 16:28	4:28 PM	64.1	7711187.348
248	5/13/2021 16:28	4:28 PM	76.7	140320542.4
249	5/13/2021 16:28	4:28 PM	72.7	55862614.1
250	5/13/2021 16:28	4:28 PM	67.1	15385841.52
251	5/13/2021 16:29	4:29 PM	72	47546795.77
252	5/13/2021 16:29	4:29 PM	61.9	4646449.857
253	5/13/2021 16:29	4:29 PM	52	475467.9577
254	5/13/2021 16:29	4:29 PM	45.7	111460.5687
255	5/13/2021 16:29	4:29 PM	44.6	86520.94509
256	5/13/2021 16:29	4:29 PM	54.2	789080.3976
257	5/13/2021 16:29	4:29 PM	56.4	1309547.497
258	5/13/2021 16:29	4:29 PM	60.4	3289434.588
259	5/13/2021 16:29	4:29 PM	69.4	26128907.7
260	5/13/2021 16:29	4:29 PM	69.9	29317116.63
261	5/13/2021 16:29	4:29 PM	62.5	5334838.23
262	5/13/2021 16:29	4:29 PM	61.4	4141152.794
263	5/13/2021 16:29	4:29 PM	65.2	9933933.644

264	5/13/2021 16:29	4:29 PM	57.3	1611095.389
265	5/13/2021 16:29	4:29 PM	56.7	1403205.424
266	5/13/2021 16:29	4:29 PM	60	3000000
267	5/13/2021 16:29	4:29 PM	70.3	32145579.16
268	5/13/2021 16:29	4:29 PM	71.6	43363193.12
269	5/13/2021 16:29	4:29 PM	72.6	54591025.76
270	5/13/2021 16:29	4:29 PM	64.6	8652094.509
271	5/13/2021 16:30	4:30 PM	65.1	9707809.708
272	5/13/2021 16:30	4:30 PM	69.5	26737528.14
273	5/13/2021 16:30	4:30 PM	74	75356592.95
274	5/13/2021 16:30	4:30 PM	76.9	146933645.8
275	5/13/2021 16:30	4:30 PM	70.1	30698789.77
276	5/13/2021 16:30	4:30 PM	61.9	4646449.857
277	5/13/2021 16:30	4:30 PM	65.7	11146056.87
278	5/13/2021 16:30	4:30 PM	70.3	32145579.16
279	5/13/2021 16:30	4:30 PM	61	3776776.235
280	5/13/2021 16:30	4:30 PM	51.2	395477.0216
281	5/13/2021 16:30	4:30 PM	46.2	125060.815
282	5/13/2021 16:30	4:30 PM	48.2	198208.0344
283	5/13/2021 16:30	4:30 PM	61.3	4046888.648
284	5/13/2021 16:30	4:30 PM	72.2	49787607.22
285	5/13/2021 16:30	4:30 PM	64.8	9059855.161
286	5/13/2021 16:30	4:30 PM	65.3	10165324.68
287	5/13/2021 16:30	4:30 PM	58.3	2028248.926
288	5/13/2021 16:30	4:30 PM	56.5	1340050.776
289	5/13/2021 16:30	4:30 PM	69.9	29317116.63
290	5/13/2021 16:30	4:30 PM	71.6	43363193.12
291	5/13/2021 16:31	4:31 PM	70.6	34444608.64
292	5/13/2021 16:31	4:31 PM	73.6	68726029.58
293	5/13/2021 16:31	4:31 PM	71.4	41411527.94
294	5/13/2021 16:31	4:31 PM	70.5	33660553.63
295	5/13/2021 16:31	4:31 PM	73.1	61252138.34
296	5/13/2021 16:31	4:31 PM	72.2	49787607.22
297	5/13/2021 16:31	4:31 PM	71.4	41411527.94
298	5/13/2021 16:31	4:31 PM	70.7	35246926.65
299	5/13/2021 16:31	4:31 PM	74.2	78908039.76
300	5/13/2021 16:31	4:31 PM	77.8	180767875.8

Groundborne Noise and Vibration Modeling

Notes

The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure.

Equipment	Reference Level Inputs			
	PPV _{ref} (in/sec)	Lv _{ref} (VdB)	RMS _{ref} (in/sec)	Reference Distance
Vibratory Roller	0.21	94	0.050	25
Large bulldozer	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

Equipment	Vibration Level at Receiver			
	Distance (feet)	PPV _x (in/sec)	Lv _x (VdB)	RMS _x (in/sec)
Vibratory Roller	50	0.0980	87	0.023
Large bulldozer	50	0.0415	80	0.010
Loaded trucks	50	0.0355	76	0.007
Jack hammer	50	0.0163	72	0.004
Small bulldozer	50	0.0014	51	0.000

Source

California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-20-365.01.01). April. <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf>.

Last Updated: 10/19/2020

Appendix E

Wildfire Risk Assessment

Appendix E

Wildfire Risk Assessment

Wildfire Risk Assessment for the City of Calabasas

prepared by TSS Consultants

Introduction

Goals and Objectives of Preparing the Wildfire Risk Assessment

The principal objective of conducting this wildfire risk assessment (WRA), and generating a subsequent report, is to provide the City of Calabasas (City) with an understanding of the specific elements and mechanisms that comprise the risks posed by wildfire. Achieving this objective contributes to meeting the following goals:

- Affording, through the taking of municipal actions, an elevated measure of protection for the health, safety, and property of the City’s inhabitants appropriate to the level of this risk, and
- Becoming a better-informed partner when cooperating with other entities engaged in reducing wildfire risk in the region.

This assessment will address **conditions**, and associated levels of risk from wildfire, for twelve individual properties located around the City. A map showing these locations is presented in Figure 1 below. These locations are also addressed as planned redevelopment sites in the draft 2021 – 2029 Housing Element Update¹ that is currently in process.

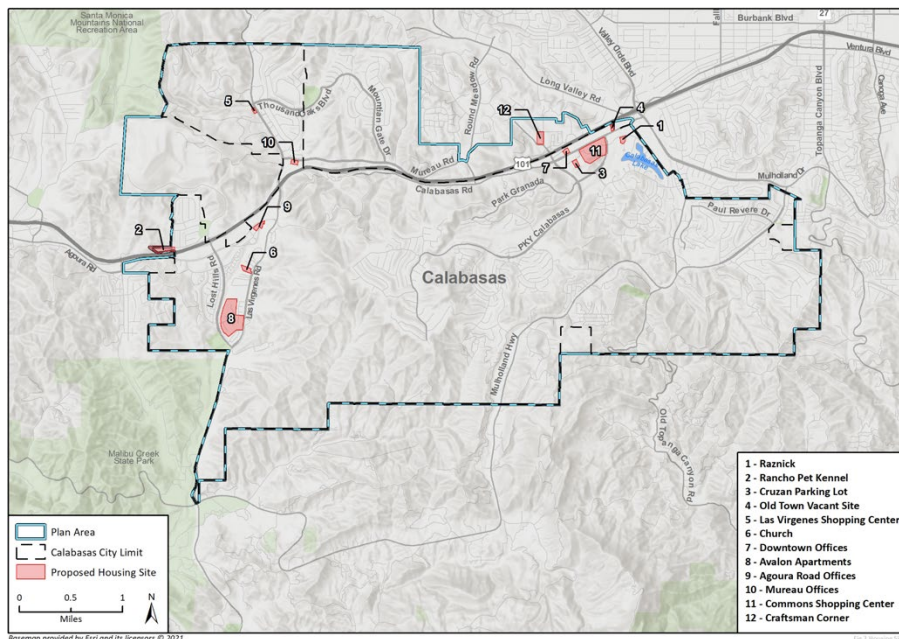


Figure 1. A map of the boundaries of the City of Calabasas showing the twelve project sites that were studied as part of this assessment and are designated for redevelopment activities in the draft 2021-2029 Housing Element update.

Table 1, below, presents attributes and specifications for the twelve project sites addressed in this wildfire hazard risk (WHR) assessment. In the left-hand portion of the table is a description of the current situation and in the right-hand portion specification regarding the nature and intensity of the redevelopment being planned.

¹ City of Calabasas, Housing Element Update. July, 2021

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Table 1. City of Calabasas Redevelopment Project Sites

Current Development Site Parameters				Maximum Expected Development	
Site ID	Site Name	Surface Area (ft ²)	Current Land Uses	Potential Dwelling Units	Potential Commercial Development (ft ²)
1	Raznick Offices	84,071	Professional Offices, Parking Lot, & Landscaping	42	2,100
2	Rancho Pet Kennel	297,950	Private Residences, Pet Kennels	60	N/A
3	Cruzan Parking Lot	85,378	Parking area	88	12,672
4	Old Town Vacant Lot	41,818	Large animal pens	43	6,192
5	Las Virgenes Shopping Center	39,204	Retail businesses & parking area	41	5,904
6	Church in the Canyons	107,593	Religious facility	111	N/A
7	Downtown Offices	58,370	Professional Offices, parking area	60	8,640
8	Avalon Apartments	1,350,360	Multi-family residences, parking areas	142	N/A
9	Agoura Road Offices	120,661	Professional Offices, parking area	125	18,000
10	Mureau Offices	69,260	Professional Offices, parking area	64	10,368
11	Commons Shopping Center	1,088,564	Retail businesses & parking area	201	44,393
12	Craftsman Corner	427,324	Professional offices, parking area, & tree services enterprise	236	40,584
Totals		3,770,553		1,213	148,853

The general steps that will be taken in the course of completing this assessment are:

1. Through a detailed analysis of the conditions specific to each of the twelve project sites identify:
 - a. A comparable index value for the WHR each project site, and,
 - b. Those conditions that had an observable influence on the WHR level for that project site
2. Conduct an analysis of each condition identified in Task 1b, above, with the objective being to identify the specific manner in which the condition influenced the WHR rating outcome;
3. Project the causal aspects of each condition's influence onto the redevelopment specifications for each project site and derive new WHR ratings;
4. Conduct an analysis of the causal mechanisms in order to determine if changes can be made to the mechanisms that can result in lowering WR rating values. For example, it is generally accepted that blue gum (*Eucalyptus globulus*) has a relatively high flammability rating due to the oils in its leaves and stems and bark shedding characteristics. Yet, throughout the City blue gum has been planted as part of the landscape design. One very basic mechanism that influences WHR rating level is language in regulatory code and if such codes in existence do not have specific language forbidding the use of blue

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gum as a landscaping component then a basic beneficial (from the standpoint of lowering WHR) change in the mechanism would be to codify such language, and;

5. Prepare a list of changes in the set of mechanisms influencing WHR levels that would be reasonable to implement.

General Setting for this Assessment

Incorporated in April, 1991 the City occupies 13.3 square miles, and, in July of 2019, the US Census Bureau estimated the population to be 26,116. A portion of the City's northern limit, and the commercial core, lies along 5.1 miles of the Ventura Freeway (State Route 101). The principal land uses characterizing the City include single family residential, multiple family residential, commercial, and open space (primarily under state and local jurisdictions). Elevations run from approximately 500 feet above mean sea level (AMSL) in the Ventura Freeway (US Hwy 101) corridor to approximately 2,800 feet AMSL on the southern limits of the City. The climate can be roughly described as being in between two classically described climates: hot and cold semi-arid.

The northwestern, western, southwestern, southern, southeastern, and eastern limits of the City all border on some form of open space jurisdiction. These open space/wildlands extend for no less than 5 miles and have been, historically, the origin of a series of wildfires that have impacted the City².

Regulatory Setting

Calabasas is an incorporated entity that offers basic, but not all, municipal services. The City does not offer emergency fire or medical response services. These services are provided by Los Angeles County Fire Department, and their specialty subcontractors, under contract to the City. CAL FIRE does not provide initial response as the City is located in a Local Area Responsibility Area but, if cooperative agreement provisions need to be put in place due to a prolonged wildfire incident, services can be provided. Similarly, federal resources would not be made available for initial wildfire response; only in the event of a prolonged incident. Law enforcement services have been contracted to the Los Angeles County Sheriff's Office. With respect to wildfire issues within a planning context, project design review services are provided by the Los Angeles County Planning Department, Los Angeles County Fire Department, and CAL FIRE.

Wildfire Behavior Basics

Wildfire has three basic elements germane to this study, 1) how and where its ignition occurred, 2) how and why it moves across a landscape from its point of origin, and 3) what is the fire's nature upon arrival at a location important to the City. In general, a fire's nature is defined by eight characteristics:

- Direction of the advance of the fire front;
- Speed of the advance of the fire front (rate of spread);
- Mechanism causing the advance;
- Duration at any one location;
- Structure-related consumption of fuels;
- Flame length;

² www.la.curbed.com. July, 2021.

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- Intensity;
- Gaining control.

A fire front's direction of travel is primarily determined by, in order of influence: Direction of prevailing winds, geographic aspect, and condition of the fuels in the advance direction. The speed of a fire front's advance is a result of conditions: 1) at the site of the currently burning material and 2) of lands in the advance direction of the fire. As a fire advances the overriding influences determining its speed are prevailing wind speed, terrain slope gradient, dominant fuel size classes, and fuel continuity;

Wildfires advance by two principal mechanisms: 1) combustion resulting from radiant heating, and 2) remote ignition resulting from ember production;

Fire stays at one location primarily due to the size class of the material being consumed. Grass formations are dominated by low volumes of very "fine" fuels and, depending on the level of dryness, can be consumed, with the fire advancing, in a matter of minutes. On the other hand, tree-dominated formations have significantly greater volumes of available fuel and a far greater amount of larger-sized pieces. Fires can remain at these locations for days, often weeks, and sometimes months (on heavily wooded conifer sites);

Fires burn where fuels are available. Fires in grasslands burn at one level set by the height of the grass. Fires in brushlands can burn surface fuels and typically consume the stems and leafy crowns to the full height of the plants. Fires in tree formations have a much more complex pattern of movement based primarily on the continuity (or "connectedness") of the fuels. In these stands there are typically three distinct layers of fuels, arranged vertically, 1) surface, 2) stems and trunks, and 3) the crown composed of branches, twigs and leaves. The continuity of fuels is important to consider in both horizontal and vertical directions. If a fire enters a stand and is advancing only as a surface fire it will continue this manner of advance if there is high horizontal fuel connectivity. However, if there is also a high degree of vertical continuity (provided by fuels referred to as "ladder fuels") then a fire can move into the crown as well as forward across the surface and fuels in the entire stand structure become involved.

Flame lengths are generally determined by the volume of fuels burning, the amount of time to total consumption, and the height of the species in the composition. Grassland produces flame lengths typically in a 1- to 3-foot range as they are composed of low volumes of fine materials that are consumed quickly. Flame lengths are at their maximum when the material is dry. Brush formations can produce flame lengths from 4 to 10 feet in length. Native oak-dominated hardwood formations can generate 20- to 40-foot flame lengths and stands of exotics, such as *Eucalyptus globulus* or *E. cinerea*, or dense conifer stands, over 100 feet. Flame length is important as it sets the distance over which radiant heating-related combustion can occur.

The temperature achieved in a wildfire is directly related to the amount of cellulosic material available for consumption. Grasslands have very low amounts and attain lower temperatures but woodland, characterized by large amounts of highly concentrated cellulosic material, can attain temperatures on the order of 1,800 degrees Fahrenheit;

Gaining control over a wildfire's behavioral character is the objective of response efforts. Grassland fires, burning in low fuel volume, rapid consumption, and at a single level are the easiest to bring under control. On the other end, fires that are burning in high fuel volumes, full spectrum size classes, and entire stand structure involvement, can require days, weeks, even months, to bring under complete control.

Wildfire Risk Assessment for the City of Calabasas

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Approach and Study Methodology

Overall Approach

This assessment addressed three main aspects of wildfire risk:

- The physical mechanisms driving the destructive nature of wildfire in the Calabasas region;
- The current capability of the emergency response apparatus to effectively respond to a wildfire outbreak, and;
- The state of the legal and regulatory context, as defined by policies and practices being implemented, in its ability to address today's wildfire issues.

The portions of the study addressing physical conditions focused a majority of the effort on the twelve project sites (On-Site). Primarily due to time constraints study efforts were minimized on City-wide and Off-Site (Regional) endeavors.

Approach Methodology

Industry standard methodologies were employed in conducting and preparing the report of results. There was an initial, and continuing, assembly of publicly available material pertaining to the three different overall approach elements examined. This effort also involved direct contact with individuals and professional entities involved in wildfire-related endeavors (primarily suppression) and the delivery of related emergency services.

With regard to the physical conditions influencing wildfire risk levels, the next phase of the study involved examination of mapped information and interpretation of satellite imagery available through the Google Earth platform to make initial predictions regarding the ground conditions. Original field observations were completed at selected On-Site locations. Regional, on the ground conditions were predicted via interpretation of the Google Earth imagery and further analysis of the interpreted information was completed without the added benefit of ground verification. Standard data analysis procedures were employed to 1) generate indexed risk values for the 12 On-Site locations and 2) identify specific ground conditions that contributed significantly to elevated risk levels. The results of these analyses were subsequently used in preparing responses for the four questions comprising Section XX of the California Environmental Quality Act's Initial Study Checklist and this wildfire hazard risk assessment report.

Accumulation of Background Information

A significant level of effort was devoted to using the internet to accumulate background documents and information. The areas of emphasis which were the focus of this background information search included; 1) wildfire-related planning and management, 2) emergency evacuation, 3) physical conditions related to hazards, 4) design/review procedures, and 5) legal mandates and authorities. A complete list of these source documents is presented in the reference section of this report. Efforts were also mounted to personally contact and interview personnel with entities involved in the current wildfire planning and management activities in the region. For the purposes of this study and accompanying report, relative success from this endeavor was not optimal, due to the project's time horizon, availability of individuals contacted, and constraints on meetings imposed by COVID considerations. The effect on this study process notwithstanding, collaboration is a vital aspect of the City's process of addressing wildfire issues and will be continued.

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Information Gathering from Map and Satellite Image Sources

Mapped and satellite imagery-sourced information provided significant information regarding on-the-ground conditions vital in the study processes employed for this risk assessment. Mapped information addressed subjects that included, but were not limited to: fire history in the region, geological instabilities (earthquake- and landslide-related hazards), flooding hazards, topographic specifications, road systems, planning jurisdictions, emergency response jurisdictions, municipal jurisdictions, and special land use jurisdictions. It must be noted that some of the informative maps and databases do not present information directly related to wildfire risk. They were accumulated and used to prepare the responses to the questions in Section XX of the CEQA Initial Study Checklist. These two questions raised the issue of a wildfire event being an indirect, exacerbating influence on other hazardous situations: Landslides and flooding.

Interpretation of synoptic view satellite imagery provided information on conditions both in highly localized and regional situations. For example, the 12 individual properties identified by the City as potential development sites for future housing are a focus of the wildfire risk assessment. The satellite imagery provided the ability to examine each site with a resolution of approximately one foot and then, expanding the view, to put the property's location into a more regional relationship perspective. Exactly how these maps and imagery products were used to support each site's evaluation will be explained in the individual site reports presented in Addendum III.

With respect to evaluating the current capability of the wildfire-related emergency response the maps and satellite databases were used to provide three types of information:

- Location of fire stations providing initial response in relation to the 12 project sites;
- Identification of the roads that would be reasonably utilized by emergency equipment as part of their response, and;
- Identification of road-related conditions that could possibly constrain their use by emergency equipment and personnel.

Collection of Field Data

As previously mentioned, the City has identified 12 properties requiring assessment for their vulnerability to adverse effects from wildfire. Direct, on the ground observations were essential to the completion of the assessment. The first step in this portion of the process was to produce the Google Earth images (acquired the 21st of February, 2021) clipped to the boundaries of each subject property. These images were produced in a natural color format to maximize the effectiveness of interpreting ground conditions and a black-and-white format for use when recording ground observations. All 12 project sites were field checked during the week starting June 14th and ending the 18th by TSS Associate Steven Daus, Ph.D. For each separate site a complete documentation of ground conditions was completed comprised of a written record, satellite image records, and terrestrial digital images. This documentation is presented in Addendum II to this report. It is also included as part of the Project Folder being compiled in support of the CEQA process.

Analyses of Information Collected from Map, Satellite, and Field Observations

The primary goal of the analyses of the ground observations, mapped information, and information interpreted from the satellite images was to assign a wildfire risk level indicator value for each of the 12 subject sites. An effective tool for producing such an indicator value in situations where there are a relatively large number of input parameters is commonly referred to

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as a rubric. What the general attributes are that defines a rubric, and how the rubric was designed to meet the needs of this particular study, are explained in the following sections.

Generation of the Rubric

An approach often used in educational and industrial decision-making situations is typically referred to as a rubric. A rubric is simply a model, generally including mathematical relationships, of the decision-making process. The basic process involved here is modeling the influence as a single parameter, that can be either quantitative or qualitative, used as an input variable and has influence over a resulting change in the level of wildfire risk. An example of a quantitative input parameter would be the distance to a significant source of fire ignition, and for a qualitative parameter, whether a municipal emergency water system is readily available (or not). Following this example, if one of the project sites was immediately adjacent to a welding shop the risk of a fire ignition from the welding shop moving onto the project site would be significantly higher than if it were ½ miles away. Similarly, if the only source of water for emergency fire suppression was a private system, characterized by a tube well and low storage capacity, the risk of a wildfire entering onto the subject property and doing significant damage, and possibly endangering lives and health, would be significantly higher than if a municipal water system were available.

Example of Rubric Design and Function

Figure 2 shows a very small part of the rubric used in this assessment. This example shows the linear quantitative string for only two input parameters in the “Water System” category (there were actually 10 parameters in this category).

Figure 2. Abbreviated Example of the Linear Arrangement of the Rubric Approach

Water System	Factor	Selection	Multiplier Factor	Calc Input	Index Contribution
Municipal	1	0	1	0	2
Private	2	2	1	2	

The first cell at the top of the first column presents the category title, in this case “Water System”. The two cells below the category show the input parameters that were identified from the results of the field visits and/or map/image interpretations.

The second column entitled “Factor” represents the weight given to a particular parameter in contributing to the overall index calculation. These factors are sourced from a set of “look-up” tables prepared for each category. Below, in Figure 3, is the “look-up” table for the “Water System” category. In this case the Factor of “1” given the municipal input parameter is an indication that where this system is available there will be a more dependable, high flow volume, and basically unlimited supply of water; thus lowering the risk of wildfire impacts. To the contrary where private systems are the only source available the potential shortcomings with reliance on this source would act to elevate the overall risk; thus being assigned the larger Factor “2”. This is the full table showing the 10 parameters that constitute the “Water System” category.

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Figure 3. Look Up Table for Factor Values

Water System	Multiplier Factor
Municipal	1
Private	2
Water Yield: <10 GPM	5
Water Yield: 11 G/M - 20 GPM	4
Water Yield: 21 G/M - 40 GPM	3
Water Yield: 41 GPM - 100 GPM	2
Water Yield: >100 GPM	1
Hydrants: Within 50'	1
Hydrants: Within 100'	3
Hydrants: Within 250'	5

The next column, entitled “Selection” indicates what the user observes to be present at the site; in this case a private system. The next column, entitled Multiplier Factor is a value that enables the user to make incremental changes, either up a bit or down, to the value being taken to the right. The next column, entitled “Calc Input” (Calc Input) represents the results of the calculated value Selection x MF for that input parameter line condition. In this case, since no municipal system was available the “Calc Input” would be equal to 0, whereas the line entry for “Calc Input” would be “2” for the presence of the private system. Lastly, the far-right column presents the sum of all of the line conditions comprising the “Water System” category.

The rubric model used in this study was comprised of 12 categories of parameters and among these categories a total 152 input parameter lines contributing to the calculated overall wildfire risk index value.

Study Results

Emergency Response Apparatus Capability

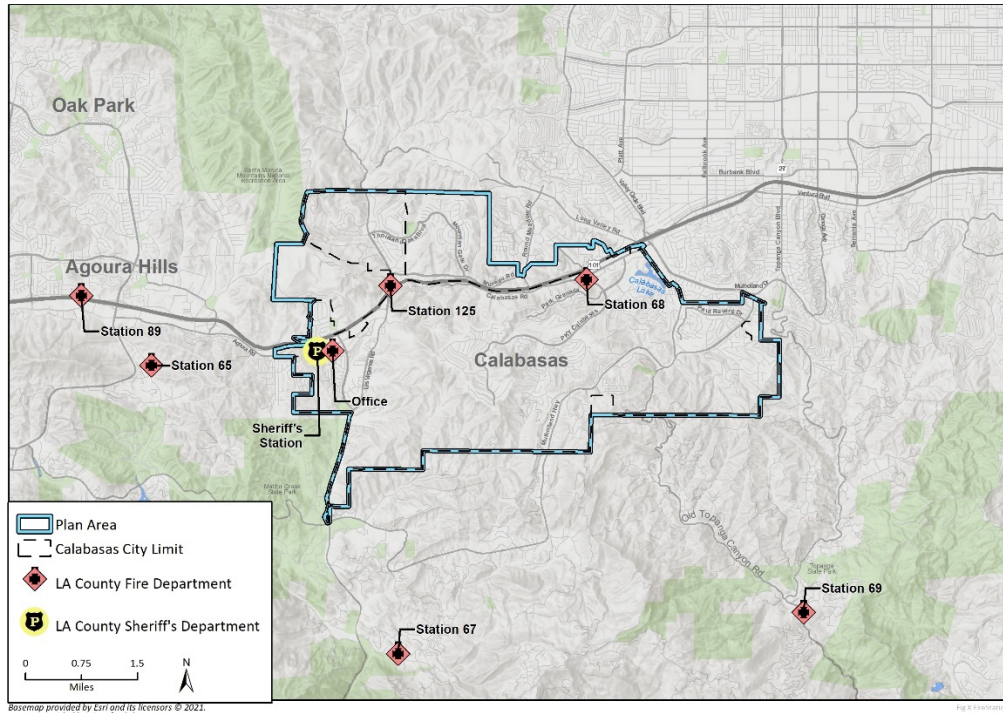
Research indicated that 3 Los Angeles County Fire Department (LACFD) fire stations and one Los Angeles County Sheriff’s Department (LACSD) office are positioned to provide immediate emergency assistance to City locations. In addition three other LACFD stations are located within a reasonable response distance.

Figure 4 presents a map showing the locations of the five LACFD stations and the single LACSD office.

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Figure 4. Map Showing The Locations of the Emergency Response Facilities



The chart presented in Table 2 (below) presents information pertaining to each emergency-response facility's address, distance to a central downtown point in the City, and the roads most likely to be utilized.

Table 2. Emergency Response Facilities Serving the City of Calabasas

Station	Physical Address	Distance to Central Point (mi.)	Roads Utilized
LACFD # 125	5215 Las Virgenes Rd. Calabasas, CA	3.0	Las Virgenes Rd; VFW; Mureau Rd; Calabasas Rd.
LACFD # 68	24130 Calabasas Rd. Calabasas, CA	0.5	Calabasas Rd.
LACFD # 67	25801 Pluma Rd. Calabasas	8.8	Pluma Rd; Las Virgenes Rd., VFW, Mureau Rd.; Calabasas Rd.
LACFD # 89	29575 Canwood St. Agoura Hills, CA	7.7	Canwood st; VFW, Las Virgenes Rd; Mureau Rd; Calabasas Rd.
LACFD # 69	401 S. Topanga Blvd, Topanga, CA	9.0	So. Topanga Canyon Blvd; Mulholland Dr; Calabasas Rd
LACFD # 65	4206 Cornell Rd. Agoura Hills, CA	8.1	Cornell Rd; Kanan Rd; VFW; Las Virgenes Rd; Mureau Rd; Calabasas Rd
LACSD	27050 Agoura Rd. Calabasas, CA.	4.2	Agoura Rd; Las Virgenes Rd; VFW; Mureau Rd; Calabasas Rd

LACFD: Los Angeles County Fire Department. LACSD: Los Angeles County Sheriffs Department
VFW: Ventura Freeway (US 101)

Call-out sheets for each fire-related emergency response station have not been accessed for past time periods so the ratios of fire-related call-outs to other emergencies is not known at this time.

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Comparative Rubric Results for the Twelve Subject Sites

Rubric model results for each of the 12 sites is presented in Addendum III. The material in Addendum III includes, for each individual site, the rubric result and detail regarding the individual category totals. The introductory section in Addendum III includes the “look up” tables used for each rubric calculation.

Below, in Figure 5 is a chart showing the comparative results for the rubric model runs for the twelve sites.

Figure 5. Project Sites Ranked by Wildfire Risk (highest to the lowest)

Site	Name	Risk Index
PE 2	Rancho Pet Kennel	79.0
PE 12	Craftsman Corner	65.0
PE 6	Church in the Canyons	60.0
PE 1	Raznich Offices	56.0
PE 4	Old Town Vacant Lot	36.0
PE 8	Avalon Apartments	36.0
PE 11	Commons Shopping Center	36.0
PE 9	Agoura Road Offices	33.5
PE 5	Las Virgenes Shopping Center	33.0
PE 3	Cruzan Parking Lot	31.0
PE 10	Mureau Offices	29.5
PE 7	Downtown Offices	29.0

The risk index value is only a comparative indication of which project sites have higher, or lower, wildfire risk ratings than the other eleven sites. These numbers show any of the detailed reasons why one site has a higher risk rating than another. The design of the rubric model used in this study permits the user to delve into the category sub-total contributions, and even the individual input parameter line condition, results. Thus the rubric model can be used as a sensitivity tool to identify those parameters whose contributions have the greatest effect on the outcome of each run of the model, whether it be in elevating the risk level, or lowering it. Figure 6 shows the categories ranked by their influence on wildfire risk level with water systems having the greatest effect and storage of flammable material the lowest.

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Figure 6. Categories of Key Parameters

Category	Affect
Water System	Greatest
Ignition Potential	
Exterior Construction Specifications	
Initial Response	
Vegetation Type Makeup	
Ignition Type	
On-Site Fuels Characteristics	
Response Constraints	
On-Site Surface Conditions	
Terrain Aspect	
Terrain Slope	
Hazardous Materials Storage	

Parameters shown in the upper portion of the list were those that exerted greater influence.

Having these more detailed results is important to staff conducting wildfire-related planning, policy development, and performing regulatory activities. Having this information enables involved personnel to focus efforts on the most important parameters that need to be addressed when considering taking actions, be they by statute, regulation, policy, guidelines or operationally, to reduce wildfire vulnerability.

In addition to generating wildfire risk level ratings here are other purposes for using this input parameter-to-risk level value approach:

1. It is a standardized procedure, and,
2. Once having gained experience exercising the model, planners can work within the established framework to “tailor” the model to their specific needs without losing transparency.

A standardized tool is independent of user bias and offers a high level of transparency in assessing the process and results. Holding all input categories, “look-up” table values, and multiplier values constant, the results will accurately reflect the true on the ground conditions that impact wildfire risk.

After gaining experience with the rubric model presented herein planning specialists can modify the list of input parameter, “look-up” table values, and multiplier factors to fit their changing situations and needs. As long as the basic structure is employed results will always be comparable through an examination of the input parameters and quantitative expression differences.

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Individual Project Assessment Sites

Summary of Results

Table 3, below, presents the individual parameters that were the most influential in generating a particular project site’s rubric result. The column entitled “Wildfire Risk Reducing Parameters” were those parameters that contributed to, by either being present or absent, their nature, or intensity, a reduction in the calculated index number. Conversely, the column on the right, entitled “Wildfire Risk Increasing Parameters” shows those parameters contributing to higher index numbers

Table 3. Summary of Results

Site	Wildfire Risk Reducing Parameters	Wildfire Risk Increasing Parameters
Raznick Offices	A-O / MWS / UGU	C-PD&FM / DGFAdj-H / HS-M / LSD&S-P
Rancho Pet Kennels		A-R / C-PD&FM / HS-N / LSD&S-B / OHU-E / PWS / SSIAdj-DA / WVAdj-H
Cruzan Parking Lot	A-O / HS-H / MWS / UGU	HV-Adj
Old Town Vacant Lot	NFS-NS	C-PD&FM / OHU-E / SSIAdj-M
Las Virgenes Shopping Center	A-O / HS-H / MWS	WVAdj-H
Church in the Canyons	A-O / MWS	DGFAdj-H
Downtown Offices	HS-H	OVU-E
Avalon Apartments		DGFAdj-H
Agoura Road Offices	HS-M	DGFAdj-H / LSD&S-MP / OHU-E
Mureau Offices	A-O / HS-H	LSD&S-MP
Commons Shopping Center	C-D & NFM / HS-H	A-MCR / WVAdj-M
Craftsman Corner		A-R / C-D & FM / FMS

- Access-MCR: Access/Egress – Moderate Closure Risk
- Access-O: Access/Egress - Open
- Access-R: Access/Egress– Restricted
- C-GD & NFM: Construction – Good Design & Non-Flammable Materials
- C-PD & FM: Construction – Poor Design & Flammable Materials
- DGFAdj-H: Drainage Gallery Formation Adjacency - High
- FMS: Flammable Material Storage
- HS-M: Hardscape Percentage - Moderate
- HS-H: Hardscape Percentage – High
- LSD&S-P: Landscaping Design and Species Use – Poor
- LSD&S-MP: Landscaping Design and Species Use – Moderately Poor
- MWS: Municipal Water Source
- NFS-NS: Non-Flammable Surface- Native Soil
- OHU-E: Overhead Utilities-Electricity
- UGU: Underground Utilities
- PWS: Private Water Supply
- WVAdj-H: Wildland Vegetation Adjacency - High
- WVAdj-M: Wildland Vegetation Adjacency - Moderate

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Individual Site Reports

Individual descriptive site reports will not be presented in the body of this report. They will be joined with the rubric results for the site and presented in Addendum III

General Conclusions

Emergency Response Apparatus Capability

An evaluation of travel time required for response from each station involved 1) the condition of the roads that would be used and 2) the total distance traveled. It was estimated that response time to any one of the twelve project sites was no greater than 10 minutes (from station departure to arrival on scene) and that this condition was not a contributor to significant increase in wildfire-related risk level. Analysis of the system of roads that would reasonably be used for emergency response showed them to be in generally good condition and free of the risk of significant closure. One 1,800-foot segment of Mureau Road runs through a corridor of mixed hardwood tree species that, at several locations along the segment, narrows and completely overtops the passage. If ignition occurs in this bordering vegetation the risk of complete closure of the route, for at least hours, could happen.

On-Site Wildfire-Related Hazards

Analysis of the results from the assessments completed for the 12 project sites, and general observations made around the City, leads to a conclusion that conditions within the City limits will have low wildfire risk levels, and that the risks would be localized. Furthermore, many of the hazardous conditions that were observed as part of the 12-site assessment are the product of past planning and implementation practices; conditions that would not be allowed to be implemented given the design/review process in place today.

As mentioned previously the hazardous situations identified in the site assessments included:

- Adjacency to hazardous vegetation conditions involving the use of inappropriate species and un-managed wildfire-related vegetation structure. This category applied to both naturally occurring and planted formations;
- Use of inappropriate construction designs and non-fire-resistant materials
- Adjacency to sources with a high potential to cause ignitions;
- Road systems that are inadequately designed for access by emergency vehicles or egress for evacuation purposes. As well, roads that have bordering vegetation that is inadequately maintained such that significant closures could occur (during a wildfire event) limiting their use by emergency equipment.
- Storage of hazardous materials.

Off-Site Wildfire-Related Hazards

Given the characteristics of the City's setting, wildfire will continue to be an element in daily lives of Calabasas City residents. Topographic and meteorological influences will continue to generate lightning-cause ignitions and produce higher velocity prevailing winds. The combination of high population levels and high density of roads in the wildland areas will continue to generate human caused ignitions, both accidental and intentional. Ignitions associated with the two situations above are typically in remote areas where there is generally enough time (due to time requirement for detection and initial response) for "mature" fire behaviors to develop and movement away from the ignition location. The lands surrounding a

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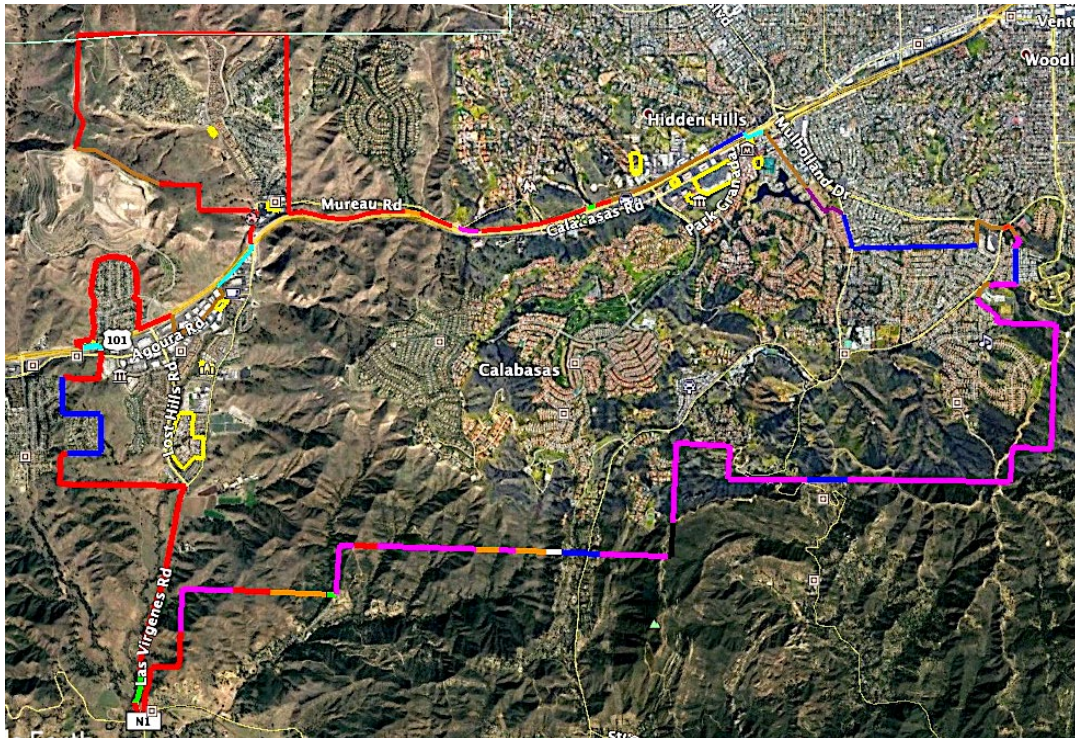
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majority of the City's boundaries, being wildlands with little commercial value, are not being managed to reduce wildfire risk. Thus these areas will continue to provide pathways for wildfire, with behaviors running the gamut from controllable to extremely dangerous, and likely to arrive at the City limits.

Mapping of Off-Site Conditions

Two mapping efforts were completed using satellite imagery (acquisition date: 28 February, 2021) and mapping tools available on the Google Earth platform. The first effort mapped the City limit boundary distances occupied by identifiable vegetation/land use categories (V/LU). A total of 11 distinctly different V/LU types were mapped. A map of the individual segments, all color-coded with its V/LU type, comprising V/LU type is presented in Figure 7. Attribute results are presented in the chart in Table 4 and include named V/LU type, the total boundary distance occupied (in feet and miles), and percentage of the total.

Figure 7. City Boundary Segments Occupied by Different Vegetation/Land Use Types



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Table 4. Results Of The Mapping Effort to Identify the Nature and Intensity of Conditions Bordering Calabasas

Map Color	Vegetation/Land Use Type (V/LU)	Boundary Distances		
		Feet	Miles	%
red	Grassland (Gr)	60,678	11.49	42.16%
magenta	Grassland/Brush/Oak Woodland (Gr/Br/OW)	38,280	7.25	26.60%
Blue	Residential Development (RD)	15,913	3.01	11.06%
Brown	Commercial/Institutional (Comm)	15,655	2.96	10.88%
Orange	Brush/Grassland (Br/Gr)	3,778	0.72	2.63%
Cyan	Pavement (PvMnt)	3,590	0.68	2.49%
purple	Agriculture (Ag)	1,757	0.33	1.22%
green	Wetland (WtLnd)	1,570	0.30	1.09%
black	Brush (Br)	1,291	0.24	0.90%
tan	Mixed Tree Species (MxTree)	839	0.16	0.58%
white	Oak Woodlands (OW)	564	0.11	0.39%
	Totals	143,915	27.26	

Each V/LU has distinctly different wildfire behaviors characterized by 1) susceptibility to ignition, 2) rates of fire-front advance across surfaces occupied by a particular V/LU, 3) nature (surface, crown, full structure involvement), 4) intensity, and 5) residence time. A comparative wildfire risk index considered in this assessment is shown below as Table 5. The risk index was generated based on information provided in descriptions of standardized fuels models and direct professional experience with the type.

Table 5. Fuel Model Identification and Assigned Risk Factor

V/LU Type	Standard Fuel Model(s)	Risk Factor
PvMnt	NB 1 ²	1
RD	NB 1 ³	1
Comm	NB 1 ²	1
Ag	NB 3 ²	1
Gr	GR 1 ²	2
Br/Gr	SB 4 / GR 1 ²	3
WtLnd	Professional Judgment	3
Br	SB 4 ²	4
OW	FM 9 ⁴	5
Gr/Br/OW	GR 1 / SB 4 / FM 9 ^{2,3}	5
MxTree	FM 9 ³	5

Risk Factors 5 = Highest, 1 = Lowest

The four V/LUs with the lowest wildfire index (1) occupy 36,915 feet of boundary distance; a figure representing 26% of the full boundary line distance. The next lowest index (2) was represented by pure grassland (Gr) conditions and occupied 60,678 feet. Alone 42% of the boundary was occupied by this V/TT and, when combined with the percentages for the Index 1 types occupied 68% of the total boundary of the City. The two V/TTs characterized by a moderate index (3) occupied 5,348 feet, alone representing 4%, and in combination with the lower index types, 102,941 feet; 72% of the total City boundary distance. The higher index V/TTs (levels 4 and 5), occupy, in total, 40,974 feet, representing 29% of the City's boundary

³ NWCG. March, 2019

⁴ USFS. April, 1982

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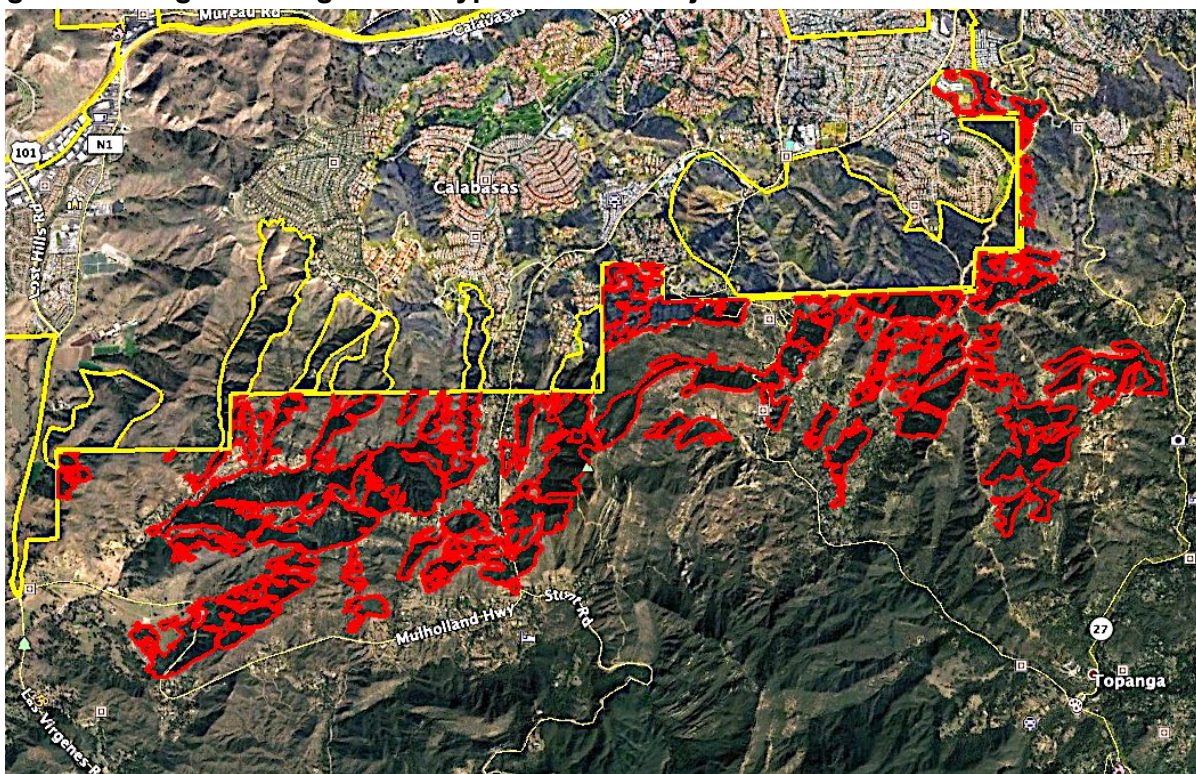
line total. These figures indicate that the City has a low-to-moderate risk that wildfire with uncontrolled behavior will enter into the City limits.

The second mapping effort addressed land to the south and southeast of the City. This area was selected to conduct additional mapping to assess the potential for wildfire to reach the City boundary for the following reasons:

- These lands are occupied by a relatively high percentage of ground cover by vegetation formations that upon ignition could produce dangerous fire behavior;
- The predominant direction of prevailing winds during fire season is from the south⁵ and ⁶;
- Fire history maps show a majority of the wildfires in recent history (with the exception of the Woolsey Fire) ignited to the south of the City and advanced north.

This effort focused on mapping the location of dangerous (from the standpoint of fire behavior), vegetation types for the purposes of identifying the role they could possibly play as wildfire moves from the south toward the City. The vegetation units mapped were typically comprised of dense-to-moderately dense mixed oak stands and brush, with minor inclusion of grassland. The result of this mapping effort is presented in Figure 8.

Figure 8. Dangerous Vegetation Types Located Adjacent to Calabasas



Vegetation types of concern are indicated by the red-bordered polygons and are made up of the more volatile vegetation units lying to the south and east of the City. These are primarily lands covered by oak woodlands and brushlands. By their nature with respect to fire behavior and their orientation these units could reasonably carry wildfire from points south to the limits of the City. Also shown as irregularly shaped polygons outlined in yellow are similar wildfire pathways inside

⁵ University of Iowa. May, 2021c

⁶ *Ibid.* May, 2021d

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the City's limits. Note how the two categories of approach pathways line up at the border, due primarily to topographic continuity.

It was determined that the aggregated ground coverage of the Off-Site volatile units was equal to approximately 1,635 Acres. The On-Site pathway aggregate was equal to approximately 1,242 acres.

Regional Planning Area (RPA)

A 18,577-acre Regional Planning Area was established to examine regional conditions as they related to fire behavior and pathways of approach to the City's boundaries. This examination was completed by interpreting ground conditions using the satellite imagery available through the Google Earth platform. The results, conclusions, and recommendations included in this discussion were generated without the benefit of ground verification.

This RPA includes lands adjacent to approximately three-quarters of the City's boundaries; from a north-central location around to the eastern limits. The northeastern quadrant was excluded from consideration as it has been completely developed as part of the City of Los Angeles. The area has a mix of jurisdictions with public ownership administering the majority of the land area. There are also large private, and small-parcel rural residential, ownerships. The landform is moderately-to-highly dissected with slopes ranging from less than 5% up to 90%; with an estimated mid-slope average of 25%. The drainage system is a combination of dendritic and parallel patterns. In the northern and western portions of the RPA the principal streams flow in north-south directions whereas in the southern portion trending toward east-west flows.

A major factor in examining wildfire behavior and movement is the direction and strength of prevailing winds. Consistent annual wind direction and speed patterns were indicated by information from two meteorological stations adjacent to the RPA: Topanga RAWS⁷ and Simi Valley⁸. Figure WHA.[xx] shows the locational relationships with the City and the various portions of the RPA. It is reasonable to assume that wind direction and speed will be a risk contributor that occurs annually and with a relatively high level of predictability of the season of occurrence.

The principal vegetation types, as they relate to wildfire risk, that characterize the RPA include:

- Land occupied by Short stature annual grasses and forbs;
- Chapparal
- Mixed species scrublands
- Oak species-dominated woodlands;
- Oak savannah, and;
- Gallery mixed species tree formations in drainages.

Figure 9 shows a regional satellite view showing the limits of the City of Calabasas (yellow line), a regional planning area (cyan lines), prevailing wind directions (white arrows), and wind "rose" from two meteorological stations: Simi Valley and Topanga.

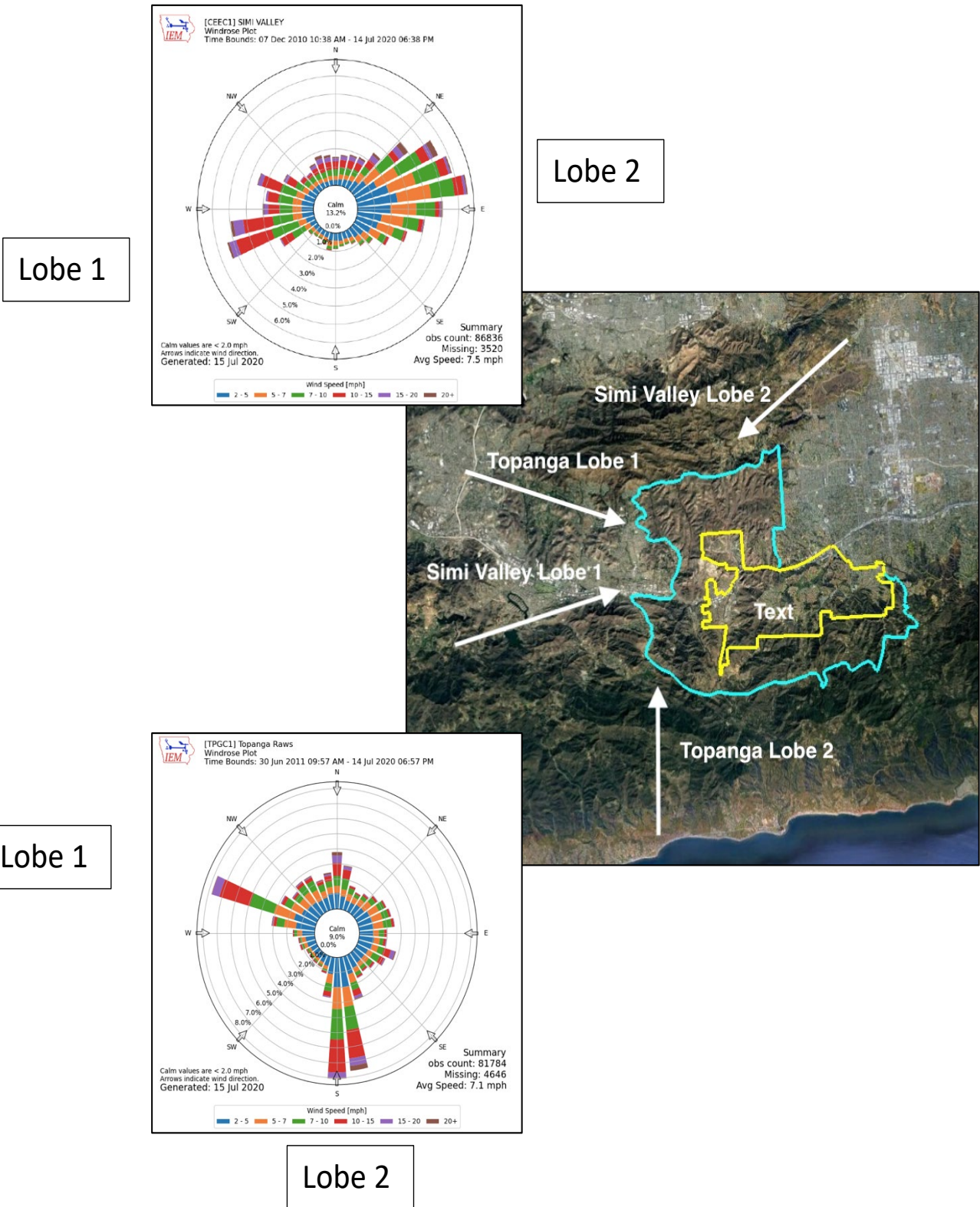
⁷ Iowa State University. June, 2021(a)

⁸ *Ibid.* June, 2021(b)

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Figure 9. Regional Plan Area and Wind Direction



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Risk Determination

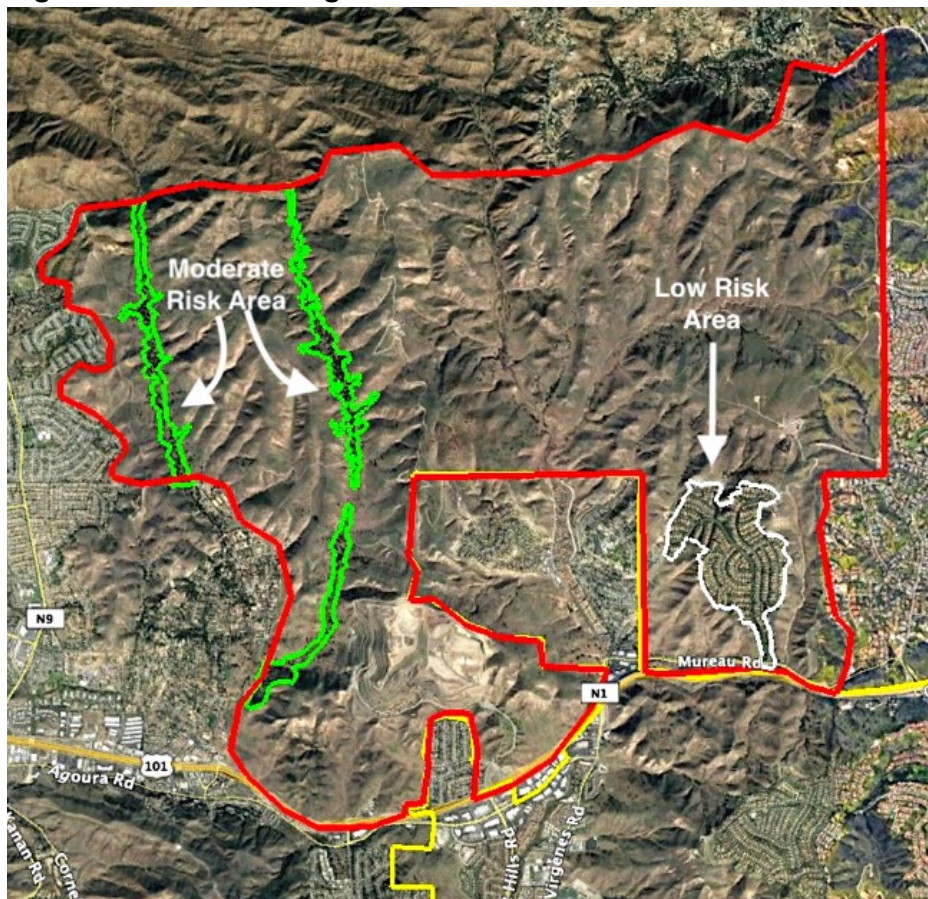
In consideration of the three wildfire-related categories of risk level influence below, and in the professional judgment of the authors of this report, the RPA was separated into three levels of current risk: low, moderate, and high.

- Wind parameters
- Fuels conditions
- Topographic influence

Regional Planning Area – Northern Section

In general, the surface area of the portions of the RPA above the Ventura Freeway is dominated (estimated at 95%) by the short annual grassland type. The heaviest concentration of fuels capable of generating dangerous fire behavior, including ember production, are located in the drainages associated with the western and eastern branches of Cheseboro Canyon Road. The only other concentration of vegetation types with notable fuels conditions are isolated patches of the woody species gallery formations and patches of woody species scrub and chapparal located on a small proportion of north and north-west facing slopes in the high dissected terrain. An overview of the conditions for this northern portion of the RPA is present below in Figure 10.

Figure 10. Northern Regional Plan Area Wildfire Risk



An overview of the northern portion of the Regional Planning Area. Shown are its borders (red lines), and feature representing specific risk levels (bright green and white lines).

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Consideration of the three categories of wildfire-related risk influencers led to the conclusion that this 8,549-acre portion of the RPA should carry a low-to-moderate wildfire risk level. Three areas of vegetation and land use types were distinguishable at this scale of mapping and they were:

- The gallery vegetation type bordering the drainages associated with the western and eastern portions of Cheseboro Canyon Road (indicated by the bright green lines):
 - Area: 225 acres,
 - WHR Level: Moderate
- A residential subdivision currently not part of the incorporated area of the City of Calabasas (indicated by the white lines):
 - Area: 263 acres,
 - WHR Level: Low

The area covered by each isolated patch of scrub and chaparral was too small to map individually (at the scale used in this study) and too widely scattered to aggregate. A greater level of detailed mapping would be required should management for fire risk reduction be considered for these types. The total aggregated area of these two categories of vegetation/land use types is approximately 490 acres, representing 5.7% of the total northern area of the RPA.

The level and arrangement of the dissection of the topography neither reveal clear topographic pathways for wildfire to use in its advance toward the City nor does it align up with prevailing wind directions. Wildfire would have its advance slowed by the sequential downslope burns needed.

Given that 94% of the surface area in the northern portion of the RPA is occupied by short annual grasses it will be the fire behavior of this type that has the majority influence on WHR levels. Because of their limited area of occupation larger statute woody species dominated types (gallery formation, scrublands and chaparral) will exert insignificant influence on elevating WHR levels; the only notable contribution would be the ability to generate embers. This grass/forb type would be classified as “Short Sparse Dry Climate Grass” (Model GR1) or “Low Load Dry Climate Grass” (Model GR2) in Scott and Burgan’s Standard Fire Behavior Fuel Models⁹. These models average between 0.4 and 1.10 tons per acre of fuel material (in comparison of approximately 50 tons per acre for dense 6’-8’ brush fields¹⁰).

Rates of spread, in feet (and miles) per hour for the two models would be:

- For GR1, up to 1,320 (0.25 miles per hour) for the combination of high wind speeds and low fuel moisture contents, and,
- For GR2, up to 10,560 (2.0 miles per hour) for the combination of high wind speeds and low fuel moisture contents.

Flame lengths, , in feet for the two models would be:

- For GR1, up to 2.30 feet for the combination of high wind speeds and low fuel moisture contents, and,
- For GR2, up to 10 feet for the combination of high wind speeds and low fuel moisture contents.

⁹ Scott and Burgan. June, 2005.

¹⁰ Sikkink, Lutes and Keane. May, 2009.

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Regional Planning Area – Southern Section

In general, the surface area of the portions of the RPA below the Ventura Freeway, the southern portion of the RPA, is occupied by a mix of vegetation types including grass/forbs, chapparal, scrub types and heavily wooded stands of mixed hardwoods. There is a clear domination of the southern portion of the RPA by the woody-species dominated types.

The topography in this southern portion of the RPA is, in general, more highly dissected than in the northern portion and much more extreme in terms of elevation changes and slope percentages. In addition, there are more clearly defined topographic avenues for fire to follow; avenues that are also generally occupied by dense formations of woody tree and brush species.

Figure 11. Southern Regional Plan Area Wildfire Risk

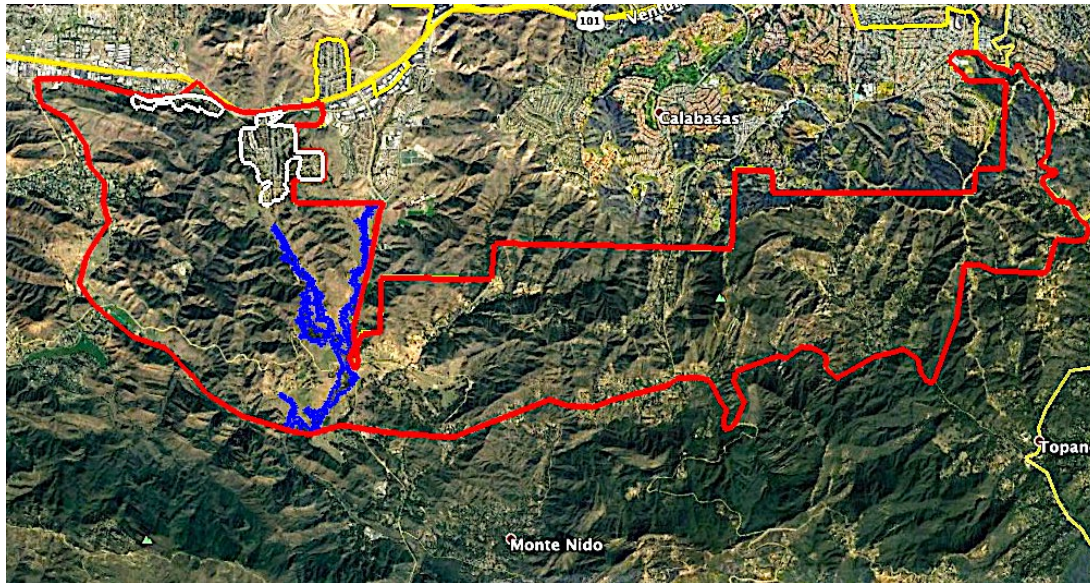


Figure 11 shows an overview of the southern portion of the Regional Planning Area. Shown are its borders (red lines), and feature representing specific risk levels (bright blue and white lines).

The prevailing winds will certainly influence rate, and direction, of spread; more so in the eastern two-thirds of the southern portion. In the western portion the alignment of the ridges matches up only with the Topanga RAWs Node 1 winds. The stronger and more unidirectional Node 2 winds blow across the ridges and, as in the northern portion, will force wildfire into some amount of downhill burning. On the other hand the ridgelines in the eastern 2/3rds portion are more strongly aligned with the Node 2 allowing for greater periods of uphill or on-contour burns.

The combination of topographic alignment and prevailing wind influences result in reasonably definable approach pathways that permit wildfire to cross the landscape and arrive at specific locations on the City's limits. The question that needs to be posed at this point pertains to the nature of the wildfire's behavior upon arrival at the City's limits; "what will be its behavioral characteristics?". In the northern section, in an overwhelming number of incidents it will have the nature of a grass-fed fire. However, in the southern portion this is not the case.

In this southern portion woody species dominated types (gallery formation, scrublands, chapparal, and dense mixed hardwoods) will be exerting significant influence on elevating WHR levels. Whereas in the northern portion of the RPA the two grass-based fuel models (GR1 and GR2) operate with fuel volume averages between 0.4 and 1.10 tons per acre and flame lengths of up to 10 feet, the behavior of fuel models in the south are significantly different. It must be

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noted that no standard fuels and fire behavior models are available for the types of oak-, and mixed hardwood-dominated, vegetation types typically occurring in the City's region. The closest models available would be the woody dry climate shrub types defined as "High Load Dry Climate Shrub" (Model SH5) or "Very High Load Dry Climate Shrub" (Model SH7) in Scott and Burgan's Standard Fire Behavior Fuel Models¹¹. Sikkink, et.al.¹² presents that these shrub types can average between total fuel loads between 40 and 52 tons per acre. Given these fuel volumes, normal stature (typically between 5 and 10 feet in height), and fuel structure, these formations can generate flames on the order of 40 to 50 feet and temperatures above 1,600° F.

Risk Level – Regional Planning Area

In consideration of the conditions described above in this section conclusions reached regarding the level of risk posed were:

- For the northern portion of the RPA an overall level of "Low-to-Moderate" with very localized conditions that would be considered a simple "Moderate" designation, and,
- For the southern portion "Moderate-to-High" with conditions in the western 1/3rd similar to those in the northern portion, being "Moderate" and, conditions in the eastern 2/3rds warranting a "High" designation.

Potential Actions for Reducing Fire Hazard Risk Levels

1. In situations where the City's limits could be approached by a grass-fed wildfire reduce vegetation volume prior to fire season, on both side of the City's boundary, employing:
 - a. Prescribed livestock grazing, or,
 - b. Prescribed fire.
2. In situations where the City's limits could be approached by a woody species-fed wildfire reduce overall vegetation volume and interrupt fuel continuity by managing stand structure prior to the fire season, on both side of the City's boundary, employing:
 - a. Hand felling and on-site reduction (lopping or use of a chipper);
 - b. Mastication, or;
 - c. Combinations of hand felling or machine reduction and prescribed fire.

Mitigating Actions

Currently Ongoing Mitigating Actions

As previously described, wildfire risk mitigation is being required by state statutes, local ordinances, local design/review procedures, and officially recognized planning documents. Compliance is evidenced by project applicants including required regulatory commitments in each development's project description.

On-Site Mitigations

Recommended On-Site wildfire risk reducing actions:

1. Thoroughly examine the City's, County's, and CAL FIRE's requirements and guidelines regarding landscaping design, species preferences, installation, and maintenance, with

¹¹ Scott and Burgan. June, 2005.

¹² Sikkink, Lutes and Keane. May, 2009.

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the purpose being to update them in order to reduce vulnerability to ember ignition, and generally, wildfire impacts;

2. Thoroughly examine the City's, County's, State's, and CAL FIRE's statutes, regulations, requirements, and guidelines regarding construction (both residential and commercial) design, use of non-flammable materials, and maintenance, with the purpose being to augment them in order to reduce each elements vulnerability to ember ignition, and generally, wildfire impacts;
3. Conduct a survey of arterial routes that could possibly be used for emergency access or egress to determine their vulnerability to closure in a wildfire incident. Based on the findings define action plans to reduce this vulnerability;
4. Conduct a City-wide survey of vegetation conditions in locations that could provide opportunities for wildfire to approach valued assets. These locations would include drainages occupied by a woody "gallery" formation and hillside locations;
5. Survey the conditions in the seven On-Site wildfire approach pathways (outlined in yellow in Figure 11) to assess possible vegetation management actions (e.g., mastication) that could reduce wildfire movement ability i.e., allowing wildfire moving from Off-Site locations to approach valued assets in the City.

Off-Site Mitigations

It is recommended that Off-Site wildfire risk reducing mitigation opportunities be focused on near-boundary locations to the south. As these lands are mostly under the jurisdiction of state, county, and federal entities, it is recommended that a study be initiated to address the existence and contents of any cooperative management agreements that are already in place, and, if there is none, open discussions with the entities holding jurisdiction to examine the possibility of putting some in place.

CEQA Compliance

Responses to four questions in CEQA/IS Checklist submitted under separate cover

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Addendum I: Resumes of Involved Personnel

Addendum I can be viewed electronically on the City's website at:
<https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update/resources>

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Addendum II: Original Site Visit Records

Addendum II can be viewed electronically on the City's website at:

<https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update/resources>

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Addendum III: Individual Site Visit Reports

Addendum III can be viewed electronically on the City's website at:
<https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update/resources>

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Addendum IV: Rubric Reports

Addendum IV can be viewed electronically on the City's website at:
<https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update/resources>

General Applicability of CEQA Initial Study Checklist Section 20

The initial step in conducting this California Environmental Quality Act (CEQA)-compliant study of wildfire-related impacts is to establish that the conditions requiring Section 20 to be completed are met. The exact wording of the primary qualifying question in the section is:

“If located in, or near, SRA, or lands classified as a very high fire hazard severity zone, would the project:”

The City of Calabasas (City) has not been designated as being “in” a State Responsibility Area as indicated in Forestry Resources Assessment Program (FRAP) documents¹. However, these same documents do establish that area to the south, actually coming up to meet the City’s southern boundary does establish meeting the “near” qualification. Furthermore, although not being specifically given the mandate or authority to designate fire hazard severity ratings for non-SRA areas, CAL FIRE has recommended that the City’s area be considered for planning, and some regulatory action, purposes as a “Very High Fire Hazard Severity Zone”. The primary purpose for CAL FIRE’s issuing this recommendation was for the purposes of providing a legal description of the geographic areas for the installation of fire sprinkler systems in occupancies as required by Section 903.2.11.72, the City has been specifically designated as VHFHSZ in Appendix P to the Fire Code, §§ P102.2 and P102.33.

Primary Approach

This impact assessment will be comprised of two basic tasks. The first task will be an assessment of wildfire hazard risks (WHR) associated with twelve (12) properties as they are currently developed. In this initial task the study will address what influences on WHR level are present and to what relative degree they are exerting their influence. Addressed were influences in three primary categories:

- Inherently present in the physical setting
- Response apparatus capability influences
- Regulatory framework influences

The second task will entail applying the results of the “influences” study to the planned redevelopment activities at each of the twelve project sites. Within the framework established in the four questions in Section 20 of the California Environmental Quality Act/Initial Study Checklist (Checklist)⁴ reasonably expected impacts will be identified resulting from direct and indirect effects, the significance of each impact will be determined, and possible mitigating actions, associated with the three “influence” categories, identified.

Wildfire Hazard Risk-Reducing Actions

One result of this impact analysis is the identification of specific actions that, when implemented, will result in a reduction of the level of risk of significant damage from wildfire. In this study report a distinction will be made between two categories of action, that independently, or in combination, can result in a risk level reduction:

¹ CAL FIRE/FRAP. November 7, 2007.

² Los Angeles County Code, 1987 (revised June 23, 2021).

³ Los Angeles County Code, Title 32 FIRE CODE.

⁴ CEQA/IS Checklist citation

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- Actions that are inherent in the current regulatory framework, and,
- Actions that address either modifying physical setting components on a highly localized basis or adjust elements in the regulatory framework that generate project descriptions.

These actions are often referred to as “mitigations”. However, the terms “mitigation” or “mitigating actions” are more narrowly defined within the CEQA framework. In Section 15126.4(a) of the CEQA Guidelines⁵ it is established that:

CEQA requires that, for each significant impact identified in the EIR, the EIR must discuss feasible measures to avoid or substantially reduce the project’s significant environmental effect

Thus, findings in the EIR are the “mitigation” trigger and any applicant must provide a comprehensive project description that will be the subject of the EIR study.

Inherent Actions

Currently any applicant’s proposed project is subjected to a well-defined and codified design review process that addresses the applicant’s project description’s approach to reducing wildfire risks. This process is administered by the City of Calabasas, Los Angeles County Planning Department (LACPD), Los Angeles County Fire Department (LACFD), and the California State Fire Marshall’s office (delegated to the California Department of Forestry and Fire Protection (CAL FIRE)). The object of the review process is to generate project descriptions have “built in actions” that, when implemented, will result in wildfire risk reduction. Technically the “built in actions” are not “mitigations” but may be better defined as “environmental commitments”.

Post-EIR Actions

As presented in the second bullet above wildfire risk reducing actions can take the following forms:

- Project location-specific actions designed to avoid, or reduce, adverse impacts on sensitive resources (tactical actions);
- Actions that can be implemented in a more regional context, and;
- Adjustments to the design review process, including its guiding policies and practices.

Project Location Specific Actions

These are actions that can only be defined once a location-specific project description has been prepared. The actions may be of the “one-off” type that is, uniquely defined to address resource protection issues on the particular site, or it may entail actions that are applicable across a broader range of project descriptions and settings.

Regionally Applicable Actions

These are actions designed to reduce wildfire risk wherever specific setting conditions would warrant such actions. For example, several individual project locations are adjacent to extensive linear formations of dense tree and shrub species located in drainages. In this situation wildfire risk reducing actions would include lowering fuel volume and altering the structure of the formation using standard vegetation management practices. Thus, whenever this specific condition occurred and a project was

⁵ 14 CCR Division 6, Chapter 3, §§ 15000 -15387.

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sited closely these types of actions should be considered and included as part of the site-specific project description.

Regulatory Adjustments

Actions in this category could include policy formulation, establishing legal mandates and authorities through legislation, and changes in, or additions to, regulatory codes. These actions pertain solely to the framework in which projects are evaluated with regard their compliance with current, and future adjusted, requirements regarding wildfire risk.

Applicability to the Four CEQA/IS Checklist Section 20 Questions

Where wildfire risk reduction is warranted, and feasible, in the subjects addressed in the four questions comprising the CEQA/IS Checklist Section 20 recommendation will be made within the context of the three action categories presented above.

Project Description

The described project (Project), employed in preparing responses to the four questions posed in Section 20 of the Checklist, is comprised of current and planned residential and commercial development on twelve (12) sites located in the City’s currently incorporated area and those being considered for annexation. Table 1, below, presents the basic land use-related specifications for the twelve sites addressed, including the current land uses and the nature and intensity (maximum potential number of dwelling units square footage of maximum new commercial development) of planned future development.

Table 1. Specifications of the 12 Project Sites

Potential Development Site Parameters				Maximum Expected Development	
Site ID	Site Name	Surface Area (ft ²)	Current Land Uses	Potential Dwelling Units	Potential Commercial Development (ft ²)
1	Raznick Offices	84,071	Professional Offices, Parking Lot, & Landscaping	42	2,100
2	Rancho Pet Kennel	297,950	Private Residences, Pet Kennels	60	N/A
3	Cruzan Parking Lot	85,378	Parking area	88	12,672
4	Old Town Vacant Lot	41,818	Large animal pens	43	6,192
5	Las Virgenes Shopping Center	39,204	Retail businesses & parking area	41	5,904
6	Church in the Canyons	107,593	Religious facility	111	N/A
7	Downtown Offices	58,370	Professional Offices, parking area	60	8,640
8	Avalon Apartments	1,350,360	Multi-family residences, parking areas	142	N/A
9	Agoura Road Offices	120,661	Professional Offices, parking area	125	18,000
10	Mureau Offices	69,260	Professional Offices, parking area	64	10,368
11	Commons Shopping Center	1,088,564	Retail businesses & parking area	201	44,393
12	Craftsman Corner	427,324	Professional offices, parking area, & tree services enterprise	236	40,584
Totals		3,770,553		1,213	148,853

Assessment Methodology

A significant proportion of the information used to inform and support the decisions and recommendations in this CEQA study was derived from a separate wildfire risk assessment prepared for the City⁶. As a result of the existence of this source report briefer descriptions of the data collection and analysis methodology will be presented in this impact study, with citations to the source report where warranted.

This assessment was initiated with thorough research of publicly available literature and databases in order to define the current conditions, in terms of influences, characterizing the setting elements associated with WHR. The types of influence-producing conditions included physical, biological, meteorological, legal, regulatory, and administrative. Once established, these findings constituted the baseline against which any changes resulting from implementing the project could be compared.

The next step was to conduct interpretive studies for each of the twelve (12) sites, and surrounding areas, using the satellite images (acquisition date: 9/26/2020) and mapping tools available on the Google Earth platform (GEP). A two-stage interpretive approach was employed because wildfire is both a highly localized and regional phenomenon. Should a fire incident occur either as a result of an on-site ignition or from an off-site source, it is the specific conditions within the boundaries of the property that determine fire behavior and the ability of initial responders to gain control. Within a regional context wildfire is generally ignited at one location and travels across a landscape using fairly predictable pathway, to another. The direction and velocity of movement is controlled by regional forces including prevailing winds, diurnal wind flows, terrain, slope gradient, topographic position, patterns of vegetation types across the landscape. Should wildfire from a regional source encounter a specific location it is, again, the on-site conditions that determine on-site fire behavior and risks to health, safety, and property damage.

After a thorough examination of the GEP imagery using the two-stage approach, all 12 of the sites were visited by TSS staff. These site visits provided 1) direct in-field verification of the interpretation of the GEP imagery, 2) the ability to record conditions apparent on the ground but which were not identifiable on the GEP imagery, and 3) the opportunity to document the conditions using terrestrial photography. These field visits, conducted by Steven J. Daus, Ph.D. of TSS Consultants, were completed in the period June 14th through June 18th, 2021. All field records and terrestrial photographs were assembled by site and the full set catalogued in the Project Folder. These records are presented herein in Addendum II.

The next step involved using the interpreted, and field verified, information to generate a WHR level index for each of the project sites. This process was facilitated, and standardized, through the use of a rubric approach. This approach utilized a comprehensive set of conditions known to be related to WHR as input parameters. The conditions were identified on the basis of their potential influence, either direct or indirect, on the calculated risk level index. There were 12 general Categories of Settings (CatSets) and within these CatSets a total of 143 individual parameter-related options (PRO) that comprised the input data set. Each PRO was given a corresponding numeric value that was based on 1) whether it was present or not, and 2) what was its relative influence intensity (typically on 1-to-4 or 1-to-5 scale). Then, in order to insert a measure flexibility for the use of professional judgment, the user is then given an opportunity to incrementally alter, either increase or diminish, the option's numerical value through the use of a Multiplier Factor (MF). The result of the calculation (PRO x MF) then became a contribution to the Wildfire Risk Index (WRI). All contributions were summed and the result is an index value. Index values were generated for each of the 12 project sites using the same input parameters, PROs, and MFs. Thus the WRI generated for any one of the 12 project sites was directly comparable with that of

⁶ TSS Consultants. July, 2021.

the 11 others. The individual site results for all 12 of the project sites are presented in Addendum III, and full descriptions of the process and associated analyses are presented in the TSS Wildfire Assessment Report⁷.

Results of Analyses

Results of Rubric Analysis – Wildfire Hazard Risk Rankings

Below in Table 2 are the ranked results for the 12 project sites studied. The wide range in index results indicated that the model had an appropriate set of data inputs and mathematical relationships between the selected option value and its intensity of influence on the calculated index value.

Table 2. Ranked Wildfire Risk Index for the 12 Project Sites

Site	Name	Risk Index
PE 2	Rancho Pet Kennel	79.0
PE 12	Craftsman Corner	65.0
PE 6	Church in the Canyons	60.0
PE 1	Raznick Offices	56.0
PE 4	Old Town Vacant Lot	36.0
PE 8	Avalon Apartments	36.0
PE 11	Commons Shopping Center	36.0
PE 9	Agoura Road Offices	33.5
PE 5	Las Virgenes Shopping Center	33.0
PE 3	Cruzan Parking Lot	31.0
PE 10	Mureau Offices	29.5
PE 7	Downtown Offices	29.0

Results of Rubric Analysis – Input Parameter Sensitivity Analysis

In addition to assigning a comparable overall risk level to each project site there was another valuable outcome of using this comparative, rubric-based, approach. That outcome was the ability to delve into the input parameter details and identify which of them correlated highly with higher levels of risk and those that contributed more to lower levels. A very detailed analysis of the correlations between an individual CatSet's, and even into the individual input parameters', influence on WHR level was completed for the comprehensive WHR assessment completed by TSS Consults⁸. Whereas the full detailed results of this correlative study are presented in the TSS report only a brief account will be given here. Following are the specific input conditions that showed greater levels of influence on the WHR:

- Water Systems – A significant influence was exerted by the presence, or conversely, the absence, of the availability of a municipal source for emergency response. The highest ranking for the Rancho Pet Kennels was partly a result not having a municipal source available, whereas, all of the other project sites did;

⁷ TSS Consultants July, 2021

⁸ TSS Consultants, July, 2021.

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- Ignition Potential – Higher WHR rankings were correlated to both potential on-site ignitions and proximity to off-site sources of ignition (either from direct fire front advancement or ember showers). The second highest ranked site, Craftsman Corner, had significant inputs from two conditions resulting from the use of the site by a commercial tree service: High ignition potential from task like welding and heavy equipment usage, and storage of flammable materials. The other highly ranked sites, that included the Rancho Pet Kennel, Raznick Offices, and Agoura Road Offices, showed significant contributions from input parameters related their proximity to off-site sources of ignition. These conditions included proximity to larger areas of open space and the dense gallery formation occupying drainages;
- Exterior Construction Specifications: The age of a construction project was critical to the WHR index level. Projects that were designed and constructed more than 30 years ago did not put great emphasis on creating structure with high fire resiliency. Designs did not account for embers being a significant source of on-site ignitions nor was there an emphasis on using, to the maximum extent possible, non-flammable materials. The influence of the presence of “older” construction contributed significantly to the WHR levels for the Rancho Pet Kennels, Craftsman Corner, Raznick Offices, and the Old Town Vacant Lot, and;
- On-Site Landscaping Design and Maintenance: The conditions related to landscaping design and species used for planting showed a mid-to-high level of influence on WHR. These conditions were present at all of the sites surveyed. Where problems were observed they were indicated by trees and under-plantings that were, 1) too close to buildings, 2) form groups with high fuel volumes and continuity, and/or 3) utilized species (primarily exotics) with higher flammability ratings. Poor maintenance showed in not maintaining adequate crown-to-surface vegetation distances and inadequate litter removal.

Individual Project Site Assessment Results

Presented in Table 3, below, is a summary of the of the impact significance analysis for the for Section 20 questions broken down by individual project site. Following is a brief discussion, including explanations and justifications for the conclusions drawn. Full site visit reports and impact analyses or presented in Addendum III of this report.

Table 3. CEQA/IS Checklist Section 20 Levels of Impact Significance

Project Site	CEQA/IS Checklist Section XX Questions			
	XX (a)	XX (b)	XX (c)	XX (d)
Raznick Offices	LTSI	NI	NI	NI
Rancho Pet Kennels	LTSI	PSI	NI	LTSI
Cruzan Parking Lot	LTSI	NI	NI	NI
Old Town Vacant Lot	LTSI	NI	NI	NI
Las Virgenes Shopping Center	NI	PSI	LTSI/M	LTSI/M
Church in the Canyon	LTSI	PSI	LTSI/M	LTSI
Downtown Offices	LTSI	NI	NI	NI
Avalon Apartments	LTSI	PSI	LTSI	LTSI
Agoura Road Offices	LTSI	PSI	LTSI	LTSI/M
Mureau Offices	LTSI	PSI	LTSI	NI
Commons Shopping Center	PSI	NI	NI	NI
Craftsman Corner	LTSI	NI	LTSI/M	LTSI

PSI: Potentially Significant Impact LTSI/M: Less Than Significant Impact with Mitigation Incorporated
LTSI: Less Than Significant Impact. NI: No Impact

Reznick Offices (PS-1)

This property is surrounded on all sides by land uses that would not be considered to be high-level contributors to WHR. Their foot prints are dominated by roof surfaces, paved areas, and paved access roads. The structures present are generally new and designed and constructed in compliance with statutes and regulations that were formulated in consideration of wildfire risk reduction. There is negligible terrain slope and no proximity to areas with topographic extremes. The property is served by municipal emergency water services and initial emergency response time is less than 5 minutes from a LACFD station located approximately 1,440 feet away. Forming one of the borders of the property is a drainage with a well-developed gallery formation. This drainage was not indicated as being “flood prone” by the Federal Emergency Management Agency (FEMA)⁹.

On-Site conditions showed a potential for an increase in WHR level. The buildings occupying the site appear to be more than 30 years old. The design includes open-beam construction and employment natural wood products in framing, beam support, joists, and siding applications. Landscaping is mature trees and shrubs and is, in general too close to the buildings and utilizes species, primarily exotics, that have higher flammability ratings. Lastly, the gallery formation in the drainage is in an un-managed state with high fuel volumes and fuel connectivity. This feature could be a source of ignition during a wildfire incident.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, NI, NI, and NI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Availability of a municipal system as a source of water for fire suppression;
- Underground placement of utilities;
- Short distances to principal routes used for evacuation, and;
- The high percentages of surface area considered as “hardscape” characterizing the adjacent land uses.

Hazardous Conditions

Three conditions were observed that would reasonably lead to an increase in wildfire risk:

- The direct adjacency to a mature and unmanaged (with regard to potential wildfire behavior) gallery formation along the un-named drainage;
- Proximity to the buildings, and the species involved, of the trees used in the landscaping, and;
- The construction design (primarily without considerations of wildfire risks; and more specifically ember ignition) and relatively high percentage use of flammable materials

Rancho Pet Kennel (PS-2)

The current use of this property is holding and care of small animals. Interpretation of Google Earth image product indicates the property is occupied by kennel and support facilities, private residences, miscellaneous outbuildings, and mature stands of trees and shrubs. Outside of the structure footprints the surface is native soil. Adjacent land uses include, Single Family Residential (R-SF), Open Space-

⁹ FEMA map citation.

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Resource Protection (OS-RP), and transportation infrastructure (roads). To the north and west of the subject property is a very large tract of open range land occupied primarily by annual grass and forb species. In addition, a mature dense galley formation of trees and shrubs is occupying a linear wet area created by drainage from the Ventura Freeway. At a distance of 1,855 feet Canwood Street encounters Lost Hills Road at a traffic light-controlled intersection. Access to the Ventura Freeway (US Hwy 101 and a Designated Evacuation Route (DER)) is approximately 462 feet to the south on Lost Hills Road. The property does not appear to be served by the municipal emergency response water system of the City of Calabasas. However, hydrants indicative of municipal service were observed within the Saratoga Ranch single family housing development, with the closest hydrant at 292 feet from the subject property's lock gate. Emergency response is provided by the Los Angeles County Fire Department (LACFD) with the closest facility being Station 125, at a distance of 8,958 feet (1.7 miles). Estimated response time from Station 125 is under ten minutes from the time of station departure. Sources and type of electrical services to the project property is undetermined but may be from an overhead feeder line that approaches the property from the west along the north side of the Ventura Freeway.

On-Site conditions showed a potential for an increase in WHR level. The buildings occupying the site appear to be more than 30 years old. The design includes open-beam construction and employment natural wood products in framing, beam support, joists, and siding applications. Landscaping is mature trees and shrubs and is, in general too close to the buildings and utilizes species, primarily exotics, that have higher flammability ratings. The lack of municipal water availability and the locked would, most likely, have an adverse effect on initial response efforts. The overhead electrical could possibly a source of fire ignition. The proximity to the large open space area could allow the approach of wildfire to come into direct contact with the boundaries of the subject property. Lastly, the gallery formation in the drainage is in an un-managed state with high fuel volumes and fuel connectivity. This feature could be a source of ignition during a wildfire incident.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, PSI, NI, and LSTI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Short distances to principal routes used for evacuation

Hazardous Conditions

Several conditions were observed that would reasonably lead to an increase in wildfire risk:

- Lack of access to a municipal supply of emergency response water;
- Moderate emergency response time;
- Presence of overhead electrical lines;
- Construction that was completed prior to any consideration of resilience to wildfire;
- Dense landscaping that involves mature, and overmature, tree species (both native and exotics) and intermediate tree and brush species creating "ladder fuel" conditions;
- Immediate adjacency to open space with no buffer conditions that could halt a wildfire's approach to its contact with the subject property's boundaries;

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- Vegetation formation in the wet depression between the subject property and the Ventura Freeway (overall density, flammable exotic species, proximity to freeway being a potential source of fire ignitions).

Cruzan Parking Lot (PS-3)

This property is surrounded on all sides by land uses that would not be considered to be high-level contributors to WHR. Their foot prints are dominated by roof surfaces, paved areas, and paved access roads. The entire property is currently in use as a paved and landscaped parking lot. There are no structures on the property. There is negligible terrain slope over the property. An adjacent tract of land does contain a hill where the base meets the project property boundary. The hill has slopes averaging 35%, is occupied by short annual grasses and forbs, and has a thin stand of eucalyptus near its crest. The property is served by municipal emergency water services and initial emergency response time is less than 7 minutes from a LACFD station located approximately 1,440 feet away. There are no drainages or wet areas associated with the property.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, NI, NI, and NI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

1. Availability of a municipal system as a source of water for fire suppression;
2. Underground placement of utilities;
3. Short distances to principal routes used for evacuation, and;
4. The high percentages of surface area considered as “hardscape” characterizing both the project parcel itself and the adjacent land uses.

Hazardous Conditions

A single condition was observed that would reasonably lead to an increase in wildfire risk:

1. The adjacency of the open space area that contained stands of *Eucalyptus globulus*, a species considered to be in a highly flammable category.

Old Town Vacant Lot (PS-4)

This property is in the Old Section of the City. It is bordered on the north by the Ventura Freeway (separated by a sound barrier wall), on the south by Calabasas Road, and on either side by other parts of the Leonis Adobe historical park. The project property is current used for boarding large animals used in events consistent with the theme of the Park. The surface of the property is native soil and the only structures are cross fences and small shelter buildings. On the west and north boundaries of the property there are linear formations comprised of tree and brush species. The tree element of the formation is a mix of native and exotic species, with some of the exotics with relatively high flammability ratings. The location is served by the municipal emergency water system and electrical service are located underground. Emergency response time is under 5 minutes from the LACFD fire station located 0.76 miles to the west on Calabasas Road. There are no watercourses or wet areas associated with the property

On-Site conditions show little potential for an elevated WHR level. The entire surface is non-flammable soil and the fences and buildings contain a very small volume of fuel. There is no landscaping and the

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perimeter vegetation has little structure development with respect to carry significant level of fire. Potential ignitions from the Ventura Freeway corridor is not an issue because of the presence of the sound wall.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, NI, NI, and NI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Availability of a municipal system as a source of water for fire suppression;
- Underground placement of utilities;
- Short distances to principal routes used for evacuation, and;
- The high percentages of surface area considered as “hardscape” characterizing both the project parcel itself and the adjacent land uses.

Hazardous Conditions

A single condition was observed that would reasonably lead to an increase in wildfire risk:

- The adjacency of the open space area that contained stands of *Eucalyptus globulus*, a species considered to be in a highly flammable category.

Las Virgenes Shopping Center

This property is surrounded on three sides by land uses that would be considered to be high-level contributors to WHR. On the northern, western and southern limits are large tracts of open rangeland occupied principally by short annual grasses and forbs. On the eastern side front on Las Virgenes Road (an officially identified Designated Evacuation Route (DER)) and beyond that a multiple-family residential development. Over the property there is negligible terrain slope, but immediately behind the shopping center is a hill with 25% - 30% slopes. The retail structure is in excess of 30 years old and has design approaches typical of a time that did not put a great deal of emphasis on wildfire resistibility, however, use of non-flammable material was employed. Landscaping is confined to a row of single trees across the front of the existing building. The property is served by municipal emergency water services and initial emergency response time is less than 5 minutes from a LACFD station located approximately 0.66 miles south on Las Virgenes Road. No watercourses or wetlands are associated with the project property.

On-Site conditions showed a rationale for a higher WHR level. The buildings occupying the site appear to be more than 30 years old. Although the design does include open-beam construction it does employ non-flammable materials fairly extensively. A primary concern is the immediate adjacency to the open rangelands where wildfire can approach the property without the buffering provided by either less flammable types of land uses or proactive management.

Wildfire-Related Hazards

The Section 20 findings for the four questions (NI, PSI, LTSI/M, and LTSI/M, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Availability of a municipal system as a source of water for fire suppression;
- Low initial response time, estimated to be under five minutes, from closest the LACFD facility (Station 125);
- Multiple avenues of ingress/egress
- Short distances to principal routes used for evacuation, and;
- The high percentages of surface area considered as “hardscape” characterizing both the project parcel itself and approximately 40 % of the adjacent developed land uses.

Hazardous Conditions

Three conditions were observed that would reasonably lead to an increase in wildfire risk:

- The adjacency of the large amount of open space areas;
- Overhead location of electrical services (with transformers), and;
- The age of the structure, its construction design, and high percentage of flammable materials used.

Church in the Canyon

This property is bounded on the north and south by multi-family residential developments; on the east Las Virgenes Road (an officially identified Designated Evacuation Route (DER)) across which is a large tract of hills with open rangeland occupied primarily by short annual grasses and forbs; and to the west by a segment of Las Virgenes Creek. The setting is a mix of land use types, some that can affect an elevation of the WHR and others a lowering of it. The property is characterized by terrain slopes less than 5% and there is no immediate proximity to more extreme topography., but immediately behind the shopping center is a hill with 25% - 30% slopes. The property is served by municipal emergency water services and electrical services are located underground with an access vault near southeast corner of the property. There is a short (~100 feet) section of overhead electrical line located on the northeastern property line that has a single pole with transformer. This line appears to be serving the residential development to the north of the project property. Initial emergency response time is less than 5 minutes from a LACFD station located approximately 1.10 miles north on Las Virgenes Road. Access to the DER Las Virgenes Road is via a very short section of Willow Glen Street to a traffic light control intersection. The church-related structures appear to be in excess of 30 years old and has design approaches and selection of materials typical of a time that did not put a great deal of emphasis on wildfire resistibility. Landscaping, primarily in the form of mature trees of mixed species, is confined to groupings aligned along the southern property line. At the southwestern corner of the property landscaping formation merges into the gallery formation associated with Las Virgenes Creek. The gallery formation along Las Virgenes Creek is characterized by a heavy fuel loading and un-managed structure. As previously mentioned, this formation has a direct connection to some of the project property’s landscaping elements.

On-Site conditions showed a rationale for a higher WHR level. The buildings occupying the site appear to be more than 30 years old and the construction design and use of materials reflects a lack of consideration regarding wildfire resistance. Additional concerns include the potential opportunities for wildfire approach provided by the open rangeland to the east and the gallery formation associated with Las Virgenes Creek on the west.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, NI, PSI, and LSTI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Availability of a municipal system as a source of water for fire suppression;
- Low initial response time, estimated to be under five minutes, from the closest LACFD facility (Station 125);
- Multiple avenues of ingress/egress
- Short distances to principal routes used for evacuation, and;
- The high percentages of surface area considered as “hardscape” characterizing the surrounding land uses.

Hazardous Conditions

Three conditions were observed that would reasonably lead to an increase in wildfire risk:

- Proximity to the hazardous fuels situation in the gallery formations along the drainage;
- Proximity to the open rangeland to the east of the project property;
- Overhead location of some portion of the electrical services (with transformers);
- Construction design and use of more flammable materials used for the existing structures, and;
- Improper use/maintenance of landscaping in certain locations (especially regarding species used, density and structure of stands, and locations at which they were planted).

Downtown Offices

This property is surrounded by land uses that would not be considered to be high-level contributors to WHR. Their foot prints are dominated by roof surfaces, paved areas, paved access roads, and the Ventura Freeway. The on-site structures present are generally new and designed and constructed in compliance with statutes and regulations that were formulated in consideration of wildfire risk reduction. There is negligible terrain slope and no proximity to areas with topographic extremes. The property is served by municipal emergency water services and initial emergency response time is less than 5 minutes from a LACFD station located approximately 1,440 feet away. Electrical service is located underground although there is, what appears to be, a medium tension trunk line on concrete poles along the northern property line. Access to the DER Ventura Freeway is a distance of 1,185 feet.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, NI, NI, and NI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

1. Availability of a municipal system as a source of water for fire suppression;
2. Low initial response time, estimated to be under five minutes, from the closest LACFD facility (Station 68);

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3. Short distances to principal routes used for evacuation
4. Construction design and use of inflammable materials that reflects the need for increased fire resistance, and;
5. The high percentages of surface area considered as “hardscape” characterizing both the project property itself and approximately 40 % of the adjacent developed land uses.

Hazardous Conditions

Two conditions were observed that would reasonably lead to an increase in wildfire risk:

1. Overhead location of electrical services, and;
2. A single entrance/exit point for the surface parking.

Avalon Apartments

This project property is set within a mix of adjacent land uses that include, Public Facilities – Institutional (PF-I), High-Density Single-Family Residences (R-SF), Open Space – Resource Protection (OS-RP), Public Facilities-Recreational (REC/PF-R), agricultural facilities, and transportation infrastructure (roads). The property has two direct ingress/egress routes: Lost Hills Road and Las Virgenes Road (a Designated Evacuation Route (DER)) with both of them being at traffic light-controlled intersections. Lost Hills Road also provides access to the Ventura Freeway system (4,462 feet to the north). Emergency response is provided by the Los Angeles County Fire Department (LACFD) with the closest facility being Station 125 approximately 8,297 feet (approximately 1.6 miles) north on Las Virgenes Road. Estimated response time is less than eight minutes from departure from the station. A second LACFD facility, Station 67, is located just off Las Virgenes Road approximately 21,790 feet (approximately 4.1 miles) to the south. Estimated response time for Station 67 time is less than twelve minutes from departure from the station. The property is served by the municipal emergency response water system of the City of Calabasas. Electrical service to the project property is located underground with access vaults located around the property. Landscaping varies in quality, with respect to wildfire resistance; in some locations it is well designed and maintained and in others, less so. Immediately to the west of the property is a segment of Las Virgenes Creek. Fuels conditions in the gallery formation are adverse as they relate to the fire behavior the formation will generate if/when it burns. Additionally, directly to both the east and west, across Las Virgenes Road and Lost Hills Road, respectively, are extensive areas of open range land occupied primarily by annual grass and forb species. This open space area would allow the approach of wildfire to within 75 feet of the subject property.

On-Site conditions showed a rationale for a higher WHR level. The buildings occupying the site appear to be more than 30 years old and the construction design and use of materials reflects a lack of consideration regarding wildfire resistance. Additional concerns include the potential opportunities for wildfire approach provided by the open rangeland to the east and the gallery formation associated with Las Virgenes Creek on the west.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, PSI, NI, and LSTI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Availability of a municipal system as a source of water for fire suppression;

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- Low initial response time, estimated to be under eight minutes, from the closest LACFD facility (Station 125);
- Multiple avenues of ingress/egress
- Short distances to principal routes used for evacuation
- Construction design, with regard to increasing fire resistance, and use of less flammable materials for the existing structures;
- Proper use/maintenance of landscaping (especially regarding species used, density and structure of stands, and locations at which they were planted).
- The high percentages of surface area considered as “hardscape” characterizing both the subject property and approximately 50% of the surrounding land uses.

Hazardous Conditions

Three conditions were observed that would reasonably lead to an increase in wildfire risk:

- Proximity to the hazardous fuels situation in the gallery formations along the drainage;
- Proximity to the open rangeland to the east of the project property, and;
- Potential closure of internal roads during a fire incident due to bordering mature trees.

Agoura Road Offices

The project property is located in a commercial zone west of the intersection of Las Virgenes road and the Ventura Freeway. Directly adjacent land uses include, Commercial, Limited (CL/BLI), Commercial Offices, Business/Professional(CO/B-PO), Single Family Residences (R-SF), and transportation infrastructure (roads). The parcel fronts directly on Agoura Road, with an intersection with Las Virgenes Road (a Designated Evacuation Route (DER)) at a distance of 1,123 feet to the northeast, and eventually reaching the Ventura Freeway (also a DER) in an additional 1,737 feet to the north. The property is served by the municipal emergency response water system of the City of Calabasas. Electrical service to the project property is located underground. There is, however, what appears to be a medium tension electrical, and communications, lines elevated and communications lines on wooden poles (with transformers) that passes along the northwestern property line. Landscaping varies in quality, with respect to wildfire resistance; in some locations it is well designed and maintained and in others, less so. A section of Las Virgenes Creek follows the southeastern boundaries of the subject property. Fuels conditions in the gallery formation are adverse as they relate to the nature of the fire behavior the formation will generate should it ever burn.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, NI, LSTI/M, and LSTI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Availability of a municipal system as a source of water for fire suppression;
- Low initial response time, estimated to be under five minutes, from closest the LACFD facility (Station 125);
- Multiple avenues of ingress/egress
- Short distances to principal routes used for evacuation, and;

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- The high percentages of surface area considered as “hardscape” characterizing both the project parcel itself and approximately 40 % of the adjacent developed land uses.

Hazardous Conditions

Three conditions were observed that would reasonably lead to an increase in wildfire risk:

- Proximity to the hazardous fuels situation in the gallery formations along the drainage,
- Overhead location of electrical services (with transformers), and;
- Improper use/maintenance of landscaping in certain locations (especially regarding species used and locations at which they were planted).

Mureau Offices

This 69,260-square foot parcel fronts directly on Mureau Road, with an intersection at, Las Virgenes Road (577 feet to the west), and then eventually reaching the Ventura Freeway (US Hwy 101) in an additional 1,471 feet to the south.

The parcel is an area that is primarily open grasslands with a low density of development, and yet, is served by the municipal emergency response water system of the City of Calabasas. Electrical service and communications are located underground with an access vault at the northwestern corner of the property. Landscaping covers a minimal surface area with occasional instances of tree groupings, proximity to the buildings, and use of more flammable exotic species; conditions that could elevate wildfire risk. Directly adjacent land uses include Commercial, Office (CO/B-PO) and transportation infrastructure (roads). Large contiguous tracts of Open Space (either OS or OS-DR) and/or Recreation (O-SR) are within 650 feet in all four cardinal directions.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, PSI, LSTI, and NI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Availability of a municipal system as a source of water for fire suppression;
- Underground placement of utilities;
- Construct design and large percentage use of non-flammable materials;
- Multiple avenues of ingress/egress
- Short distances to principal routes used for evacuation, and;
- The high percentages of surface area considered as “hardscape” characterizing both the project parcel itself and the adjacent developed land uses.

Hazardous Conditions

Three conditions were observed that would reasonably lead to an increase in wildfire risk:

- The adjacency of the large amount of open space areas;
- Landscaping that has matured such that it has formed dense groups, or unacceptable proximity to the structures, and;

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- The presence of a mature dense galley formation occupying a linear wet area created by drainage from the Ventura Freeway.

Commons Shopping Center

This 1,088,564-square foot parcel fronts directly on Calabasas Road, with an intersection at, Mulholland Drive (4,000 feet to the northeast), and Calabasas Parkway (2,094 feet to the southwest), eventually reaching the Ventura Freeway (US Hwy 101) in and additional 422 feet.

The parcel is in the densely-developed commercial center of the City and is served by a municipal emergency response water system. Electrical service and communications are located underground and there are access vaults and emergency generating systems at the southwest corner of the property. Landscaping covers a minimal surface area with well-spaced trees and “evergreen” shrubs in the lot’s landscaping “islands”. Directly adjacent land uses include Commercial, Office (CO/B-PO), Public Facility-Institutional (PF-I) (Calabasas City offices), Residential, Multifamily (R-MF), and transportation infrastructure (roads). Open space (either OS or OS-DR) occupies the southern boundary of the parcel with established stands of *Eucalyptus globulus*.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LTSI, NI, NI, and NI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Availability of a municipal system as a source of water for fire suppression;
- Underground placement of utilities;
- Construct design and large percentage use of non-flammable materials;
- Three avenues of ingress/egress
- Short distances to principal routes used for evacuation, and;
- The high percentages of surface area considered as “hardscape” characterizing both the project parcel itself and the adjacent land uses.

Hazardous Conditions

Two condition were observed that would reasonably lead to an increase in wildfire risk:

- The adjacency of the open space area that contained stands of *Eucalyptus globulus*, a species considered to be in a highly flammable category, and,
- One access avenue was flanked by large mature trees with shrub and grass under-plantings that catch fire, fall, and close one of the three avenues.

Craftsman Corner

This 427,324-square foot parcel fronts on the Parkway Calabasas extension north of the Ventura Freeway. Access to the Ventura Freeway (a Designated Evacuation Route (DER)) occurs 725 feet south on Parkway Calabasas. The parcel is in a mixed-use area with some incompatibilities. The southern edge of the parcel is served by a municipal emergency response water system, with two hydrants across the street. It is unknown whether any other parts of the subject property are served as well. Electrical service is located underground. Emergency response is provided by the Los Angeles County Fire Department, with the nearest facility being Station 68. This Station is located at a travel

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distance of 1,450 feet (south on Calabasas Parkway then right on Calabasas Road) and has an associated response time of under two minutes after departing the station.

Directly adjacent land uses include Single Family Residential (R-SF), Commercial-Retail (CR/B-R), Commercial-Office (CO/B-PO), animal husbandry, and transportation infrastructure (roads). The eastern boundary of the parcel is aligned with an un-named drainage.

The office building appears to have been constructed no less than 30 years ago through observations regarding the construction design and material used. The landscaping is limited to a row of mixed tree species over lawn on the street side of the office buildings. The office facility is served by an unorganized, poorly-paved lot on the back of the offices that has a one-way entrance and a one-way exit. The upper two-thirds of the property is occupied by a tree service operation.

Wildfire-Related Hazards

The Section 20 findings for the four questions (LSTI, NI, LSTI/M, and LSTI, respectively) were the result considering the following:

Ameliorating Conditions

Several conditions were observed that would reasonably lead to a reduction in wildfire risk:

- Availability of a municipal system as a source of water for fire suppression;
- Underground placement of utilities;
- Short distances to principal routes used for evacuation, and;
- The moderate percentage of surface area considered as “hardscape” characterizing the adjacent land uses.

Hazardous Conditions

Three conditions were observed that would reasonably lead to an increase in wildfire risk:

- The construction design (primarily without considerations of wildfire risks; and more specifically ember ignition) and relatively high percentage use of flammable materials;
- Fire ignition producing capability of a tree service operation;
- Storage of large amounts of woody fuels;
- Poor conditions, with respect to wildfire-related risks, of vegetation formations along the boundaries of the property

Responses to CEQA Initial Study Checklist XX (Wildfire)

XX. WILDFIRE. If located in, or near, SRA, or lands classified as a very high fire hazard severity zone, would the project:

Question XX(a): Substantially impair an adopted emergency response plan or emergency evacuation plan?

Setting

Emergency response and evacuation plans that apply directly to the City of Calabasas include:

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- City of Calabasas Emergency Preparedness Guide¹⁰,
- LA County All Hazard Mitigation Plan¹¹,
- Santa Monica Mountains North Area Standards District¹²,
- Santa Monica Mountains North Area Plan¹³.

Other emergency response and evacuation plans that that have been prepared and officially recognized in the Project's immediate area include:

- City of Malibu Mass Evacuation Plan¹⁴,
- Topanga Community Wildland Fire Evacuation Plan¹⁵, and,
- Ventura County. Emergency Preparedness Guide¹⁶.

The City of Calabasas has a robust disaster preparedness and evacuation planning program. Pertinent to this question is the evacuation routes map¹⁷. This map defines two classes of evacuation routes:

- Freeway Disaster Route comprised of the Ventura Freeway (US 101), and,
- Disaster Route comprised of Las Virgenes Road, Mulholland Blvd., and Topanga Canyon Blvd.

Reasonably Foreseeable Impacts

- The most likely approaches wildfire could make to all twelve project sites will not involve access to the properties for emergency response purposes;
- With regard to added pressure on the system of designated evacuation routes the nature of traffic that will be associated with the planned development will mirror that already characterizing the City: Private vehicles used by residents and clients of commercial services.
- Table 4 presents for each of the 12 project sites, the number of potential dwelling units, the number of additional residents (calculated on a figure of 2.71 residents per household¹⁸), percentage of the City's current population (calculate using the California DOF figure of 26,116¹⁹), the closest Principal Arterial, and the distance to it.

¹⁰ City of Calabasas. July, 2019.

¹¹ Los Angeles County. February 2014.

¹² Los Angeles County. May, 2021

¹³ Los Angeles County. June, 2021.

¹⁴ City of Malibu. August, 2020.

¹⁵ Topanga Community. July, 2009

¹⁶ Ventura County. 2011.

¹⁷ City of Calabasas. July 21, 2008.

¹⁸ California DOF. 2021.

¹⁹ Ibid.

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Site ID	Site Name	Potential Dwelling Units	Additional Residents	% of Current Population	Closest DER	Distance (ft)
1	Raznick Offices	42	114	0.44	MHD	3,619
2	Rancho Pet Kennel	60	163	0.62	VFW	2,677
3	Cruzan Parking Lot	88	238	0.91	VFW	1,916
4	Old Town Vacant Lot	43	117	0.45	MHD	1,417
5	Las Virgenes Shopping Center	41	111	0.42	LVR	0
6	Church in the Canyons	111	301	1.15	LVR	94
7	Downtown Offices	60	163	0.62	VFW	1,201
8	Avalon Apartments	142	385	1.47	LVR	0
9	Agoura Road Offices	125	339	1.30	LVR	1108
10	Mureau Offices	64	173	0.66	LVR	615
11	Commons Shopping Center	201	545	2.09	VFW	2,534
12	Craftsman Corner	236	640	2.45	VFW	703

DER: Designated Evacuation Route
MHD: Mulholland Drive
VFW: Ventura Freeway (US Hwy 101)
LVR: Las Virgenes Road

- None of the envisioned developments involve any elements of animal husbandry, a principal consideration in evacuation plans currently in force in the area^{7, 8, 9 and 10}. In fact, should redevelopment occur on the Rancho Pet Kennel site it will remove some portion of the need to evacuate and board animals.
- All of the 12 sites are within a reasonable distance of an already defined evacuation route in the City's evacuation planning document²⁰ and within minutes of accessing the large capacity Ventura Freeway (VFW).
- In the event of the typically most dangerous type of wildfire occurring (one driven by prevailing south winds and approaching the City over the more heavily wooded landscapes on the southern edge of the City) none of the subject project sites would be cut off from either access for emergency responses or accessing the defined evacuation routes;
- In all likelihood, in the case of a required evacuation in a wildfire incident, the total number of occupants of a household will utilize a single vehicle. All of the project sites are within one mile of an already established surface evacuation route and the VFW system. If all sites were to be evacuated in a single effort (where such evacuations are more typically phased to avoid congestion) this would contribute less than 1,400 vehicle miles traveled.

Wildfire Hazard Risk Reducing Actions

Location-Specific Actions

Consideration should be given to integrating "shelter-in-place" concepts into project designs. Having a facility with this capability in either the residential or commercial elements of any given project would 1) permit a focus location for initial emergency responders, 2) result in a reduction of evacuees.

²⁰ City of Calabasas. Evacuation Route Map. July, 2008

Condition-Specific Actions

Whereas none of the twelve project sites studied are in settings where reasonable wildfire approach pathways would impact access routes, either ingress or egress, no WHR-reducing actions are warranted

Regulatory-Related Actions

The majority of the project sites are located in settings with adjacency to officially recognized sensitive resources. For example, four of the sites are bordered by watercourses and three by parklands under public jurisdiction. Being protected resources there may be constraints in place on the types and intensities of fuels management practices that could lessen WHR on the road system allowing for emergency response and evacuation.

Conclusions

Given the full breadth of the hazard and evacuation plans available, and the robust design/review process currently in place, it is reasonable to conclude that any version of a development subsequent to this review process will not produce direct or indirect effects that will substantially impair an adopted emergency response plan or emergency evacuation plan.

Question XX(b): [Would implementing the project] Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Setting

The City of Calabasas lies at the base of the northern facing slope of the Santa Monica Mountains. The City is located approximately five miles north of the east-west oriented primary ridge line of the mountain range. The portions of the City located on the northern-facing slope of the Santa Monica Mountains are characterized by highly dissected dendritic drainage patterns with a wide range of slopes (0% -90%). Elevation changes within the City limits, on a north-to-south trend line, start at approximately 1,000 feet (AMSL) along State Route 101 to 1,500 feet (AMSL) along the southern City limits. The soil resource across the City is comprised of five principal soils series: Balcom²¹, Gazos²², Linne²³, Nipolomol²⁴, and Topanga²⁵.

These soils are generally derived from sandstone and calcareous parent materials and are moderately-to-well drained. In terms of soil slippage rating the key factor is slope; Balcom silty clay loam, Linne-Los Ossos Association, and Xerorthents-Urban-Balcom, and Xerorthents-Urban-Gazos, Associations are rated as “High” when slopes exceed 30%. In addition, there are occurrences of fluvaquents (unconsolidated fluvial deposits) and Xerorthents (soils with a dominantly xeric moisture regime). The Xerorthents are generally located on low slope classes and have been, historically, the sites of urban development.

Research has identified four weather stations that make “wind rose” data available. The locations of these stations are shown, in relation to the City’s position, in Figure 1. Table 5, below, presents data from the four stations that include 1) the wind source directions (PWD), for a primary and secondary (when it is present) lobes (P and S), and, 2) Average Wind Speed AWS (again presented for the

²¹ USDA/NRCS. Balcom Series

²² USDA/NRCS. Gazos Series

²³ USDA/NRCS. Linne Series

²⁴ USDA/NRCS. Nipolomol Series

²⁵ USDA/NRCS. Topanga Series

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primary and secondary lobes. The data has been further broken out into two seasonal periods: March-to-October (which roughly corresponds to the fire season) and the wetter months between November and April.

Table 5. Weather Station Data

Station	Seasonal Period			
	March - October		November - April	
	PWD (P/S)	AWS	PWD	AWS
Simi Valley [CEEC1] ²⁶	ENE/WSW	5-10/7-15	E/ENE	7-10/7-10
Malibu Canyon [MBCC1] ²⁷	S	10-20	S	10-20
Calabasas-Stunt Ranch [SUZC1] ²⁸	WNW/ESE	2-5/5-7	WNW/SE	1-5/2-5
Topanga RAWS [TPGC1] ²⁹	S/WNW	7-15/7-15	N/S	7-10/5-7

In terms of regional vegetation type distributions a mapping procedure determined that the northern and western City boundaries are dominated by contact with grassland, high density residential, commercial/institutional enterprises, and transportation infrastructure (See Figure xx.x). On the other hand, portions of the eastern boundary and the entire southern boundary are dominated by mixed hardwood (both dense and more open savannah types), shrub/hardwood mixes, pure shrublands, and grasslands. These conditions continue on into the city limits for approximately ½ mile in the southwestern and southeastern corners of the City area. The woody types, tree and brush formations, are generally associated, especially under extreme fire weather conditions, with rapid fire front advance, high burn intensities, longer duration at a given location, and generation of airborne embers.

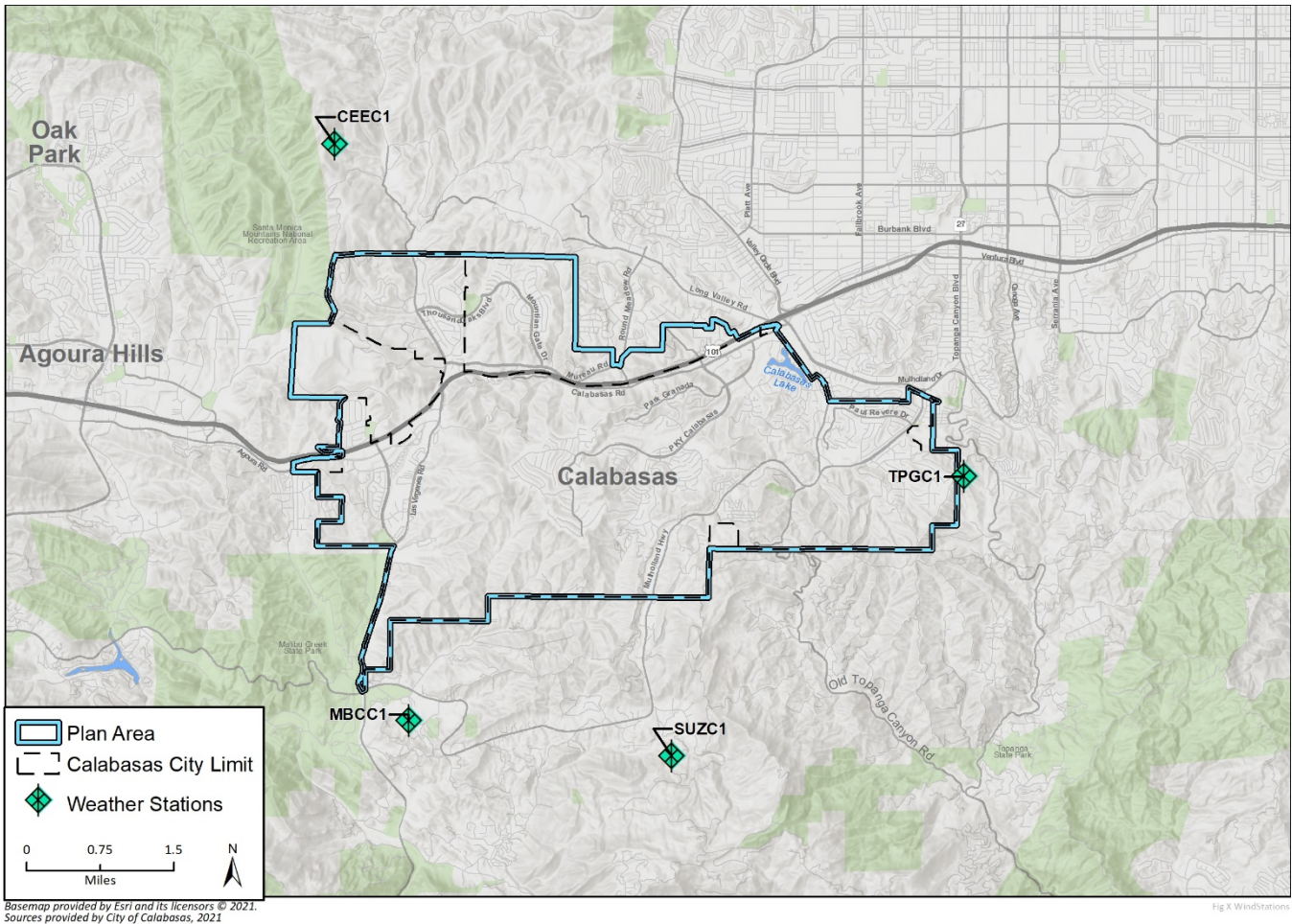
²⁶ Iowa State University. May, 2021a.

²⁷ Ibid. May, 2021b

²⁸ Ibid. May, 2021c

²⁹ Ibid. May, 2021d

Figure 1. Wind Station Locations



Reasonably Foreseeable Impacts

1. None of the twelve project sites are located on slopes exceeding 8% (Craftsman Corner was the maximum). Four sites were located at locations with a moderate adjacency to terrain with slopes in the 30% - 40% range: Cruzan Parking Lot, Commons Shopping Center, Las Virgenes Shopping Center, and Rancho Pet Kennels. However, all of these sites are located on lower topographic positions than any point in the adjacent terrain, thus lessening the influence of terrain on spread rates (fire spread rates, under constant wind conditions, are faster moving uphill, and conversely slower going downhill). It is not reasonably expected that any of the twelve project sites will experience increased risk levels attributable to topographic influences.
2. The combination of the presence of heavier fuel types to the south of the City and the prevailing wind directions indicated by the wind rose data from the Malibu Canyon and Topanga RAWS weather stations, could result in the advance of a primary fire front, ember flows, and smoke plumes toward all locations within the City's limit. These conditions could result in significantly adverse impact on occupants of the following project sites: Avalon Apartments, Church in the Canyon, Agoura Road Offices, and Rancho Pet Kennels. Project sites possibly impacted to a lesser extent would include Mureau Offices, and Las Virgenes Shopping Center.
3. In the event of prevailing west-to-east winds, as described in the data from the Simi Valley and Calabasas-Stunt Ranch weather stations, all five of the "west side" project sites could be adversely affected.

Wildfire Hazard Risk Reducing Actions

Location-Specific Actions

Consideration should be given to integrating “shelter-in-place” concepts into project designs. Having a facility with this capability in either the residential or commercial elements of any given project would provide immediate shelter in the face of an advancing wildfire front and, if appropriately designed air filtration systems are utilized, provide a refuge from smoky conditions. focus location for initial emergency responders, 2) result in a reduction of evacuees.

Condition-Specific Actions

If fuels management is not implemented at strategic locations in the near region of the City the influences associated with meteorological and fuels conditions will continue their overriding influence on WHR.

Regulatory-Related Actions

The vast majority, from the standpoint of surface area occupied, of the strategic locations mentioned above, are located within an expanded Regional Planning Area as described in the accompanying Wildfire Hazard Risk Assessment for the City of Calabasas³⁰. Furthermore, a majority of these lands are under the jurisdiction of public agencies or are large private holdings. The potential for establishing cooperative working agreements specific to addressing wildfire issues should be considered as a way to implement WHR-reducing actions on a more regional basis.

Conclusions

In the event of a wildfire occurring under extreme weather conditions all previous attempts at mitigating wildfire-related risk could be rendered moot and the placement of any type of development could be subjected to potentially significant impacts.

For wildfire events not occurring under extraordinary weather conditions, implementing projects, whose designs are, 1) compatible with applicable zoning restrictions, and, 2) consistent with the results of the various project reviews being implemented in Los Angeles County and the City of Calabasas, could result in direct, or indirect, effects that would lower wildfire risk. There is no reasonable expectation that implementing these projects will significantly increase exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Question XX(c): Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Setting

The development projects comprising the Project Description addressed in this impact assessment would all have final design characteristics and specifications that are products of a rigorous multi-agency review process. This review process would include input from 1) the planning agencies at both the city and county levels, 2) technical entities, including those associated with LA County Fire and CAL

³⁰ TSS Consultants. July, 2021

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FIRE, and 3) the impact assessment conducted in Compliance with the California Environmental Quality Act^{31 & 32}

With regard to wildfire-related elements those common to all of the projects would include:

- Multiple avenues of ingress/egress available for use by 1) emergency equipment and personnel responding to an incident, 2) ongoing incident control activities, and 3) occupant evacuation if warranted;
- Road system specifications suitable for the full operational needs of emergency equipment and personnel;
- Opportunities to use municipal emergency water supply systems;
- Underground placement of utilities (thus eliminating overhead wires and transformer systems; a common source of fire ignition);
- Structure design and use of materials³³ that reduce overall flammability and lower vulnerability to ember-source ignitions;
- Landscaping designed and managed to provide buffer zones and individual landscape elements that would utilize 1) species that are less flammable, 2) provide proper clearances to structures, and 3) are arranged and managed to reduce the likelihood of ignition and bolster the ability to gain control;
- Providing occupants opportunities for “shelter-in-place” should this use be warranted.

Wildfire Hazard Risk Reducing Actions

Location-Specific Actions

At the current time the specific parameters that are associated with the “installation or maintenance (such as roads, fuel breaks, emergency water sources, power lines, or other utilities)” are being addressed in the comprehensive design review process being conducted by the City, County of Los Angeles, and CAL FIRE. No other location-specific WHR-reducing actions were identified in this study.

Condition-Specific Actions

No actions in this category were identified as a result of this study.

Regulatory-Related Actions

No actions in this category were identified as a result of this study.

Conclusions

Given that all envisioned development projects would be subjected to this rigorous review process it is reasonable to conclude that the installation, or maintenance, of associated infrastructure would not result in significant levels of adverse direct or indirect effects resulting in exacerbated fire risk or temporary/ongoing impacts to the environment.

Given the nature of the comprehensive design review process that each individual project will undergo, it is reasonable to conclude that potentially adverse impacts would be identified and conditions placed on project design and implementation that would act to minimize, or avoid altogether, adverse impacts.

³¹ Public Resources Code, Division 13, §§ 21000-21177

³² California Code of Regulations, Title 14, Division 6, Chapter 3, §§ 15000-15387 and Appendices A-K.

³³ California Code of Regulations, Title 24, Part 2, Chapter 7A, §§ 701A.1-710A.3.3.

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Question XX(d): Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Setting

With an average annual rainfall of 13.6”³⁴ the City of Calabasas is a marginally xeric environment and the watercourse systems can experience flashy (high volume short duration flows) watercourse flows. The FEMA flood zone maps^{35, 36} show that 1) there is predicted to be a 1% annual chance of flooding along the full extent of Las Virgenes Creek and, 2) in the portion within the City limits, there are six restricted area locations where there is a 0.2% chance of flooding.

After a series of wildfires in the upper watershed of the creek in 2005, various water quality studies were conducted in order to assess possible fire-related impacts. One important test addressed total suspended sediments (TSS). Samples taken in December, shortly after the 2005 fire did not show any significant increase in TSS at a sample site in the upper portions of the watershed. In the Lower Las Virgenes Creek sub-watershed, the site downstream of the fires showed a slight elevation of TSS on December 25, 2005; but nothing greater than other samples taken previously at the site³⁷. This is an indication that removal of the vegetation experienced in the 2005 fires was not of a nature or intensity that resulted in significant changes in water quality, or apparently, the watercourse’s hydrograph.

With regard to landslides and potential site destabilization C.J. Willis, et.al. organized a series of maps and conducted an analysis to determine susceptibility to deep-seated landslides for California³⁸. Conducting an analysis that considered eight slope classes and three level of rock strength they indicated that the City showed a distribution of several susceptibility classes: From the lowest “III” to the highest “X”. A companion map, Landslide Inventory, presenting the locations of all previously mapped deep-seated landslides available in digital format showed no indication of such occurrences in the City’s footprint. A review of Los Angeles County’s GeoHub: Landslide Zones³⁹ showed a greater detail with respect to the distribution within the City but essentially the same pattern as that presented by Willis, et.al., i.e. essentially all of the dissected uplands were classified as a landslide zone. Additional mapped information was available through a web portal operated by the United State Geological Service⁴⁰. This data showed polygons representing approximately 25 individually-recorded landslides (about 20% with date information, all in 1997) within the City limits. The majority of the recorded slides were clustered in three locations: The open state-owned quarry area off Las Virgenes Road north of the 101, in the dissected uplands east of Las Virgenes Road south of the 101, and in the already-developed Greater Mulwood section.

With respect to soils, and their associated potential for mass movement, four soils groups (including individual series, associations of series, and mixed land use/soils combinations) showed a “High” level of Soils Slippage Potential:

- Balcom silty clay loam, 15% - 50% slopes;
- Linne-Los Osos, 30% - 75% slopes;
- Xerorthent-Urban-Balcom, 0% - 30%, and;
- Xerorthent-Urban-Gazos, 0% - 30%

³⁴ City of Calabasas website [www.cityofcalabasas.com], June, 2021.

³⁵ Los Angeles County, Department of Public Works. May, 2015a.

³⁶ Los Angeles County, Department of Public Works. May, 2015b.

³⁷ City of Calabasas, March, 2008

³⁸ California Geological Survey, Willis, et.al. 2011

³⁹ County of Los Angeles, GeoHub. November, 2015

⁴⁰ USGS. Landslide Inventory Database. June, 2021.

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Site visits to the 12 projects showed that none occupied significantly sloped terrain, nor were they immediately adjacent to the lower portions of slopes. Observations at several of the subject sites showed slope stabilization and retention actions and there were no indications conditions on these adjacent sites posed a risk of landslide or showed evident instabilities. The pathway south is completely disguised by residential and commercial developments, golf courses, and transportation infrastructure.

Reasonably Expected Impacts

1. Seven of the potential project sites are not associated with a defined drainage or wet area. It is not a reasonable expectation that these project sites will have a vulnerability to flooding;
2. The Raznick Offices site is immediately adjacent to Calabasas Creek, whose headwaters point is completely lost in commercial and residential developments to the southwest. Examination of the creek showed no indication of extraordinarily high flows nor is there a reasonable expectation of such flows in the future primarily due to the low average gradient (approximately 3% at the project site) in its run to the assumed headwaters point;
3. Five of the project sites are within the sphere of Las Virgenes Creek but only three have immediate adjacency:
 - a. Las Virgenes Shopping Center is ~475' from a concrete lined channel carrying LVC.
 - b. Mureau Rd. Offices are ~390' from where LVC could be topographically although did not see evidence of a channel in the vicinity.
 - c. Agoura Road Offices, Church in the Canyon, and Avalon Apartments are immediately adjacent to LVC.

Although designated by FEMA as a watercourse prone to flooding (1% to 2% occurrence rates) the five project sites are reasonably protected by a combination of 1) artificial channeling, 2) providing full channel widths that allow adequate dispersion of high-water flows, and 3) containment berms. Furthermore, stream hydrographic data is available for the post-fire reaction to a 2005 wildfire that impacted the lands in the upper portions of LVC. Station metering data showed no significant increase in flow volumes, peak flow characteristics, or suspended sediment percentages. Given the results of a previous wildfire incident, taken in concert with the flood prevention mitigation practices currently in place, it is not reasonable to expected the subject properties along LVC will be adversely impacted, either by direct or indirect effects related to flooding.

Wildfire Hazard Risk Reducing Actions

Location-Specific Actions

As the second criterion, post-fire slope instability, is not an issue as all twelve have terrain slope less than 8% and will be developed with hardscape most likely dominating the surface percentage, and the first and third criteria, runoff and drainage changes, respectively, would be addressed in the Storm Water Pollution Plan (SWPP) process required for all developments of the nature as those planed here, no additional location-specific actions specific to WHR-reduction were indentified in this study..

Condition-Specific Actions

No lands are truly “downslope” of any of the project site with the exception of the Craftsman Corner site. Five project sites are in up-stream positions, however wildfire hazard risks at these downstream locations are more directly related to their on-site conditions, not those on any of the proposed project sites. Considering these aspect leads to the conclusion that no additional condition-specific WHR-reducing actions would be warranted.

Regulatory-Related Actions

Wildfire behavior is controlled by a combination of very localized conditions and regional influences. With respect to this study, in this setting, regulatory actions having the objective of reducing WHR would need to address regional mechanisms. Policies would need to be developed and enacted that foster participation in cooperative agreements that employ WHR-reducing best management practices (BMPs) in a regional context.

Conclusions

1. Conduct fuels modification on lands within the City's southern boundaries and adjacent lands to the south, focusing on Potential Wildfire Approach Pathways (PWAP). These management actions would result in a buffer zone characterized by lower fuel volumes and fuel-bed continuities. The existence of this type of buffer zone will provide greater opportunities for bringing a wildfire under control before it makes an approach to the City's population concentrations.
2. Within the City limits focus fuels modification efforts on:
 - a. Ember generating vegetation stands, for example the stands of eucalyptus on the hill just south of the Commons Shopping Center;
 - b. Natural vegetation stands exhibiting a potential for producing adverse fire behavior (gallery formations in drainages, property perimeter "screens", etc.;
 - c. Implementing landscaping designs that are consistent with State of California buffer zone specifications and removes exotics that are determined to be dangerously flammable, and;
 - d. Utilize native species that are 1) determined to be more fire resilient and exhibit lower flammability ratings, 2) used to create stands that mimic those found in the region, and 3) used in stands structured and maintained to increased resistance to ignition, and if fire does ignite, enhances the opportunity to bring it under control.

In consideration of the combination of:

- The robust design/review process,
- An intense focus on the landslide issues in that process;
- The relative lack of flooding potential, and;
- A demonstrated relative stability of the landscape even post-fire,

it is reasonable to conclude that implementing the envisioned development projects will not produce direct or indirect effects that will subject people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Impact Summary

Below is a reproduction of Section 20 of the CEQA/IS Checklist presenting impact significance levels for an aggregation of all twelve project sites considered. These significance levels are for the projects constituting the redevelopment plans being considered by the City of Calabasas. It must be noted that, in this particular situation, the questions are worded in such a manner that it was difficult to assign the specific mitigating actions usually employed in wildfire situations to a particular question; basically rendering the "Less Than Significant With Mitigation Incorporated" option moot. The results did reflect the influences of the mitigations being built into the project descriptions in order to comply with the set of laws, regulations, and design review procedures in effect in Los Angeles County and the City of Calabasas.

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XX. WILDFIRE. If located in, or near, SRA, or lands classified as a very high fire hazard severity zone, would the project:

Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX(a): Substantially impair an adopted emergency response plan or emergency evacuation plan?	[]	[]	[X]	[]
XX(b): Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	[X]	[]	[]	[]
XX(c): Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	[]	[]	[X]	[]
XX(d): Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	[]	[]	[X]	[]

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Addendum I: Resumes of Involved Personnel

Addendum I can be viewed electronically on the City's website at:

<https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update/resources>

Addendum II: Original Site Visit Records

Addendum II can be viewed electronically on the City's website at:

<https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update/resources>

Addendum III: Individual Site Visit Reports

Addendum III can be viewed electronically on the City's website at:

<https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update/resources>

Addendum IV: Rubric Reports

Addendum IV can be viewed electronically on the City's website at:

<https://www.cityofcalabasas.com/government/community-development/2021-2029-housing-element-update/resources>