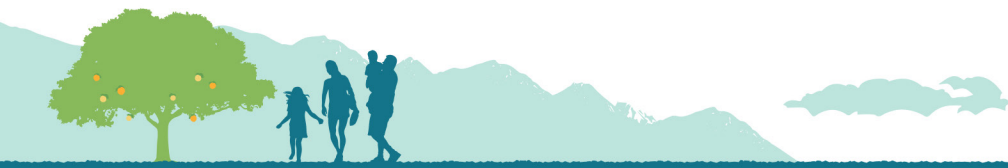


# CITY OF MOORPARK GENERAL PLAN 2050 DRAFT ENVIRONMENTAL IMPACT REPORT VOLUME II — APPENDICES



State Clearinghouse No. 2022050327 | December 2022





**MADE BY MOORPARK**  **General Plan 2050**



CITY OF MOORPARK GENERAL PLAN 2050  
DRAFT ENVIRONMENTAL IMPACT REPORT  
Volume II — Appendices



State Clearinghouse No. 2022050327 | December 2022



Prepared By: PlaceWorks  
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t 213.623.1443



# **Appendix A      Notice of Preparation and Public Comment Letters**

## Appendices

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# CITY OF MOORPARK

COMMUNITY DEVELOPMENT DEPARTMENT | 799 Moorpark Avenue, Moorpark, California 93021  
Main City Phone Number (805) 517-6200 | Fax (805) 532-2540 | www.moorparkca.gov

**Fecha:** 17 de mayo de 2022

**Asunto:** **Aviso de Preparación (NOP) y Reunión de Alcance para el Informe de Impacto Ambiental del Programa de Actualización del Plan General de Moorpark (PEIR)**

**Para:** State Clearinghouse, Agencias Estatales Responsables, Agencias Fideicomisarias Estatales, Otras Agencias Públicas, Organizaciones Interesadas y el Público en general

**Agencia Principal/Patrocinador:** Ciudad de Moorpark

**Título del Proyecto:** Informe de Impacto Ambiental del Programa Actualización del Plan General 2050 de la Ciudad de Moorpark

**Período de comentarios públicos:** del 17 de mayo de 2022 al 16 de junio de 2022

**Reunión de alcance:** 31 de mayo de 2022 a las 06:00 p.m. – Ciudad de Moorpark, Ayuntamiento, cámaras del consejo, Apricot Room, 799 Moorpark Avenue

**POSTED**  
**MAY 17 2022**  
MARK A. LUNN  
Ventura County Clerk and Recorder

By: \_\_\_\_\_, Deputy

**POR LA PRESENTE SE NOTIFICA** que la Ciudad de Moorpark (Ciudad), como agencia líder, preparará un Informe de Impacto Ambiental del Programa (PEIR) para el proyecto de Actualización del Plan General de la Ciudad de Moorpark (proyecto propuesto). El propósito de este aviso es (1) servir como un Aviso de Preparación (NOP) de un EIR de conformidad con la Sección 15082 de las Directrices de la Ley de Calidad Ambiental de California (CEQA), (2) asesorar y solicitar comentarios y sugerencias con respecto al alcance y contenido del EIR que se preparará para el proyecto propuesto, y (3) para notar la reunión de alcance público.

**Aviso de preparación:** La Ciudad determinó que el proyecto propuesto requeriría la preparación de un PEIR de alcance completo; por lo tanto, no se preparó un Estudio Inicial junto con este NOP. De acuerdo con la Sección 15168 de las Directrices de CEQA, la Ciudad preparará un PEIR para abordar los impactos ambientales asociados con el proyecto a nivel programático. El proyecto propuesto es una actualización del Plan General de la Ciudad, que es un plan a largo plazo que consiste en políticas que guiarán las actividades de desarrollo futuras y las acciones

JANICE S. PARVIN  
Mayor

DR. ANTONIO CASTRO  
Councilmember

CHRIS ENEGREN  
Councilmember

DANIEL GROFF  
Councilmember

DAVID POLLOCK  
Councilmember



# CITY OF MOORPARK

COMMUNITY DEVELOPMENT DEPARTMENT | 799 Moorpark Avenue, Moorpark, California 93021  
Main City Phone Number (805) 517-6200 | Fax (805) 532-2540 | www.moorparkca.gov

**Date:** May 17, 2022

**Subject:** **Notice of Preparation (NOP) and Scoping Meeting for the Moorpark General Plan Update Program Environmental Impact Report (PEIR)**

**To:** State Clearinghouse, State Responsible Agencies, State Trustee Agencies, Other Public Agencies, Interested Organizations, and the Public at-large

**Lead Agency/Sponsor:** City of Moorpark

**Project Title:** The Moorpark General Plan Update 2050 Program Environmental Impact Report

**Public Comment Period:** May 17, 2022, to June 16, 2022

**Scoping Meeting:** May 31, 2022, 6:00 p.m.– City of Moorpark, City Hall, Council Chambers / Apricot Room, 799 Moorpark Avenue

POSTED  
 MAY 17 2022  
 MARK A. LUNN  
 Ventura County Clerk and Recorder  
 Deputy

**NOTICE IS HEREBY GIVEN** that the City of Moorpark (City), as lead agency, will prepare a Program Environmental Impact Report (PEIR) for the City of Moorpark General Plan Update project (proposed project). The purpose of this notice is (1) to serve as a Notice of Preparation (NOP) of an EIR pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15082, (2) to advise and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project, and (3) to notice the public scoping meeting.

**Notice of Preparation:** The City determined that the proposed project would require preparation of a full-scope PEIR; thus, an Initial Study was not prepared in conjunction with this NOP. Consistent with Section 15168 of the CEQA Guidelines, the City will prepare a PEIR to address the environmental impacts associated with the project at a programmatic level. The proposed project is an update to the City's General Plan, which is a long-range plan consisting of policies that will guide future development activities and City actions. No specific development projects are proposed as part of the proposed project. However, the PEIR will serve to streamline environmental review of future projects.

**Public Comment Period:** The City of Moorpark, as lead agency, requests that responsible and trustee agencies respond in a manner consistent with Section 15082(b) of the CEQA Guidelines and Section 21080.4 of the Public Resources Code. Responsible agencies must submit any comments in response to this notice during the 30-day public review period. The public review period will commence on **May 17, 2022**, and will close on **June 16, 2022**. A copy of the NOP can be viewed electronically on the City's web page at: <https://moorparkca.gov/568/Environmental-Documents>.

JANICE S. PARVIN  
Mayor

DR. ANTONIO CASTRO  
Councilmember

CHRIS ENEGREN  
Councilmember

DANIEL GROFF  
Councilmember

DAVID POLLOCK  
Councilmember



## NATIVE AMERICAN HERITAGE COMMISSION

May 19, 2022

Doug Spondello  
City of Moorpark  
799 Moorpark Avenue  
Moorpark, CA 93021

**Re: 2022050327, Moorpark General Plan Update Program EIR Project, Ventura County**

Dear Mr. Spondello:

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



CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

PARLIAMENTARIAN  
**Russell Attebery**  
Karuk

SECRETARY  
**Sara Dutschke**  
Miwok

COMMISSIONER  
**William Mungary**  
Paiute/White Mountain  
Apache

COMMISSIONER  
**Isaac Bojorquez**  
Ohlone-Costanoan

COMMISSIONER  
**Buffy McQuillen**  
Yokayo Pomo, Yuki,  
Nomlaki

COMMISSIONER  
**Wayne Nelson**  
Luiseño

COMMISSIONER  
**Stanley Rodriguez**  
Kumeyaay

EXECUTIVE SECRETARY  
**Raymond C. Hitchcock**  
Miwok/Nisenan

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)



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, subs. (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](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](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 ([https://ohp.parks.ca.gov/?page\\_id=30331](https://ohp.parks.ca.gov/?page_id=30331)) 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:  
[Cody.Campagne@nahc.ca.gov](mailto:Cody.Campagne@nahc.ca.gov).

Sincerely,

*Cody Campagne*

Cody Campagne  
Cultural Resources Analyst

cc: State Clearinghouse



June 13, 2022

Mr. Doug Spondello, Deputy Community Development Director  
City of Moorpark, Community Development Department  
799 Moorpark Avenue  
Moorpark, California 93021  
Phone: (805) 517-6251  
E-mail: [dspondello@moorparkca.gov](mailto:dspondello@moorparkca.gov)

**RE: SCAG Comments on the Notice of Preparation of a Program Environmental Impact Report for the Moorpark General Plan Update 2050 Program [SCAG NO. IGR10637]**

Dear Mr. Spondello,

Thank you for submitting the Notice of Preparation of a Program Environmental Impact Report for the Moorpark General Plan Update 2050 Program (“proposed project”) to the Southern California Association of Governments (SCAG) for review and comment. SCAG is responsible for providing informational resources to regionally significant plans, projects, and programs per the California Environmental Quality Act (CEQA) to facilitate the consistency of these projects with SCAG’s adopted regional plans, to be determined by the lead agencies.<sup>1</sup>

Pursuant to Senate Bill (SB) 375, SCAG is the designated Regional Transportation Planning Agency under state law and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS). SCAG’s feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and align with RTP/SCS policies. Finally, SCAG is the authorized regional agency for Intergovernmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372.

SCAG staff has reviewed the Notice of Preparation of a Program Environmental Impact Report for the Moorpark General Plan Update 2050 Program in Ventura County. The proposed project consists of updating the City of Moorpark’s General Plan to bring all elements into compliance with state housing mandates; conform with new state laws related to community health, environmental justice, climate adaption, resiliency, and mobility; and bring long-term growth and fiscal projections into alignment with current economic conditions.

**When available, please email environmental documentation to [IGR@scag.ca.gov](mailto:IGR@scag.ca.gov) providing, at a minimum, the full public comment period for review.**

If you have any questions regarding the attached comments, please contact the Intergovernmental Review (IGR) Program, attn.: Anita Au, Senior Regional Planner, at (213) 236-1874 or [IGR@scag.ca.gov](mailto:IGR@scag.ca.gov). Thank you.

Sincerely,

Frank Wen, Ph.D.  
Manager, Planning Strategy Department

<sup>1</sup> Lead agencies such as local jurisdictions have the sole discretion in determining a local project’s consistency with the 2020 RTP/SCS (Connect SoCal) for the purpose of determining consistency for CEQA.

SOUTHERN CALIFORNIA  
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**COMMENTS ON THE NOTICE OF PREPARATION OF A  
PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE  
MOORPARK GENERAL PLAN UPDATE 2050 PROGRAM [SCAG NO. IGR10637]**

**CONSISTENCY WITH CONNECT SOCIAL**

SCAG provides informational resources to facilitate the consistency of the proposed project with the adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or Connect SoCal). For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project’s consistency with Connect SoCal.

**CONNECT SOCIAL GOALS**

The SCAG Regional Council fully adopted [Connect SoCal](#) in September 2020. Connect SoCal, also known as the 2020 – 2045 RTP/SCS, builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in Connect SoCal may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project. Among the relevant goals of Connect SoCal are the following:

<b>SCAG CONNECT SOCIAL GOALS</b>	
Goal #1:	<i>Encourage regional economic prosperity and global competitiveness</i>
Goal #2:	<i>Improve mobility, accessibility, reliability and travel safety for people and goods</i>
Goal #3:	<i>Enhance the preservation, security, and resilience of the regional transportation system</i>
Goal #4:	<i>Increase person and goods movement and travel choices within the transportation system</i>
Goal #5:	<i>Reduce greenhouse gas emissions and improve air quality</i>
Goal #6:	<i>Support healthy and equitable communities</i>
Goal #7:	<i>Adapt to a changing climate and support an integrated regional development pattern and transportation network</i>
Goal #8:	<i>Leverage new transportation technologies and data-driven solutions that result in more efficient travel</i>
Goal #9:	<i>Encourage development of diverse housing types in areas that are supported by multiple transportation options</i>
Goal #10:	<i>Promote conservation of natural and agricultural lands and restoration of habitats</i>

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG CONNECT SOCIAL GOALS	
Goal	Analysis
Goal #1: <i>Encourage regional economic prosperity and global competitiveness</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
Goal #2: <i>Improve mobility, accessibility, reliability and travel safety for people and goods</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
etc.	etc.

**Connect SoCal Strategies**

To achieve the goals of Connect SoCal, a wide range of land use and transportation strategies are included in the accompanying twenty (20) technical reports. Of particular note are multiple strategies included in Chapter 3 of Connect SoCal intended to support implementation of the regional Sustainable Communities Strategy (SCS) framed within the context of focusing growth near destinations and mobility options; promoting diverse housing choices; leveraging technology innovations; supporting implementation of sustainability policies; and promoting a Green Region. To view Connect SoCal and the accompanying technical reports, please visit the [Connect SoCal webpage](#). Connect SoCal builds upon the progress from previous RTP/SCS cycles and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that helps the SCAG region strive towards a more sustainable region, while meeting statutory requirements pertinent to RTP/SCSs. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

SCAG staff would like to call your attention to resources available from SCAG’s [Regional Climate Adaptation Framework](#) including the [Southern California Climate Adaptation Planning Guide](#), [Communication and Outreach Toolkit](#), [Library of Model Policies](#), and [SB 379 Compliance Curriculum for Local Jurisdictions](#).

**DEMOGRAPHICS AND GROWTH FORECASTS**

A key, formative step in projecting future population, households, and employment through 2045 for Connect SoCal was the generation of a forecast of regional and county level growth in collaboration with expert demographers and economists on Southern California. From there, jurisdictional level forecasts were ground-truthed by subregions and local agencies, which helped SCAG identify opportunities and barriers to future development. This forecast helps the region understand, in a very general sense, where we are expected to grow, and allows SCAG to focus attention on areas that are experiencing change and may have increased transportation needs. After a year-long engagement effort with all 197 jurisdictions one-on-one, 82 percent of SCAG’s 197 jurisdictions provided feedback on the forecast of future growth for Connect SoCal. SCAG also sought feedback on potential sustainable growth strategies from a broad range of stakeholder groups – including local jurisdictions, county transportation commissions, other partner agencies, industry groups, community-based organizations, and the general public. Connect SoCal utilizes a bottom-up approach in that total projected growth for each jurisdiction reflects feedback received from jurisdiction staff, including city managers, community development/planning directors, and local staff. Growth at the neighborhood level (i.e., transportation analysis zone (TAZ) reflects entitled projects and adheres to current general and specific plan maximum densities as conveyed by jurisdictions (except in cases where entitled projects and development agreements exceed these capacities as calculated by SCAG). Neighborhood level growth projections also feature strategies that help to reduce greenhouse gas emissions (GHG) from automobiles and light trucks to achieve Southern California’s GHG reduction target, approved by the California Air Resources Board (CARB) in accordance



with state planning law. Connect SoCal’s Forecasted Development Pattern is utilized for long range modeling purposes and does not supersede actions taken by elected bodies on future development, including entitlements and development agreements. SCAG does not have the authority to implement the plan -- neither through decisions about what type of development is built where, nor what transportation projects are ultimately built, as Connect SoCal is adopted at the jurisdictional level. Achieving a sustained regional outcome depends upon informed and intentional local action. To access jurisdictional level growth estimates and forecasts for years 2016 and 2045, please refer to the [Connect SoCal Demographics and Growth Forecast Technical Report](#). The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts				Adopted City of Moorpark Forecasts			
	Year 2020	Year 2030	Year 2035	Year 2045	Year 2020	Year 2030	Year 2035	Year 2045
Population	19,517,731	20,821,171	21,443,006	22,503,899	39,579	41,079	41,546	42,198
Households	6,333,458	6,902,821	7,170,110	7,633,451	11,755	12,545	12,767	13,021
Employment	8,695,427	9,303,627	9,566,384	10,048,822	12,214	13,314	13,768	15,037

**MITIGATION MEASURES**

SCAG staff recommends that you review the [Final Program Environmental Impact Report](#) (Final PEIR) for Connect SoCal for guidance, as appropriate. SCAG’s Regional Council certified the PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on May 7, 2020 and also adopted a PEIR Addendum and amended the MMRP on September 3, 2020 (please see the [PEIR webpage](#) and scroll to the bottom of the page for the PEIR Addendum). The PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

**ENVIRONMENTAL JUSTICE**

Per [Senate Bill 1000](#) (SB 1000), local jurisdictions in California with disadvantaged communities are required to develop an Environmental Justice (EJ) Element or consider EJ goals, policies, and objectives in their General Plans when updating two or more General Plan Elements. The City of Moorpark does not have any disadvantaged communities but if the City would like to consider environmental justice in its General Plan Update, SCAG staff recommends that you review the [Environmental Justice Technical Report](#) and the updated [Environmental Justice Toolbox](#), which is a resource document to assist local jurisdictions in developing EJ-related goals and policies regarding solutions for EJ-related community issues.

**From:** [Douglas Spondello](#)  
**To:** [Emma Haines](#); [Nicole Vermilion](#)  
**Cc:** [Shanna Farley](#)  
**Subject:** FW: Moorpark General Plan Update (SCH 2022050327) - CGS comments  
**Date:** Monday, June 13, 2022 3:43:17 PM  
**Attachments:** [image001.png](#)

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FYI

Doug Spondello, AICP  
Deputy Community Development Director  
Community Development Department  
City of Moorpark | 799 Moorpark Ave. | Moorpark, CA 93021  
(805) 517-6251 | [dspondello@moorparkca.gov](mailto:dspondello@moorparkca.gov)  
[www.moorparkca.gov](http://www.moorparkca.gov)



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**From:** Frost, Erik@DOC <Erik.Frost@conservation.ca.gov>  
**Sent:** Monday, June 13, 2022 12:59 PM  
**To:** Douglas Spondello <DSpondello@MoorparkCA.gov>  
**Cc:** OLRA@DOC <OLRA@conservation.ca.gov>; OPR State Clearinghouse <State.Clearinghouse@opr.ca.gov>  
**Subject:** Moorpark General Plan Update (SCH 2022050327) - CGS comments

Hello,

The CGS has received a Notice of Preparation (NOP) for the City of Moorpark's General Plan Update Program Environmental Impact Report (PEIR).

This email conveys the following recommendations from CGS concerning geologic issues related to the project area:

1. Liquefaction and Landslide Hazards

The City's current General Plan Safety Element includes a general discussion of liquefaction and seismically induced landslides and provides some geologic context for where these hazards may exist within the program area. The CGS notes that Earthquake Zones of Required Investigation Maps (EZRIM) for liquefaction and landsliding have been prepared within the program area. These hazard zones should be discussed in the PEIR and included in the General Plan Update Safety Element. The EZRIM can be viewed here:

<https://maps.conservation.ca.gov/cgs/EQZApp/app/>

Individual Seismic Hazard Zone Reports and associated GIS data are available for download here:

[https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?  
map=regulatorymaps](https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps)

Cities and counties affected by earthquake zones of required investigation must regulate certain development projects within them. The Seismic Hazards Mapping Act (1990) also requires sellers of real property (and their agents) to disclose at the time of sale that the property lies within such a zone.

If you have any comments or questions, please feel free to call or email.

**Dr. Erik Frost**

Senior Engineering Geologist | Seismic Hazards Program

California Geological Survey

715 P Street, MS 1901, Sacramento, CA 95814

(916) 205-8255

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**DEPARTMENT OF TRANSPORTATION**  
DISTRICT 7- OFFICE OF REGIONAL PLANNING  
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*Making Conservation  
a California Way of Life.*

June 15, 2022

City of Moorpark  
Community Development Department  
ATTN: Doug Spondello  
799 Moorpark Avenue  
Moorpark, CA 93021

RE: Moorpark General Plan Update – Notice of  
Preparation (NOP)  
SCH# 2022050327  
GTS# 07-LA-2022-00488  
Vic. LA-Multiple

Dear Doug Spondello,

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The City of Moorpark is in the process of preparing an update to its General Plan, which constitutes the proposed project. The following element updates and related policy changes are included as part of the proposed project: updates to the Land Use Element, Circulation Element, Housing Element, Economic Development Element, Open Space, Parks, and Recreation Element, Conservation Element, Safety Element, and Noise Element. The General Plan will also include an Implementation Plan that identifies responsible parties and actions to carry out the General Plan Policies.

The nearest State facilities to the project are SR 118 and SR 23. After reviewing the NOP, Caltrans has the following comments:

To best accommodate the additional anticipated housing units and not induce demand for excessive Vehicle Miles Travelled (VMT), Caltrans recommends significantly reducing or eliminating car parking requirements. Research looking at the relationship between land-use, parking, and transportation indicates that car parking prioritizes driving above all other travel modes and undermines a community's ability to choose public transit and active modes of transportation. For any community or city to better support all modes of transportation and reduce vehicle miles traveled, we recommend the implementation of a TDM ordinance, as an alternative to requiring car parking.

Caltrans looks forward to reviewing the forthcoming Draft Environmental Impact Report (DEIR) to confirm that the Project will result in a net reduction in VMT.

Doug Spondello  
June 15, 2022  
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If you have any questions, please contact project coordinator Anthony Higgins, at [anthony.higgins@dot.ca.gov](mailto:anthony.higgins@dot.ca.gov) and refer to GTS# 07-LA-2022-00488.

Sincerely,



MIYA EDMONSON  
IGR/CEQA Branch Chief

cc: State Clearinghouse



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
South Coast Region  
3883 Ruffin Road  
San Diego, CA 92123  
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**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



June 16, 2022

Mr. Doug Spondello  
City of Moorpark  
799 Moorpark Avenue  
Moorpark, CA 93021  
[DSpondello@moorparkca.gov](mailto:DSpondello@moorparkca.gov)

**Subject: Moorpark General Plan Update, Notice of Preparation, SCH No. 2022050327;  
City of Moorpark, Ventura County**

Dear Mr. Spondello:

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 Moorpark (City) for the Moorpark General Plan Update (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 for the people of the state [Fish & Game 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). CDFW is also directed to provide 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 (Public 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 & Game Code, § 1600 *et seq.*). To the extent implementation of the Project as proposed may result in "take" of any species protected under the California Endangered Species Act (CESA; Fish & Game Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & Game Code, §1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Mr. Doug Spondello  
City of Moorpark  
June 16, 2022  
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## Project Description and Summary

**Objective:** The City of Moorpark is comprehensively updating its General Plan. The last update of the City of Moorpark's General Plan took place in 1986, with a limited update in 1992. The State of California requires each city to adopt a comprehensive, long-term general plan for the physical development of a community and provides a list of topics that must be addressed. The City of Moorpark's 2050 General Plan Update (Project) is an effort undertaken by the City to update the existing General Plan for the next 30 years through 2050. The updated General Plan will consist of 8 elements: Land Use; Circulation; Housing; Economic Development; Open Space, Parks, and Recreation; Conservation; Safety; and Noise. Efforts will be taken to bring all elements into compliance with state laws and mandates. As part of the Project, land use designations will be updated to add 5,488 residential units and ~110 acres of nonresidential areas to the City of Moorpark.

**Location:** The Project would apply to the entire geographic area located within the boundaries of the City of Moorpark. The City of Moorpark is located in the near the southeastern portion of the Ventura County boundary. The city comprises about 12.5 square miles and is surrounded by the cities of Thousand Oaks to the south, Simi Valley to the southeast, Fillmore to the north, and Camarillo to the southwest.

## 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.

## COMMENTS AND RECOMMENDATIONS

### Specific Comments

1) Sensitive Habitats and Open Space Sites. Sensitive habitats/open space in the Project area are present in the form of parks and reserves, including, but not limited to; Monte Vista Nature Park, Miller Park, Peach Hill Park, Mountain Meadows City Park, Arroyo Vista Community Park, Tierra Rejada Park, Mammoth Highlands Park, and all open spaces labeled OS within Figure 4 of the NOP titled *Proposed General Plan*.

- a. CDFW recommends the City analyze and discuss the Project's direct impacts on sensitive habitats/open space within the Project area. The Project could result in loss of sensitive habitats/open space due to fuel modifications and introduction of non-native, invasive plants facilitated by the Project (collectively, indirect impacts). The DEIR should disclose the acreage of sensitive habitats and open space that would be lost as a result of any subsequent development from the proposed Project, including all areas subject to fuel modifications and grading to accommodate development. CDFW also recommends the City analyze and discuss the Project's potential impacts on conserved lands adjacent to the Project area.
- b. CDFW recommends the Project avoid developing and encroaching onto sensitive habitats/open space. Encroachment onto sensitive habitats/open space creates an abrupt transition between two different land uses. Encroachment onto sensitive

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habitats/open space could affect environmental and biological conditions and increase the magnitude of edge effects on biological resources. CDFW recommends the DEIR provide alternatives to the Project that would not result in conversion of sensitive habitats/open space into developed areas. CDFW also recommends the DEIR provide alternatives that would not encroach onto sensitive habitats/open space, particularly conservation easements. Pursuant to CEQA Guidelines section 15126.6, a DEIR “shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasible attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives.” Furthermore, a DEIR “shall include sufficient information about alternatives to allow meaningful evaluation, analysis, and comparison with the proposed project” (CEQA Guidelines, § 15126.6) (see General Comment #6).

- c. If avoidance is not feasible, CDFW recommends the DEIR provide measures to mitigate for impacts to sensitive habitats/open space. There should be no net loss of sensitive habitats/open space. CDFW recommends the DEIR provide measures where any future development facilitated by the Project mitigates (avoids first if feasible) for project-level impacts on sensitive habitats/open space not previously identified in the DEIR. CDFW recommends the DEIR provide a measure where any future development facilitated by the Project establishes unobstructed vegetated buffers and setbacks. The DEIR should provide standards for an effective buffer and setback; however, the buffer and setback distance should be increased at a project-level as needed. The DEIR should provide justifications for the effectiveness of all proposed mitigation measures. The DEIR should provide sufficient information and disclosure to facilitate meaningful public review, analysis, and comment on the adequacy of proposed mitigation measures to offset Project-related impacts on sensitive habitats/open space.

2) Impacts on Wildlife Corridors and Habitat Connectivity. According to the California Essential Habitat Connectivity dataset available in BIOS, the Project area supports some continuous natural habitat blocks in the eastern side of the City. These areas support native biodiversity and areas essential for ecological connectivity between them (CDFWa 2022). Additionally, according to the Ventura County’s GIS viewer, two sections of the Santa Monica-Sierra Madre wildlife corridors transect the City of Moorpark from north to south (Ventura County 2022). The western segment of the Santa Monica-Sierra Madre corridor that runs directly to the east of the Moorpark Highlands residential area is especially impacted. South of this development is the 118 overpass and riparian habitat associated with Arroyo Simi. Further development should be avoided to maintain this important linkage area. The Project could impact the ecological integrity and function of wildlife corridors and steppingstones supporting resident and transient wildlife movement. Habitat fragmentation could threaten the viability of remaining natural resources. Maintaining wildlife corridors and habitat connectivity is essential for wildlife survival and is increasingly important considering habitat loss and climate change.

- a. CDFW recommends the City analyze whether the Project would impact wildlife corridors (see General Comment 4). Impacts include (but are not limited to) habitat loss and fragmentation, narrowing of a wildlife corridor, and introduction of barriers to wildlife movement. CDFW recommends such an analysis be supported by studies to document wildlife activity and movement through Project area where development is proposed.



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Technical detail such as data, maps, diagrams, and similar relevant information should be provided to permit full assessment of significant environmental impacts by reviewing agencies and members of the public (CEQA Guidelines, §15147).

- b. CDFW recommends the Project avoid developing and encroaching onto wildlife corridors. A minimum half-mile buffer is recommended around wildlife corridors to maintain the integrity of these connectivity areas. If avoidance is not feasible, CDFW recommends the DEIR provide measures to mitigate for the Project's significant impacts on wildlife corridors (see General Comments 8 and 9). CDFW also recommends the DEIR provide measures where any future development facilitated by the Project mitigates (avoids first if feasible) for project-level impacts on wildlife corridors not previously identified in the DEIR.

3) Coastal California Gnatcatcher. The Project area contains large areas of critical habitat for the coastal California gnatcatcher (*Poliioptila californica californica*), a California Species of Special Concern (SSC) and Endangered Species Act (ESA)-listed species (USFWS 2022). Populations of coastal California gnatcatchers in the Ventura County area have been found to be genetically isolated from other populations within their range (Vandergast 2019). This lack of genetic mixing between other geographical populations is likely due to fragmentation and loss of suitable habitat between Ventura County and the remainder of their range across southern California (Vandergast 2019). Genetic isolation paired with lack of suitable habitat makes coastal California gnatcatchers in Ventura County more susceptible to local extirpation (Vandergast 2019). CDFW recommends the DEIR discuss the Project's potential impacts on coastal California gnatcatcher and their habitat. The DEIR should provide measures to avoid those impacts or measures to mitigate for impacts if avoidance is not feasible.

4) Sensitive Bird Species. A review of the California Natural Diversity Database (CNDDDB) indicates nearby occurrences of special status bird species including: coastal California gnatcatcher (*Poliioptila californica var. californica*); CESA-listed and ESA-listed least Bell's vireo (*Vireo bellii pusillus*); SSC yellow warbler (*Setophaga petechia*), ESA-listed willow flycatcher (*Empidonax trailii*), fully protected white-tailed kite (*Elanus leucurus*), and SSC yellow-breasted chat (*Icteria virens*). Project activities occurring during the breeding season of nesting birds could result in the incidental loss of fertile eggs, or nestlings, or otherwise lead to nest abandonment in trees and shrubs directly adjacent to the Project boundary. The Project could also lead to the loss of foraging habitat for sensitive bird species.

- a. CDFW recommends that measures be taken, primarily, to avoid Project impacts to nesting birds. 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 MBTA).
- b. Proposed Project activities including (but not limited to) staging and disturbances to native and nonnative vegetation, structures, and substrates 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 or their eggs. If avoidance of the avian breeding season is not feasible, CDFW recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect

Mr. Doug Spondello  
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protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). 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.

5) 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). Urban forests and street trees, both native and some non-native species, provide habitat for a high diversity of birds (Wood and Esaian 2020). Several prospective Projects within the City of Moorpark will result in the removal of native, protected, and non-native trees. These projects include but are not limited to: Hitch Ranch, Beltramo Ranch, Everett Street Terrace, and the Civic Center Master Plan. 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 eBird, there are multiple observations of red-tailed hawks and Cooper's hawks throughout the City.

- a. CDFW recommends the DEIR provide measures where future 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) (See general comment 4-C). 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.
- 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 2022).

6) Bats. Numerous bat species are known to roost in trees and structures throughout Ventura 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 infill 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

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City of Moorpark  
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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)].

7) Lake and Streambed Alteration (LSA) Agreements. 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 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.* 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 (CDFWb 2022).

- a. The Project area 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.
- b. 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. The environmental document should provide a justification for the effectiveness of the chosen distance for the setback.
- c. Project-related changes in upstream and downstream drainage patterns, runoff, and sedimentation should be included and evaluated in the environmental document.

8) Wetlands Resources. CDFW, as described in Fish and Game Code section 703(a), is guided by the Fish and Game Commission's policies. The Wetlands Resources policy

Mr. Doug Spondello  
 City of Moorpark  
 June 16, 2022  
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(<http://www.fgc.ca.gov/policy/>) of the Fish and Game Commission "...seek[s] to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California. 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 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, the 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 the DEIR 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 & Game Code, § 5650).

9) Tree Disease Management Plan. Project activities may include tree removal and new trees as a part of landscaping activities. This may have the potential to spread tree pests and diseases throughout the Project site and into adjacent habitat not currently exposed to these stressors. Pests and diseases include (but not limited to): sudden oak death (*Phytophthora ramorum*), thousand canker fungus (*Geosmithia morbida*), Polyphagous shot hole borer (*Euwallacea* spp.), and goldspotted oak borer (*Agrilus auroguttatus*) (Phytosphere Research 2012; TCD 2020; UCANR 2020; UCIPM 2013). This could result in expediting the loss of native trees and woodlands. CDFW recommends the DEIR include an infectious tree disease management plan or a list of preventative measures, developed in consultation with an arborist, to describe how it will be implemented to avoid or reduce the spread of tree insect pests and diseases.

Mr. Doug Spondello  
 City of Moorpark  
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10) Landscaping. Habitat loss and invasive plants are a leading cause of native biodiversity loss. CDFW recommends that the DEIR stipulate that no invasive plant material be used. Furthermore, we recommend using native, locally appropriate plant species for landscaping on the Project site. A list of invasive/exotic plants that should be avoided as well as suggestions for suitable landscape plants can be found at <https://www.cal-ipc.org/solutions/prevention/landscaping/>.

## General Comments

1) Disclosure. A DEIR 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 appropriateness 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) Biological Baseline Assessment. CDFW recommends providing a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project area, with 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 the Project. The DEIR 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)]. The DEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities from Project-related impacts. Project implementation may result in impacts to rare or endangered plants or plant communities that have been recorded adjacent to the Project vicinity.  
<https://www.wildlife.ca.gov/Data/VegCAMP/NaturalCommunities#sensitive%20natural%20communities>;
- b. A complete floristic assessment within and adjacent to the Project area, with particular emphasis upon identifying endangered, threatened, sensitive, and locally unique species and sensitive habitats. This should include a thorough, recent, floristic-based assessment of special status plants and natural communities;
- c. Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the 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, 2008). Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts off-site. Habitat mapping at the alliance level will help establish baseline vegetation conditions;
- 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 the Project. CDFW's CNDDDB in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat. CDFW recommends that CNDDDB Field Survey

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Forms be completed and submitted to CNDDDB to document survey results. Online forms can be obtained and submitted at <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>;

- e. The DEIR should provide columns for each element and approximate acres potentially impacted by critical habitat type. CDFW recommends using “None” or the number zero to indicate no impacts and, provide a brief discussion why there would be no impacts to demonstrate that impacts were evaluated;
- f. 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 the Project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the United States Fish and Wildlife Service (USFWS); and
- g. 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 two years as long as there was not a prevailing drought during the time of the botanical survey. Some aspects of the 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.
- h. Presence/absence determinations of wildlife and rare plants in the Project area, specifically areas that would be impacted due to Project implementation (e.g., existing facilities), should be determined based on recent surveys. CDFW recommends the DEIR provide any recent survey data.

3) 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 impact report 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, 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

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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.

4) Biological Direct, Indirect, and Cumulative Impacts. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the DEIR:

- a. A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage. The latter subject should address Project-related changes on drainage patterns and downstream of the Project site; 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 site. The discussion should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary 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;
- b. A discussion regarding indirect Project 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 & Game 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;
- c. A discussion regarding impacts to loss of bird nesting habitat. Several proposed projects in the area (Hitch Ranch, Beltramo Ranch, Civic Center Master Plan, and Everette St. Terrace) will include removal of both native and non-native trees which could be utilized by passerine birds and raptors. The Project should analyze the cumulative impact, if any, in regards to loss of potential nesting habitat;
- d. An analysis of impacts from land use designations 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,
- e. 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 communities and wildlife habitats.

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5) 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, subs. (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.

6) Moving out of Harm's Way. The proposed Project may result in impacting habitats on and/or adjacent to the Project site that may support wildlife. To avoid direct mortality, CDFW recommends that a qualified biological monitor approved by CDFW be on-site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project related construction activities. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. If the Project requires species to be removed, disturbed, or otherwise handled, we recommend that the DEIR clearly identify that the designated entity shall obtain all appropriate state and federal permits.

7) 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.

8) 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 must exercise due



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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.

9) 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.

10) 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, including all staging areas and access routes to the construction and staging areas; and,
- b. A range of feasible alternatives to Project component location and design features to ensure that alternatives to the proposed Project are fully considered and evaluated. Potential impacts to wildlife movement areas should also be evaluated, avoided, or mitigated consistent with applicable requirements of the City's sub-area plan (SAP).

## Conclusion

We appreciate the opportunity to comment on the NOP to assist the City in identifying and mitigating Project impacts on biological resources. If you have any questions or comments regarding this letter, please contact Angela Castanon, Environmental Scientist, at [Angela.Castanon@wildlife.ca.gov](mailto:Angela.Castanon@wildlife.ca.gov)

Sincerely,

DocuSigned by:



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Erinn Wilson-Olgin  
Environmental Program Manager I  
South Coast Region

ec: CDFW

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State Clearinghouse, Office of Planning and Research – [State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov)

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**VENTURA COUNTY  
AIR POLLUTION CONTROL DISTRICT**  
Memorandum

TO: Doug Spondello, Deputy Community Development Director

DATE: June 15, 2022

FROM: Nicole Collazo, Air Quality Specialist, VCAPCD Planning Division 

SUBJECT: Notice of Preparation of a Draft Programmatic Environmental Impact Report for the City of Moorpark 2050 General Plan Update

Air Pollution Control District (APCD) staff has reviewed the subject Notice of Preparation (NOP) for the draft program environmental impact report (PEIR) of the 2050 General Plan Update (GPU), which will set forth the City of Moorpark's (City) vision of its developmental future and express the goals, policies, and implementation programs as it pertains to land use, health and safety, housing, and resource conservation. All General Plan elements will be updated to reflect current conditions, requirements of Government Code Section 65302, and community preferences. The Project location encompasses the City of Moorpark city limits. The Lead Agency for the project is the City of Moorpark.

**General Comments**

The General Plan Update will address topics and issues pursuant to state requirements adopted since the existing General Plan was comprehensively updated in the 1980s. Of these topics listed in the NOP, the Air Quality and Climate Change sections of the PEIR will be reviewed by the Ventura County APCD as well as the Conservation Element of the GPU addressing air pollution.

Regarding the PEIR,

*Air Quality Section-* The air quality assessment should consider project consistency with the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP presents Ventura County's strategy (including related mandated elements) to attain the 2008 federal 8-hour ozone standard by 2020, as required by the federal Clean Air Act Amendments of 1990 and applicable U.S. EPA clean air regulations. The 2016 AQMP uses an updated 2012 emissions inventory as baseline for forecasting data, SCAG RTP 2016 data, and CARB's EMFAC2014 emission factors for mobile sources. The AQMP can be downloaded from our website at <http://www.vcapcd.org/AQMP-2016.htm>.

The Ventura County Air Quality Assessment Guidelines (AQAG) is recommended to evaluate all potential air quality impacts. The AQAG are also downloadable from our website here: <http://www.vcapcd.org/environmental-review.htm>. Specifically, the air quality assessment should consider reactive organic compound, nitrogen oxide emissions, and toxics from all project-related

motor vehicles, sources not permitted with APCD, and construction equipment that may result from potential buildout, as appropriate to future development policies and implementation measures. We note that the AQAG has not been updated since 2003 and newer emission reduction measures have been recommended by APCD and implemented in other jurisdictions. For example, the County of Ventura recently updated a new policy in its 2040 GPU to always require Tier 3 and Tier 4 diesel construction off-road equipment.

*GHG Section-* Neither APCD nor the County has adopted a threshold of significance applicable to Greenhouse Gas (GHG) emissions from discretionary projects. On November 8, 2011, APCD published a report at the request of the Ventura County Air Pollution Control Board to report back on possible GHG thresholds options. The District will be looking into what GHG threshold is best suitable for Ventura County in the near future which will undergo a public review process.

The following are recommended guidance documents that could be used to address the impacts of climate change and greenhouse gases in Ventura County.

On May 2016, the CARB published a Mobile Source Strategy. In this report, ARB staff is outlining a mobile source strategy that simultaneously meets air quality standards, achieves GHG emission reduction targets, decreases toxics health risk, and reduces petroleum consumption from transportation emissions over the next fifteen years. These goals and targets include These include 1) Attaining federal health-based air quality standards for ozone in 2023 and 2031 in the South Coast and San Joaquin Valley, and fine particulate matter (PM2.5) standards in the next decade; 2) Achieving greenhouse gas (GHG) emission reduction targets of 40 percent below 1990 levels by 2030, with continued progress towards an 80 percent reduction by 2050; 3) Minimizing health risk from exposure to toxic air contaminants; 4) Reducing our petroleum use by up to 50 percent by 2030; and 5) Increasing energy efficiency and deriving 50 percent of our electricity from renewable sources by 2030. The report can be found here: <https://www.arb.ca.gov/planning/sip/2016sip/2016mobsrc.htm>.

On November 2017, the California Air Resources Board published its latest Climate Change Scoping Plan. The Scoping Plan lays out a strategy for achieving California's 2030 Greenhouse Gas target and builds on the state's successes to date, proposing to strengthen major programs that have been a hallmark of success, while further integrating efforts to reduce both GHGs and air pollution. California's climate efforts will 1) Lower GHG emissions on a trajectory to avoid the worst impacts of climate change; 2) Support a clean energy economy which provides more opportunities for all Californians; 3) Provide a more equitable future with good jobs and less pollution for all communities; 4) Improve the health of all Californians by reducing air and water pollution and making it easier to bike and walk; and 5) Make California an even better place to live, work, and play by improving our natural and working lands. The 2017 Climate Change Scoping Plan can be accessed here [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf).

Finally, on December 2018, the Governor's Office of Planning and Research (OPR) published a Draft Technical Advisory. This document incorporates developments since the June 2008

Technical Advisory publication, including regulatory changes made to the regulations that implement CEQA, commonly known as the “CEQA Guidelines” in late 2018 by the California Natural Resources Agency. Although this document largely focuses on project-level analyses of greenhouse gas impacts, Section IV briefly addresses community-scale greenhouse gas reduction plans as one pathway to streamline CEQA analyses. This discussion draft is intended to address some common issues and topics that arise in greenhouse gas emissions analyses under CEQA but is not intended to address every single issue and topic. More information on the OPR’s Technical Advisory can be found here <http://opr.ca.gov/ceqa/technical-advisories.html>.

*Environmental Justice-* The AB 617 legislation sets out an ambitious implementation schedule for APCD. The California Air Resources Board (CARB) must set the overall direction of the program by October 1, 2018. This includes identifying impacted communities, establishing the criteria for air monitoring and local emissions reduction programs, and developing statewide strategies for reducing emissions. The local air districts also have specific roles and responsibilities. On April 27, 2018, the VCAPCD submitted to CARB a technical assessment to develop an initial list of candidate communities for Ventura County.

On July 31, 2018 the Ventura County Air Pollution Control Board approved the District staff’s recommendation that the greater Oxnard/Port Hueneme area be the highest priority region in Ventura County for inclusion in CARB’s Community Air Protection Program. District staff’s recommendation is based on our assessment that we have not identified a single or multiple sources of significant air emissions that would lead us to identify a smaller region adjacent to these source(s). This is in part based on our review of our permitted sources in the area. The greater Oxnard/Port Hueneme area is also home to several agricultural operations and these operations generally utilize pesticides and diesel equipment. In addition, the Port of Hueneme and several warehouse type distribution centers are located in the area. Heavy-duty trucks associated with these goods movement facilities move throughout the area. In summary, we are looking at a diffuse inventory of air pollution sources in this area. This will likely require additional research including community level air monitoring in several locations to identify any sources of concern. In addition, by having a larger area, the VCAPCD will have flexibility to target our incentive funds within the area as we learn more about potential issues with air pollutant sources in and adjacent to the area.

As amended by Assembly Bill 617 (C. Garcia, Chapter 136, Statutes of 2017), Health and Safety Code section 40920.6(c) requires that on or before January 1, 2019, each local air district that is a nonattainment area for one or more air pollutants must adopt an expedited schedule for the implementation of BARCT by the earliest feasible date, but in any event not later than December 31, 2023.

District staff has created a BARCT rule development schedule to comply with this statutory requirement. CARB has identified four affected facilities that are subject to AB 617 BARCT requirements; the facilities are operated by Procter and Gamble, New Indy Container, California Resources (Santa Clara Valley Gas Plant), and Trinity ESC. District staff then evaluated which District rules are applicable to these facilities that may not meet BARCT requirements including Rule 74.23, *Stationary Gas Turbines*; Rule 74.15, *Boilers, Steam Generators and Process Heaters*; Rule 71.3, *Transfer of Reactive Organic Compound Liquids*; and Rule 74.10, *Components at*

*Crude Oil and Natural Gas Production and Processing Facilities.* In addition, District development of a new rule is proposed to regulate the ozone precursor emissions from oilfield flares to address emissions from a nonemergency flare at the Santa Clara Valley Gas Plant.

A public meeting was held on October 30, 2018 by the District to provide the participants with the list of affected facilities and rules, rule adoption schedules and deadline to submit the written comments. No significant concerns with the proposed rule schedules were expressed by the meeting participants. On December 11, 2018, the Ventura County Air Pollution Control Board will consider approval of District staff's proposed schedule for implementation of Best Available Retrofit Technology (BARCT) to fulfill this mandate under AB 617.

The APCD would like to make the City aware of its Incentive Programs that are directed at reducing emissions of criteria pollutants by reducing the amount of NOx generated from mobile sources. NOx when combined with VOC (VOCs) can react with sunlight to create ground-level smog. The two types of programs, Incentive Programs and Transportation Outreach Program, have a co-benefit in indirectly reducing GHG emissions as older, dirtier equipment and vehicles are traded in for newer engines that have stricter air quality emission standards or as Vehicle Miles Travelled (VMT) are reduced due to an increase in alternative modes of transportation. More information can be found [here](#) on our District Incentive Programs Website Page and [here](#) on the Transportation Outreach Program. These existing programs may be included in the City's General Plan Update in the implementation programs discussion if the City should qualify for funding. Some of these programs include Lower Emission School Bus Program, EV Charging Stations Funding and Funding Agricultural Replacement Measures for Emission Reductions (FARMER).

APCD would also like to encourage additional Programs and Implementation Measures that will further reduce the generation of mobile emissions in your jurisdiction. Many of the specific mitigation measures at the project level can be promoted at the plan level through zoning ordinances, parking standards, and design guidelines. These measures are discussed in Section 7.3, *Plan Level Mitigation* and 7.5.2 *Operational Mitigation Measures* of the APCD Air Quality Assessment Guidelines and can include the increased use of bicycle lanes, park-and-ride lots, establishing an employee rideshare program, and supporting a multi-modal transportation system in conjunction with mixed-land use practices.

Regarding the GPU and Conservation Element,

Please consider adopting new policies and procedures in line with that APCD currently recommends, such as using cleanest diesel technology available, Tier 4, for construction and conducting a Health Risk Assessment for analyzing toxic impacts of siting residential projects within 500 feet of SR-118 (which may be considered a freeway of 10,000 vehicles/day, source: [Caltrans](#)) during environmental review of the project. In addition to the respiratory health effects in children, proximity to freeways increases potential cancer risk and contributes to total particulate matter exposure. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risk from motor vehicle traffic – diesel particulate matter (diesel PM) from trucks, and benzene and 1,3-butadiene from passenger vehicles. On a typical urban freeway (truck traffic of 10,000-20,000/day), diesel PM represents about 70 percent of the potential cancer

risk from the vehicle traffic. Diesel particulate emissions are also of special concern because health studies show an association between particulate matter and premature mortality in those with existing cardiovascular disease.

APCD may also be reviewing the waste section of the GPU to ensure organic waste diversion policies per SB 1383 are designed in way that will reduce the emissions of nuisance-related odors to the general public.

Thank you for the opportunity to comment on the project. If you have any questions, you may contact me at [nicole@vcapcd.org](mailto:nicole@vcapcd.org).



June 16, 2022

Doug Spondello  
Deputy Community Development Director  
City of Moorpark  
799 Moorpark Avenue  
Moorpark, CA 93021

**SUBJECT: Response to Notice of Preparation and Scoping for the Moorpark General Plan Update 2050 Program Environmental Impact Report**

Dear Deputy Community Development Director Doug Spondello,

Thank you for providing the Ventura County Planning Division (Planning Division) with the opportunity to comment regarding the City of Moorpark's (City) Notice of Preparation (NOP) of a Program Environmental Impact Report (PEIR) for the 2050 General Plan Update project. The City's General Plan Update is the first since 1992 and the document represents a roadmap for long-term goals and policies that will guide development and city actions in the future. The Planning Division coordinates with neighboring jurisdictions during general plan updates and provides review and comment on environmental documents prepared for projects that could affect the unincorporated area.

**Recommended for Inclusion - 2040 General Plan Goals and Policies**

On September 15, 2020, the Ventura County Board of Supervisors adopted the 2040 General Plan following five years of community engagement and planning. The Planning Division encourages the City to consider incorporating the below 2040 General Plan goals, policies and programs for inclusion in the General Plan Update as it is being drafted. The effects of these goals, policies and programs could be evaluated in the PEIR which is the subject of this NOP.

In addition to the information below, the Planning Division encourages the City to review the 2040 General Plan which presents a wide range of regionally appropriate potential goals, policies and programs for the City's consideration in the General Plan Update related to new state laws, healthy communities, environmental justice, climate resilience and climate action planning. Visit the Planning Division website at <https://vcrma.org/en/ventura-county-general-plan> to view this plan.

**Land Use**

The Land Use and Community Character Element contains Policy LU 1.1 Guidelines for Orderly Development that states the County shall work with cities in Ventura County and the Ventura Local Agency Formation Commission (LAFCO) to promote and maintain responsible city boundaries and Spheres of Influence to prevent growth-inducing urban development in unincorporated areas. While the Proposed Areas of Change Map and Proposed Land Use Plan maps do not show any changes to the city boundary, if the city plans to annex any lands in the



foreseeable future, these areas should be identified in the General Plan, and the PEIR should evaluate potential impacts to the unincorporated area from intensification of lands planned for annexation.

Please consider the following land use policy for the City's General Plan Update.

General Plan Policy LU-1.1 – Guidelines for Orderly Development: The County shall continue to promote orderly and compact development by working with cities in Ventura County and the Ventura Local Agency Formation Commission (LAFCO) to promote and maintain reasonable city boundaries and Spheres of Influence to prevent growth-inducing urban development in unincorporated areas.

### **Wildlife Corridors**

The California Environmental Quality Act requires protection of wildlife corridors/movement areas and the City's General Plan and PEIR should consider measures to conserve the habitat wildlife corridors that ensure species can move throughout the region. When the County adopted the Habitat Connectivity and Wildlife Corridor overlay zone in 2019, the City of Moorpark supported these amendments and discussed conducting a similar effort with City Council review.

Wildlife corridors through Moorpark are necessary to connect the Sierra Madre and Santa Susana Mountains with the Santa Monica Mountains. Several wildlife crossing structures within the Tierra Rejada Valley have been identified as critical to retain wildlife movement between the Santa Monica Mountains and Santa Susana Mountains<sup>1</sup>. However, the wildlife crossing structures are only functional if new or modified development is sited and designed to funnel wildlife through adjacent properties to reach the protected open space areas that are located to the north and south of the City.

At a more detailed scale, wildlife movement studies completed to date indicate that wildlife is successfully traversing SR-23 and SR-118 at critical roadway crossings. The Arroyo Simi Creek that runs from the east and connects to Arroyo Las Posas Creek to the west is an important wetland/creek/riparian corridor for wildlife. However, wildlife movement from north to south is constrained due to urban development on both sides of the creek and a riparian area. In addition, the SR--118 connecting to Los Angeles Avenue and Princeton Avenue to the west is another restrictive barrier to the open space and the protected greenbelt areas to the south and north, where numerous state and federally listed species have been found within and immediately outside in the undeveloped portions of the area (e.g., least bell's vireo (*Vireo bellii pusillus*), mesa horkelia (*Horkelia cuneata*), California legless lizard (*Anniella pulchra*), Lyon's pentachaeta (*Pentachaeta lyonia*), and coastal California gnatcatcher (*Polioptila californica californica*)).

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<sup>1</sup> For the location of key wildlife crossings identified within the Tierra Rejada Valley, please visit <https://maps.ventura.org/countyview/> and turn on the layers under: PlanningGIS/Habitat Connectivity and Wildlife Corridors

The General Plan Update should identify and protect these critical wildlife passage areas, wildlife corridors, and key crossing structures through policies and standards that ensure development is safe for wildlife passage and protects wildlife corridor movement, particularly through industrial zoned parcels. Please see Attachment 1 for maps of the Habitat Connectivity and Wildlife Corridors in the South Coast Ventura County region.

Please consider the following County Conservation and Open Space Element policies for the City's General Plan Update:

General Plan Policy COS-1.1 - Protection of Sensitive Biological Resources: The County shall ensure that discretionary development that could potentially impact sensitive biological resources be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures that fully account for the impacted resource. When feasible, mitigation measures should adhere to the following priority: avoid impacts, minimize impacts, and compensate for impacts. If the impacts cannot be reduced to a less than significant level, findings of overriding considerations must be made by the decision-making body.

General Plan Policy COS-1.2 - Consideration of Sensitive Biological Resources: The county shall identify sensitive biological resources as part of any land use designation change to the General Plan Land Use Diagram or zone designation change to the Zoning Ordinance that would intensify the uses in a given area. The County shall prioritize conservation of areas with sensitive biological resources.

General Plan Policy COS-1.3 - Wildlife Corridor Crossing Structures: Based on the review and recommendation of a qualified biologist, the design and maintenance of road and floodplain improvements, including culverts and bridges, shall incorporate all feasible measures to accommodate wildlife passage.

General Plan Policy COS-1.4 - Consideration of Impacts to Wildlife Movement: When considering proposed discretionary development. County decision makers shall consider the development's potential project-specific and cumulative impacts on the movement of wildlife at range of special scales (e.g., hundreds of feet) and regional scales (e.g., tens of miles).

General Plan Policy COS-1.8 - Bridge Crossing Design: The County shall require discretionary development that includes new or modified road crossings over streams, wetlands and riparian habitats to include bridging design features with bridge columns located outside the riparian habitat areas, when feasible.

General Plan Policy COS-1.13 - Partnerships for Protection of Natural and Biological Resources: The County shall continue to work in partnership with agencies, organizations, and entities responsible for the protection, management, and enhancement of the county's biological resources.

### **Climate Change and Energy Storage**

In accordance with the requirements of SB 379 (2015), codified in Government Code section 65302(g)(4), climate change adaptation and resilience must be addressed in the safety element

of all general plans in California. Policies that support energy production and storage facilities could be useful to mitigate climate change emissions in the PEIR.

The City should identify undeveloped lands near electrical transmission and distribution lines that can serve as possible development sites for utility-scale solar energy generation and battery energy storage projects. For example, vacant sites on and to the west of the Southern California Edison (SCE) Substation could be suitable for battery energy storage or solar facilities since they are in close proximity to connect with the existing electrical utility infrastructure. Future development of solar energy generation and battery energy storage systems will assist with greenhouse gas emission reductions and help achieve goals in climate action plans.

Please consider the following climate change goals and policies for the City's General Plan Update:

General Plan Goal COS-8: To minimize energy consumption and increase the use of renewable energy.

General Plan Policy COS-8.3 – Coordinate Climate Action Plan with Cities and Organizations: The County shall facilitate the coordination of its Climate Action Plan implementation and maintenance with the cities in the county, the Air Pollution Control District, and other organizations to promote countywide collaboration on addressing climate change.

General Plan Policy-8.10 – Battery Energy Storage Systems: The County shall encourage battery energy storage systems as an option for optimizing the management of electricity generated by renewable resources.

### **Inter-Jurisdictional Coordination**

The County's General Plan recognizes that there are many local, regional, state, and federal agencies that have land use planning, permitting, or development review authority in Ventura County, and it contains goals and policies to enhance inter-agency coordination and relationships that could avoid environmental impacts.

Please consider the following coordination goals and policies for the City's General Plan Update:

General Plan Goal LU-19 – To enhance inter-agency coordination to achieve mutually beneficial land use conservation and development.

General Plan Policy LU-19.1 – County and City Cooperation: The County shall work cooperatively with all cities in the county to enhance consistency among planning processes and to ensure that each jurisdiction's general plan is compatible with the Ventura County General Plan, the Guidelines for Orderly Development, and adopted greenbelt agreements.

General Plan Policy LU-19.2 – Policy Consultation within Spheres of Influence: For General Plan amendments and other policy changes that may impact growth or the provision of public services within city Spheres of Influence, the County shall engage in meaningful consultation with the appropriate city early on in the process.

## Tribal Coordination

California Law also recognizes the unique relationship of California's local governments and public agencies with California Native American tribal governments and aims to create an effective collaboration and informed decision-making process. The Legislature has also recognized that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated.

Please consider the following coordination policies for the City's General Plan Update:

### General Plan Policy COS-4.2 -

- (A) Cooperation for Cultural, Historical, Paleontological, and Archaeological Resource Preservation: The County shall cooperate with cities, special districts, appropriate organizations and private landowners to identify known cultural, archaeological, historical, and paleontological resources to preserve identified resources within the county.
- (B) Cooperation for Tribal Cultural Resource Preservation: For discretionary projects, the County shall request local tribes contact information from Native American Heritage Commission, to identify known tribal cultural resources. If requested by one or more of the identified local tribes, the County shall engage in consultation with each local tribe to preserve, and determine appropriate handling of, identified resources within the county.

Thank you again for the opportunity to comment on this NOP. If you have any questions about this letter, please contact Joel Hayes at [Joel.Hayes@ventura.org](mailto:Joel.Hayes@ventura.org) or 805.654.2834.

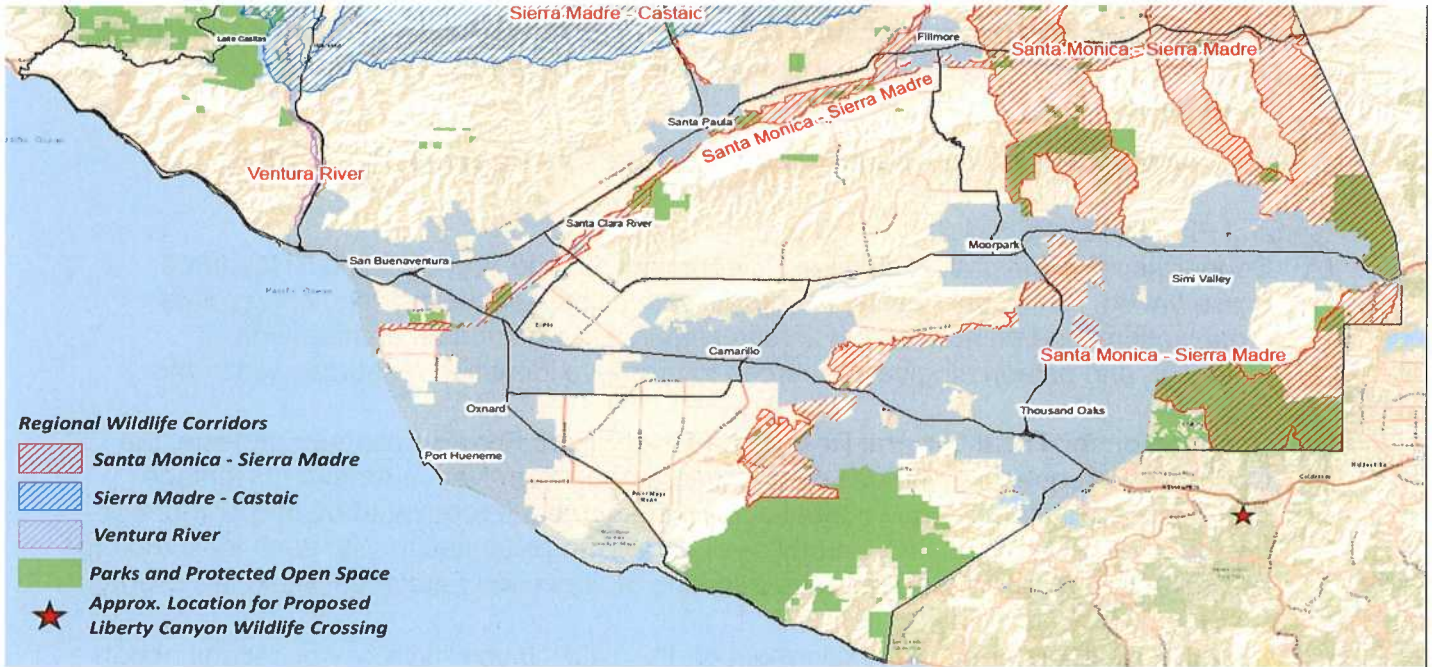
Sincerely,



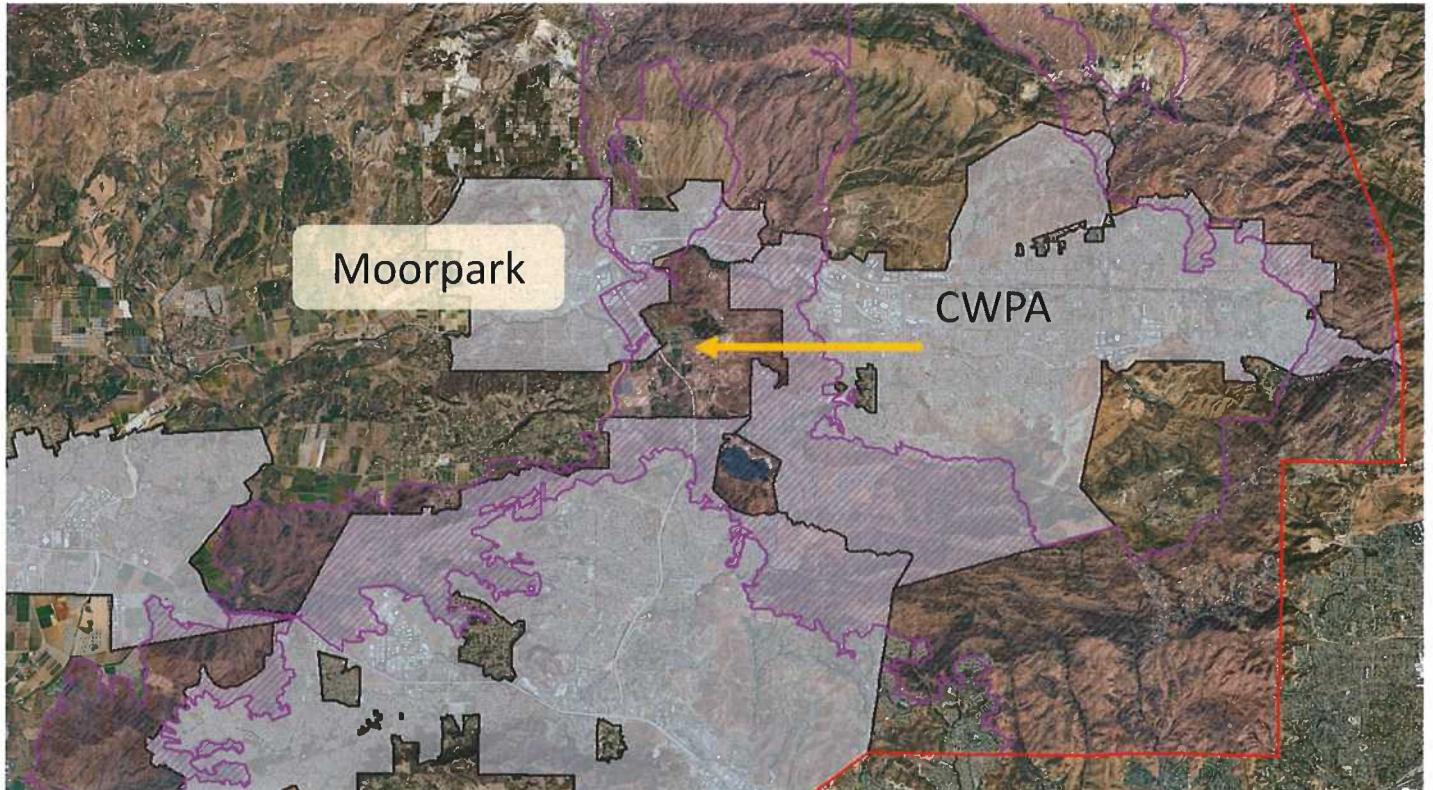
Dave Ward, AICP | Planning Director  
County of Ventura, Planning Division

Attachment 1: Geographic Maps of the Habitat Connectivity and Wildlife Corridors for the South County

### Attachment 1 Geographic Maps Showing the Habitat Connectivity and Wildlife Corridors for the South County



Tierra Rejada Valley “Critical Wildlife Passage Area”(CWPA).



## Ciuffetelli, Anthony

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**From:** Husted, Dawn  
**Sent:** Thursday, June 16, 2022 10:11 AM  
**To:** Ciuffetelli, Anthony  
**Cc:** CEQA  
**Subject:** RE: Outside Environmental Document Review RMA# 22-013; Comments due 06/16/2022

Hello Anthony,

Watershed Protection is requesting the Masterplan Hydrology Reports that addresses any impact(s) to the jurisdictional channels within the City of Moorpark.

Please let us know if you have any questions.

Thank you,

Dawn Husted  
*Management Assistant II*  
**Watershed Protection – Planning & Permits**



800 S. Victoria Ave. / #1610  
Ventura, CA 93009  
P: 805.662-6882  
[VCPWA Online](#) | [Facebook](#) | [Twitter](#)



*Santa Ynez Band of Chumash Indians  
Tribal Elders' Council*

*P.O. Box 517 ♦ Santa Ynez ♦ CA ♦ 93460*

*Phone: (805)688-7997 ♦ Fax: (805)688-9578 ♦ Email: elders@santaynezchumash.org*

June 23, 2022

City of Moorpark  
Community Development Department  
ATTN: Doug Spondello  
799 Moorpark Avenue  
Moorpark, CA 93021

Att.: Doug Spondello, Deputy Community Development Director

Re: The Moorpark General Plan Update 2050 Program Environmental Impact Report

Dear Mr.Spondello:

Thank you for contacting the Tribal Elders' Council for the Santa Ynez Band of Chumash Indians.

At this time, the Elders' Council requests no further consultation on this project; however, we understand that as part of NHPA Section 106, we must be notified of the project.

Thank you for remembering that at one time our ancestors walked this sacred land.

Sincerely Yours,

*Crystal Mendoza*

Crystal Mendoza  
Administrative Assistant | Cultural Resource Management  
Santa Ynez Band of Chumash Indians | Tribal Hall  
(805) 325-5537  
cmendoza@santaynezchumash.org

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**From:** Frances Lee <flee13726@gmail.com>  
**Sent:** Tuesday, June 14, 2022 12:56 PM  
**To:** Douglas Spondello <DSpondello@MoorparkCA.gov>  
**Subject:** Comments for Moorpark General Plan 2050

Hi Mr. Spondello,

I am writing to you to give comments on the General Plan. I'm originally from Vancouver, Canada, so I have personal experience with many of these suggestions that I consider to add value to urban/suburban living, yet, nature is just a step away and many smaller neighborhoods exist within the city that have a strong community feeling. I am also envisioning a greener, cleaner future that we will need to adopt as part of the solution to the climate crisis we are in. We are already experiencing global warming with heatwaves, drought and fires, and these will only worsen. I want to live in a place that is part of the solution, proactively working to make a livable life for us all and that requires living more sustainably and with less carbon emissions. Transportation and buildings account for 80% of carbon emissions.

My suggestions address the need to improve **transportation** to reduce emissions of CO2(GHG) and to introduce EV chargers to promote the utilization of EV cars and trucks, but many of the suggestions have multiple-benefits, such as improve air quality. Air quality has a direct correlation to better health for residents.

-run clean energy buses, trams or shuttles along high traffic corridors to reduce traffic congestion. (High St, College, SW Tierra Rejada, LA Ave, large housing developments like Hitch Ranch, esp affordable homes and the rest of the city to and from shopping areas) We need to connect our city better for our local businesses and for our residents.

-build protected bike lanes along same corridors, to provide alternate Active transportation, clean



energy forms. Not everyone wants a car or can afford one and this is enabling across the economic spectrum.(see Recreation)

-build in walking paths in new housing developments to businesses close-by, esp mixed housing/business developments, esp to connect to mass transit. Again, this is to enable transport and walking is good for health.

### **Recreation:**

-increase number of bike trails in the city, for recreation, connect up to really build the biking network in the city. This is also the form of transportation for younger people and Moorpark needs to retain more youth. Also described as Active Transportation.

-connect Arroyo Simi in Moorpark to Simi Valley existing trails, in conjunction with Simi Valley. Simi Valley already has a plan to do this. This is a mixed use trail, for walking, enjoying nature, biking. The Simi trail is not for horses, but Moorpark can take a different tact.

-if Moorpark had a good network of trails, we could create a draw for the city; as an attraction. (San Luis Obispo has done this successfully with their trails).

### **Urban agriculture and Parks:**

- establish community farm or gardens which will connect people to nature, also good for mental health and empower residents to grow their own food, another health benefit, and can save residents money.

-nature-based solution to sequester carbon and help with adding habitat to aid the biodiversity of pollinators. Where ever possible, the city should replace grass with native plants. Native plants are adapted to drought conditions, require little water once adapted, and provide nectar plants for pollinators. The city could build a pollinator garden at City Hall for residents to emulate. Also, planting more trees is needed to contribute to natural carbon sequestration. Natives trees, like native plants will tolerate drought better than non-native trees. Planting oak trees will provide habitat for birds and provides shady areas for residents within parks.

### **Housing**

-I support building more affordable housing, to meet state requirements of affordability. Younger people also fit into this bracket and this would help Moorpark demographics. Older people also fit into this bracket, and they could free up their house for available housing that the city needs. Thousand Oaks seniors want to downsize, but suitable housing is lacking. Affordable also could mean smaller units for single people of all ages.

-new businesses and housing developments should be built with an ordinance to be All-Electric, as this is the best way to reduce emissions by 50% by 2030, next to the transportation sector, is a major contributor to emissions of approx. 40%.

-I support the mixed use plan of business with housing, to increase the density of building and preserving the need to build the city out, into farm lands. This supports business and gives opportunity to residents to reduce their carbon footprint, by walking instead of driving.

-High Street development for housing above businesses. This increases density needs in a “town” situation and is very convenient to residents. Access to walking streets, business, markets, and especially the train, will be a big draw to people commuting to work. These residents might not even own a car, or require one. The additional residents of High St. will bring more life to this area. As a resident of Moorpark for 21 years, we have been waiting for this to happen. Let’s make it happen! We need the culture and community.

### **GHG emissions- see Transportation, Housing and Energy**

- We need to advance access to EV chargers for EV drivers, especially in multi-family complexes.
- We also need to utilize more canopy solar on our parking lots. This can help with city expenses in parks or contributing to the clean energy grid. It can also provide shade for parking and a refuge during heatwaves.

## **Energy**

- Utilize the wind. This is a windy city, so we should allow wind farm operations on the edges of our town, like the college on the hills.
- increase solar canopies on parking areas of parks and multi-family dwellings and industrial centers.

Thank-you for taking the time to consider my suggestions for the Moorpark General Plan. I plan to follow-up with the city on increasing the role Moorpark can play in the clean energy transition. Please let me know if you have any questions and that you have received my correspondence.

Sincerely,  
Frances Lee

Sent from [Mail](#) for Windows

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**From:** Theresa Brady <terriebrady@gmail.com>  
**Sent:** Wednesday, June 22, 2022 5:38 PM  
**To:** Douglas Spondello <DSpondello@MoorparkCA.gov>; terrie brady <terriebrady@gmail.com>  
**Subject:** Re: birds in my area general plan scoping

On Wed, Jun 22, 2022 at 5:31 PM Theresa Brady <[terriebrady@gmail.com](mailto:terriebrady@gmail.com)> wrote:

Subject: scoping for the general plan revision

I would like to share a pamphlet with you that was developed with a bird survey some years ago. birds that are on this list which are currently listed as endangered, rare, declining or vulnerable are: mountain plover, long billed dowitcher, plain titmouse ( could be oak or juniper),california towhee, vermillion flycatcher, lesser nighthawk, wrentit, vaux's swift, costa's hummingbird, nuttail's woodpecker, california thrasher,phainopepla, lawrences goldfinch, purple finch, loggerhead shrike, piedbilled grebe, sprague pipit, wilson's warbler,tricolored black bird, yellow

breasted chat, snowy egret, hooded oriole, eurasion wigeon, american kestrel, swainson's hawk, and california scrub jay. they were all known to be within the arroyo and the surrounding area when this survey was done.

these birds and other wildlife in the attached pamphlet should be surveyed. there should be biologist and sources of wildlife such as inaturalist used to see where are biological hotspots. as part of the eir for the general plan. these biological hotspots should be preserved as open space and parkland. i also think it is important to consider the importance of maintaining i tagricultural zoning in its own right.

some other aspects i think need to be considered, where would wildlife crossings be best situated. the stretch of the 118 between moorpark and simi is an area that needs traffic calming. wildlife are hit crossing it on a regular basis. since i moved here in 2020 i have seen raccoons, coyotes, rabbits and hawks that have been killed in traffic. the 118 may be outside of the moorpark city limits but los angeles ave as it is is a formidable barrier for wildlife. the considered widening of it could make it worse. there should be consideration of where do wildlife generally try to cross the 23 the 118 and other major throughfares and how to make those crossings safer. collisions with cars are dangerous for drivers and fatal for wildlife. avoidance should be the goal.

tree  
the charm of moorpark for me is the wildlife the open space and the farmland. lets keep the other species in mind during this planning process. people benefit from being near nature. this is kind of rushed and I hope it makes sense. i will look for these aspects in the deir. thank you  
theresa brady 15750 arroyo drive 129 moorpark, ca 93021

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Virus-free. [www.avg.com](http://www.avg.com)

# VILLA DEL ARROYO AREA

in the VILLA DEL ARROYO AREA by Bob and Doris  
 ON SOCIETY and VENTURA COUNTY BREEDING BIRD  
 does not list all of the species that could occur in this area

ing a season )

ONS

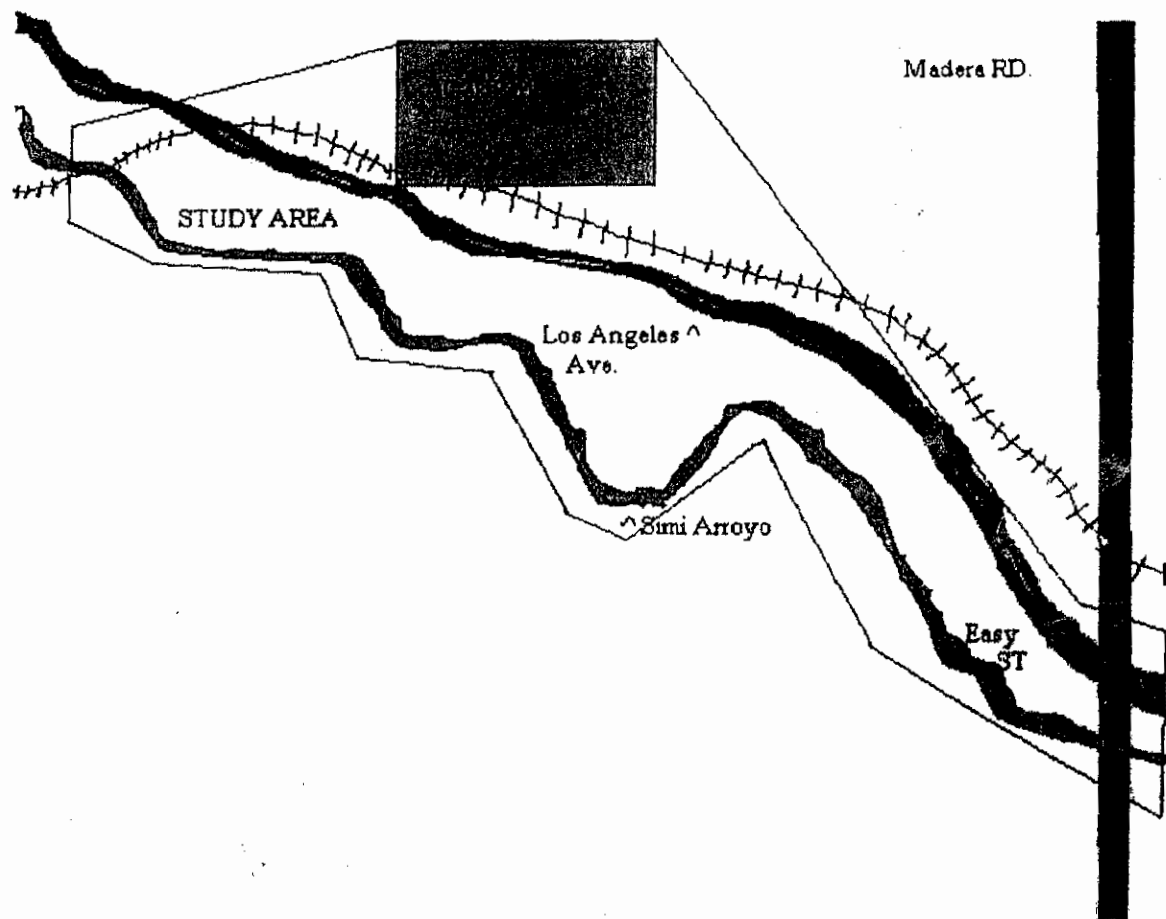
--- Hooded Merganser..... W

## VULTURES\*HAWKS\*QUAILS\*RAILS

--- Turkey Vulture.....P  
 --- Black-shouldered Kite.....P

--- Ferruginous Hawk.....W  
 --- Swainson's Hawk.....S  
 --- Sharp-shinned Hawk.....W,S,F  
 --- Cooper's Hawk.....P  
 --- Red-tailed Hawk.....P  
 --- Red-shouldered Hawk.....P  
 --- Northern Harrier.....O  
 --- American Kestrel.....P  
 --- California Quail.....P  
 --- Ring-necked Pheasant.....P  
 --- Sora.....P  
 --- Common Moorhen.....P  
 --- American Coot.....P  
 --- Black-necked Stilt.....V  
 --- Common Snipe.....W

# MOORPARK-SIMI VALLEY, CALIFORNIA VILLA DEL ARROYO AREA



**PLOVERS\*SNIPES\*SANDPIPERS**

- Killdeer..... P
- Mountain Plover..... P
- Semipalmated Plover..... W
- Spotted Sandpiper..... O,S,F
- Least Sandpiper..... W,S,F
- Western Sandpiper..... W,S,F
- Greater Yellowlegs..... W,S,F
- Lesser Yellowlegs..... V
- Long-billed Dowitcher..... W,S,F
- Red-necked Phalarope..... O,W,F

**GULLS\*TERNES\*DOVES**

**OWLS\*NIGHTJARS\*SWIFTS**

- California Gull..... W,S,F
- Ring-billed Gull..... P
- Western Gull..... P
- Mew Gull..... W
- Rock Dove..... P
- Mourning Dove..... P
- Greater Roadrunner..... O
- Barn Owl..... P
- Great Horned Owl..... P
- Western Screech-Owl..... P
- Common Poorwill..... S,Su
- Lesser Nighthawk..... S,F
- White-throated Swift..... W,S,F
- Vaux's Swift..... S,F

**HUMMINGBIRDS\*KINGFISHERS**

- Anna's Hummingbird..... P
- Costa's Hummingbird..... O,S,Su
- Black-chinned Hummingbird..... P
- Rufous Hummingbird..... O,S
- Allen's Hummingbird..... O,S
- Calliope Hummingbird..... V

- Belted Kingfisher..... P

**WOODPECKERS\*FLYCATCHERS  
LARKS\*SWALLOW**

- Northern Flicker..... P

- Hairy Woodpecker..... P
- Acorn Woodpecker..... P
- Nuttall's Woodpecker..... P
- Downy Woodpecker..... P
- Red-breasted Sapsucker..... W,F

- Western Kingbird..... S,Su,F
- Cassin's Kingbird..... F
- Ash-throated Flycatcher..... S,Su
- Black Phoebe..... P
- Say's Phoebe..... W
- Western Wood-Pewee..... S,Su
- Olive-sided Flycatcher..... S,Su
- Vermilion flycatcher..... V
- Horned Lark..... P
- Barn Swallow..... S,F
- Violet-green Swallow..... S,F
- Cliff Swallow..... S,F
- Rough-winged Swallow..... S,F
- Purple Martin..... S,F

**JAYS\*TITMICE\*BUSHTITS\*WRENS**

- Scrub Jay..... P
- Common Raven..... P
- American Crow..... P
- Wrenit..... P
- Plain Titmouse..... P
- Mountain Chickadee..... V
- Bushtit..... P
- Marsh Wren..... P
- Cactus Wren..... P
- House Wren..... P
- Bewick's Wren..... P
- Winter Wren..... O,W
- Canyon Wren..... P

**MOCKINGBIRDS\*THRUSHES  
KINGLETS\*WAXWINGS**

- Mockingbird..... P
- California Thrasher..... P
- Western Bluebird..... O,F
- American Robin..... S,Su,F
- Hermit Thrush..... W,F

- Ruby-crowned Kinglet..... P
- Blue-grey Gnatcatcher..... P
- Cedar Waxwing..... P
- Phainopepla nitens..... P

**SHRIKE**

- Loggerhead Shrike..... P
- Water Pipit..... P
- Sprague's Pipit..... P
- Starling..... P

- Hutton's Vireo..... P
- Townsend's Solitaire..... P
- Yellow-billed Cuckoo..... P
- Yellow Warbler..... P
- Yellow-rumped Warbler..... P
- Common Yellowthroat..... P
- Wilson's Warbler..... P
- Orange-crowned Warbler..... P
- MacGillivray's Warbler..... P

**BLACK**

- House Sparrow..... P
- Yellow-headed Vulture..... P
- Western Meadowlark..... P
- Brewer's Blackbirds..... P
- Red-winged Blackbird..... P
- Tricolored Blackbird..... P
- Brown-headed Cowbird..... P
- Bullock's Oriole..... P
- Hooded Oriole..... P
- Great-tailed Grackle..... P
- Western Tanager..... P

**GROS  
SPA**

- Rose-breasted Grosbeak..... P
- Black-headed Grosbeak..... P
- Lazuli Bunting..... P
- Red Crossbill..... P
- California Towhee..... P
- Rufous-sided Towhee..... P

___	Hairy Woodpecker.....	P
___	Acorn Woodpecker.....	P
___	Nuttall's Woodpecker.....	P
___	Downy Woodpecker.....	P
___	Red-breasted Sapsucker.....	W,F
___	Western Kingbird.....	S,Su,F
___	Cassin's Kingbird.....	F
___	Ash-throated Flycatcher.....	S,Su
___	Black Phoebe.....	P
___	Say's Phoebe.....	W
___	Western Wood-Pewee.....	S,Su
___	Olive-sided Flycatcher.....	S,Su
___	Vermilion Flycatcher.....	V
___	Horned Lark.....	P
___	Barn Swallow.....	S,F
___	Violet-green Swallow.....	S,F
___	Cliff Swallow.....	S,F
___	Rough-winged Swallow.....	S,F
___	Purple Martin.....	S,F

#### JAYS\*TITMICE\*BUSHTITS\*WRENS

3-25-21	Scrub Jay.....	P
___	Common Raven.....	P
___	American Crow.....	P
___	Wrenit.....	P
___	Plain Titmouse.....	P
___	Mountain Chickadee.....	V
___	Bushtit.....	P
___	Marsh Wren.....	P
___	Cactus Wren.....	P
___	House Wren.....	P
___	Bewick's Wren.....	P
___	Winter Wren.....	O,W
___	Canyon Wren.....	P

#### MOCKINGBIRDS\*THRUSHES KINGLETS\*WAXWINGS

___	Mockingbird.....	P
___	California Thrasher.....	P
___	Western Bluebird.....	O,F
___	American Robin.....	S,Su,F
___	Hermit Thrush.....	W,F

___	Ruby-crowned Kinglet.....	W,F
___	Blue-grey Gnatcatcher.....	W,S,F
___	Cedar Waxwing.....	W,S,F
___	Phainopepla.....	S,Su

#### SHRIKES\*VIREOS\*WARBLERS

___	Loggerhead Shrike.....	O
___	Water Pipit.....	O,W
___	Sprague's Pipit.....	O,W
___	Starling.....	P
___	Hutton's Vireo.....	S,F
___	Townsend's Warbler.....	S,F
___	Yellow-breasted Chat.....	O,S,Su
___	Yellow Warbler.....	S,F
___	Yellow-rumped Warbler.....	W,S,F
___	Common Yellowthroat.....	P
___	Wilson's Warbler.....	S,F
___	Orange-crowned Warbler.....	P
___	MacGillivray's Warbler.....	S,F

#### BLACKBIRDS\*TANAGERS

___	House Sparrow.....	P
___	Yellow-headed Blackbird.....	O,F
___	Western Meadowlark.....	P
___	Brewer's Blackbird.....	P
___	Red-winged Blackbird.....	P
___	Tricolored Blackbird.....	O,S,Su
___	Brown-headed Cowbird.....	P
___	Bullock's Oriole.....	S,Su
___	Hooded Oriole.....	S,Su
___	Great-tailed Grackle.....	V
___	Western Tanager.....	S,F

#### GROSBEAKS\*BUNTINGS SPARROWS\*FINCHES

___	Rose-breasted Grosbeak.....	V,F
___	Black-headed Grosbeak.....	S,Su
___	Lazuli Bunting.....	S,Su
___	Red Crossbill.....	V
___	California Towhee.....	P
___	Rufous-sided Towhee.....	P

___	Savannah Sparrow.....	W,S,F
___	Dark-eyed Junco.....	W,S,F
___	White-crowned Sparrow.....	W
___	Song Sparrow.....	P
___	Lincoln's Sparrow.....	W
___	Lark Sparrow.....	W,S,F
___	Purple Finch.....	O
___	House Finch.....	P
___	Pine Siskin.....	W
___	American Goldfinch.....	W,S,F
___	Lesser Goldfinch.....	P

#### EXOTICS \* EXOTIC WATERFOWL

___	Grey Cockateel
___	Orange Bishop
___	White-collared Pigeon
___	Domestic Goose
___	Opaline dominant Pied Budgerigar

#### ADDITIONAL SPECIES SEEN

#### MAMMALS \* REPTILES

___	OPOSSUM ( Marsupial )
___	RACCOON
___	STRIPED SKUNK
___	COYOTE
___	GRAY FOX
___	MOUNTIAN LION
___	CALIFORNIA GROUND SQUIRREL
___	Eastern Fox Squirrel(Introduced in California)
___	DESERT COTTONTAIL
___	BLACK-TAILED JACKRABBIT
___	MULE DEER
___	WESTERN PIPISTREL BAT
___	GOPHER SNAKE
___	SOUTHERN PACIFIC RATTLESNAKE
___	SOUTHWESTERN POND TURTLE

#### ADDITIONAL SPECIES SEEN

~~3-25-21~~ ~~3-25-21~~

# BIRDS of VILLA DEL ARROYO AREA

This folder lists 157 species of birds identified in the VILLA DEL ARROYO AREA by Bob and Doris Gerritsen of the CONEJO VALLEY AUDUBON SOCIETY and VENTURA COUNTY BREEDING BIRD ATLAS ( This is a 4 Year Study ) This folder does not list all of the species that could occur in this area

## SEASONAL STATUS

- P Permanent Resident ( includes breeding )  
 W Winter Resident  
 S Spring Migrant  
 F Fall Migrant  
 Su Summer Resident ( includes breeding )  
 O Occasional Visitor ( seen a few times during a season )  
 V Vagrant ( seen at intervals of 2 to 5 years )

## LOONS\*GREBES\*CORMORANTS\*HERONS

- |                                    |   |                           |   |
|------------------------------------|---|---------------------------|---|
| ___ Western Grebe.....             | W | ___ Hooded Merganser..... | W |
| ___ Pied-billed Grebe.....         | P |                           |   |
| ___ Doubled-crested Cormorant..... | P |                           |   |
| ___ White-faced Ibis.....          | V |                           |   |
| ___ Great Blue Heron.....          | P |                           |   |
| ___ Green-backed Heron.....        | P |                           |   |
| ___ Black-crowned Night Heron..... | P |                           |   |
| ___ Great Egret.....               | P |                           |   |
| ___ Snowy Egret.....               | P |                           |   |
| ___ Cattle Egret.....              | O |                           |   |

## SWANS\*GEESE\*DUCKS

- |                            |   |
|----------------------------|---|
| ___ Canada Goose.....      | W |
| ___ Ruddy Duck.....        | W |
| ___ Lesser Scaup.....      | W |
| ___ Mallard.....           | P |
| ___ Gadwall.....           | W |
| ___ Cinnamon Teal.....     | W |
| ___ Blue-winged Teal.....  | W |
| ___ Eurasian Wigeon.....   | W |
| ___ American Wigeon.....   | W |
| ___ Green-winged Teal..... | W |

## VULTURES\*HAWKS\*QUAILS\*RAILS

- |                                |       |
|--------------------------------|-------|
| ___ Turkey Vulture.....        | P     |
| ___ Black-shouldered Kite..... | P     |
| ___ Ferruginous Hawk.....      | W     |
| ___ Swainson's Hawk.....       | S     |
| ___ Sharp-shinned Hawk.....    | W,S,F |
| ___ Cooper's Hawk.....         | P     |
| ___ Red-tailed Hawk.....       | P     |
| ___ Red-shouldered Hawk.....   | P     |
| ___ Northern Harrier.....      | O     |
| ___ American Kestrel.....      | P     |
| ___ California Quail.....      | P     |
| ___ Ring-necked Pheasant.....  | P     |
| ___ Sora.....                  | P     |
| ___ Common Moorhen.....        | P     |
| ___ American Coot.....         | P     |
| ___ Black-necked Stilt.....    | V     |
| ___ Common Snipe.....          | W     |



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**From:** S Praetorius <[praetorius1980@gmail.com](mailto:praetorius1980@gmail.com)>  
**Sent:** Wednesday, June 08, 2022 8:52 AM  
**To:** Douglas Spondello <[DSpondello@MoorparkCA.gov](mailto:DSpondello@MoorparkCA.gov)>  
**Subject:** PEIR Comments

Dear City of Moorpark,

Thank you for calling for public comments on the PEIR results and providing documents for review by the public.

These comments are primarily for EIR Hitch Ranch but can apply to all the development areas because the issues are all of the same type.

In reading through the documents, time and again the words "Significant Impact" came up. We are lucky enough to have rare plant species in the area. We also have unique wildlife and pollinator species that should be protected. These areas are in close proximity to fields that supply food for Ventura, California and the rest of the country. The habitats of the pollinators will be unduly affected by the construction and are not replaceable. We would also lose valuable grassland which is a wildlife habitat for many species. Ground cover plants and native species are vital in combatting the effects of climate change. Since California is undergoing aridification, combating climate change is vital to the area in which we live.

The loss and removal of trees that aren't protected in the same way the Pepper Tree is, will also impact Moorpark's ability to be climate resilient. The trees that will be lost are old and we cannot replant or replace with any species that will do as well as those that are already established. Trees also help cool the area and have lasting benefits to wildlife and the humans who live near. The cooling effect is especially important with temperatures continuing to rise yearly.

Another issue is pollution. Moorpark is affected by the pollution from the Santa Susana Field Lab. This is evidenced by the abnormally high rate of cancer in the area. This was increased after the large fires that went through the site. Construction dust and debris will fly all over town including in and around existing homes and schools in the area. Moorpark cannot afford to have more health issues associated with preventable problems. The school children in the areas should not have to

deal with limited outside time and breathing trouble. Wetting debris doesn't go far enough as a plan.

Lastly, the water supply will be affected. We are in a near constant drought. Most of the documents refer to hoping the Moorpark WasteWater Treatment Plant will receive funding to fix infrastructure. Meaning that it is an issue that has not been fixed or addressed. If the WWTP needs infrastructure updates, how will that affect the already established homes, farms, businesses and schools in the area? I had asked the Water District previously if Moorpark recycles its grey water. I was told that yes it does and that water is sold at a discount to the farms. How will this be affected by adding to the burden the district is already under?

The documents over and over show that planning paid little to no attention to native flora and fauna, to water management, to pollution nor to climate change and the last impacts of such in this area over the next decades. None of these plans are eco friendly or innovative in development. Hardscaping all of Moorpark will not help the city become climate resilient in the future where temperatures increase yearly and drought is constant. These plans look to the past and not the future that we will be living in.

Sincerely,

Shannon Praetorius  
Moorpark Resident

## **Appendix B      Buildout Methodology Memorandum**

## Appendices

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# Moorpark General Plan

## Methodology for Calculating Development Capacity

Draft 04-22-22

### 1. Introduction

The following document summarizes the methodology used to analyze the potential development capacity of the proposed General Plan Land Use Plan to be used as the “project” for analyzing impacts as required by the California Environmental Quality Act (CEQA) in the Program Environmental Impact Report (PEIR). Three sets of data are provided in this analysis – 1) Existing Conditions, 2) a No Project Alternative, and 3) a Proposed Land Use Plan.

Existing conditions reflect the built environment as of 2022. The No Project Alternative represents an estimate of future development in accordance with the currently adopted General Plan. The Proposed Land Use Plan projects future development in accordance with the changes to land use designations proposed in the preferred Plan approved by the City Council on Feb 2<sup>nd</sup>, 2022. It is important to note that development capacity represents an informed but estimated projection of a future condition. Actual development will likely vary in terms of location and mix of uses.

### 2. Buildout Methodology

Development capacity calculations involve the following steps. These steps are described in greater detail later in this document.

- a. Existing development is documented.
- b. Projected development using Current General Plan capacities is calculated.
- c. Projected development using the Proposed Land Use Plan is calculated, which includes:
  - i. areas identified which are expected to be most likely to change over the lifetime of the General Plan,
  - ii. future non-residential square footage (sf) and housing unit development is calculated using proposed land use categories and applicable densities within areas where change is expected,
  - iii. population estimates are generated by multiplying projected households by an average household size, and
  - iv. employment estimates are generated by dividing projected non-residential square footage by employment generation rates (see section 2.5.5).

## 2.1 Existing Conditions

Existing conditions (see **Table 1**) reflect the built environment as of 2022 using data provided by the City and County Assessor’s office, employment statistics based on US Census Bureau data<sup>1</sup>, and population estimates derived from data provided by the California Department of Finance<sup>2</sup>. Dwelling unit counts are based on parcel-level data supplied by the City. Non-residential square footage (sf) is based on a GIS area calculation of building footprints. For multi-story buildings, footage is taken by multiplying building footprints by the number of stories as determined by field observation. Data reflecting existing conditions can be found in **Tables 5** and **6**, organized by Current General Plan Land Use Categories and Proposed Land Use Categories respectively. See **Figure 1** for a map of existing land uses.

## 2.2 No Project Alternative

As required by CEQA, the PEIR must analyze impacts of the proposed General Plan update and compare results with impacts attributable to the current General Plan, also described as the “No Project Alternative.” The No Project Alternative includes the remaining undeveloped capacity of the current General Plan’s land use designations, including approved Specific Plans, Accessory Dwelling Units (ADUs) as allowed by state legislation, and pending and approved projects. In instances where existing uses exceed the densities/intensities permitted by the current General Plan’s land use designations, the No Project Alternative accounts for these areas in accordance with their existing uses. The No Project Alternative assumes that there would be little or no intensification of development in areas where growth is not anticipated, including the majority of the City’s established residential neighborhoods. A summary of the No Project Alternative can be found in **Table 1**, with development capacity calculations reflecting assumptions shown in **Table 6**. See **Figure 2** for a map of current General Plan land uses.

## 2.3 Proposed Land Use Plan

Development capacity under the Proposed Land Use Plan is shown in **Table 7**. Factors used to calculate development capacity for the Proposed General Plan Land Use categories can be found in **Table 8**. Factors associated with Opportunity Sites recommended by the GPAC and Planning Commission and approved by the City Council are found in **Table 10**. The following subsections describe components of the Proposed Land Use Plan in greater detail. See **Figure 3** for a map of Proposed Land Uses.

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<sup>1</sup> U.S. Census Bureau. (2022). LEHD Origin-Destination Employment Statistics Data (2002-2019). <https://lehd.ces.census.gov/data/#lodes>. LODES 7.5

<sup>2</sup> 2021 CA DOF E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark

### 2.3.1 Areas of Growth

It is anticipated that by the horizon year of the Proposed General Plan, new development will be focused in areas exhibiting characteristics that make them economically suitable for change and intensification. Additionally, some growth is anticipated in areas with pending and approved projects, residential neighborhoods where ADUs may be constructed, several rural areas with capacity for additional housing, and a small number of other underdeveloped parcels where intensified development can be expected.

### 2.3.2 Opportunity Sites

In coordination with the General Plan Advisory Committee, 21 areas were identified as exhibiting characteristics that suggest opportunities to accommodate new growth and development – these “Opportunity Sites” are shown in **Figure 4**. Opportunity Sites were selected based on the following criteria:

- a) Unimproved Land – vacant properties that may be appropriate to accommodate new development.
- b) Under-Improved Land – properties currently developed with buildings that may be vacant, contain uses of marginal economic value, or otherwise considered to be inappropriate to their location.
- c) Improved Land Suitable for Intensification or Redevelopment – properties currently developed at comparatively low intensity with expansive surface parking lots, where additional buildings may be constructed with new uses to enhance the existing use.

### 2.3.3 Pending and Approved Projects

19 proposed projects are currently pending for review and approval by the city and included in estimates of future growth both in the No Project Alternative and Proposed Land Use Plan. A list of these projects and their capacities may be found in Table 4.1-5 of the Existing Conditions Report.

### 2.3.4 Specific Plans

There are four approved or pending Specific Plans as shown in **Figure 3** - the Hitch Ranch Specific Plan (SP1, pending approval), Moorpark Highlands Specific Plan (SP2), Carlsberg Specific Plan (SP92-1), and the Downtown Specific Plan (SP-D).<sup>3</sup> The potential for new development in these areas is based on forecasted development capacities documented by corresponding EIRs at the time of each Specific Plan’s adoption. Where Opportunity Sites fall within existing Specific

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<sup>3</sup> Specific Plan 9 (SP9) as designated in the Existing/Current General Plan Land Use Map will be removed on approval of the 2050 General Plan.

Plan areas (Sites 1 & 2 in SP-D, and 11 & 12 in SP92-1), development capacities for these Opportunity Sites have been calculated in accordance with their proposed land use categories.

### 2.3.5 Accessory Dwelling Units (ADUs) and Rural Areas

Some residential growth is projected in Rural Residential-designated areas with capacity for additional housing. A limited amount of additional residential development is expected to occur in existing single-family and multi-family neighborhoods through the construction of Accessory Dwelling Units (ADUs), consistent with State legislation. The estimate of ADUs corresponds with projections of the 2021-2029 Housing Element.

## 2.4 Areas where growth is not anticipated

Growth in other areas of the city is generally expected to be incremental and limited. The number of housing units in most residential neighborhoods is expected to remain consistent with existing numbers, with some infill of ADUs as described previously. For commercial and industrial properties outside of identified Opportunity Sites, it is anticipated that square footage (sf) will also primarily remain as existing. No increases of development capacity have been estimated for areas designated by the Plan for governmental institutions, schools, utility-related uses, rights of way, floodways, and open space designations.

## 2.5 Development Capacity Calculation Factors

### 2.5.1 Dwelling Units: $[parcel\ acreage] \times [units\ per\ acre]$

Existing dwelling unit (also referred to as residential units or “Res’d Units”) counts are drawn from parcel data supplied by the City. Under the No Project Alternative, the dwelling unit estimate includes all existing dwelling units, pending/approved projects, projected ADUs, and remaining residential capacity under the current General Plan. The estimate of future housing capacity under the Proposed Land Use Plan includes existing dwelling units, pending/approved projects, projected ADUs, remaining residential capacity, and, within areas where growth is anticipated, additional dwelling units calculated by multiplying parcel acreage by residential density factors indicated in **Table 9**.

### 2.5.2 Households: $[dwelling\ units] \times [occupancy\ rate]$

Household counts under Existing Conditions, the No Project Alternative, and the Proposed Land Use Plan are estimated by multiplying the total number of existing or projected dwelling units by an occupancy rate of 97.6 percent, based on the existing occupancy rate as reported by the California Department of Finance<sup>4</sup>.

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<sup>4</sup> 2021 CA DOF E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark



### 2.5.3 *Population: [households] x [persons per household]*

Existing population calculations are benchmarked against Census data (see **Table 11**). Population figures under Existing Conditions, the No Project Alternative, and the Proposed Land Use Plan are calculated by multiplying households by a persons per household rate of 3.23, a blended rate which accounts for the City's mix of single and multi-unit housing, resulting in a population estimate.<sup>5</sup>

### 2.5.4 *Non-residential square footage (sf): [parcel area] x [floor-area ratio]*

Existing non-residential square footage is based on a GIS analysis of existing single- and multi-story building square footage using building footprint data and field observations of story counts. Non-residential square footage under the No Project Alternative includes existing square footage, pending/approved projects, and areas where current General Plan Land Use designations allow for additional capacity beyond what is utilized by current uses. The Proposed Land Use Plan's capacity for commercial and industrial development within areas where change is anticipated is calculated by multiplying the net area within which development and/or redevelopment can be expected by the permitted development intensities, referred to as Floor-Area Ratios (FAR). FAR associated with proposed land use categories can be found in **Table 8**. In areas where there are adopted specific plans and pending/approved projects, potential commercial and industrial development capacity corresponds with the level of development documented by their certified EIRs.

### 2.5.5 *Employment and Generation Rates: [non-residential square footage (sf)] / [employment generation rate]*

An employment generation rate is used to estimate of the number of employees in a general area by providing a standardized way to relate employment numbers to workplace square footage. Employment generation rates are based on the average number of employees per workplace across each land use category.

Existing employment generation rates are locally-specific numbers derived from Moorpark's existing employment data as reported by the 2019 Longitudinal Employer-Household Dynamics: Origin-Destination Employment Statistics (LEHD LODES) data (as included in **Table 11**)<sup>6</sup>. It is assumed that new commercial and industrial development will see comparable employment generation rates as those associated with existing uses. For this reason, estimates of future employment capacity are calculated by applying existing, local employment generation rates to the estimated increases in building square footage. (see **Table 9**.)

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<sup>5</sup> Ibid.

<sup>6</sup> U.S. Census Bureau. (2022). LEHD Origin-Destination Employment Statistics Data (2002-2019). <https://lehd.ces.census.gov/data/#lodes>. LODES 7.5

As the majority of Moorpark’s existing office development is found in Industrially-zoned areas, the employment generation rate used for Industrial land use categories is based on an average of existing office and industrial employment intensity.

### 3. Tables

Table 1. Summary of Existing Conditions, No Project Alternative, and Proposed Land Use Plan

<b>Existing Development</b>				
	<b>Res'd Units</b>	<b>Non-Res'd SF</b>	<b>Employment</b>	<b>Population</b>
	11,537	8,783,171	12,915	36,445
<b>No Project Alternative</b>				
	<b>Res'd Units</b>	<b>Non-Res'd SF</b>	<b>Employment</b>	<b>Population</b>
	14,351	11,056,808	16,917	45,335
<b>Proposed Land Use Plan</b>				
	<b>Res'd Units</b>	<b>Non-Res'd SF</b>	<b>Employment</b>	<b>Population</b>
	17,025	13,567,083	20,249	53,781

Table 2. Summary Change: Existing Conditions to No Project Alternative

<b>Res'd Units</b>	<b>Non-Res'd SF</b>	<b>Employment</b>	<b>Population</b>
+2,814	+2,273,637	+4,002	+8,890

Table 3. Summary of Change: Existing Conditions to Proposed Land Use Plan

<b>Res'd Units</b>	<b>Non-Res'd SF</b>	<b>Employment</b>	<b>Population</b>
+5,488	+4,783,912	+7,334	+17,337

Table 4. Summary of Change: No Project Alternative to Proposed Land Use Plan

<b>Res'd Units</b>	<b>Non-Res'd SF</b>	<b>Employment</b>	<b>Population</b>
+2,674	+2,510,274	+3,332	+8,446

Table 5. Existing Land Use

Land Use	Res'd Units	Non-Res'd SF	Employment	Population
Rural Residential	54	-	-	171
Single Family Residential	8574	-	-	27,085
Mobile Home	253	-	-	799
Multi-family Residential	2640	-	-	8,340
Open Space and Recreation <sup>1</sup>	0	124,126	-	-
Agriculture	0	-	866	-
Commercial Services	4	1,752,318	2,366	13
Industrial	1	4,277,295	6,941	3
General Office	1	723,787	1,037	3
Public Facilities	4	468,244	89	13
Education	0	1,314,684	1,610	-
Transportation, Communication, Utilities	0	95,609	6	-
Right of Way	0	-	-	-
Water/Floodway	0	-	-	-
Vacant	6	27,108		19
<b>TOTAL</b>	<b>11,537</b>	<b>8,783,171</b>	<b>12,915</b>	<b>36,445</b>

<sup>1</sup> Parks employees are accounted for elsewhere in this table by the land use category of their primary work address.

Table 6. No Project Alternative

Category Code	Res'd Units	Non-Res'd SF	Employment	Population
OS-1	5	-	19	15
OS-2	1	-	137	3
AG	2	-	866	6
RL	212	-	-	668
RH	202	-	-	639
L	203	-	-	643
ML	1,881	-	-	5,941
M	4,551	-	-	14,376
H	1,171	-	-	3,699
VH	2,964	-	-	9,364
I-1	3	3,566,216	5,920	9
I-2	-	2,569,435	3,681	-
C-1	-	47,662	64	-
C-2	97	1,184,895	1,599	306
SP-D	403	780,377	1,053	1,274
SP1	755	-	-	2,385
SP2	685	-	-	2,164
SP9	100	-	-	316
SP92-1	554	1,387,495	1,872	1,751
S	-	1,314,684	1,610	-
PUB	78	128,729	89	246
U	3	39,971	6	9
P <sup>1</sup>	1	37,344	-	3
ADUs	480	-	-	1,516
<b>TOTAL</b>	<b>14,351</b>	<b>11,056,808</b>	<b>16,917</b>	<b>45,335</b>

1 Parks employees are accounted for elsewhere in this table by the land use category of their primary work address.

Table 7. Proposed Land Use Plan Development Capacity

Category Code	Res'd Units	Non-Res'd SF	Employment	Population
OS	64	164,609	153	204
AG	-	-	866	-
R	382	-	-	1,207
NVL	2,624	-	-	8,289
NL	4,532	-	-	14,316
NMX	568	-	-	1,795
NM	1,220	-	-	3,853
NH	3,143	-	-	9,928
MUD	1,088	675,267	911	3,438
MUM	100	796	1	316
MUL	-	-	-	-
IF	-	1,153,815	2,464	-
IP	3	6,797,695	9,739	9
NC	-	173,532	234	-
C-A	-	606,377	818	-
SP1	755	6,398	9	2,385
SP2	548	-	-	1,730
SP92-1	554	1,387,495	1,872	1,751
SP-D <sup>2</sup>	961	1,092,991	1,475	3,037
S	-	1,314,684	1,610	-
PUB	1	113,487 <sup>1</sup>	89	3
U	-	39,971	6	-
NCP <sup>3</sup>	1	39,966	-	3
<i>ADUs</i>	<i>480</i>	-	-	<i>1,516</i>
<b>TOTAL</b>	<b>17,025</b>	<b>13,567,083</b>	<b>20,249</b>	<b>53,781</b>

- 1 The Oakmont Senior Living project is located on parcels designated PUB under the No Project Alternative but have a residential use under the Proposed Land Use Plan. This accounts for the reduction in PUB square footage between the Proposed and No Project Alternative.
- 2 SP-D here includes Opportunity Sites 1, 2, and a portion of 6.
- 3 Parks employees are accounted for elsewhere in this table by the land use category of their primary work address.

Table 8. Factors for Proposed Land Use Categories

Proposed Land Use	Description	FAR	Density (du/ac)
<b>Residential Allowed</b>			
AG	Agriculture	-	.1 - .025
OS	Open Space	-	.1 - .025
R	Rural	-	1
NVL	Neighborhood Very Low	-	3
NL	Neighborhood Low	-	8
NM	Neighborhood Medium	-	24
NH	Neighborhood High	-	32
NMX	Neighborhood Mixed Density	-	8
<b>Mixed Uses</b>			
MUL	Mixed-Use Low	1.5	*
MUM	Mixed-Use Medium	2.0	*
MUD	Mixed-Used District	2.0	*
<b>Non-Residential</b>			
NC	Neighborhood Commercial	0.35	-
C-A	Commercial - Auto	0.5	-
IP	Industrial Park	1.0	-
IF	Industrial Flex	1.0	-
NCP	Neighborhood/Community Park	-	-
S	School	-	-
PUB	Public/Institutional	-	-
U	Utilities	-	-
FLDWY	Floodway	-	-
ROW	Right of Way	-	-

Table 9. Employment Generation Rates

Employment Sector	Employment Generation Rate (sf/employee)
Office/Industrial	698
Commercial	741
Public	*
Agricultural	780
Utility	*
School	817

\* These workforces occupy relatively small land use categories in Moorpark. Calculations have assumed a constant figure through the planning period.

Table 10. Opportunity Site Factors

#	Opportunity Site	Proposed Land Use	No Project Alternative <sup>1</sup>	Proposed GP	No Project Alternative <sup>1</sup>	Proposed GP
			Residential Factors		Non-residential Factors	
1	High Street Corridor	MUM	7 du/ac	(50% area * 1.0 FAR/1200 SF) + existing units	C-OT: 0.38 FAR C-2: 0.25 FAR	0.5 FAR * 50% area + existing SF
2	Moorpark Avenue Corridor	MUL	-	(33% area * 1.0 FAR / 1200 SF) + existing units	C-1: 0.25 FAR C-2: 0.25 FAR C-OT: 0.38 FAR C-O: 0.5 FAR	33% area * 0.5 FAR + existing SF
3a	Mission Bell	MUD	-	mixed use residential (30% area * 1.5 FAR/1200 SF) + residential (50% area @ 32 du/ac)	0.25 FAR	Mixed use commercial (30% area * 0.5 FAR) + Commercial (20% SF*0.5 FAR)
3b	Moorpark Town Center	MUD	-	mixed use residential (30% area*1.5 FAR/1200 SF) + residential (50% area @ 32 du/ac)	0.25 FAR	Mixed use commercial (30% area*0.5 FAR) + Commercial (20% SF*0.5 FAR)
3c	Tuscany Square/Village Retail Area	C-A	-	-	0.25 FAR	0.5 FAR
4a	Duncan Ashley	NH	95 units <sup>2</sup>	32 du/ac	0.25 FAR	-
4b	Commercial Center	C-A	-	-	0.25 FAR	0.5 FAR
4c	Moorpark Plaza	NC	-	-	0.25 FAR <sup>4</sup>	0.35 FAR
5	Industrial District/Enegren Building	IF	-	-	0.38 FAR	0.7 FAR
6	Princeton Avenue Industrial/Concrete Batching	IP	4 du/ac	-	0.38 FAR	0.7 FAR
7	WDC/Ortho Commercial Center	C-A	-	-	0.25 FAR <sup>3</sup>	0.5 FAR
8	Ensign Bickford Adjacent Vacant Property	OS	-	-	0.38 FAR	-
9	Moorpark Campus Plaza	MUD	-	1.0 FAR / 1200 SF per unit	0.25 FAR <sup>3</sup>	0.5 FAR
10	Varsity Park Plaza	NC	-	-	0.25 FAR	0.35 FAR
11	Patriot Commerce Center Vacant Sites	IF	-	-	0.38 FAR	1.0 FAR
12	Moorpark Marketplace Parking Lot	C-A	-	-	0.25 FAR <sup>3</sup>	0.5 FAR
13	Penny Mac (incl. parking lot)	IF	-	-	0.38 FAR	1.0 FAR
15	Canyon Crest/Birdsall	NVL	21 units <sup>2</sup>	2 du/ac	-	-
16	The Vistas at Moorpark/City Ventures	NMX	2 du/ac <sup>4</sup>	8 du/ac <sup>5</sup>	-	-
17	Special Needs Housing Study Area	NM	0.2 du/ac	24 du/ac	-	-
18	Hilltop Site	MUD	-	-	0.38 FAR	0.75 FAR

- 1 Unless otherwise noted, No Project calculations are based on the maximum envelope described in the Current General Plan land use designation. Exceptions described in subsequent footnotes.
- 2 No Project reflects descriptions of projects approved.
- 3 No Project reflects existing land uses which exceed the Current General Plan maximum envelope.
- 4 A project has been approved for this site consisting of 110 single family homes, which appears to be less units than would be allowed under the Current General Plan designation.
- 5 NMX = 65% Multi-Unit + 35% Single-Unit

Table 11. Benchmarks

Data Source	Res'd Units	Non-Res'd SF	Employment	Population
ACS/LEHD 2018	11,796	*	13,128	36,274
ACS/LEHD 2019	12,114	*	12,915	36,372
ACS/LEHD 2020	11,981	*	**	36,443
Parcel-based Existing Conditions Calculations	11,537	8,783,171	12,915 <sup>1</sup>	36,445

\* This information is not collected by these surveys.

\*\* This data is not publicly available as of 03/21/2022

1 This figure uses 2019 data as a benchmark to calculate generation rates for use in No Project and Proposed Land Use Plan calculations.



Figure 1. Existing Land Use

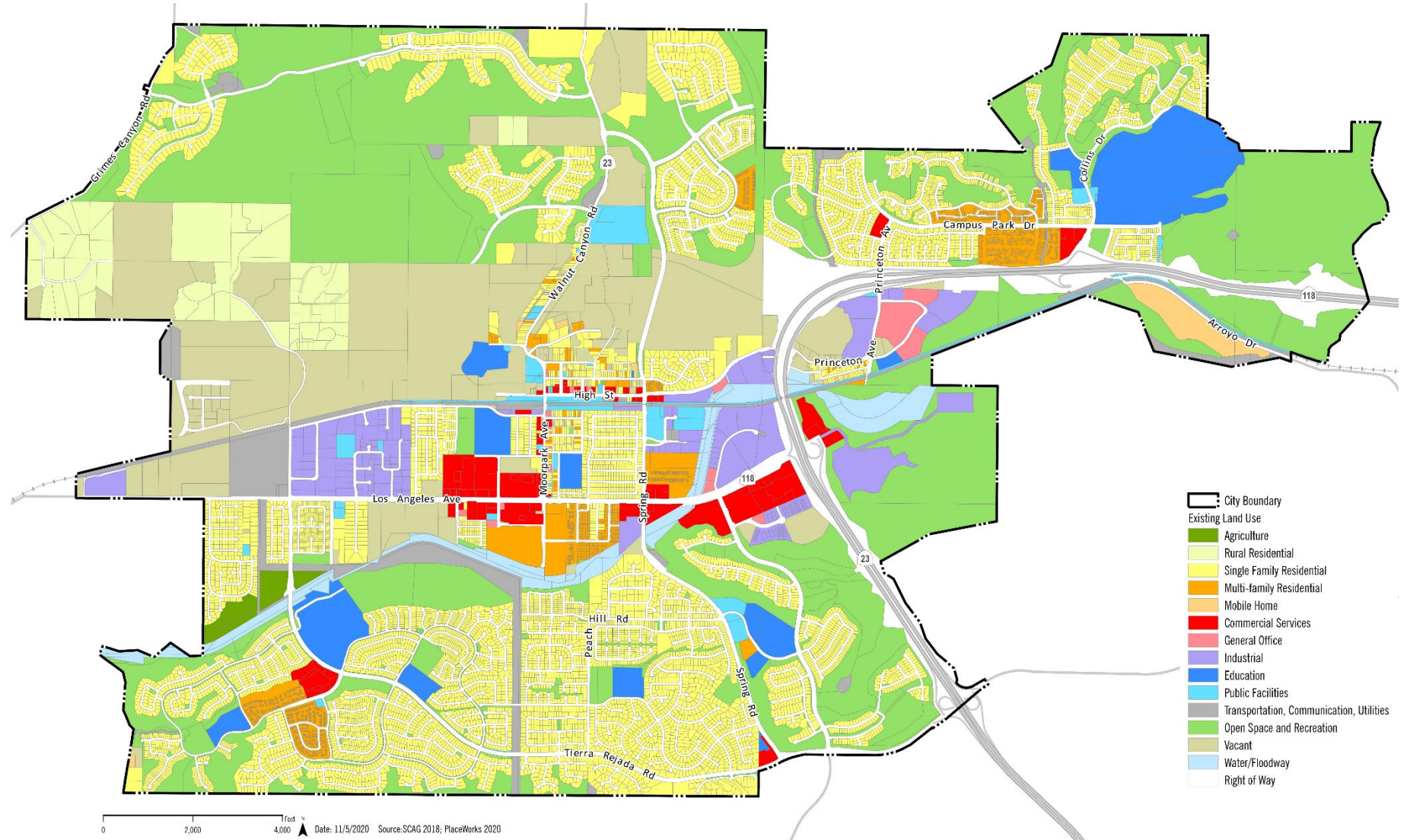


Figure 2. Current General Plan Land Use

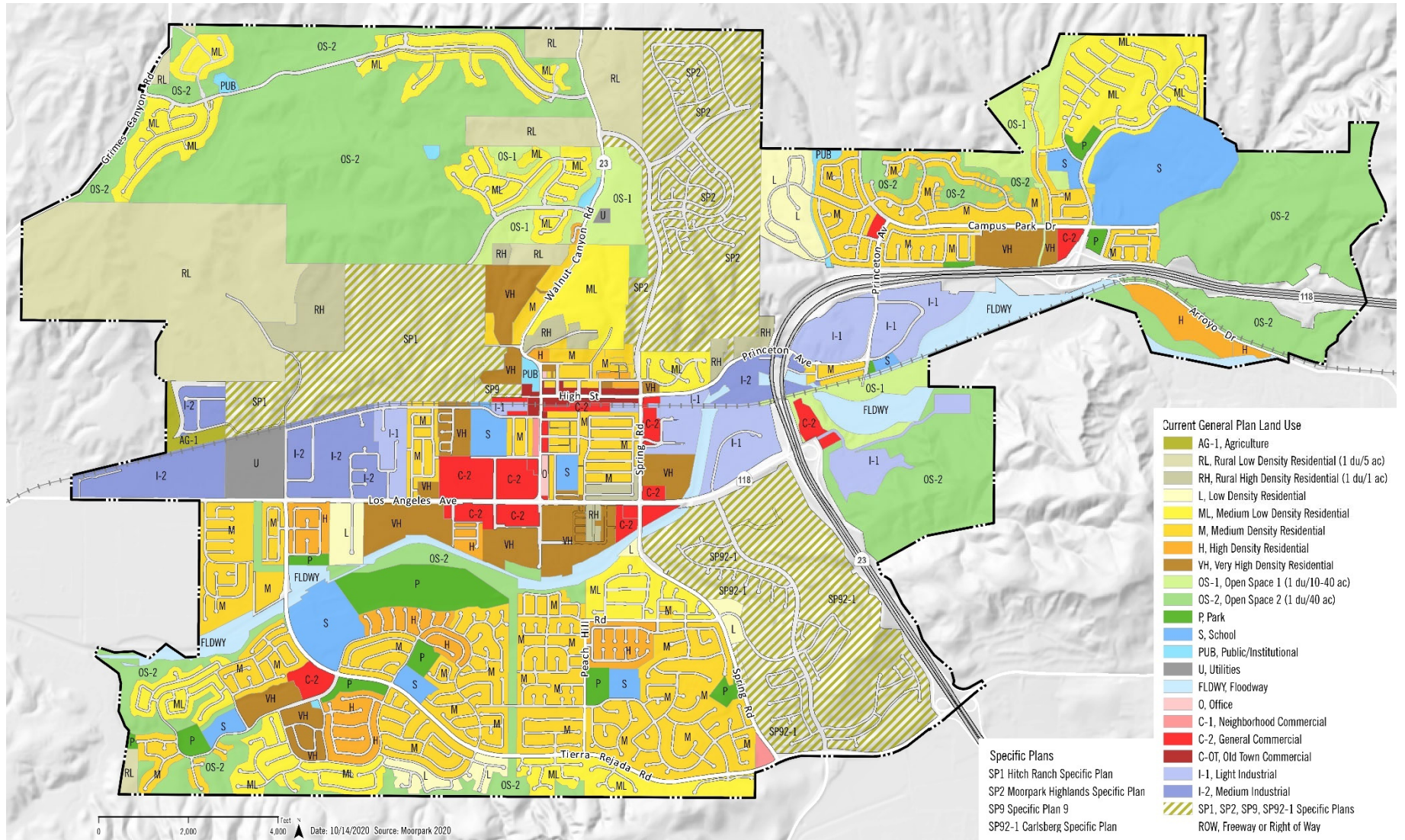


Figure 3. Proposed Land Use

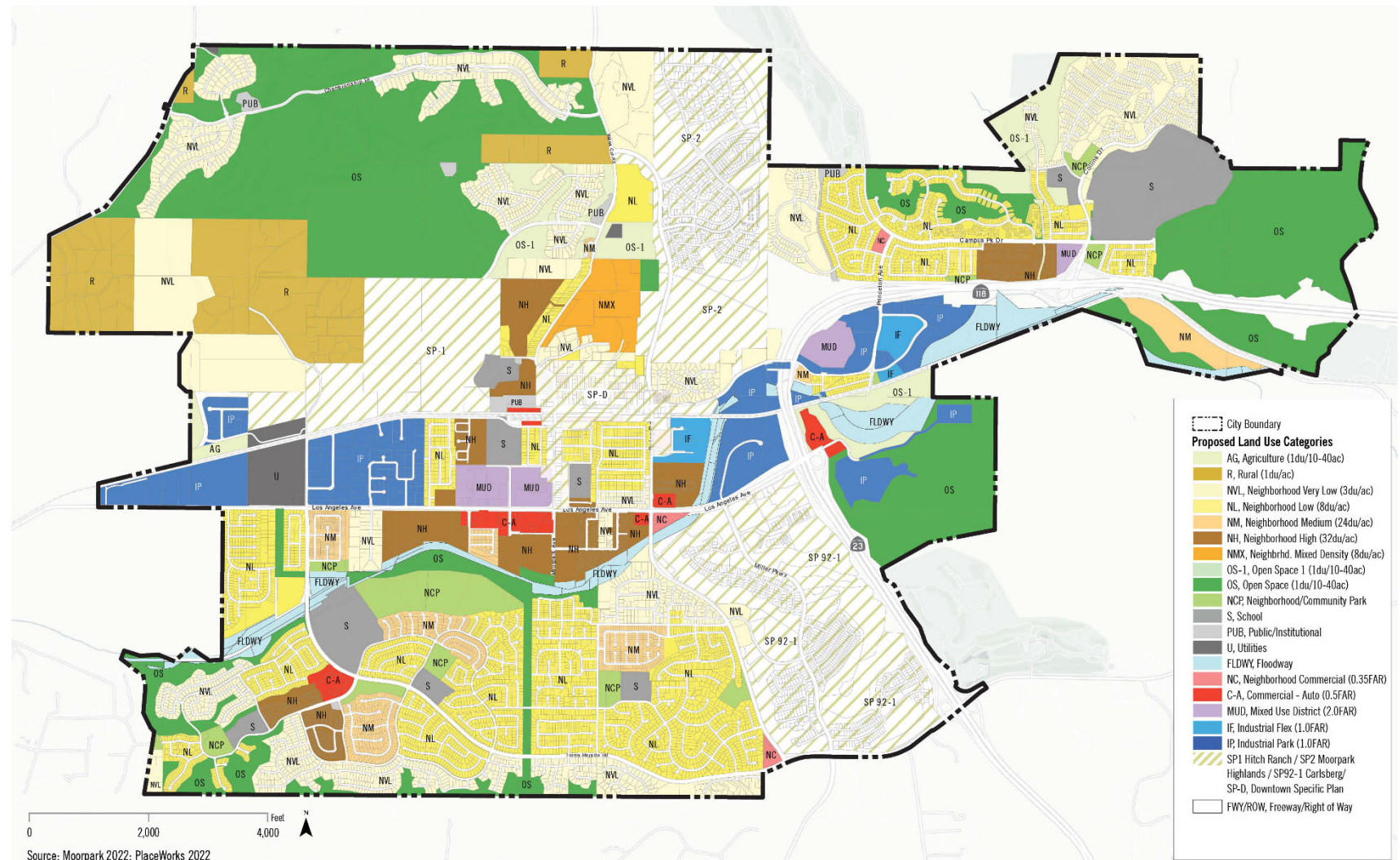
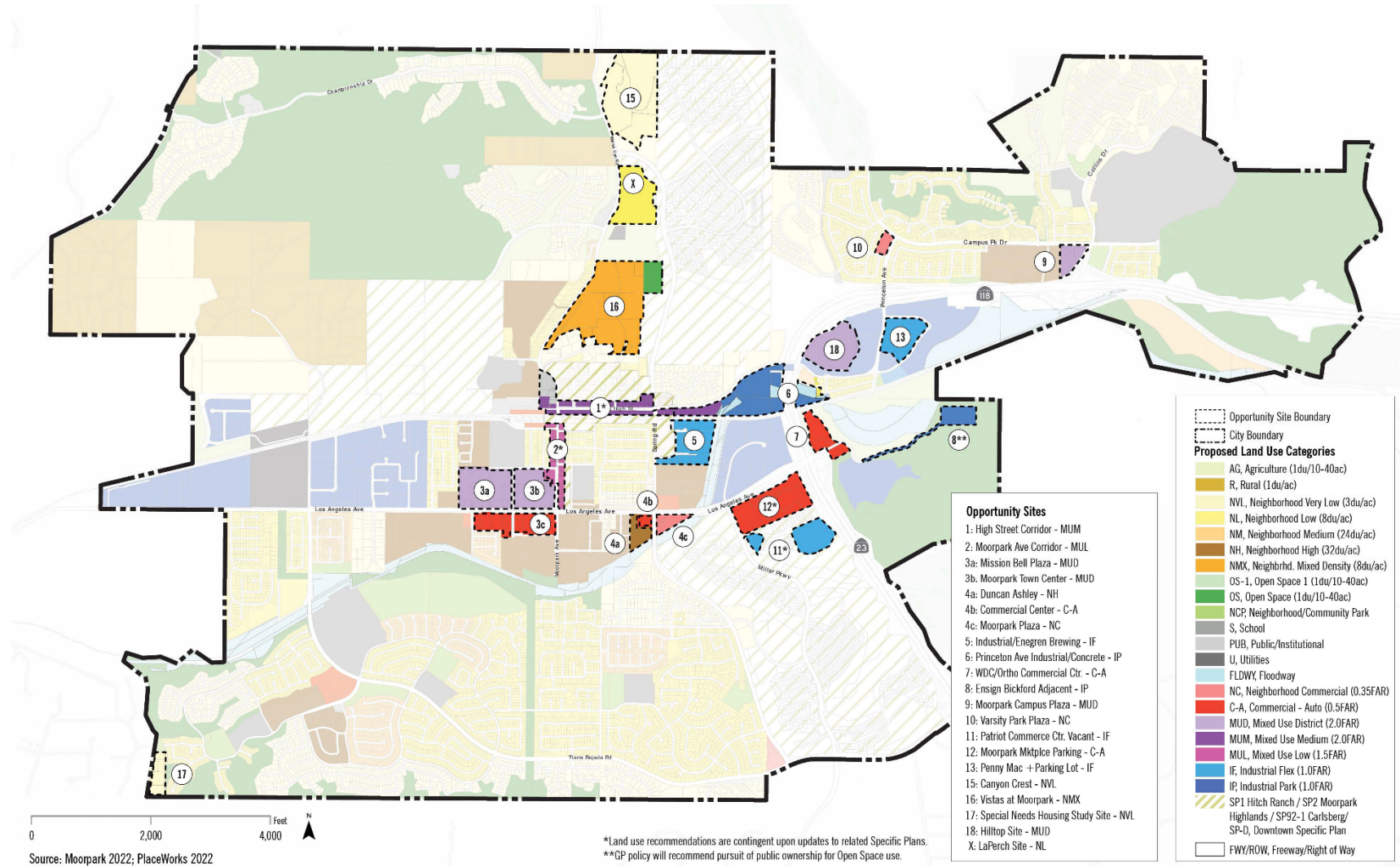


Figure 4. Opportunity Sites



## **Appendix C      Moorpark General Plan 2050 Policies**

## Appendices

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# Land Use Element: Goals and Policies

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## GOAL LU 1

**DEVELOPMENT CAPACITY:** SUSTAINABLE GROWTH THROUGH WELL-PLANNED DEVELOPMENT THAT PROVIDES FOR THE NEEDS OF MOORPARK'S RESIDENTS AND BUSINESSES, MAKES EFFICIENT USE OF LAND AND INFRASTRUCTURE, PROTECTS IMPORTANT ENVIRONMENTAL RESOURCES, PROMOTES THE HEALTH OF THE COMMUNITY, AND MAINTAINS THE UNIQUE CHARACTER DISTINGUISHING THE CITY AS A SPECIAL PLACE IN THE REGION.

### LU 1.1

**Growth respecting Moorpark's values and character:** Accommodate growth that is consistent with community values and complements the scale and character of Moorpark's residential neighborhoods, business districts, and natural environmental setting.

### LU 1.2

**Types and distribution of land uses:** Accommodate population and employment growth attributable to the categories and standards for densities/intensities of the land uses depicted on the Land Use Diagram and as evaluated in the General Plan Program Environmental Impact Report (PEIR).

### LU 1.3

**Housing to meet resident needs:** Review the city's land use inventory concurrent with Housing Element updates and, if necessary, modify the land use element to ensure that general plan policies are being adhered to and to provide an adequate up-to-date database for continuing development considerations.

### LU 1.4

**Public services to support growth:** Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted.

### LU 1.5

**Development timing:** Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character.

### LU 1.6

**Development priorities:** Prioritize infill and redevelopment of existing developed areas and immediately adjoining properties to achieve a seamless and connected development pattern, limiting expanded development outward into hillsides and natural areas.

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## GOAL LU 2

**SPHERE OF INFLUENCE:** A LOGICAL SPHERE OF INFLUENCE ENSURING CONSISTENCY WITH MOORPARK'S VISIONS AND VALUES.

### LU 2.1

**Growth beyond the city's boundaries:** Evaluate the appropriateness of expanding Moorpark's Sphere of Influence to manage conservation and uses adjoining the city boundary, consistent with the community's visions and values and consideration of the area's environmental resources, hazards, accessibility of infrastructure and services and local and regional growth policies and regulations.

### LU 2.2

**Process for considering future areas of growth:** Participate in Ventura County Local Agency Formation Commission's five-year municipal service and Sphere of Influence reviews to identify appropriateness of any modifications to city's designated Sphere of Influence.

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## GOAL LU 3

**LAND USE MIX:** A MIX OF LAND USES THAT MEETS THE DIVERSE NEEDS OF THE MOORPARK COMMUNITY.

### LU 3.1

**Housing for all residents:** Provide a mix of residential densities to accommodate the housing needs of all members of the community and address Moorpark's fair share of regional housing needs consistent with the Housing Element.

### LU 3.2

**Housing types:** Provide for the development of a diversity of residential product types, lot sizes, and designs, unless determined by the city to be infeasible due to the size of the project.

### LU 3.3

**Broader mix of housing types:** Facilitate the development of mid-range, or "missing middle," housing units such as duplexes, multiplexes, courtyard homes, and townhomes.

### LU 3.4

**Reuse of declining commercial properties:** Promote the redevelopment of commercial centers and corridors that are underutilized, where businesses have closed, and do not exhibit supportable market demand for economically viable uses desired by the community.

### LU 3.5

**Mixed-use development:** Provide for development projects that mix housing with commercial uses to enable Moorpark's residents to live close to businesses and employment, reducing vehicle trips, and supporting social interactions.



### LU 3.6

**Industries and jobs:** Prioritize the development of industries that have limited emissions, meet local, regional, and state air and water pollution control goals and standards, and are designed to be compatible with surrounding land uses.

### LU 3.7

**Transit-oriented development:** Promote opportunities to develop uses that can economically benefit from their proximity to the Moorpark Metrolink station and promote increased ridership.

### LU 3.8

**Public services and facilities:** Support a diversity of uses and services supporting Moorpark's residents such as facilities for governance and administration, public safety, seniors and youth, community gatherings, and comparable activities.

### LU 3.9

**Parks, recreation, and open spaces:** Maintain existing parks and recreations facilities, trails, and other open space amenities and develop new parks, facilities and amenities in areas of need consistent with the provisions of the Open Space, Conservation and Recreation Elements.

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## GOAL LU 4

**URBAN FORM: A CITY OF DISTINCT, COMPACT, AND WALKABLE CENTERS AND CORRIDORS, SURROUNDED BY DIVERSE AND COMPLETE NEIGHBORHOODS, AND CONNECTED TO A UNIFYING NETWORK OF GREENWAYS AND OPEN SPACES.**

### LU 4.1

**Sustainable urban form:** Provide an overall pattern of land uses that promotes efficient development; reduces automobile dependence, greenhouse gas emissions; and consumption of non-renewable resources; ensures compatibility among uses; enhances community livability and health; and sustains economic vitality.

### LU 4.2

**Focused development:** Reinforce existing patterns of development by concentrating development in key centers and districts serving as destinations and gathering places for the community that are linked by pedestrian connections to adjoining residential neighborhoods, such as the downtown High Street corridor, Mission-Bell/Moorpark Town Center, and Moorpark Marketplace.

### LU 4.3

**Residential neighborhoods:** Maintain a development pattern of distinct residential neighborhoods oriented around parks, schools, and community facilities that are connected with neighborhood-serving businesses and public transit.

### LU 4.4

**Multi-family housing:** Promote the development of multiple-family dwellings in close proximity to employment opportunities, shopping areas, public parks, and transit lines, with careful consideration of the proximity to and compatibility with single-family neighborhoods.

#### LU 4.5

**Community-serving uses:** Encourage uses that meet the daily needs of residents such as grocery stores, local-serving restaurants, and service businesses to be located within safe walking distance of residents.

#### LU 4.6

**Highway-oriented development:** Cluster commercial development in compact areas along major roadways and provide pedestrian links to adjacent residential areas.

#### LU 4.7

**Moorpark College community:** Promote the long-term development of commercial uses and housing in proximity to Moorpark College.

#### LU 4.8

**Enhanced industrial districts:** Support new industrial development adjacent to and as infill within existing industrial uses and along major transportation corridors.

#### LU 4.9

**Development fit with natural terrain:** Decrease the overall density and intensity of development as the slope of the natural terrain increases.

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### GOAL LU 5

**CHARACTER:** A WELL-DESIGNED COMMUNITY CONTRIBUTING TO THE CITY'S DISTINCT IDENTITY AND QUALITY OF LIFE OF RESIDENTS.

#### LU 5.1

**Development complements existing character:** Require that new development be designed to complement Moorpark's historical family-oriented small-town feel.

#### LU 5.2

**Integration of public spaces:** Maintain public spaces and services to create an aesthetically and functionally welcoming environment.

#### LU 5.3

**Special design districts:** Establish design concepts for the overall community and special treatment areas, such as the downtown district, which may include guidelines for architecture, landscape architecture, signage, streetscape, and infrastructure.

#### LU 5.4

**Landscapes for quality development:** Require the use of landscaping around residential, commercial and industrial buildings and parking areas as well as along easements of flood control channels, roadways, railroad right of ways, and other public and private areas, to soften the urban environment and enhance views from roadways and surrounding uses.

#### LU 5.5

**Compatible land uses:** Require design features that provide visual relief and separation between land uses of conflicting character.

## LU 5.6

**Historic resources:** Collaborate with the County of Ventura Cultural Heritage Board and Moorpark Historical Society to identify, inventory, and preserve Moorpark's historical resources.

## LU 5.7

**Public art:** Encourage the provision of art in public places and inclusion of works of art or artistic elements as a part of commercial and industrial development projects.

## LU 5.8

**Entryways:** Encourage the development of identifiable entryways for the overall community, and in unique or principal business/commercial districts of the city (i.e. city core and transportation corridors) by establishing design standards for these areas that include landscape setbacks, sign monumentation and other special design treatments.

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## GOAL LU 6

**MAINTENANCE AND COMPATIBILITY WITH OTHER USES: DEVELOPMENT IS LOCATED AND DESIGNED TO MAINTAIN THE QUALITIES DISTINGUISHING MOORPARK AND ENSURE EFFECTIVE TRANSITIONS AMONG NEIGHBORHOODS AND DISTRICTS.**

## LU 6.1

**Land use compatibility:** Require that development is located and designed to assure compatibility among land uses.

## LU 6.2

**Development transitions:** Require that the scale and massing of new development in higher density locations provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of the adjoining uses.

## LU 6.3

**Design for safety:** Require that development and public spaces are designed to enhance public safety and discourage crime by providing street-fronting uses, adequate lighting, and features that cultivate a sense of community ownership.

## LU 6.4

**Property maintenance:** Maintain aging structures and prevent deteriorating conditions through private and public conservation and rehabilitation programs.

## LU 6.5

**Property upgrades:** Provide for and promote the revitalization of visually degraded landscaping, building facades and deteriorated buildings in the community.

## LU 6.6

**Gathering places for residents:** Permit the development of assembly facilities for social, cultural, and educational, organizations in locations where they can be located, designed, and managed to assure compatibility with adjoining uses.

## LU 6.7

**Protection from environmental hazards:** Prohibit or effectively control land uses that pose potential environmental hazards to Moorpark’s neighborhoods and districts.

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## GOAL LU 7

**COMPATIBILITY WITH THE NATURAL ENVIRONMENT:** LAND USES AND DEVELOPMENT INTENSITIES THAT ARE COMPATIBLE WITH SCENIC AND NATURAL RESOURCES AND THAT ENCOURAGE ENVIRONMENTAL PRESERVATION.

### LU 7.1

**Mitigate environmental impacts:** Locate and design new development to minimize adverse visual and/or environmental impacts to the community.

### LU 7.2

**Design development to respect natural setting:** Require that new development respect, integrate with, and complement the natural features of the land including conforming building massing to topographic forms, restricting grading of steep slopes and encouraging the preservation of visual horizon lines and significant hillsides as prominent visual features.

### LU 7.3

**Protect uses from hazards:** Require that new development be located and designed to avoid or mitigate any potentially hazardous conditions.

### LU 7.4

**Open space corridor:** Preserve and enhance the flood control easement area adjacent to the Arroyo Simi floodway as an important natural and scenic feature of the community.

### LU 7.5

**Arroyo Simi corridor recreation:** Encourage the development of compatible open space/recreational uses of the Arroyo Simi floodway that are consistent with the provisions of the Federal Emergency Management Agency for floodway uses.

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## GOAL LU 8

**SUSTAINABLE LAND USE DEVELOPMENT:** LAND USE DEVELOPMENT PRACTICES THAT PROTECTS ENVIRONMENTAL RESOURCES, REDUCES GREENHOUSE GAS EMISSIONS, REMOVES CARBON FROM THE ATMOSPHERE, AND IS RESILIENT TO CLIMATE CHANGE.

### LU 8.1

**Model of environmental sustainability:** Establish Moorpark as a leader of land use development practices that contribute to the sustainability and stewardship of environmental resources including air quality protection, energy and water efficiency, natural resource conservation, greenhouse gas reduction, and climate change resiliency.

## LU 8.2

**Reduction of energy and water use:** Encourage developers to exceed standards for building design and construction specified by the California Green Building Standards Code, with goals of achieving net zero energy and water use.

## LU 8.3

**Design for climate change:** Require major development projects, as defined in the Municipal Code, to prepare greenhouse gas reduction and climate change resilience plans.

## LU 8.4

**Adaptive re-use of existing buildings:** Encourage the adaptive reuse of structures as a means of minimizing waste, capitalizing on a building's embodied energy, and supporting environmental sustainability.

## LU 8.5

**Low-impact landscapes:** Require new development projects to use, and encourage existing development to retrofit properties using, low impact landscaping techniques which include drought-tolerant plant species, reduction of turf area, irrigation designed to meet plant needs, and grouping plants according to their watering needs.

## LU 8.6

**Sustainable streetscapes:** Consider improvements of the city's streetscapes addressing the impacts of climate change by such techniques as tree canopies to reduce heat islands and use of pervious paving, and bioswales to capture stormwater and percolate into the groundwater.

## LU 8.7

**Habitat protection:** Encourage public & private projects to be located and designed to preserve significant habitats, vegetation, and other significant educational, scientific, scenic, resources of social value, protect air quality, and reduce greenhouse gas emissions as specified by the Conservation, Open Space and Recreation Element.

## LU 8.8

**Waste reduction and recycling:** Require that commercial, industrial and manufacturing uses implement reuse, reduction, and recycling programs consistent with the city's Source Reduction and Recycling Element.

## LU 8.9

**Design to avoid hazards:** Require that development in significant hazard areas is located and designed to ensure safety in accordance with the Safety Element.

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## GOAL LU 9

**HEALTH AND WELLNESS: LAND USE DEVELOPMENT PRACTICES AND PROGRAMS THAT CONTRIBUTE TO HEALTHY LIVES FOR MOORPARK'S RESIDENTS.**

## LU 9.1

**Healthy buildings and places:** Promote a healthy built environment by encouraging the design and rehabilitation of buildings and sites for healthy living and working conditions, including

promoting enhanced pedestrian-oriented circulation, lighting, building materials and universal accessibility using existing tools, practices, and programs.

#### **LU 9.2**

**Active pedestrian environment:** Locate and design new development to foster active pedestrian access and use by such techniques as locating a mix of uses and buildings around common plazas and open spaces to promote outdoor gatherings and walking among businesses, inclusion of bicycle storage facilities, and pedestrian walkways and connections to adjoining residential neighborhoods.

#### **LU 9.3**

**Age-friendly living:** Encourage the development of barrier-free buildings and streets, enhanced mobility, and independence of people with disabilities and safe neighborhoods to support a life-long process of active aging by making Moorpark an “age friendly” city that strives to create a positive, socially inclusive, and supportive environment.

#### **LU 9.4**

**Active transportation:** Promote infrastructure improvements that support active transportation with safe, attractive, and comfortable facilities that meet community needs.

#### **LU 9.5**

**Parks contributing to healthy lives:** Promote opportunities for physical activity for users of all ages and abilities by continuing to improve the quality of existing park and open space facilities and creating recreation programs as defined by the Conservation, Open Space, and Recreation Element.

#### **LU 9.6**

**Urban agriculture:** Encourage and preserve land for urban agriculture in the city to ensure a long-term supply of locally produced healthy food; promote resiliency, green spaces, and healthy food access through resources such as a farmers’ market; increase the number of urban agriculture sites including but not limited to: community gardens, parkway gardens, urban farms and rooftop gardens.

#### **LU 9.7**

**Arts and culture:** Support arts and culture as a way of enhancing mental health, social connectedness and overall well-being.

#### **LU 9.8**

**Healthy food options:** Promote ready access to affordable, fresh, and healthy food options by supporting and promoting community gardens, urban agriculture, culinary classes, farmers markets, and full service and culturally diverse markets.

#### **LU 9.9**

**Responsible alcohol use:** Support responsible alcohol regulations that protect public health, safety, and welfare that include, but are not limited to: responsible advertising, licensing conditions, social host regulations, prevention of overconcentration of stores selling alcohol, and appropriate public education.

#### **LU 9.10**

**Drug aversion:** Discourage drug (mis)use through prohibition of the cultivation or use of cannabis, appropriate public education, and extra-curricular programs and activities for youth (e.g., Teen Center, Boys and Girls Club, etc.).

#### **LU 9.11**

**Childcare provision:** Support an adequate supply of affordable and quality child-care options in a variety of settings- private homes, schools, public agencies, faith-based organizations, and private agencies- for caregivers.

#### **LU 9.12**

**Elder and assisted care:** Support the increased availability of home care and appropriate assisted-living opportunities for older adults and people with disabilities, including appropriate support and resources for their caregivers.

#### **LU 9.13**

**Health services:** Support nonprofit and for-profit organizations, business, and local schools that are engaged in health and wellness education and that provide access to affordable, quality health care for all residents.

#### **LU 9.14**

**Access to quality health care:** Leverage city tools to attract and retain a full complement of primary, preventive, and specialty health care providers, including those providing mental health, vision, and dental care.

#### **LU 9.15**

**Mental health literacy:** Support a range of appropriate activities and resources, and promote community awareness and sensitivity regarding the importance of mental health literacy and care for residents of all ages.

#### **LU 9.16**

**Food security:** Support nonprofit agencies, local schools, and governmental agencies that reduce food insecurity and improve readily available nutrition for lower income or assistance-dependent residents, particularly in underserved areas.

#### **LU 9.17**

**Family resources:** Support family resource centers that offer activities for children and their caregivers that focus on early literacy, parenting classes and workshops, caregiver-and-child classes, childcare, nutrition classes, school readiness, and other services.

#### **LU 9.18**

**Library and lifelong learning:** Provide and promote a state-of-the-art library that offers resources and engaging programs to meet the varied educational, cultural, civic, and general business needs of all residents and support opportunities for lifelong learning and enrichment.

### LU 9.19

**Smoking and vaping:** Continue to support public health and safety through local tobacco/smoking regulations; discourage youth smoking and vaping and support prevention and cessation efforts.

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## GOAL LU 10

**FAIR AND EQUITABLE:** FAIR AND EQUITABLE ACCESS FOR ALL RESIDENTS TO EMPLOYMENT, HOUSING, PARKS, EDUCATION, RECREATION, TRANSPORTATION, RETAIL, AND PUBLIC SERVICES, INCLUDING PARTICIPATION IN GOVERNMENTAL DECISION-MAKING.

### LU 10.1

**Access to services and amenities:** Strive to ensure that recreational, health, public service, and other desired services and neighborhood amenities are distributed equitably throughout the city.

### LU 10.2

**Access to housing:** Promote an equitable distribution of housing types for all income groups throughout the city and promote mixed-income developments rather than over-concentrating below-market-rate housing in certain areas.

### LU 10.3

**Employment and education match:** Encourage a balance between job type, the workforce, and housing development to reduce the negative impacts of long commutes and provide a range of employment opportunities for all city residents.

### LU 10.4

**Overconcentration of impact uses:** Avoid the overconcentration of high-impact uses and facilities that disproportionately affects a particular neighborhood, center, or corridor to ensure that such uses do not result in an inequitable environmental burden on low-income or minority neighborhoods.

### LU 10.5

**Local-serving businesses:** Encourage mixed-use and commercial development to provide retail spaces conducive to community-serving small businesses and business incubation.

### LU 10.6

**Community participation:** Provide and promote opportunities for all residents to fully participate in civic decision-making through the city's commissions, boards, oversight entities, and committees and processes that emphasize the collaborative exchange of ideas by all segments of the community.

### LU 10.7

**Educational partnerships:** Collaborate with local schools in areas of opportunity, including school transit, health and safety, academic performance, and educational outcomes.



## LU 10.8

**Economic security:** Promote and support workforce development options for residents seeking to enhance their job skills, employment stability, and economic security by supporting collaborations with Moorpark College, high schools, adult schools, and employers.

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## GOAL LU 11

**MAINTAIN AND ENHANCE RESIDENTIAL NEIGHBORHOODS: A CITY COMPOSED OF NEIGHBORHOODS WITH A VARIETY OF HOUSING TYPES THAT ARE DESIRABLE PLACES TO LIVE, CONTRIBUTE TO THE QUALITY OF LIFE, AND WELL-MAINTAINED.**

### LU 11.1

**Quality neighborhoods:** Maintain the uses, character, amenities, and quality of Moorpark's residential neighborhoods, recognizing their contribution to the city's identity, economic value, and residents' quality of life.

### LU 11.2

**Neighborhood maintenance and upgrades:** Promote the renovation of existing housing units in single- and multi-family neighborhoods requiring that they maintain the distinguishing characteristics and qualities of their neighborhood, such as prevailing lot sizes; building form, scale, massing, and relationship to street frontages; architectural design; landscape; property setbacks; and comparable elements.

### LU 11.3

**Pedestrian-oriented neighborhoods:** Maintain sidewalks, parkways, street tree canopies, and landscaping throughout the residential neighborhoods to promote walking as an enjoyable and healthy activity and alternative to automobile use.

### LU 11.4

**Safe neighborhoods:** Require that residential developments be designed to facilitate and enhance neighborhood surveillance for safety.

### LU 11.5

**Sustained development standard:** Preserve and enhance residential neighborhoods through enforcement of land use and property standards, ensuring that adjacent nonresidential uses are buffered from residences in harmonious and attractive ways.

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## GOAL LU 12

**COMPATIBILITY OF NEW RESIDENCES: NEW HOUSING THAT IS COMPATIBLE WITH THE CHARACTER OF EXISTING INDIVIDUAL NEIGHBORHOODS AND MINIMIZES LAND USE INCOMPATIBILITY.**

### LU 12.1

**Managed growth:** Require that new residential development be consistent with city-adopted growth ordinance policies for location and standards.

## LU 12.2

**Development that complements:** Require that new residential development complements the overall character of the city, establishes a sense of place, is compatible with the scale and character of the surrounding neighborhood, and ensures compatibility with important existing local community identities.

## LU 12.3

**Accessory dwelling units:** Require that accessory dwelling units are located and designed to complement the scale and architectural character of the existing single family unit on a property.

## LU 12.4

**Recreation and open space:** Require that new residential development includes adequate public and private open space and recreational uses to serve residential neighborhoods.

## LU 12.5

**Multi-family housing quality:** Require that new and renovated multi-family residences achieve a high level of architectural design and quality of life for residents, in consideration of the following principles:

- a. Consistent architectural design treatment of all elevations, including those not visible from public places
- b. Design elevations of multi-family buildings facing public streets and pedestrian ways to exhibit a high level of visual interest and distinguish entries for separate residences as feasible for security and privacy
- c. Incorporate setbacks, modulate building mass, and design multi-family buildings and projects in consideration of the development patterns of the surrounding neighborhood

## LU 12.6

**Inclusion of public spaces:** Provide ample public spaces and tree-lined sidewalks or pathways furnished with appropriate pedestrian amenities that contribute to comfortable and attractive settings for pedestrian activity in multi-family neighborhoods.

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## GOAL LU 13

**MAINTAIN AND ENHANCE COMMERCIAL AREAS: VITAL, ACTIVE, PROSPEROUS, AND WELL-DESIGNED COMMERCIAL CENTERS AND CORRIDORS THAT OFFER A DIVERSITY OF GOODS, SERVICES, AND ENTERTAINMENT AND CONTRIBUTE A POSITIVE EXPERIENCE FOR MOORPARK'S RESIDENTS AND VISITORS.**

## LU 13.1

**Commercial uses and diversity:** Provide for and encourage the development of a broad range of uses in Moorpark's commercial centers and corridors consistent with Economic Development Element that reduce the need to travel to adjoining communities and capture a greater share of local spending.

### **LU 13.2**

**Los Angeles Avenue commercial centers:** Provide for the concentration of commercial uses along Los Angeles Avenue and other arterial corridors in a manner that provides for improved commercial services to the community, maximizes revenue generation, and improves access to adjoining residential neighborhoods.

### **LU 13.3**

**Intensification of commercial centers:** Encourage the intensification of existing commercial centers by permitting the construction of new buildings on surface parking lots, provided that sufficient parking is developed to support existing and new businesses.

### **LU 13.4**

**Economic enhancement of commercial centers:** Prioritize the transition of existing commercial centers to incorporate experiential uses that enhance their economic vitality and role as active places for community gathering and patronage.

### **LU 13.5**

**Commercial center identities:** Establish and maintain distinct identities for Moorpark's commercial centers and corridors to reflect their location, mix of uses, surrounding uses, and targeted markets, differentiating these by use, scale and form of development, and amenities.

### **LU 13.6**

**Quality commercial design:** Require that new development and renovated or remodeled multi-tenant commercial centers and corridors be designed to complement existing uses, as appropriate, and exhibit a high quality of architecture and site planning in consideration of the following principles as feasible and appropriate to the site:

- a. Seamless connections and transitions with existing buildings, in terms of building scale, elevations, and materials
- b. Landscaping contributing to the appearance and quality of development
- c. Clearly delineated pedestrian connections between business areas, parking areas, and to adjoining neighborhoods and districts
- d. Incorporation of plazas and expanded sidewalks to accommodate pedestrian, outdoor dining, and other activities.

### **LU 13.7**

**Connections with neighborhoods and districts:** Require the development of external cross-connections between commercial uses so as to reduce the number of curb cuts and number of vehicle trips on adjacent roadways.

### **LU 13.8**

**Coordinated design:** Encourage adjacent commercial developments to coordinate design with regard to access, parking, and architectural features.

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## GOAL LU 14

**COMPATIBILITY OF NEW COMMERCIAL USES:** NEW COMMERCIAL DEVELOPMENT THAT IS COMPATIBLE WITH SURROUNDING LAND USES.

### LU 14.1

**Commercial compatibility with adjoining uses:** Require that new commercial uses are compatible in scale and character with adjacent commercial uses and residential neighborhoods.

### LU 14.2

**Managed truck access:** Require that automobile and truck access to commercial properties be located so as to minimize impacts to adjacent uses.

### LU 14.3

**Maintained commercial properties:** Require that commercial uses be well maintained to enhance the visual characteristics of the area.

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## GOAL LU 15

**MIXED USE DISTRICTS AND CORRIDORS:** A DIVERSITY OF WELL-DESIGNED DISTRICTS AND CORRIDORS CONTAINING AN INTEGRATED MIX OF COMMERCIAL, OFFICE, AND/OR HOUSING THAT ENABLE MOORPARK'S RESIDENTS TO LIVE CLOSE TO BUSINESSES AND EMPLOYMENT, REDUCE AUTOMOBILE USE, AND ACTIVELY ENGAGE AND ENHANCE PEDESTRIAN ACTIVITY.

### LU 15.1

**Integrated housing and commercial development:** Support the development of housing integrated with commercial and/or office uses on existing commercially-developed properties in Moorpark characterized by declining retail activity where full development for such uses is unlikely to be supportable by the marketplace and/or properties with expansive surface parking lots.

### LU 15.2

**Mix uses to enhance economic activity:** Support mixed-use development projects as a strategy to enhance the economic vitality of adjoining commercial districts, through increases of population in proximity to these uses.

### LU 15.3

**Mixed-use compatibility:** Require that buildings and sites integrating housing with nonresidential uses be designed to assure compatibility among uses.

### LU 15.4

**Inclusion of recreation and amenities:** Require that residential/commercial mixed-use projects provide on-site recreational areas and other pedestrian-scale amenities such as benches, fountains, and landscaping that contribute to the living environment of residents, or contribute funds for their development within proximity of the project.

### LU 15.5

**Active mixed-use districts:** Require that sites and corridors integrating housing and commercial/office uses are designed to establish the character of distinct, cohesive, and pedestrian-oriented places that are linked with and walkable from adjoining residential neighborhoods. Contributing elements may include:

- a. Wide sidewalks, plazas, and courtyards along building frontages for outdoor dining and gathering
- b. Pedestrian walkways connecting parking areas with buildings and public spaces that are well defined by paving materials, landscaping, lighting, and way-finding signage
- c. Landscaping that is sustainable and contributes to the aesthetic and economic value of the center and provides a tree canopy reducing the heat island effect and greenhouse gas emissions
- d. Buildings oriented toward the street and public spaces with parking located to the rear of the buildings, underground, or in structures

### LU 15.6

**Ground floor building frontages:** Require that the ground floor of buildings facing primary street frontages, as defined in the Municipal Code, be developed for pedestrian active retail and comparable uses, with housing located on their upper floors or to their rear.

### LU 15.7

**Parking:** Encourage that parking be located and accessed from the rear of buildings along corridor frontages, while supporting the development of shared parking structures as an alternative to individual on-site parking.

### LU 15.8

**Transitions with adjoining uses:** Require that development projects in the “Mixed Use Corridors” are designed to assure transitions in density and scale, and avoidance of impacts on adjoining residential neighborhoods.

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## GOAL LU 16

**INDUSTRIAL USES:** A DIVERSITY OF INDUSTRIAL USES THAT ARE LOCATED AND DESIGNED IN A COMPATIBLE MANNER WITH SURROUNDING LAND USES.

### LU 16.1

**Diverse industries and jobs:** Support a variety of industrial uses, including green industries, that offer job opportunities for Moorpark’s residents and revenues to the city without compromising environmental quality.

### LU 16.2

**Industrial expansion:** Provide sufficient land capacity and development standards attracting development of technology and digital, research and development, and creative industries offering skilled jobs for Moorpark’s residents consistent with the Economic Development Element.

### LU 16.3

**Technology and innovation:** Anticipate the technological and innovative evolution to support a greater diversity of activity by facilitating new development that is flexible and can accommodate changing uses over time.

### LU 16.4

**Redevelopment of Princeton Avenue industrial:** Support the long-term redevelopment of the concrete batching facilities along Princeton Avenue as a unified industrial park, integrating multiple buildings and tenants in a “park-like” setting with extensive common areas, landscape, and amenities for employees.

### LU 16.5

**Industrial park diversity:** Support the integration of uses in areas designated as “Industrial Flex” supporting local employees and that may attract evening use, such as financial offices, health clubs, childcare, restaurants, and entertainment, provided that these are compatible and do not detrimentally impact the primary industrial function of the area.

### LU 16.6

**Design for compatibility:** Require that industrial uses incorporate design features, such as screen walls, landscaping and setbacks, and include height and lighting restrictions, so as to minimize adverse impacts on adjacent uses and enhance the visual characteristics of the area.

### LU 16.7

**Maintenance and enhancement:** Require that industrial uses shall be well maintained to enhance the visual characteristics of the area.

### LU 16.8

**Bicycle access:** Encourage major business park and industrial projects, as defined in the Municipal Code, to incorporate facilities that promote employee access by bicycles such as secured storage, showers, and lockers.

### LU 16.9

**Alternative energy infrastructure:** Encourage large scale industrial development projects, as defined in the Municipal Code, to provide on-site alternative energy sources and containment of stormwater runoff.

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## GOAL LU17

**PUBLIC FACILITIES AND SERVICES:** GOVERNMENTAL, UTILITY, INSTITUTIONAL, EDUCATIONAL, RECREATIONAL, CULTURAL, RELIGIOUS, AND SOCIAL FACILITIES AND SERVICES ARE LOCATED AND DESIGNED TO COMPLEMENT MOORPARK’S NEIGHBORHOODS, CENTERS, AND CORRIDORS.

### LU 17.1

**Services supporting Moorpark’s residents:** Provide public facilities and services that are cost effective, and contribute to the health, safety, welfare, and personal development of all residents.

## LU 17.2

**Efficient development:** Promote the co-location of parks, schools, libraries, health services, recreation facilities, and other community facilities to support resident needs and leverage limited resources.

## LU 17.3

**Maintenance and enhancement:** Coordinate, partner with, and encourage school and utility districts and other government and independent agencies that may be exempt from city land use control and approval to plan and improve their properties and design improvements to achieve a high level of visual and architectural quality that maintains the character of the neighborhood or district in which they are located.

## LU 17.4

**Compatibility with adjoining uses:** Ensure that city-owned buildings, sites, and infrastructure are designed to be compatible in scale, character, and landscape with the district or neighborhood in which they are located, and minimize potential impacts such as traffic, noise, and lighting.

## LU 17.5

**Design excellence:** Lead by example, demonstrating design excellence in new buildings developed by the city by incorporating sustainable building practices and providing a high level of architectural quality.

## LU 17.6

**Utility undergrounding:** Encourage the undergrounding of utilities in conjunction with development projects where feasible.

## LU 17.7

**Design of utility facilities:** Minimize the visual impacts of above-grade utility structures, such as water storage tanks, water check valves, electric and telephone boxes, etc. through use of landscaping, screening materials, and colors that blend with the environment to the extent feasible.

## LU 17.8

**Equitable access to infrastructure:** Support equitable access to a full complement of critical infrastructure and utilities for all residents and business.

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## GOAL LU 18

**SPECIFIC PLAN AREAS:** DISTRICTS INTEGRATING MULTIPLE BUILDINGS, PROJECTS, AMENITIES, AND LANDSCAPE INTO A COHESIVE DEVELOPMENT PROJECT DISTINGUISHED AS A SPECIAL PLACE TO LIVE, WORK, AND VISIT.

## LU 18.1

**Role of specific plans:** Utilize Specific Plans as a tool for implementation of General Plan policies and priorities as appropriate to integrate uses and establish a unique district.

## LU 18.2

**Consistency of specific plans with 2050 General Plan:** Review and amend existing adopted Specific Plans to ensure that the ultimate land uses, design guidelines, development standards, infrastructure and phasing requirements are consistent with the 2050 General Plan text discussion for the type, location and intensity of use determined appropriate for each Specific Plan area.

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## GOAL LU 19

**DOWNTOWN: REVITALIZE THE DOWNTOWN COMMERCIAL CORE (MOORPARK AVENUE AREA, WALNUT STREET, BARD STREET, MAGNOLIA AVENUE, AND HIGH STREET)**

### LU 19.1

**Core community district:** Support the continued development of the area along High Street as a distinct place identified as the symbolic and functional downtown of Moorpark.

### LU 19.2

**Complementary development:** Promote the development of new commercial and office uses, housing, park or recreational facilities, public parking, and a potential multimodal transportation center in the commercial core.

### LU 19.3

**Relationship to transit station:** Locate and design development to capitalize on and reflect its adjacency to the Metrolink station, including developing direct pedestrian connections.

### LU 19.4

**Visual character:** Strengthen the visual character of the downtown commercial core in order to attract a variety of commercial and mixed-use (commercial and housing) projects and promote the economic viability of downtown Moorpark.

### LU 19.5

**Tree canopy:** Maintain and expand the tree canopy in the downtown area to provide shade, improve air and water quality, reduce the heat island effect, and create habitat for birds and pollinators.

### LU 19.6

**Cooling elements:** Encourage the use of trees and architectural elements that provide shade, cooling stations, and seating areas for pedestrian corridors.

### LU 19.7

**Pedestrian-oriented development:** Require that buildings are located along and oriented to the street frontage of High Street to maintain an active pedestrian environment.

### LU 19.8

**Historic buildings:** Preserve where possible historic structures and ensure that where new development occurs, it complements the physical qualities and distinct features of existing historic resources.



## LU 19.9

**Parking:** Consider creative programs to provide sufficient parking for commercial and mixed-use developments on High Street.

# Circulation Element: Goals and Policies

## GOAL CI 1

**TRANSPORTATION SYSTEM:** A TRANSPORTATION SYSTEM SUPPORTING USES ACCOMMODATED BY THE LAND USE PLAN AND PROVIDING FOR THE SAFE AND EFFICIENT MOVEMENT OF PEOPLE OF ALL AGES AND ABILITIES, GOODS, AND SERVICES INTO, OUT OF, AND THROUGH THE CITY OF MOORPARK.

### CI 1.1

**Multimodal transportation:** Require that the planning, design, and construction of all transportation projects consider the needs for all modes of travel to create safe, livable, and inviting environments for motorists, pedestrians, bicyclists, and public transit users of all ages and abilities.

### CI 1.2

**Complete streets:** Design, plan, maintain, and operate streets using complete streets<sup>1</sup> principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes.

### CI 1.3

**User safety:** Enhance the safety of all users of the transportation system.

### CI 1.4

**System improvements:** Promote the continued improvement of the circulation system, through the improvement of sub-standard roadways, sidewalk crossings, and intersections and the construction of missing links and related facilities through the city's Capital Improvement Program (CIP).

### CI 1.5

**Rail Improvements:** Encourage the improvement and modification of rail transportation facilities to promote ridership and safety and minimize impacts on local circulation.

### CI 1.6

**Rural areas:** Design roadways, pedestrian areas, walks, and other elements of mobility infrastructure in applicable outlying areas to convey a rural appearance while providing for low maintenance costs and safe passage of vehicles, pedestrians, equestrians, and bicycles.

### CI 1.7

**Collaborate with Regional Partners:** Engage with Ventura County and the Ventura County Transportation Commission to achieve consistency between regional and local transportation improvements and the city's General Plan, and accomplish the city's future transportation goals.

### CI 1.8

**Collaborate with Caltrans:** Engage with Caltrans to achieve consistency between regional and local transportation improvements and the city's General Plan and accomplish the city's future transportation goals.

### CI 1.9

**Truck Safety:** Engage with the California Highway Patrol to ensure that large commercial trucks and trailers meet all California and federal safety standards and move safely throughout the Moorpark community.

### CI 1.10

**Transportation Equity:** Consider health and equity in the design and operation of the city's transportation network; and make provisions for convenient, accessible, affordable, and alternative modes of mobility based on the needs of residents.

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## GOAL CI 2

**LEVEL OF SERVICE:** A CIRCULATION SYSTEM WHICH SUPPORTS EXISTING, APPROVED, AND PLANNED USES THROUGHOUT THE CITY WHILE MAINTAINING A DESIRED LEVEL OF SERVICE ON ALL STREETS AND AT ALL INTERSECTIONS.

The policies within this goal address two performance metrics that the city will utilize in order to maintain acceptable operations of the circulation network: Level of Service and Vehicle Miles Traveled.

Level of Service (LOS) is used to evaluate local congestion-related impacts of future development, at intersections and roadways, typically during peak commuting hours.

As of July 2020, the requirements for environmental analysis shifted to the use of Vehicle Miles Traveled (VMT) instead of LOS, in order to align with goals to reduce greenhouse gas emissions and impacts of climate change. VMT is assessed as an "efficiency metric", measured either per capita, per employee, or both.

### CI 2.1

**Roadway performance standard:** Maintain Level of Service "D" as the standard for system performance for traffic volumes on the circulation system. High Street between Moorpark Avenue and Spring Road is exempt from this standard. For roadways and interchanges already operating at a lower level of performance than level of service "D", the standard shall be to maintain or improve the current level of service.

### CI 2.2

**Environmental impact threshold:** Maintain thresholds for the determination of environmental impacts for proposed residential, commercial, and industrial uses of a minimum reduction of per capita vehicle miles travelled (VMT) of 15% below existing and no net increase in per capita VMT compared to existing for all other land use types. Periodically review and adjust this threshold as appropriate in consideration of actual vehicle miles and greenhouse gas emissions resulting from implementation of the Land Use Plan.

### **CI 2.3**

**VMT analysis.** Require the analysis of VMT per resident and/or per employee as part of CEQA environmental review, and development of a mitigation program to reduce any significant impacts consistent with State law.

### **CI 2.4**

**VMT reduction:** Work to reduce VMT through land use planning, enhanced transit access, localized attractions that reduce the need for travel to adjoining communities, and improved access to non-vehicular modes of transportation.

### **CI 2.5**

**Phasing to maintain LOS:** Coordinate project phasing to ensure that the timing of accompanying on-site and off-site circulation improvements maintain the level of service standards specified in CI 2.1.

### **CI 2.6**

**Traffic signal coordination:** Prioritize traffic signal coordination and retiming to accommodate changes in travel patterns and traffic flows to limit unnecessary delay and congestion.

### **CI 2.7**

**New technologies:** Evaluate opportunities to incorporate new materials, technologies, or design features that improve safety and operations of the circulation system.

### **CI 2.8**

**Funds for transportation improvements:** Require that development projects participate in a transportation fee program and contribute their fair share of funds for transportation improvements, and that revenue generated by this program be allocated only toward transportation improvements.

### **CI 2.9**

**Driveway access:** Limit driveway access points onto arterial roadways where feasible, to ensure the smooth and safe flow of vehicles and bicycles.

### **CI 2.10**

**Emerging trends:** Update roadway and operational standards to account for emerging mobility trends, such as connected and autonomous vehicles, electric vehicle charging, micromobility, and microtransit.

### **CI 2.11**

**Roadway widening:** No public widening of local roadways beyond their current width shall be considered without environmental review, public consultation, and City Council approval.

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## GOAL CI 3

**ROADWAY STANDARDS:** TRANSPORTATION SYSTEM DESIGN CRITERIA AND ROADWAY STANDARDS SUPPORT AND MAINTAIN THE DESIRED CHARACTER OF THE CITY OF MOORPARK.

### CI 3.1

**Roadway classifications:** Maintain roadway design standards that specify right-of-way, cross-sections, and other design criteria for designated roadway classifications as depicted in **Figures CI-2a** through **Figure CI-2i**.

### CI 3.2

**Landscaping:** Provide for the planting of sustainable landscaping along principal arterials to mitigate visual impacts and erosion problems, as part of new development or a city-sponsored roadway construction project.

### CI 3.3

**Natural features:** Require that roadways in hillside areas be located and designed to preserve ridgelines and natural features to the extent feasible.

### CI 3.4

**Hillside areas:** Require that new collector streets in hillside areas incorporate curbs, gutters, and graded shoulders, and prohibit on-street parking except where pull-outs may be incorporated that do not affect safe access to residents and for fire equipment.

### CI 3.5

**Private streets:** Require that private streets be improved to public street standards prior to dedication to the city.

### CI 3.6

**Medians:** Encourage the use of sustainable landscaped medians on principal and minor arterial streets to achieve a high level of visual quality.

### CI 3.7

**Evacuation routes:** Designate and sign evacuation routes in consideration of the findings of the Risk Vulnerability Assessment.

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## GOAL CI 4

**TRANSIT SYSTEM:** PUBLIC TRANSPORTATION THAT SERVES THE CITY OF MOORPARK.

### CI 4.1

**Moorpark Transit:** Support Moorpark Transit and other transit operators in the city.

### CI 4.2

**Integration with mobility networks:** Work with public transit providers to ensure transit stations and stops are connected with pedestrian, bicycle, and micromobility networks to maximize access.

#### CI 4.3

**Transit facilities:** Incorporate improvements supporting public transit use in new development and public spaces such as bus benches, shelters, tree canopy, pads and/or turn-outs.

#### CI 4.4

**Enhance access:** Implement improvements and programs enhancing the access to and use of public transit by students, senior citizens and those with limited mobility.

#### CI 4.5

**Pilot projects:** Encourage the use of new and emerging technologies through pilot programs.

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### GOAL CI 5

**BICYCLE AND PEDESTRIAN FACILITIES: A CITYWIDE SYSTEM OF SAFE, EFFICIENT, AND ATTRACTIVE BICYCLE AND PEDESTRIAN ROUTES FOR COMMUTER, SCHOOL, AND RECREATIONAL USE.**

#### CI 5.1

**New bicycle and pedestrian facilities:** Prioritize plans for new bicycle and pedestrian facilities to provide continuity and close gaps in the bikeway and sidewalk network.

#### CI 5.2

**Improvements to bikeway network:** Require proposed residential, commercial, and industrial developments to include bikeways in their street improvement plans, consistent with the Bikeway Network Plan (**Figure CI-5**) and construct pertinent improvements.

#### CI 5.3

**Funding for bikeways:** Require development projects to incorporate or participate in the funding of planned bikeways that allow the community to utilize bicycles as an alternative to automobiles.

#### CI 5.4

**Off-street bicycle paths:** Encourage the provision and maintenance of off-street bicycle paths.

#### CI 5.5

**Bicycle parking and storage:** Encourage the provision of bicycle parking and storage facilities at new or modified public, commercial, and industrial building sites.

#### CI 5.6

**Sidewalks and landscape buffers:** Require the development of sidewalks and incorporation of sustainable landscaping between the curb and sidewalk for new projects proposed in commercial and industrial areas along arterial and collector roadways. Provide landscaped buffers where feasible to separate pedestrian environments from the travel way adjacent to motor vehicles.

#### CI 5.7

**Pedestrian safety:** Require sidewalks to be designed for observation from vehicles and bicycles to ensure safety of pedestrians and follow accepted traffic engineering practice, when included

as part of roadway improvement plans. Provide convenient and high-visibility crossings for pedestrians.

#### **CI 5.8**

**Buffers and protected lanes:** Recognize that high-speed streets, high-volume streets, and truck routes can increase pedestrian and bicycle stress levels and decrease comfortability. To mitigate impacts, provide increased buffers and protected bicycle lanes in high-stress areas, where feasible.

#### **CI 5.9**

**Partnerships with schools:** Develop partnerships with local schools to identify and implement mobility improvements and non-infrastructure programs that improve safety for students traveling to/from school and increase the number of students walking and bicycling to school.

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### **GOAL CI 6**

**TRANSPORTATION DEMAND MANAGEMENT:** TRANSPORTATION DEMAND MANAGEMENT (TDM) IS UTILIZED TO ASSIST IN REDUCING VEHICLE TRIPS, TRIP LENGTHS, AIR QUALITY IMPACTS, AND GREENHOUSE GAS EMISSIONS.

#### **CI 6.1**

**Employer incentives:** Encourage businesses to provide incentives for employees to utilize alternatives to the conventional automobile transportation to reduce energy consumption, noise pollution, air pollution, and greenhouse gas emissions, such as shared ride programs, parking cash out, transit benefits, and allowing telecommuting and alternative work schedules.

#### **CI 6.2**

**Routing, scheduling, and planning priority:** Support the provision of alternative forms of public and private transit that offer routing, scheduling, and planning priority to the work force, youth, students, handicapped, senior citizens, and shoppers to the extent feasible.

#### **CI 6.3**

**Ventura County Air Pollution Control District:** Support the Ventura County Air Pollution Control District in its effort to implement transportation demand management strategies.

#### **CI 6.4**

**TDM fund expenditure:** The city shall develop a program for expending transportation demand management funds collected as mitigation for developments' air quality impacts.

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### **GOAL CI 7**

**PARKING:** AN INTEGRATED PARKING PROGRAM TO PROVIDE APPROPRIATE LEVELS OF PUBLIC AND PRIVATE PARKING TO SUPPORT EXISTING AND FUTURE DEVELOPMENT.

#### **CI 7.1**

**Parking management:** Employ parking management strategies, such as shared parking in mixed use areas, on-street residential parking, and spill-over parking to avoid construction of unnecessary parking.

## CI 7.2

**Residential neighborhoods:** Manage the supply, restrictions (e.g., duration, type of use), and location of parking to limit parking intrusion into residential neighborhoods.

## CI 7.3

**Supply and demand:** Ensure that parking supply accommodates the projected demand, allowing for shared parking as determined by additional parking analysis.

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## GOAL CI 8

ADEQUATE STORM DRAINAGE SERVICES AND FACILITIES THAT PRESERVE WATER QUALITY, PROVIDE MULTI-BENEFIT SOLUTIONS, MEET EXISTING AND FUTURE GROWTH NEEDS, AND PROTECT RESIDENTS AND PROPERTY.

### CI 8.1

**Infrastructure maintenance:** Manage city storm drain infrastructure in an effective manner to reduce flooding and protect downstream receiving waters.

### CI 8.2

**Roles and responsibilities:** Develop clear mechanisms and documentation of the roles and responsibilities of city departments, Community Facilities Districts (CFD), and private property owners on required inspection and maintenance practices for drainage and water quality facilities.

### CI 8.3

**Establish fair cost sharing mechanisms for drainage improvements:** Manage flood control management and CIP projects to minimize impacts to city drainage features and establish fair and practical cost sharing mechanisms.

### CI 8.4

**Green streets and BMP:** Consider additional development/redevelopment requirements for city right-of-way Best Management Practice (BMP) improvements and promote green streets approaches.

### CI 8.5

**Harvest and reuse systems:** Incentivize new development/redevelopment projects to implement stormwater harvest and reuse systems in addition to adopted standards.

### CI 8.6

**Funding mechanisms for smarter watershed management:** Promote regional multi-benefit stormwater projects, consistent with regional watershed management programs, and determine feasibility of implementing stormwater credit program/in lieu fees for new development/redevelopment projects.

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## GOAL CI 9

EFFECTIVE MANAGEMENT OF ALL STORMWATER ASSETS TO TRACK IMPROVEMENTS AND ACHIEVE GOALS RELATED TO WATER QUALITY.

### CI 9.1

**Management database and new technology methods:** Implement smart strategies to track and maintain all stormwater assets to ultimately improve watershed health

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## GOAL CI 10

ADEQUATE WASTEWATER COLLECTION SERVICE AND TREATMENT FACILITIES THAT MEET REGULATORY REQUIREMENTS, MINIMIZE ADVERSE EFFECTS TO WATER QUALITY AND ACHIEVE EXISTING AND FUTURE SEWER NEEDS.

### CI 10.1

**Recycled Water:** Expand the capacity of recycled water resources and distribution infrastructure.

### CI 10.2

**Adequate capacity:** Continue to coordinate with the District to ensure wastewater infrastructure is effectively serving existing customers and has adequate capacity to provide for new demands on the infrastructure system.

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## GOAL CI 11

HIGH-QUALITY RELIABLE POTABLE AND NON-POTABLE WATER SERVICES, DIVERSE SUPPLY, AND ROBUST FACILITIES THAT MEETS EXISTING AND FUTURE WATER DEMANDS.

### CI 11.1

**Coordinate with partners:** Continue to coordinate with the District on effective management of water infrastructure systems.

### CI 11.2

**Monitor supply and demand:** Track local and regional water supplies with the District to ensure adequate water supplies exist to support future development.

### CI 11.3

**OneWater approach:** Implement OneWater approach where potable water, grey water, recycled water, and stormwater are all viewed as integral components to integrated water management alongside natural flows and watersheds within the city.

### CI 11.4

**On-site greywater and stormwater standards:** Adopt new statewide standards for on-site greywater and stormwater systems, or develop city standards to streamline the permitting of these systems by following the Building and Safety Division, Building Code, and other applicable regulatory agencies and associated guidance documents.



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## **GOAL CI 12**

**SOLID WASTE AND RECYCLING: DIVERT AND EFFECTIVELY MANAGE THE GENERATION AND DISPOSAL OF SOLID AND ORGANIC WASTE.**

### **CI 12.1**

**Adequate services and collection facilities:** Support efforts of the local solid waste collection, disposal, and recycling service providers to maintain adequate residential, commercial, and industrial solid waste and mixed recycling collection service levels and solid waste facilities in accordance with state law.

### **CI 12.2**

**Waste Diversion:** Continue to partner, plan for, and document compliance with waste applicable State law related to source reduction and recycling requirements of 50% diversion of solid waste from landfills.

### **CI 12.3**

**Recycling programs:** Continue to support the residential, commercial, industrial, and construction / demolition recycling programs to minimize the solid waste stream to landfills.

### **CI 12.4**

**Electronic Waste Recycling:** The city shall coordinate with businesses that recycle electronic waste (e.g., batteries, fluorescent lamps, compact-fluorescent (CFL) bulbs) and the California Product Stewardship Council, CalRecycle, and other pertinent agencies to provide convenient means of responsible disposal for city residents.

### **CI 12.5**

**Clean up events:** Continue to sponsor clean-up events in which volunteers and community organizers help pick up litter in public areas.

### **CI 12.6**

**Organic waste collection:** Continue to work with the city's waste haulers to provide organic waste collection services to residents and businesses and recycle organic materials, in compliance with applicable State law.

### **CI 12.7**

**Organic waste recycling:** Continue to provide resources to support composting, grasscycling, and the recycling of organic waste.

### **CI 12.8**

**Disposable, Toxic, or Non-Renewable Products:** The city shall reduce the use of disposable, toxic, or nonrenewable products in city operations.

### **CI 12.9**

**Education and public information:** Prepare and disseminate, as appropriate, information to educate the public on source reduction, solid waste diversion, recycling, infectious waste management, and composting resources and educational programs.

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## **GOAL CI 13**

### **ENERGY: ADEQUATE, RELIABLE AND SUSTAINABLE ENERGY SERVICES AND FACILITIES.**

#### **CI 13.1**

**Adequate service and facilities:** Continue to work with local utility providers to ensure that adequate electricity and natural gas services are available for existing and newly developing areas.

#### **CI 13.2**

**Integration of Energy Utility Systems:** Work with utility providers to ensure that energy facilities are located and designed to be visually compatible with the built environment and natural settings.

#### **CI 13.3**

**Utility Undergrounding:** Continue to pursue undergrounding of overhead utility lines, and support maintenance and replacement programs to reduce wildfire hazards.

#### **CI 13.4**

**Energy Reliability:** Support and encourage efforts by local energy service providers and other public agencies to improve the safety and resilience of the local power grid.

#### **CI 13.5**

**Backup Energy Provision:** Work with utility providers to ensure adequate backup energy provisions for critical public facilities and wireless infrastructure and upgrade as needed.

#### **CI 13.6**

**Microgrids:** Work with utility providers and local energy service providers to explore the use of microgrids allowing locally-generated renewable energy networks to supplement the electrical distribution system and provide back-up power in the event of an emergency.

#### **CI 13.7**

**Energy Conservation:** Support increased use of renewable energy sources through energy conservation, efficiency, and renewable resource strategies, as identified in The Conservation Element.

#### **CI 13.8**

**Service Disruptions:** Continue to work with local utility providers to prevent unplanned disruptions to utility service.

#### **CI 13.9**

**Disproportionate Impacts of Service Interruptions:** Work with utility providers to ensure preventable disruptions do not have a disproportionate impact on residents, including those dependent on uninterrupted utility service.

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## GOAL CI 14

**TELECOMMUNICATIONS:** QUALITY TELECOMMUNICATION SYSTEMS THAT ENHANCE ECONOMIC DEVELOPMENT, GOVERNMENTAL EFFICIENCY, AND EQUITABLE ACCESS FOR ALL.

### CI 14.1

**Adequate facilities and equitable access:** Work with telecommunications service providers to meet the facility and service demands of existing and future development and to provide equitable access to telecommunications infrastructure for all city residents.

### CI 14.2

**State-of-the-art technologies:** Encourage service providers to implement state-of-the-art digital and technological improvements that facilitate access by local industries and businesses and attraction of new and diverse enterprises to the city.

### CI 14.3

**Regulation of wireless communication facilities:** Continue to regulate the land use zone, location, height, appearance, and placement of wireless communication facilities to the extent permitted by applicable law.

## Economic Development Element: Goals and Policies

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### GOAL ED 1

**ROBUST LOCAL ECONOMY:** A SELF-SUSTAINING, INNOVATIVE, AND RESILIENT LOCAL ECONOMY THAT PROVIDES GOODS AND SERVICES DESIRED BY LOCAL RESIDENTS, ATTRACTS REGIONAL CONSUMER SPENDING, AND CONTRIBUTES TO MOORPARK'S PREMIER QUALITY OF LIFE.

#### ED 1.1

**Business retention and expansion:** Retain existing businesses and support their profitability and expansion, by collaborating with the Chamber of Commerce and regional economic development service providers to improve access by local businesses to business management training, financing, and marketing assistance.

#### ED 1.2

**Business start-ups:** Grow the number of independent businesses to diversify the local economy and to provide goods and services desired by local residents, by collaborating with the Chamber of Commerce and regional economic development service providers to provide entrepreneurial training and assistance.

#### ED 1.3

**Business attraction:** Attract businesses that diversify the local tax base and that create employment opportunities suited to the skills and education of residents, by collaborating with economic development service providers to market Moorpark and to market commercial and industrial sites and facilities to potential new businesses.

#### **ED 1.4**

**Local workforce:** Increase the number of residents working in the city, by prioritizing economic development activities that create employment opportunities suited to the skills and education of current and future residents.

#### **ED 1.5**

**Workforce housing:** Support an adequate and reliable workforce for local businesses, by promoting the development of housing opportunities suited to the range of incomes in accordance with the Land Use Element and the Housing Element.

#### **ED 1.6**

**Economic value of residential uses:** Support residential development to capitalize on the synergistic relations between residential growth and economic growth.

#### **ED 1.7**

**Tourism, visitors, and events:** Promote the quality of life and attract visitor spending by supporting agricultural uses, farmers markets, event venues, and tourism attractions and by collaborating with local business and civic organizations to promote special events.

#### **ED 1.8**

**Education and workforce development:** Promote life-long learning and support local businesses and workforce development, by collaborating with Moorpark College to expand access to the College's programs and services by residents and businesses, collaborating with local education service providers to create pathways and pipelines and to improve access of residents of all ages to educational opportunities and enrichment, and helping to forge and sustain partnerships with businesses and education.

#### **ED 1.9**

**Metrolink and transit:** Collaborate with transit service providers to improve awareness of and access to transit services for current and future residents and workers.

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### **GOAL ED 2**

**ECONOMIC DEVELOPMENT PROGRAM: A LONG-TERM PROGRAM THAT SUSTAINS LONG-TERM ECONOMIC GROWTH AND ATTRACTS PRIVATE INVESTMENT.**

#### **ED 2.1**

**Strategic action plan:** Adopt and periodically update an economic development strategic plan that states the city's vision for economic development, identifies objectives for the time frame of the strategy, establishes strategies and action plans, and that may also identify target sectors, partnerships, and marketing and communications. Invest in the city's economic development program to maintain and enhance the attractiveness of Moorpark for private investment, to increase local job opportunities for residents, and to facilitate growth in the local economy that contributes to and enhances Moorpark's premier quality of life.

#### **ED 2.2**

**Economic development thinking:** Integrate economic development thinking throughout city government and ensure that Moorpark epitomizes being business friendly by providing

economic development training for key city staff, discussing economic and fiscal implications in staff reports for land use cases, and regularly communicating the city's economic development efforts and successes.

### **ED 2.3**

**Economic development partners:** Leverage investments by the federal and state government and by private and non-profit entities, by collaborating with economic development partners, including but not limited to the Economic Development Collaborative, the Ventura County Economic Development Corporation Small Business Development Center, Ventura County Workforce Development Board, and other public agencies, Moorpark Chamber of Commerce, Moorpark College, and Moorpark Unified School District, and other stakeholders, including but not limited to existing businesses, real estate brokers and developers, and other community organizations.

### **ED 2.4**

**Marketing and communications:** Maintain regular public communications of the city's economic development efforts and successes, maintain regular communications with existing businesses and economic development stakeholders, and, consistent with the adopted economic development strategic action plan, invest in communications to market Moorpark as a location for new businesses and private investment.

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## **GOAL ED 3**

**COMMERCIAL AND INDUSTRIAL USES: THRIVING RETAIL, OFFICE, AND INDUSTRIAL BUSINESSES THAT FOSTER LOCAL ECONOMIC PROSPERITY.**

### **ED 3.1**

**Office and industrial preservation:** Maintain and enhance the functionality of areas currently used for and planned for office and industrial businesses in order to promote economic resilience and growth.

### **ED 3.2**

**Experience-oriented commercial areas:** Encourage a mix of uses that creates experience-oriented commercial places that can be effective in competing against online retail and that can attract visitor spending.

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## **GOAL ED 4**

**FINANCIALLY RESILIENT LOCAL GOVERNANCE: FISCALLY SUSTAINABLE LAND USE AND DEVELOPMENT PATTERNS AND WELL-MANAGED MUNICIPAL FINANCES, RESULTING IN A FISCALLY RESILIENT LOCAL GOVERNMENT THAT INVESTS IN PUBLIC AMENITIES AND SERVICES.**

### **ED 4.1**

**Purpose of financially resilient local governance:** Maintain the city's fiscal health and financial resiliency to ensure the city can invest in maintaining and enhancing public facilities and services that continue to attract private investment and support economic growth and prosperity.

#### ED 4.2

**Funding and financing mechanisms:** Improve the attractiveness of Moorpark for private investment, by encouraging the use of funding and financing mechanisms when such use contributes to the city's fiscal health and when such use improves the financial feasibility of new development.

#### ED 4.3

**Infrastructure and capital improvements:** Invest in infrastructure and capital improvements that facilitate redevelopment, infill development, and new development that is consistent with the Land Use Plan, as funding is available.

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### GOAL ED 5

**DOWNTOWN: A THRIVING DOWNTOWN THAT IS CHERISHED BY RESIDENTS AND THAT HELPS DEFINE THE POPULAR IMAGE OF MOORPARK.**

#### ED 5.1

**Downtown revitalization plan:** Collaborate with downtown businesses and the Chamber of Commerce to create and implement a Downtown Revitalization Plan, either as an augment to the Downtown Specific Plan or as a stand-alone plan, that provides actionable planning for infrastructure, provides guidance for the High Street Arts Center and special events, explores types of complementary businesses, and establishes a public relations and marketing communications strategy.

#### ED 5.2

**Downtown infrastructure:** Ensure that sufficient infrastructure is provided to support the types of uses planned for the Downtown area, including an actionable plan for such upgrades.

#### ED 5.3

**Events and activities:** Maintain and implement an annual calendar of events and activities to attract resident and visitors to the Downtown.

#### ED 5.4

**Business mix:** Identify needed or desired complementary businesses and a strategy to attract these businesses; update this strategy periodically.

#### ED 5.5

**Marketing:** Establish a public relations and marketing communications strategy to publicize downtown and attract visitors; update this strategy periodically.

# Open Space, Parks and Recreation Element: Goals and Policies

## OPEN SPACE

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### GOAL OSPR 1

PUBLIC PARKLAND IS ACQUIRED, MAINTAINED, AND PROVIDED FOR BOTH PASSIVE AND ACTIVE USE THAT IS EQUALLY ACCESSIBLE ON A NEIGHBORHOOD, COMMUNITY, AND REGIONAL BASIS.

#### OSPR 1.1

Park standard: Provide and maintain recreational/leisure parklands at the standard of 5 acres for every 1,000 residents, with a park located within a 1-mile radius of each of the city's residential neighborhoods. Study whether standards should be adjusted to support new higher-density residential and mixed-use developments.

#### OSPR 1.2

Funding mechanisms: Use a broad range of funding and economic development tools to ensure high quality development, maintenance, and programming of the city parks and recreation systems.

#### OSPR 1.3

Funding from new development: Ensure that all residential subdivision, development, or redevelopment pay their fair share of the cost of land acquisition for parks and their fair share of the cost of development and maintenance of new parks, trails, and open space.

#### OSPR 1.4

Park demand: Acquire and provide parklands in areas where existing demand is the greatest in proportion to population, prioritizing underserved areas.

#### OSPR 1.5

Joint use: Encourage the joint use of public facilities and access to lands owned by public utilities or public entities for recreational use, as recommended in the Master Plan of Parks and Recreation.

#### OSPR 1.6

Expanded access: Expand access to parklands for all residents, including the young, handicapped, and elderly.

#### OSPR 1.7

Recreational activities: Facilitate the development and provision of recreational activities that are both active and passive (e.g., hiking, biking, running, sightseeing, swimming).

### **OSPR 1.8**

Master Plan: Periodically review, update, and adopt the Master Plan of Parks and Recreation to ensure that it reflect current needs and recreational objectives of Moorpark’s residents, serving as a guide for the provision and maintenance of parkland.

### **OSPR 1.9**

**Flood control areas: Limit the use of areas designated for flood control purposes to passive recreation activities (e.g., hiking, fishing, bike riding), consistent with requirements to maintain the integrity of these areas to protect public safety.**

### **OSPR 1.10**

**Properties unsuitable for development:** Promote the use of the properties unsuitable for development due to hazards or other safety constraints (as defined by the Safety Element) for recreation uses provided that they can be safely integrated and do not require infrastructure (e.g., hiking, fishing, bike riding).

### **OSPR 1.11**

Locating and design: Require parklands, recreation facilities, and community centers to be located and designed to conform and respect their natural environmental setting, are compatible with adjoining uses, and protect users from hazards.

### **OSPR 1.12**

Sustainability features: Require that new parks are designed, and existing parks are retrofitted over time, to incorporate sustainable development and landscape practices that reduce water and energy consumption.

### **OSPR 1.13**

Private facilities: Encourage the development of private commercial recreational facilities to help meet recreational interests of Moorpark’s residents, workforce, and visitors.

### **OSPR 1.14**

New development: Allow new development to provide small plazas, pocket parks, civic spaces, and other gathering places that are available to the public, particularly in infill areas, to help meet recreational demands.

### **OSPR 1.15**

Park equity: Prioritize social equity considerations in the provision and design of public parks so that residents regardless of age, ability, or neighborhood where they live have quality active and passive green space.



## RECREATION

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### GOAL OSPR 2

RECREATION PROGRAMS SERVING ALL RESIDENTS THAT CONTRIBUTE TO THEIR ENJOYMENT AND PHYSICAL AND MENTAL HEALTH.

#### OSPR 2.1

Recreational diversity: Provide and promote a diversity of recreational, cultural arts, and educational related programs for community residents that are accessible, affordable, and suitable for residents of all ages and abilities.

#### OSPR 2.2

Reflect Moorpark's unique attributes: Provide recreation programming, special events and venues, and educational opportunities that honor, interpret, and celebrate the diversity, history, cultural heritage, and traditions of Moorpark.

#### OSPR 2.3

Shared use agreements: Encourage the development and maintenance of shared-use agreements with schools that allow their properties to be used safely and securely during non-school hours for park, recreational, and educational needs.

#### OSPR 2.4

Recreation partnerships: Support partnerships with local nonprofits (e.g., YMCA, Boys and Girls Club, and other local groups), local school district, and other agencies that provide healthful, educational, and recreational activities.

#### OSPR 2.5

Youth and teens: In collaboration with community partners, facilitate and/or the provision of recreation services, programs, and activities that meet the changing needs of youth and teens.

#### OSPR 2.6

Moorpark adults and seniors: Continue supporting Moorpark adults, including senior citizens, with an array of recreation, health, and social programs tailored to their needs.

#### OSPR 2.7

Parks and Recreation Commission: Continue the role of the Parks and Recreation Commission as the advisory body for recreation and human services programs, services, and activities within Moorpark.

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### **GOAL OSPR 3**

A NETWORK OF MULTI-USE TRAILS ENHANCES CONNECTIONS TO LOCAL AND REGIONAL PARKS AND OPEN SPACE RESOURCES AND EXPANDS THE CITY'S NON-MOTORIZED CIRCULATION INFRASTRUCTURE.

#### **OSPR 3.1**

Trail planning: Develop and adopt a Plan assessing the opportunities for, and guiding the provision and maintenance of, an interconnected network of trails serving Moorpark residents and visitors.

#### **OSPR 3.2**

Network of trails: Develop a comprehensive and interconnected network of trails that provides public access to arroyos and creeks, connects residents with open space and nature, and links urban areas with parks and recreational facilities.

#### **OSPR 3.3**

Regional connection: Connect Moorpark's trails with those of Thousand Oaks, Simi Valley, and County areas as feasible to establish a continuous regional network consistent with neighboring jurisdictions General Plan, trail plans, and the proposed Moorpark Trails Master Plan.

#### **OSPR 3.4**

Implementation of Arroyo Simi Trail: Pursue funding to implement the Arroyo Simi Trail as recommended in the Arroyo Simi Trail Feasibility Study and Master Plan.

#### **OSPR 3.5**

Nature centers: Pursue the development of nature observation and interpretative centers, viewpoints, and other amenities along trails to provide an amenity for hikers, cyclists, and other users.

#### **OSPR 3.6**

Trail Design: Design trails and pathways to incorporate universal design (ADA) and safety considerations to allow residents of all ages and abilities to safely use trails.

#### **OSPR 3.7**

Equestrian trails in new development: Require that new development projects consider the appropriateness of integrating equestrian trail linkages to regional parks and regional trail systems consistent with the multi-use/equestrian trail network.

#### **OSPR 3.8**

Homeowners Association property: Encourage the provision of public trails and trail access in coordination with Homeowners Associations on HOA property.

## OPEN SPACE AND VISUAL RESOURCES

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### GOAL OSPR 4

PROTECTION OF SCENIC TOPOGRAPHIC FEATURES AND ELEMENTS THAT CONTRIBUTE TO MOORPARK'S UNIQUE AESTHETIC AND VISUAL QUALITIES AND PROMOTE THE QUALITY OF LIFE THAT MOORPARK CITIZENS PURSUE.

#### OSPR 4.1

Landscape links: Work with Ventura County to enhance landscaped arterial entrance ways, multi-use trails, including bikeways and equestrian paths connecting to Greenbelt areas, such as Tierra Rejada, and Wildlife Corridors to create a network of aesthetically pleasing links into and around the city.

#### OSPR 4.2

New development: Ensure that new developments contribute to, and do not diminish, the city's unique aesthetic and visual qualities.

#### OSPR 4.3

Protect ridgelines: Protect ridgelines from incompatible development that diminishes their scenic value, and ensure their conservation, preservation, and management.

#### OSPR 4.4

Relationship of development to natural terrain: Require that developments be designed to create a consistent visual relationship with the natural terrain and vegetation, and require grading to conform to the existing terrain to the extent feasible.

#### OSPR 4.5

Underground utilities: Coordinate with SCE and local utilities to underground existing above-ground utility lines where feasible.

#### OSPR 4.6

Rewilding Options: Pursue rewilding opportunities that include, but are not limited to the following: the preserve, enhance and expand an integrated network of open space to support beneficial uses, such as habitat, recreation, natural resources, historic and tribal resources, water management, and aesthetics

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### GOAL OSPR 5

OPPORTUNITIES FOR PRODUCTIVE AGRICULTURAL LANDS WITHIN MOORPARK.

**OSPR 5.1: Maintenance of agricultural operations.** Maintain the potential for sustainable agricultural operations where such use is currently designated.

**OSPR 5.2: Community and rooftop gardens.** Provide incentives for developers to include community gardens and rooftop gardens in new development projects.

**OSPR 5.3: Urban agriculture.** Promote urban agriculture with zoning provisions that support means for production, distribution, and sale of locally grown foods, such as market gardens,

farmers' markets, community markets, and farm stands, and support opportunities for agricultural tourism.

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## GOAL OSPR 6

OPEN SPACES CONTRIBUTE TO THE HEALTH AND SAFETY OF MOORPARK RESIDENTS.

**OSPR 6.1: Limitations on development.** Maintain open space lands for health and safety by limiting development in areas susceptible to flood, seismic risk, geologic instability, and wildfire, as detailed in the Safety Element.

## Conservation Element: Goals and Policies

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### GOAL COS 1

SENSITIVE NATURAL AND BIOLOGICAL RESOURCES ARE PROTECTED FROM DETRIMENTAL IMPACTS OF NEW DEVELOPMENT AND ENHANCED AND RESTORED WHERE POSSIBLE.

#### COS 1.1

**Air quality coordination:** Cooperate and participate with Ventura County Air Pollution Control District, Southern California Association of Governments, and the California Air Resources Board, in regional air quality management plans, programs, enforcement measures and mitigation measures designed to reduce and/or minimize the amount of primary and secondary air pollutants.

#### COS 1.2

**Infill development:** Promote infill development to facilitate walking and use of alternative transportation modes and reduce vehicle trips and air emissions.

#### COS 1.3

**Development siting:** Require that development be located and designed to reduce the number of vehicle trips generated and air emissions.

#### COS 1.4

**Low-emission transportation:** Encourage the use of zero-emission vehicles, low-emission vehicles, bicycles and other non-motorized vehicles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.

#### COS 1.5

**Low-emission fleet:** Purchase low-emission vehicles for the city's fleet and to use available clean fuel sources for trucks and heavy equipment.

#### COS 1.6

**Clean city transportation options:** Promote reduced idling, trip reduction, routing for efficiency, and the use of public transportation, carpooling, and alternate modes of transportation for city operations.

### **COS 1.7**

**Air quality education:** Educate the public about air quality standards, health effects, and efforts they can make to improve air quality and reduce greenhouse gas emissions in the region.

### **COS 1.8**

**Local air quality concerns:** Work with the development community, local businesses, residents, regulatory bodies, and other stakeholders to minimize air pollution, clean ambient air quality, and minimize objectionable odors generated by vehicles, major emitters, agricultural uses, and other land uses.

### **COS 1.9**

**Clean water supply:** Conserve and protect water quality supplies through cooperative efforts with the Ventura County Water Conservation Plan and any future regional water quality and water supply plans and programs that may be instrumental in reducing water quality-related problems.

### **COS 1.10**

**Water quality education:** Effectively communicate water quality education to residents and businesses. Establish or expand programs to educate community members about, and subsidize, resources for reducing water use.

### **COS 1.11**

**Water quality protection:** Require that development does not degrade natural water bodies such as streams, wetlands and the Arroyo Simi.

### **COS 1.12**

**Riparian preservation:** Require that new development preserve natural watercourses and riparian habitat where they occur, either by avoidance or through ecologically-sensitive design, like clustering buildings, restoring riparian habitat, and purchasing development rights or easements.

### **COS 1.13**

**Green stormwater management:** Encourage stormwater management and drainage system improvements that minimize the need for structural modifications to watercourses and that restore creeks in culverts or hardened channels to their natural states.

### **COS 1.14**

**Stormwater Quality Management Program:** Continue to participate in the Ventura Countywide Stormwater Quality Management Program.

### **COS 1.15**

**Drinking water quality:** Work with the Ventura County Waterworks District to ensure that drinking water supplied to residences in all neighborhoods, schools, and businesses is healthful and complies with all public health, safety, and quality regulations.

### **COS 1.16**

**Ecologically Significant Resource Areas.** Maintain, restore, and enhance ecologically significant resource areas in their natural state to the greatest extent possible. Limit

development in these areas to compatible low-intensity uses with adequate provisions to protect sensitive resources, including setbacks around resource areas.

#### **COS 1.17**

**Native habitat protection:** Require that native vegetation and habitat are retained where feasible to support the health of local wildlife populations.

#### **COS 1.18**

**Wildlife corridors:** Adopt land use regulations that consider, complement and support state, regional, and county-adopted wildlife corridors, including the Ventura County Wildlife Corridor Overlay Zone and evaluate the appropriateness of designating additional corridors.

#### **COS 1.19**

**Biological resources evaluation:** Require a biological resources evaluation prepared according to current state and federal protocols for projects with the potential to impact rare, threatened, endangered, or special-status species or critical habitat. If the evaluation determines that the project would impact rare, threatened, endangered, or special-status species or critical habitat, require that project proponents consult with the appropriate federal, state, and regional agencies and mitigate project impacts in accordance with state and federal law.

#### **COS 1.20**

**Open space acquisition:** Explore acquisition of new open space areas, including privately owned parcels located adjacent to or within recognized critical habitats and wildlife corridors.

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### **GOAL COS 2**

**IMPACTS FROM PETROLEUM DRILLING ACTIVITIES ARE MINIMIZED.**

#### **COS 2.1**

**Petroleum extraction phase-out:** Require that petroleum extraction facilities currently operating within the city be phased out over time and new extraction facilities be prohibited.

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### **GOAL COS 3**

**MOORPARK'S UNIQUE HISTORICAL, CULTURAL, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES ARE PRESERVED AND PROTECTED.**

#### **COS 3.1**

**Historic resources inventory:** Maintain and periodically update an inventory of recognized historic buildings, structures, districts, and landscapes of local, regional or national significance and those that might be eligible for recognition.

#### **COS 3.2**

**Historic resource protection and use:** Ensure the protection, rehabilitation, and reuse of historic buildings, structures, districts, and landscapes of local, regional or national significance.

#### **COS 3.3**

**Downtown historic resources:** Protect Moorpark's traditional downtown area so that physical changes that occur within it enhance its historic character.

#### **COS 3.4**

**Historic resources awareness:** Promote community awareness of the benefits of historic preservation and provide resources such as how-to guides and funding that supports community actions to preserve historic resources.

#### **COS 3.5**

**Paleontological and archaeological resources:** Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources in accordance with the requirements of CEQA.

#### **COS 3.6**

**Open space resource protection:** Explore acquisition of new open space areas, including privately owned parcels located adjacent to or within recognized historical, cultural, archaeological, and paleontological resources.

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### **GOAL COS 4**

**THE COMMUNITY USES LESS ENERGY, HAS A RESILIENT AND RENEWABLE ENERGY SUPPLY, AND MAKES EXTENSIVE USE OF GREEN BUILDING PRACTICES.**

#### **COS 4.1**

**New building energy efficiency:** Encourage new buildings to exceed state energy efficiency requirements where cost-effective and equitable, including through the use of improved insulation, all-electric heating and cooling systems, and high-efficiency appliances.

#### **COS 4.2**

**Passive energy conservation:** Require that buildings in large scale commercial, mixed-use, and planned development projects include, to the extent feasible, passive energy-conservation strategies including, but not limited to, location and orientation.

#### **COS 4.3**

**Energy efficiency improvements:** Work with property owners to conduct energy efficiency retrofits and other improvements to existing buildings, particularly rental units and buildings constructed before 1980. Emphasize ways to improve the energy efficiency of existing buildings that are equitable and cost-effective

#### **COS 4.4**

**Low-cost energy efficiency:** Enact widespread energy efficiency and conservation practices that are accessible and feasible for most or all of the community, including low-cost and free actions and those with accelerated payback periods.

#### **COS 4.5**

**Carbon-free transition:** Transition to low-carbon and carbon-free energy sources for homes and nonresidential buildings.

#### **COS 4.6**

**On-site renewable energy:** Increase the installation of on-site renewable energy systems in all new and existing developments with the capacity to support these systems, enforcing the

renewable energy requirements of the California Building Standards Code and encouraging buildings not covered by state requirements to install renewable energy systems.

#### **COS 4.7**

**Energy storage systems:** Encourage new and existing developments to install energy storage systems, particularly for developments in Very High Fire Hazard Severity Zones and for developments providing essential community services.

#### **COS 4.8**

**Energy use at city facilities:** Retrofit city facilities to improve energy efficiency, decrease natural gas use, and install renewable energy and energy storage systems.

#### **COS 4.9**

**Green building practices:** Provide information about, and encourage, incorporating additional green building practices into new development and major retrofits, including active and passive energy-conservation strategies, low-carbon, sustainable building materials, and reuse of building materials.

#### **COS 4.10**

**Regional energy collaboration:** Collaborate with the Ventura County Regional Energy Alliance, the Clean Power Alliance, and other regional energy groups to promote educational campaigns and financial incentives for energy efficiency and conservation, renewable energy, and energy storage.

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### **GOAL COS 5**

COMMUNITY MEMBERS PRACTICE WATER CONSERVATION AND WATER REUSE. MOORPARK'S WATER SUPPLY IS HIGHLY RESILIENT.

#### **COS 5.1**

**Drought-tolerant landscaping:** Provide education and grant programs to encourage replacement of lawns and other water-intensive landscaping with drought-tolerant landscaping, especially landscaping incorporating native species and xeriscaping.

#### **COS 5.2**

**Water reuse:** Encourage property owners to install rainwater catchment and greywater systems in new developments or major retrofits.

#### **COS 5.3**

**Green infrastructure:** Install permeable paving, bioswales, and other green infrastructure components in new and significantly renovated hardscape projects.

#### **COS 5.4**

**Low-cost water efficiency:** Continue to work with water providers to educate community members about low-cost water efficiency improvements in homes and businesses.

#### **COS 5.5**

**Net zero water use:** Encourage developers to design new structures and property landscapes to achieve net zero water use, to the extent feasible.



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## GOAL COS 6

WASTE GENERATION IS DECREASED, THERE ARE EXTENSIVE RECYCLING AND COMPOSTING OPTIONS IN THE COMMUNITY, AND MOORPARK HAS AMPLE OPPORTUNITIES FOR MATERIAL REUSE.

### COS 6.1

**Waste sorting education:** Improve education efforts on waste sorting for community members.

### COS 6.2

**Recycling and composting access:** Expand access to recycling and composting services for homes and businesses.

### COS 6.3

**Single-use plastics:** Explore options to decrease the use of single-use plastics and encourage the use of reusable materials.

### COS 6.4

**Food waste:** Discourage food waste and remove barriers to donate food and compost.

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## GOAL COS 7

MOORPARK PRACTICES SUSTAINABLE AND LOW-CARBON AGRICULTURE AND LAND USE ACTIVITIES.

### COS 7.1

**Tree plantings:** Protect and expand the urban forest through new tree plantings and effective and timely care of existing trees, emphasizing consistent tree canopies along corridors in areas such as along Moorpark Avenue and Los Angeles Avenue and within the Downtown area.

### COS 7.2

**Invasive and prohibited plants:** Consider removal and replacement of invasive and prohibited plants located on public lands, as identified in the city's Landscape Design Standards and Guidelines.

### COS 7.3

**Carbon sequestration for working lands:** Increase opportunities to sequester carbon on agricultural land and open space.

### COS 7.4

**Pesticide reduction:** Work with agricultural operations and property owners in and around the city to reduce pesticide use and other potentially harmful agents on agricultural land and private landscaping to the extent viable alternatives are available and economically feasible.

### COS 7.5

**Edible gardens:** Support and promote opportunities to grow local food in residential yards, schools, community-gardens, and common areas in multi-family housing.

## **COS 7.6**

**Sustainable agriculture:** In coordination with agricultural organizations, improve soil conservation, reduce fertilizer use, and promote other sustainable agricultural practices that help to improve yield, maintain agricultural viability, and support adaptation to changing climate conditions.

## **COS 7.7**

**Food access:** Support the accessibility and availability of healthy food through farmers markets, urban agriculture, community gardens, grocery stores, and other venues.

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## **GOAL COS 8**

**MOORPARK SUPPORTS GREENHOUSE GAS EMISSION REDUCTION AND COMPREHENSIVE SUSTAINABILITY PRACTICES THROUGHOUT THE COMMUNITY.**

### **COS 8.1**

**Greenhouse gas reduction:** Reduce community-wide and city operations greenhouse gas (GHG) emissions from vehicles, residential, and nonresidential energy use, waste generation, water and wastewater collection and treatment, off-road uses, and other GHG emission sources to meet or exceed the State's goal to achieve carbon neutrality by 2045.

### **COS 8.2**

**Climate action plan:** Work collaboratively with regional agencies, neighboring cities, community-based organizations, businesses, and other partners, as appropriate, to develop and implement a Climate Action Plan to address statewide GHG reduction and elimination goals, including those of Assembly Bill 1279, Executive Order B-55-18, Senate Bill 32, and Executive Order S-03-05.

### **COS 8.3**

**Environmental education:** Develop and implement a public information program on environmentally responsible and sustainable practices that can: (1) educate community residents as to the nature of these issues, opportunities for public input and dates and times of public participation meetings, hearings, workshops, etc., and (2) respond to current local issues and problems associated with environmental responsibility and sustainability.

### **COS 8.4**

**Expanded environmental programs:** Explore and promote opportunities for additional environmentally responsible and sustainable programs and practices for community residents and visitors, businesses, and city operations.

# Safety Element: Goals and Policies

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## GOAL SE 1

AN EMERGENCY MANAGEMENT FRAMEWORK THAT EFFECTIVELY PREPARES AND RESPONDS TO NATURAL AND HUMAN-CAUSED EMERGENCIES.

### SE 1.1

**Multi-jurisdictional cooperation:** Continue the development of local preparedness plans and multi-jurisdictional cooperation and communication for emergency situations.

### SE 1.2

**Emergency preparedness education:** Educate residents and businesses regarding appropriate actions to safeguard life and property during and immediately after emergencies.

### SE 1.3

**Emergency coordination:** Coordinate with Ventura County, neighboring cities, and non-governmental partners to effectively prepare for and respond to hazards and natural disasters.

### SE 1.4

**Emergency alerts:** Work with Ventura County Office of Emergency Services to provide alerts about potential, developing, and ongoing emergency situations through extensive early-warning and notification systems that convey information to all residents, in multiple languages and formats to ensure it is widely accessible, including persons with access and functional needs.

### SE 1.5

**Hazard Mitigation Plan:** Incorporate the most recent version of the Ventura County Hazard Mitigation Plan, Moorpark Annex, most recently certified by FEMA in 2022, into this Safety Element by reference, as permitted by California Government Code Section 65302.6.

### SE 1.6

**Community Emergency Response Team:** Expand the capabilities of the Community Emergency Response Team to provide more community members the tools to respond to disasters.

### SE 1.7

**Redundant communication:** Create redundancies in the communication infrastructure to ensure communication services are available during emergencies.

### SE 1.8

**Renewable back-up energy:** Provide renewable back-up power supplies, such as solar, wind, and battery power, for critical facilities, including cooling centers and resilience hubs.

### SE 1.9

**Multi-Hazard Evacuation Plan:** Identify evacuation routes and develop a multi-hazard evacuation plan, in coordination with surrounding jurisdictions, to ensure evacuation routes remain open and functional during emergencies. Reassess the effectiveness of the evacuation routes with the update of the Ventura County Multi-Jurisdictional Hazard Mitigation Plan.

### SE 1.10

**Ingress and egress:** Require new development to have at least two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.

### SE 1.11

**Secondary ingress and egress:** Explore secondary means of ingress and egress in areas with evacuation constraints, as shown in **Figure SE-2, *Evacuation Constrained Residential Parcels***, for existing subdivisions or developments of 10 units or more.

### SE 1.12

**Evacuation assistance program:** Develop an evacuation assistance program, in coordination with Moorpark city bus, paratransit, and dial-a-ride agencies to help those with limited mobility or lack of access to a vehicle evacuate safely.

### SE 1.13

**Resilience hubs:** Establish a network of equitably located resilience hubs throughout Moorpark and ensure that resilience hubs are situated outside of areas at risk from hazard impacts to the extent possible, offer refuge from extreme heat and poor air quality due to regional wildfire smoke, and are equipped with renewable energy generation and backup power supplies: Such facilities should be in easily accessible locations and be available to all community members.

### SE 1.14

**Resilient critical and lifeline facility siting:** Locate new critical and lifeline facilities outside of flood and dam inundation zones, very high fire hazard severity zones, and landslide susceptibility areas, when feasible. If not feasible, appropriately site, design, and construct new critical facilities to be resilient to flooding, fires, and landslides.

### SE 1.15

**Hazard mapping:** Update hazard mapping with each update to the Safety Element, or earlier if, new information becomes available, to ensure the city relies on best available hazard mapping to inform decisions.

### SE 1.16

**Agency coordination:** Coordinate with Ventura County Fire Department, Ventura County Sheriff's Office, and City Manager's Office to ensure effective preparation, response, and recovery services are available throughout the community before, during, and after a seismic event.

### SE 1.17

**Accessible hazard preparedness education and outreach:** Promote hazard preparedness with education and outreach available in multiple languages and formats appropriate for people with access and functional needs.

### SE 1.18

**Ready Ventura County Program:** Coordinate with the Ventura County Sheriff's Office of Emergency Services to update and coordinate the Ready Ventura County Program as relevant to the city of Moorpark.

### SE 1.19

**Livestock and large animal evacuation:** Work with Ventura County Animal Services and Ventura County Office of Emergency Services to ensure that owners of livestock and large animal are prepared for and have the ability to evacuate during an emergency.

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## GOAL SE 2

A COMMUNITY PROTECTED FROM SEISMIC AND GEOLOGIC HAZARDS, AVOIDING LOSS OF LIFE AND MINIMIZING DAMAGE TO STRUCTURES, SYSTEMS, AND SERVICES.

### SE 2.1

**California Building Standards Code:** Continue to implement California Building Code seismic safety standards for construction of new buildings.

### SE 2.2

**Geologic studies:** Require the preparation of detailed geologic studies for new development within seismic and geologic hazard zones.

### SE 2.3

**Unreinforced masonry buildings:** Require existing unreinforced masonry buildings to be seismically retrofitted, based on an engineering evaluation, if deemed unsafe by a building official.

### SE 2.4

**Earthquake preparedness:** Participate in local, county, and State-sponsored earthquake preparedness programs.

### SE 2.5

**New development:** Require new development to comply with current state, regional, and local requirements for seismic and geologic safety.

### SE 2.6

**Slope stability analysis:** Require that slope stability analyses be conducted for new development in hillside areas and compliance with Section 17.38, Hillside Management of the Moorpark Municipal Code.

### SE 2.7

**Subsidence risk reduction coordination:** Coordinate with Ventura County Resource Management Agency to participate in regional measures that reduce risk of subsidence in the city of Moorpark and surrounding areas.

### SE 2.8

**Critical and lifeline facility operations:** Assess critical and lifeline facilities for seismic safety and earthquake performance to ensure they remain operational after a seismic event.

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## **GOAL SE 3**

MINIMIZE RISK OF LOSS OF LIFE, INJURY, DAMAGE TO PROPERTY, AND ECONOMIC OR SOCIAL DISLOCATIONS RESULTING FROM FLOOD HAZARDS.

### **SE 3.1**

**National Flood Insurance Program:** Continue to participate in the Federal Emergency Management Agency's National Flood Insurance Program to ensure building owners in Moorpark can obtain flood insurance.

### **SE 3.2**

**Low impact development:** Minimize impervious areas by requiring development to include low impact development and green infrastructure that increase pervious surfaces to absorb impacts from stormwater and flooding.

### **SE 3.3**

**Floodway management:** Consider floodway management design that includes areas where stream courses are left natural or as developed open space.

### **SE 3.4**

**Flood control infrastructure:** Coordinate with Ventura County Public Works Agency to improve and maintain flood control structures, detention basins, channel reconstruction, and diversion systems within Moorpark and the greater Calleguas Creek watershed, using natural infrastructure where feasible.

### **SE 3.5**

**Critical and lifeline facilities:** Maintain the structural and operational integrity of critical and lifeline facilities during and after flooding events.

### **SE 3.6**

**Floodplain management requirements:** Require new development in the 100-year and 500-year flood hazard zones to comply with provision Moorpark Municipal Code Section 15.24, Floodplain Management.

### **SE 3.7**

**Review of new flood control facilities:** Coordinate with the Ventura County Public Works Agency to review new development for flood control and flood hazard reduction from new development.

### **SE 3.8**

**Flood safety plans:** Require new development within a designated flood hazard zone to submit flood safety plan for approval by the Floodplain Administrator.

### **SE 3.9**

**Green infrastructure:** Promote the use of green infrastructure to convey stormwater and reduce flooding.

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## GOAL SE 4

### MINIMIZED INJURY, LOSS OF LIFE, AND DAMAGE TO PROPERTY FROM WILDFIRE AND STRUCTURAL FIRES.

#### SE 4.1

**Fire hazard reduction:** Continue to work with the Ventura County Fire Department and the Ventura Regional Fire Safe Council to implement fire hazard reduction policies and projects, to the extent they are relevant to Moorpark, in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan, the Community Wildfire Protection Plan, the General Plan, and the Capital Improvement Program.

#### SE 4.2

**California Building Standards Code and Fire Code:** Continue to adopt and enforce the most recent version of the California Building Code and Fire Code, as well as California Fire Safe Standards for new and existing development.

#### SE 4.3

**Sufficient water supplies for firefighting:** Ensure that existing and future development in the city has sufficient water supplies nearby for fire-fighting purposes.

#### SE 4.4

**Fire safety plans:** New development within Very High Fire Hazard Severity Zones or the Wildland Urban Interface must prepare a fire safety plan for review and approval by the Ventura County Fire Department prior to issuance of building permit.

#### SE 4.5

**Ventura County Strategic Fire Plan:** The current version of the Ventura County Fire Department Strategic Fire Plan is hereby incorporated into this Safety Element, by reference, to ensure existing non-conforming development reduces fire hazards by implementing fire safe standards for roads and vegetation.

#### SE 4.6

**Vegetation management funding:** Coordinate with the Ventura County Fire Department and Ventura Regional Fire Safe Council to obtain funding for and conduct vegetation and fuel modification or management.

#### SE 4.7

**Egress and ingress:** Require new development within a Very High Fire Hazard Severity Zone to have at least two egress and ingress options, visible street signs that identify evacuation routes, and adequate water supply for structural suppression.

#### SE 4.8

**Traffic Control Plans:** Require development projects in the Very High Fire Hazard Severity Zone or WUI to prepare a Traffic Control Plan to ensure that construction equipment or activities do not block roadways during the construction period.

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## GOAL SE 5

## A RESILIENT COMMUNITY ABLE TO ADAPT TO SEVERE WEATHER EVENTS.

### SE 5.1

**Extreme heat:** Elevate extreme heat as an important hazard of concern in Moorpark to adequately prepare and respond to extreme temperatures.

### SE 5.2

**Retrofits and weatherization:** Increase the resiliency of city-owned structures to severe weather events and support homeowners and business owners to increase the resilience of their buildings and properties, through retrofits, weatherization, and other improvements.

### SE 5.3

**Public transit:** Coordinate with Moorpark City Transit to identify alternative routes and stops if normal route infrastructure is damaged or closed due to severe weather.

### SE 5.4

**Undergrounding electric utilities:** Continue to collaborate with Southern California Edison to underground electrical transmission infrastructure throughout the city, prioritizing high voltage transmission lines and areas within Very High Fire Hazard Severity Zones.

### SE 5.5

**Drought-tolerant shade cover:** Promote and expand the use of drought-tolerant green infrastructure, including street trees and landscaped areas, as part of cooling strategies in public and private spaces.

### SE 5.6

**Water conservation:** Prepare for more frequent and severe drought events by working with regional water providers to implement water conservation measures and ensure sustainable water supplies.

### SE 5.7

**Sustainable and resilient facilities:** Encourage new developments and existing property owners to incorporate sustainable, energy-efficient, and environmentally regenerative features into their facilities, landscapes, and structures to reduce energy demands and improve on-site resilience. Support financing efforts to increase the communities funding of these features.

### SE 5.8

**Nature-based solutions:** Where feasible, encourage the use of existing natural features and ecosystem processes, or the restoration of, when considering alternatives for the conservation, preservation, or sustainable management of open space. This may include, but is not limited to, aquatic or terrestrial vegetated open space, systems and practices that use or mimic natural processes, and other engineered systems, to provide clean water, conserve ecosystem values and functions, and provide a wide array of benefits to people and wildlife.

### SE 5.9

**Backup energy supplies:** Collaborate with Southern California Edison and organizations such as the Independent Living Resource Center to ensure that those who depend on electricity supply



for medical devices and refrigerating medication have backup energy supplies during extreme heat and extreme wind events.

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## GOAL SE 6

### A COMMUNITY PREPARED FOR HUMAN HEALTH HAZARD EVENTS.

#### SE 6.1

**Reducing the spread:** Reduce the spread of human health hazards, including pests, diseases, and viruses.

#### SE 6.2

**Identifying health hazards:** Work with the Ventura County Department of Public Health and healthcare providers to identify health hazards of concern, including pests, diseases, and viruses, in Moorpark.

#### SE 6.3

**Planning for future health hazards:** Work with Ventura County Public Health to plan for future pandemic events, including securing necessary public health supplies, preparing effective messaging for preventative actions and treatments, and identifying and evaluating potential public health measures.

#### SE 6.4

**Outdoor workers resources:** Look for opportunities to ensure that workers in outdoor industries have the training and resources to be adequately protected from environmental hazards, including extreme heat, poor air quality, pests, and diseases.

#### SE 6.5

**Medical supply chain:** Collaborate with the Ventura County Department of Public Health and healthcare providers to minimize medical supply chain disruptions for facilities in Moorpark.

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## GOAL SE 7

### PROTECT RESIDENTS AND BUSINESS EMPLOYEES FROM POTENTIAL HAZARDS ASSOCIATED WITH THE USE, STORAGE, MANUFACTURE, AND TRANSPORTATION OF HAZARDOUS MATERIALS IN AND THROUGH THE CITY.

#### SE 7.1

**Hazardous materials education:** Work with the Ventura County Public Works Agency to continue educating the community regarding the proper storage, handling, use, and disposal of hazardous household materials.

#### SE 7.2

**Hazardous materials business plans:** Require business owners to incorporate into their business plans submitted to the County Fire Protection District those measures necessary to minimize hazardous materials accidents due to intense ground shaking potential and flooding. Ensure that the plans are updated as necessary.

### SE 7.3

**Hazardous waste:** Coordinate with the Ventura County Public Works Agency to manage hazardous waste, including household hazardous waste.

### SE 7.4

**Hazardous materials spills:** Coordinate with state and regional agencies to respond to hazardous materials spills.

### SE 7.5

**Prohibiting hazardous materials facilities:** Prohibit new hazardous materials facilities adjacent to schools or residential areas.

### SE 7.6

**Enforcing regulations:** Enforce regulations for the safe operations of sites that use toxic and hazardous materials, including hardening hazardous waste storage facilities against natural hazards.

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## GOAL SE 8

ADEQUATE AND EFFECTIVE LAW ENFORCEMENT SERVICES THAT PROTECT THE LONG-TERM SAFETY OF MOORPARK RESIDENTS, BUSINESSES, AND VISITORS.

### SE 8.1

**Response times:** Work with the Ventura County Sheriff's Office to achieve and maintain appropriate response times for all call priority levels to provide responsive police services for the safety of residents and visitors.

### SE 8.2

**Staffing:** Coordinate with the Ventura County Sheriff's Office to maintain optimum staffing levels for both sworn officers and civilian support staff to provide quality police services to Moorpark.

### SE 8.3

**Community relations:** Work with the Ventura County Sheriff's Office to maintain a dialogue with the community to improve relationships and continually explore innovative means to communicate with the public on police services.

### SE 8.4

**Public Safety Services:** Ensure that all neighborhoods, business districts, and other locations in the city receive an equitable and effective level of public safety services and feel safe from natural hazards, crime, vehicle hazards, and discrimination.

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## GOAL SE 9

FIRE SERVICES THAT EFFECTIVELY RESPOND TO URBAN AND WILDFIRE EMERGENCIES.

### SE 9.1

**Fire safety services:** Work with the Ventura County Fire Department to provide fire prevention, protection, and emergency preparedness services that adequately protect residents, employees, visitors, and structures from fire and fire-related emergencies.

### SE 9.2

**Staffing and equipment:** Coordinate with Ventura County Fire Department to ensure adequate staffing and equipment for fire protection services throughout the city to quickly respond to emergencies.

### SE 9.3

**Fair share extension:** Require new development to fund a fair share extension of fire services to maintain service standards, including personnel and capital improvements costs.

## Noise Element: Goals and Policies

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## GOAL N 1

THE HEALTH, SAFETY, AND GENERAL WELFARE OF THE PUBLIC ARE PROTECTED FROM ADVERSE NOISE IMPACTS.

### N 1.1

**Attenuation measures:** Provide attenuation measures to reduce noise impacts from non-transportation sources through the city's Noise Ordinance, which is intended to protect people from noise generated on adjacent properties.

### N 1.2

**Limit nuisance noise:** Limit the impact of nuisance noise sources.

### N 1.3

**Sound design:** Encourage functional and attractive building and site layout designs to mitigate excessive noise levels.

### N 1.4

**Construction noise:** Encourage enforcement of noise restrictions on hours of construction activity at noise sensitive receptors, particularly in residential areas.

---

## GOAL N 2

EXISTING AND FUTURE LAND USES ARE COMPATIBLE WITH CURRENT AND PROJECTED LOCAL AND REGIONAL NOISE CONDITIONS.

### N 2.1

**Planning for land use compatibility:** Incorporate noise considerations into land use planning decisions to prevent or minimize future noise and land-use incompatibilities per the Land Use Compatibility Table (Table 8-1). The analysis of traffic and other noise sources shall consider future conditions at General Plan build out.

### N 2.2

**Locating noise sensitive uses:** Limit or restrict new noise sensitive land uses in proximity to existing conforming noise generating uses and planned industrial areas.

### N 2.3

**Truck delivery areas:** Encourage truck delivery areas to be located away from residential properties and require associated noise impacts to be mitigated per the city's Noise Ordinance.

### N 2.4

**Protecting noise sensitive uses:** Protect noise sensitive land uses (such as libraries, schools, hospitals, residences, and other care facilities) from excessive, unsafe, or otherwise disruptive noise levels from adjacent land uses.

### N 2.5

**Design of roadway projects:** Encourage the employment of noise attenuation measures in the design of roadway improvement projects consistent with existing and future funding.

### N 2.6

**Noise transfer:** Mixed-use developments shall be designed to prevent the transfer of noise and vibration from non-residential uses by demonstrating adequate isolation of noise from the residential portion of the development.

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## GOAL N 3

NOISE IMPACTS FROM NON-TRANSPORTATION-RELATED SOURCES, MOTOR VEHICLE TRAFFIC, AND RAILROAD OPERATIONS ON SENSITIVE RECEPTORS ARE MINIMIZED.

### N 3.1

**Transportation sources:** Identify sound attenuation measures that can be applicable to transportation related noise impacts.

### N 3.2

**Stationary sources:** Require stationary noise sources to limit noise to levels that do not interfere with adjacent uses.

### N 3.3

**New projects:** Require new projects to contribute to the mitigation of off-site traffic noise impacts to the extent that these impacts are generated by the proposed project.

### **N 3.4**

**Local and regional collaboration:** Collaborate with local and regional transit agencies and other jurisdictions to minimize regional rail and traffic noise and other sources of noise in the city.

### **N 3.5**

**State Motor Vehicle Standards:** Encourage the enforcement of state motor vehicle noise standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and Moorpark Police Department.

### **N 3.6**

**Protection from mobile sources:** Require that residential and other noise-sensitive land uses adjacent to the 118 and 23 highways, major arterials, and railroad tracks be designed to incorporate elements reducing noise exposure from these sources, including such elements as walls, berms, and landscape features.

### **N 3.7**

**Interior and exterior standards:** Continue to enforce current interior and exterior noise standards to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary noise sources. Stationary noise sources consist of, but are not limited to, machinery, heavy equipment, fans, and air conditioning equipment.

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## **Appendix D      Air Quality and Greenhouse Gas Modeling**

## Appendices

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## Land Use Statistics - Moorpark, Ventura County

	Existing Conditions 2022	Proposed GP 2050	Net change Total	%	Current GP 2050
Housing Units	11,537	17,025	5,488	3%	14,351
Population	36,445	53,781	17,336	38%	45,335
Non-Residential SQFT	8,783,171	13,567,083	4,783,912	43%	11,056,808
Employment	12,915	20,249	7,334	43%	16,917
<b>Service Population</b>	<b>49,360</b>	<b>74,030</b>	<b>24,670</b>	<b>40%</b>	<b>62,252</b>

## AQMP Consistency Analysis

### Comparison of the Change in Population and VMT in Moorpark (O-D Method)

Category	2022 Existing	2050 Current GP	2050 Proposed Project	Change from Existing		Change from the Current GP	
				Change	%	Change	%
Population	36,445	45,335	53,781	17,336	48%	8,446	19%
Employment	12,915	16,917	20,249	7,334	57%	3,332	20%
SP	49,360	62,252	74,030	24,670	50%	11,778	19%
VMT per Day	472,786	532,234	602,485	129,698	27%	70,250	13%
VMT/SP	9.58	8.55	8.14	-1.4	-15%	-0.4	-5%

Note Origin-Destination (O-D) Methodology is not the same methodology for SB 743, which considers only commute-trip VMT. Modeling of vehicle miles traveled (VMT) provided by Iteris is based on Ventura County Transportation Model (VCTM). VMT from passenger vehicles and trucks that have an origin or destination in the City using a transportation origin-destination methodology. Accounting of VMT is based on the recommendations of CARB's Regional Targets Advisory Committee (RTAC) created under Senate Bill 375 (SB 375).

## Moorpark Community GHG Emissions Inventory and Forecast

Category	Existing 2022		General Plan Update 2050		Increase		Current General Plan	
	TOTAL		TOTAL		TOTAL		TOTAL	
Building Electricity	26,477	15%	38,047	18%	11,570	44%	31,490	18%
Building Natural Gas	35,645	21%	52,963	26%	17,318	49%	44,418	25%
On-Road Transportation	64,925	38%	53,868	26%	-11,056	-17%	48,426	27%
Off-Road Vehicles and Equipment	2,613	1.5%	3,798	2%	1,184	45%	3,429	2%
Solid Waste/Landfills	2,232	1.3%	3,347	2%	1,115	50%	2,815	2%
Refrigerants	17,245	10%	25,449	12%	8,203	48%	21,452	12%
Water Use	1,889	1.1%	1,702	1%	-187	-10%	1,658	1%
Wastewater Treatment	20,939	12%	27,108	13%	6,169	29%	22,795	13%
<b>Total Community Emissions</b>	<b>171,965</b>	<b>100%</b>	<b>206,283</b>	<b>100%</b>	<b>34,317</b>	<b>20%</b>	<b>176,484</b>	<b>100%</b>
Service Population (SP)	49,360	NA	74,030	NA	24,670	50%	62,252	NA
MTCO <sub>2e</sub> /SP	3.5	NA	2.8	NA	-0.7	-20%	2.8	NA
<b>Trajectory to AB 1279</b>	<b>25,795</b>	<b>-85%</b>	<b>Does not Achieve Target</b>					

Notes: Emissions may not total to 100 percent due to rounding. Based on GWPs in the IPCC Fifth Assessment Report (AR5).

The emissions inventory and forecast is based on activity data for the City of Moorpark. This emissions inventory methodology identifies GHG emissions produced within a jurisdiction and captures direct and indirect emissions generated by land uses in a community. The activity data methodology allows a direct comparison between a community's GHG emissions and that identified by CARB in the AB 32 and SB 32 inventory and forecast prepared for the scoping plan. Unlike a "consumption-based" GHG emissions inventory, an activity-based emissions inventory does not capture lifecycle emissions associated with consumptions of goods. While a consumption-based emissions inventory approach may document GHG emissions associated with the final demand (regardless of where they were generated), a consumption-based emissions inventory excludes emissions associated with products produced within the jurisdiction but consumed elsewhere. For these reasons, an activity-based emissions inventory was determined to be most applicable for determining significant impacts under CEQA.

Note: Excludes GHG emissions natural gas use from Permitted Sources within the City.

## City of Moorpark Community Criteria Air Pollutant Emissions Inventory and Forecast

Sources

<sup>1</sup> Source: Iteris 2022; EMFAC2021 Version 1.0.2 Emissions Rates. Ventura County (County)

<sup>2</sup> Sources: SoCalGas 2022. and CalEEMod User's Guide for natural gas criteria air pollutant emission rates. Excludes criteria air pollutant emissions natural gas use from Permitted Sources within the City.

<sup>3</sup> Source: OFFROAD 2021 Version 1.0.3

<sup>4</sup> Source: CalEEMod 2022 User's Guide

### EXISTING

Phase	Existing (2022) Criteria Air Pollutant Emissions (pounds/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Transportation <sup>1</sup>	25	222	1,046	4	25	10
Energy <sup>2</sup>	23	171	84	1	14	14
Offroad Equipment <sup>3</sup>	121	71	2,691	0	3	2
Consumer Products <sup>4</sup>	427	0	0	0	0	0
Total	<b>596</b>	<b>463</b>	<b>3,821</b>	<b>5</b>	<b>42</b>	<b>26</b>

### Existing in 2050

Phase	Existing Land Uses (2050) Criteria Air Pollutant Emissions (pounds/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Transportation <sup>1</sup>	6	59	440	3	23	8
Energy <sup>2</sup>	23	171	84	1	14	14
Offroad Equipment <sup>3</sup>	121	71	2,691	0	3	2
Consumer Products <sup>4</sup>	427	0	0	0	0	0
Total	<b>577</b>	<b>300</b>	<b>3,215</b>	<b>4</b>	<b>39</b>	<b>24</b>

## City of Moorpark Community Criteria Air Pollutant Emissions Inventory and Forecast

General Plan Update (2050)

Phase	Project Criteria Air Pollutant Emissions (pounds/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Transportation <sup>1</sup>	8	69	568	3	28	9
Energy <sup>2</sup>	127	265	207	2	20	20
Offroad Equipment <sup>3</sup>	181	102	4,111	0	4	3
Consumer Products <sup>4</sup>	711	0	0	0	0	0
<b>Total</b>	<b>1,027</b>	<b>436</b>	<b>4,886</b>	<b>5</b>	<b>52</b>	<b>33</b>

NET CHANGE from Existing Land Uses (2050)

Phase	Net Change Criteria Air Pollutant Emissions (pounds/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Transportation <sup>1</sup>	2	10	128	1	5	2
Energy <sup>2</sup>	104	94	123	1	7	7
Offroad Equipment <sup>3</sup>	60	31	1,420	0	1	1
Consumer Products <sup>4</sup>	284	0	0	0	0	0
<b>Total</b>	<b>450</b>	<b>135</b>	<b>1,671</b>	<b>1</b>	<b>12</b>	<b>9</b>
VCAPCD Threshold	<b>25</b>	<b>25</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
Exceeds Threshold	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

NET CHANGE from Existing Conditions (2022) - Friant Ranch

Phase	Net Change (2050-2022) Criteria Air Pollutant Emissions (pounds/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Transportation <sup>1</sup>	-17	-153	-478	-1	2	0
Energy <sup>2</sup>	104	94	123	1	7	7
Offroad Equipment <sup>3</sup>	60	31	1,420	0	1	1
Consumer Products <sup>4</sup>	284	0	0	0	0	0
<b>Total</b>	<b>431</b>	<b>-27</b>	<b>1,065</b>	<b>0</b>	<b>10</b>	<b>7</b>
VCAPCD Threshold	<b>25</b>	<b>25</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
Exceeds Threshold	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Current General Plan

Phase	Project Criteria Air Pollutant Emissions (pounds/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Transportation <sup>1</sup>	7	66	495	3	26	9
Energy <sup>2</sup>	107	222	174	1	17	17
Offroad Equipment <sup>3</sup>	157	93	3,634	0	4	3
Consumer Products <sup>4</sup>	572	0	0	0	0	0
<b>Total</b>	<b>843</b>	<b>381</b>	<b>4,303</b>	<b>5</b>	<b>46</b>	<b>29</b>

## Water and Wastewater

### Water Demand for Moorpark Provided by Fuscoe Engineering (September 2022)

Note: current GP is estimated based on Service Population and assumes similar conservation measures.

Water	Existing	Proposed Project	Current GP
Million Gallons Per Day (MGD)	6,132,256	6,924,120	5,822,508
Acre Feet Per Year	6,869	7,756	6,522
MGY TOTAL	2,238	2,527	2,125
Recycled Water (AFY)	NA	1,182	1,182
Recycled Water (MGY)		385	385
Wastewater	Existing	Proposed Project	Current GP
Gallons per year	1,790,794,755	2,330,341,405	1,959,589,533
Gallons per day	4,906,287	6,384,497	5,368,738
AFY	5,496	7,152	6,014
MGY TOTAL	1,791	2,330	1,960

### Direct Emissions from Wastewater Treatment

Wastewater Treatment Type	BIOGENIC CO <sub>2</sub>			Non-Biogenic
	MT/Gallon	CH <sub>4</sub> MT/Gallon	N <sub>2</sub> O MT/Gallon	CO <sub>2</sub> e MT/Gallon
Aerobic	3.90E-07	1.34E-09	8.52E-10	2.63E-07
Anaerobic (Facultative Lagoons)	3.90E-07	4.01E-07	8.52E-10	1.15E-05
Septic	0.00E+00	2.50E-07	8.52E-10	7.23E-06

Source: California Air Pollution Control Officer's Association (CAPCOA). 2022, April. California Emissions Estimator Model (CalEEMod) User's Guide Version 2022.1. <https://www.caleemod.com/user-guide>. Table G-35, Annual Wastewater Treatment Direct Emission Factors (short ton per gallon)

Anaerobic	Existing	Proposed Project	Current Plan
<b>Non-Biogenic CO<sub>2</sub>e TOTAL =</b>	20,511	26,691	22,445

## Water and Wastewater

### Energy for Water Conveyance, Treatment, Distribution, and Wastewater Treatment

Location	Supply (Water Conveyance)	Water Treatment	Water Distribution	Total Water	Wastewater Treatment
see Tab G-33	kWhr/million gallons				
South Coast	3,044	725	1,537	5,306	1,501
San Francisco Bay	1,182	754	2,998	4,934	1,542
Central Coast	1,577	754	1,537	3,868	1,542
Tulare Lake	1,506	748	166	2,420	1,519
North Coast	620	754	1,537	2,911	1,542
San Joaquin River	827	748	166	1,741	1,519
Colorado River	2,304	748	166	3,218	1,519
Sacramento River	698	748	166	1,612	1,519
South Lahontan	1,953	748	1,537	4,238	1,519
North Lathontan	541	748	166	1,455	1,519

Source: California Air Pollution Control Officer's Association (CAPCOA). 2022, April. California Emissions Estimator Model (CalEEMod) User's Guide Version 2022.1. <https://www.caleemod.com/user-guide>. Table G-32, Water Energy Intensity Factors by Hydrologic Region and Process (kWh per million gallon).

### Southern California Edison

	Intensity factor			CO <sub>2</sub> e
	CO <sub>2</sub> lbs/MWh <sup>1</sup>	CH <sub>4</sub> lbs/MWh <sup>2</sup>	N <sub>2</sub> O lbs/MWh <sup>2</sup>	lbs/MWh
<b>2022</b>	348.637	0.033	0.004	<b>350.621</b>
<b>2050</b>	260.788	0.033	0.004	<b>262.772</b>
	Intensity factor			CO <sub>2</sub> e
	CO <sub>2</sub> MTons/MWh <sup>1</sup>	CH <sub>4</sub> MTons/MWh <sup>2</sup>	N <sub>2</sub> O MTons/MWh <sup>2</sup>	MTons/MWh
<b>2022</b>	0.158	1.50E-05	1.81E-06	<b>0.159</b>
<b>2050</b>	0.118	1.50E-05	1.81E-06	<b>0.119</b>

Source: California Air Pollution Control Officer's Association (CAPCOA). 2022, April. California Emissions Estimator Model (CalEEMod) User's Guide Version 2022.1. <https://www.caleemod.com/user-guide>. Table G-3, Electricity Utility Greenhouse Gas Emissions Factors

## Water and Wastewater

### GHG Emissions from Energy Associated with Water/Wastewater

Energy Associated with Water Use	Existing Mwh	Proposed Project Mwh	Current GP Mwh
TOTAL Water Use	11,876	13,410	11,276
TOTAL Recycled Water Use	NA	871	2,636
TOTAL Wastewater Generation	2,688	3,498	2,941
<b>Total Water/Wastewater</b>	<b>14,564</b>	<b>17,779</b>	<b>16,853</b>

GHG Emissions from Energy Associated with Water Use/Wastewater Generation	Existing MTCO <sub>2</sub> e	Proposed Project MTCO <sub>2</sub> e	Current GP MTCO <sub>2</sub> e
TOTAL Water Use + Recycled	1,889	1,702	1,658
TOTAL Wastewater Generation	427	417	351
<b>Total Water/Wastewater</b>	<b>2,316</b>	<b>2,119</b>	<b>2,009</b>

### Total GHGs

GHG Emissions from Water/Wastewater Use	Existing MTCO <sub>2</sub> e	Proposed Project MTCO <sub>2</sub> e	Current GP MTCO <sub>2</sub> e
TOTAL Water Use + Recycled	1,889	1,702	1,658
TOTAL Wastewater Generation	20,939	27,108	22,795
<b>Total Water/Wastewater</b>	<b>22,828</b>	<b>28,810</b>	<b>24,454</b>



## Energy Data Requests to SCE and SoCalGas

Note: Existing conditions data was collected in 2020 for the Moorpark General Plan Existing Conditions Report. Since 2020, Moorpark has been served by the Clean Power Alliance (CPA). Existing emissions are based on SCE carbon intensity. Forecasted emissions are based on the carbon intensity for CPA.

### Southern California Edison (SCE). 2020, December 14. Energy Report for Moorpark. Request ID SCE101128182 (2016 through 2019)

May exclude natural gas use from Industrial (Permitted) Sources within the City.

Category	Annual Kwh <sup>1</sup>				Interpolated <sup>2</sup>	Average (2016-2019) <sup>1</sup>
	2016	2017	2018	2019	2022	
Agriculture	*	*	*	*	NA	NA
Commercial	92,035,239	93,092,514	92,425,732	90,207,164	89,172,209	91,940,162
Industrial	*	*	*	*	NA	NA
Residential	79,891,713	83,453,257	81,027,109	78,225,980	77,309,009	80,649,515
Total kwh	171,926,952	176,545,771	173,452,841	168,433,144	166,481,218	172,589,677

### SoCalGas. 2020, December 4. Natural Gas Use in Moorpark (2016-2019). Request ID 427

Category	Annual Therms <sup>1</sup>				Interpolated <sup>2</sup>	Average (2016-2019) <sup>1</sup>
	2016	2017	2018	2019	2022	
Commercial	809,995	799,139	782,886	823,570	814,910	803,898
Industrial	54,969	95,453	94,077	115,325	170,817	89,956
Single-Family Residential	3,607,137	3,694,672	3,692,227	4,331,661	4,808,431	3,831,424
Multi-Family Residential	776,398	782,454	772,506	858,612	904,005	797,493
Total Therms	5,248,499	5,371,718	5,341,696	6,129,168	6,698,164	5,522,770

#### Notes:

<sup>1</sup> Average energy based on years 2016-2019.

<sup>2</sup> Extrapolated Year 2022 usage based on years 2016-2019.

## City of Moorpark Energy

### SCE, Clean Power Alliance (CPA), and SoCalGas Emission Factors

	lbs/MMBTU	lbs/MMBTU	lbs/MMBTU	lbs/MMBTU
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
All Years	117	0.01040	0.00020	117.3
	MT/Therm	MT/Therm	MT/Therm	MT/Therm
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
All Years	0.00531	4.72E-07	9.07E-09	0.005

Source: California Air Pollution Control Officer's Association (CAPCOA). 2022, April. California Emissions Estimator Model (CalEEMod) User's Guide Version 2022.1. <https://www.caleemod.com/user-guide>. Table G-4, Natural Gas Emissions Factors (pounds per MMBTU).

### Southern California Edison

	Intensity factor			CO <sub>2</sub> e
	CO <sub>2</sub> lbs/MWH <sup>1</sup>	CH <sub>4</sub> lbs/MWH <sup>2</sup>	N <sub>2</sub> O lbs/MWH <sup>2</sup>	lbs/MWh
<b>2022</b>	348.637	0.033	0.004	<b>350.6</b>
<b>2050</b>	260.788	0.033	0.004	<b>262.8</b>
	Intensity factor			CO <sub>2</sub> e
	CO <sub>2</sub> MTons/MWH <sup>1</sup>	CH <sub>4</sub> MTons/MWH <sup>2</sup>	N <sub>2</sub> O MTons/MWH <sup>2</sup>	MTons/MWh
<b>2022</b>	0.158	1.50E-05	1.81E-06	<b>0.159</b>
<b>2050</b>	0.118	1.50E-05	1.81E-06	<b>0.151</b>

Source: California Air Pollution Control Officer's Association (CAPCOA). 2022, April. California Emissions Estimator Model (CalEEMod) User's Guide Version 2022.1. <https://www.caleemod.com/user-guide>. Table G-3, Electricity Utility Greenhouse Gas Emissions Factors

#### Notes

In 2018, SB 100 (de León, 2018) was signed into law, which again increases the RPS to 60% by 2030 and encourages the state's electricity to come from carbon-free resources by 2050.

<b>Clean Power Alliance (CPA)</b>				
<b>Participation Rate</b>	<b>96.21%</b>			<b>Carbon Intensity</b>
<b>Year</b>				<b>CO<sub>2</sub>e</b>
	CO <sub>2</sub> lbs/MWH <sup>1</sup>	CH <sub>4</sub> lbs/MWH <sup>2</sup>	N <sub>2</sub> O lbs/MWH <sup>2</sup>	lbs/MWh
<b>2022</b>	429.901	0.033	0.004	<b>431.885</b>
<b>2050</b>	330.693	0.033	0.004	<b>332.677</b>
	CO <sub>2</sub> MTons/MWH <sup>1</sup>	CH <sub>4</sub> MTons/MWH <sup>2</sup>	N <sub>2</sub> O MTons/MWH <sup>2</sup>	MTons/MWh
<b>2022</b>	0.195	1.50E-05	1.81E-06	<b>0.196</b>
<b>2050</b>	0.150	1.50E-05	1.81E-06	<b>0.151</b>

Source: California Air Pollution Control Officer's Association (CAPCOA). 2022, April. California Emissions Estimator Model (CalEEMod) User's Guide Version 2022.1. <https://www.caleemod.com/user-guide>. Table G-3, Electricity Utility Greenhouse Gas Emissions Factors

**Notes**

Participation rate for CPA for the Clean Power (Default for Moorpark) is based on the CPA, 2022, July. 2021 Impact Report. [https://cleanpoweralliance.org/wp-content/uploads/2022/07/cpa\\_2022\\_impact\\_report\\_FINAL\\_singlepages-compressed.pdf](https://cleanpoweralliance.org/wp-content/uploads/2022/07/cpa_2022_impact_report_FINAL_singlepages-compressed.pdf)

In 2018, SB 100 (de León, 2018) was signed into law, which again increases the RPS to 60% by 2030 and encourages the state's electricity to come from carbon-free resources by 2050.

<b>2050 Carbon Intensity for Moorpark</b>	lbs/MWh	<b>330.0</b>
	MTons/MWh	<b>0.151</b>

## GHG Emissions from Energy Use

Based on interpolated year 2022 data.

Actual Energy Use	SCE	SoCalGas
	MWH/YR	Therms
Commercial	89,172	814,910
Industrial	0	170,817
Residential	77,309	5,712,436
<b>City Total</b>	<b>166,481</b>	<b>6,698,164</b>

Based on the carbon intensity for SCE for Existing Conditions in order to calculate the consistency with State GHG reduction targets.

	MTCO2e/Yr	
Commercial	14,182	4,337
Industrial	0	909
Residential	12,295	30,400
<b>City Total</b>	<b>26,477</b>	<b>35,645</b>

Forecast Methodology	Existing	Proposed Project	Current GP
Residential - Dwelling Units	11,537	17,025	14,351
Nonresidential - Square footage	8,783,171	13,567,083	11,056,808

MWH per Unit per year	6.7	Therms per Unit per year	495
MWH per SQFT per year	0.01	Therms per SQFT per year	0.1

Electricity	Existing	Proposed Project	Current GP
	MWH		
Nonresidential	89,172	137,741	112,256
Residential	77,309	114,084	96,166
<b>Total</b>	<b>166,481</b>	<b>251,825</b>	<b>208,421</b>
Electricity	MTCO2e		
Nonresidential	14,182	20,787	16,941
Residential	12,295	17,260	14,549
<b>Total Electricity</b>	<b>26,477</b>	<b>38,047</b>	<b>31,490</b>

	Existing	Proposed Project	Current GP
<b>Natural Gas</b>		<b>Therms</b>	
Nonresidential	985,727	8,429,767	7,105,762
Residential	5,712,436	1,522,621	1,240,896
Total	6,698,164	9,952,389	8,346,657
<b>Natural Gas</b>		<b>MTCO<sub>2</sub>e</b>	
Nonresidential	5,246	44,860	37,814
Residential	30,400	8,103	6,604
Total Natural Gas	<b>35,645</b>	<b>52,963</b>	<b>44,418</b>

## Criteria Air Pollutants from Natural Gas

Rate	lbs/MBTU					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Natural Gas						
Residential	0.0054	0.0922	0.0392	0.0006	0.0075	0.0075
Non-Residential	0.0540	0.0980	0.0824	0.0006	0.0075	0.0075

Source: California Air Pollution Control Officer's Association (CAPCOA). 2022, April. California Emissions Estimator Model (CalEEMod) User's Guide Version 2022.1. <https://www.caleemod.com/user-guide>. Table G-4, Natural Gas Emissions Factors (pounds per MMBTU).

Moorpark	Existing	Proposed Project	Current GP
	Therms		
Residential	5,712,436	1,522,621	1,240,896
Nonresidential	985,727	8,429,767	7,105,762
Total	6,698,164	9,952,389	8,346,657

Natural Gas	Existing lbs/day					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Residential	8	144	61	1	12	12
Nonresidential	15	26	22	0	2	2
TOTAL	23	171	84	1	14	14

Natural Gas	Current TOP lbs/day					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Residential	2	31	13	0	3	3
Nonresidential	105	191	160	1	15	15
TOTAL	107	222	174	1	17	17

Natural Gas	Proposed Project lbs/day					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Residential	2	38	16	0	3	3
Nonresidential	125	226	190	1	17	17
TOTAL	127	265	207	2	20	20

## Area Sources - Consumer Products

Residential Consumer Product Use		
Emissions = EF x Building Area		
Statewide (2008)	EF =	2.14E-05 lbs/sqft/day
<b>South Coast AQMD Rule 1143</b>	<b>EF =</b>	<b>1.98E-05 lbs/sqft/day</b>

Source: California Air Pollution Control Officer's Association (CAPCOA). 2022, April. California Emissions Estimator Model (CalEEMod) User's Guide Version 2022.1. <https://www.caleemod.com/user-guide>. Appendix D3 - Consumer Products Use.

Year Structure was Built	Average Square Feet		
	Percent of Housing Stock <sup>a</sup>	Average Square Feet of New Single Family Homes <sup>b</sup>	Average Square Feet (Weighted)
2014 or Later	1.70%	2,617	44
2010 to 2013	1.50%	2,467	37
2000 to 2009	9.70%	2,404	233
1990 to 1999	10.90%	2,116	231
1980 to 1989	17.90%	1,819	326
1970 to 1979	23.10%	1,699	393
1960 to 1969	19.50%	1,715	334
1950 to 1959	9.40%	1,715	161
1940 to 1949	2.80%	1,715	48
1939 or earlier	3.50%	1,715	60
	100%		1,867

Sources/Notes: <https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/>

a. United States Census Bureau, Selected Housing Characteristics, City of Moorpark, 2020. Table DP04. American Community Survey 5-Year Estimates, Year structure built.

b. United States Census Bureau, Characteristics of New Housing, Characteristics of New Single-Family Houses Completed, Median and Average Square Feet by Location. <https://www.census.gov/construction/chars/pdf/c25ann2016.pdf>

	Existing	Proposed Project	Current GP
Housing Units	11,537	17,025	14,351
Residential SQFT	21,541,431	35,901,698	28,904,731
lbs VOC per day	427	711	572

Notes

<sup>1</sup> New housing units constructed post-2014 assumed to be 2,617 square feet (based on Source b).

## Area Sources

Source: OFFROAD2021. <https://arb.ca.gov/emfac/emissions-inventory/Ventura County Year 2022>

### OFFROAD Estimate based on:

Agricultural Equipment	Based on the percentage of agricultural acreage within the City compared to the County of Ventura (Ventura County 2021)
Construction Equipment	Based on the percentage of housing permits in Moorpark compared to the Ventura County (HUD 2022)
Light Commercial and Industrial Equipment	Based on the percentage of employment in Moorpark compared to Ventura County (US Census 2022)
Lawn & Garden	Based on the percentage of housing units in Moorpark compared to Ventura County (US Census 2022)

Sources

### Farmland Acreage

Source: Ventura County, Recapitulation, Irrigated Cropland. 2021 Crop and Livestock Report. [https://cdn.ventura.org/wp-content/uploads/2022/07/2021-CR\\_1.pdf](https://cdn.ventura.org/wp-content/uploads/2022/07/2021-CR_1.pdf)

Source: Southern California Association of Governments (SCAG), Existing Land Use data, Ventura County geographic information system (GIS), and City of Moorpark GIS.

Existing Farmland acreage	28.8		
Current GP Farmland acreage	15.5		
Proposed GP Farmland Acreage	15.5	54% Current GP Farmland	15.5
Percent Reduction	-46.18%		-46.18%

### Construction (Housing Permits)

Source: Housing and Urban Development (HUD). 2022, Accessed August 5. SOCDS Building Permits Database. <https://socds.huduser.gov/permits/>

### Employment

Source. U.S. Census Bureau. Longitudinal Employer-Household Dynamics. 2021 Q4. <http://lehd.ces.census.gov/>

Existing 2022	ROG Exhaust	NO <sub>x</sub> Exhaust	CO Exhaust	SO <sub>2</sub> Exhaust	PM <sub>10</sub> Exhaust	PM <sub>2.5</sub> Exhaust*	CO <sub>2</sub>
Agricultural	0	1	1	0	0	0	17
Construction Equipment	2	14	37	0	1	1	446
Lawn & Garden	82	10	943	0	1	1	502
Light Commercial / Industrial Equipment	37	47	1,711	0	1	1	1,665
<b>TOTAL</b>	<b>121</b>	<b>71</b>	<b>2,691</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>2,613</b>

Proposed Project 2050	ROG Exhaust	NO <sub>x</sub> Exhaust	CO Exhaust	SO <sub>2</sub> Exhaust	PM <sub>10</sub> Exhaust	PM <sub>2.5</sub> Exhaust*	CO <sub>2</sub>
<b>Forecast Adjusted for:</b>	<b>lbs/day</b>						<b>MT/yr</b>
Agricultural	0.08	0.41	0.46	0.00	0.03	0.02	9.38
Construction Equipment	2	14	37	0	1	1	446
Lawn & Garden	121	15	1,392	0	1	1	740
Light Commercial / Industrial Equipment	58	73	2,682	0	2	1	2,611
<b>TOTAL</b>	<b>181</b>	<b>102</b>	<b>4,111</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>3,798</b>

Current General Plan	ROG Exhaust	NO <sub>x</sub> Exhaust	CO Exhaust	SO <sub>2</sub> Exhaust	PM <sub>10</sub> Exhaust	PM <sub>2.5</sub> Exhaust*	CO <sub>2</sub>
<b>Forecast Adjusted for:</b>	<b>lbs/day</b>						<b>MT/yr</b>
Agricultural	0.08	0.41	0.46	0.00	0.03	0.02	9.38
Construction Equipment	2	14	37	0	1	1	446
Lawn & Garden	102	13	1,173	0	1	1	624
Light Commercial / Industrial Equipment	53	66	2,423	0	2	1	2,359
<b>TOTAL</b>	<b>157</b>	<b>93</b>	<b>3,634</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>3,429</b>



## Ventura County OFFROAD2021

Source: OFFROAD 2021 <https://arb.ca.gov/emfac/emissions-inventory/>

Construction includes: Over 25 horsepower, self-propelled, diesel equipment only subjected to In-Use Regulation; AND Under 25 horsepower equipment not subject to the In-Use Regulation

Model Output: OFFROAD2021 (v1.0.3) Emissions Inventory

Region Type: County

Region: Ventura

Calendar Year: 2022

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2021 Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

### Agriculture

Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bin	Fuel	Fuel Consumption (g/yr)	ROG_tpd	NOx_tpd	CO_tpd	SOx_tpd	PM10_tpd	PM2.5_tpd	CO2_tpd	CO2e_MTY
Ventura	2022	Agricultural - Agricultural Tractors	Aggregate	Aggregate	Gasoline	373.89	0.00	0.00	0.00	0.00	0.00	0.00	0.011537	3.82E+00
Ventura	2022	Agricultural - Agricultural Tractors	Aggregate	Aggregate	Diesel	4511384.36	0.18	1.00	0.85	0.00	0.06	0.06	139.2017	4.61E+04
Ventura	2022	Agricultural - ATVs	Aggregate	Aggregate	Gasoline	148080.25	0.04	0.02	0.41	0.00	0.00	0.00	4.569112	1.51E+03
Ventura	2022	Agricultural - ATVs	Aggregate	Aggregate	Diesel	74396.77	0.00	0.01	0.02	0.00	0.00	0.00	2.295561	7.60E+02
Ventura	2022	Agricultural - ATVs	Aggregate	Aggregate	Electric	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00E+00
Ventura	2022	Agricultural - Bale Wagons (Self Propelled)	Aggregate	Aggregate	Diesel	13593.30	0.00	0.00	0.00	0.00	0.00	0.00	0.41943	1.39E+02
Ventura	2022	Agricultural - Balers (Self Propelled)	Aggregate	Aggregate	Diesel	298.89	0.00	0.00	0.00	0.00	0.00	0.00	0.009223	3.05E+00
Ventura	2022	Agricultural - Combine Harvesters	Aggregate	Aggregate	Diesel	87465.95	0.00	0.02	0.01	0.00	0.00	0.00	2.698819	8.94E+02
Ventura	2022	Agricultural - Construction Equipment	Aggregate	Aggregate	Diesel	125753.82	0.00	0.03	0.02	0.00	0.00	0.00	3.880215	1.28E+03
Ventura	2022	Agricultural - Cotton Pickers	Aggregate	Aggregate	Diesel	3262.36	0.00	0.00	0.00	0.00	0.00	0.00	0.100662	3.33E+01
Ventura	2022	Agricultural - Forage & Silage Harvesters	Aggregate	Aggregate	Diesel	22358.94	0.00	0.01	0.00	0.00	0.00	0.00	0.6899	2.28E+02
Ventura	2022	Agricultural - Forklifts	Aggregate	Aggregate	Diesel	104511.65	0.00	0.03	0.02	0.00	0.00	0.00	3.224775	1.07E+03
Ventura	2022	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	Aggregate	Diesel	10007.18	0.00	0.00	0.00	0.00	0.00	0.00	0.308778	1.02E+02
Ventura	2022	Agricultural - Nut Harvester	Aggregate	Aggregate	Diesel	210536.94	0.01	0.05	0.04	0.00	0.00	0.00	6.496254	2.15E+03
Ventura	2022	Agricultural - Other Harvesters	Aggregate	Aggregate	Diesel	108929.90	0.00	0.02	0.02	0.00	0.00	0.00	3.361103	1.11E+03
Ventura	2022	Agricultural - Sprayers/Spray Rigs	Aggregate	Aggregate	Diesel	379375.90	0.01	0.10	0.07	0.00	0.01	0.01	11.70589	3.88E+03
Ventura	2022	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	Aggregate	Diesel	36975.93	0.00	0.01	0.01	0.00	0.00	0.00	1.140916	3.78E+02
TOTAL AGRICULTURAL OFFROAD						5837306.02	0.26	1.30	1.48	0.00	0.08	0.08	180.11	5.96E+04
ESTIMATED Moorpark (g/yr; tpd; MTY)						1705.90	0.00	0.00	0.00	0.00	0.00	0.00	0.05	17
ESTIMATED Moorpark (lbs/day)						3411793.4	0	1	0.863	0.0	0.0	0	105	

AGRICULTURAL ACREAGE: <a href="https://cdn.ventura.org/wp-content/uploads/2022/07/2021-CR_">https://cdn.ventura.org/wp-content/uploads/2022/07/2021-CR_</a>		2021
Farmland Acreage in Ventura County		98,549
Farmland Acreage in Moorpark		29
Percent in the City		0.03%

## Ventura County OFFROAD2021

Source: OFFROAD 2021 <https://arb.ca.gov/emfac/emissions-inventory/>

Construction includes: Over 25 horsepower, self-propelled, diesel equipment only subjected to In-Use Regulation; AND Under 25 horsepower equipment not subject to the In-Use Regulation

Model Output: OFFROAD2021 (v1.0.3) Emissions Inventory

Region Type: County

Region: Ventura

Calendar Year: 2022

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2021 Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

### Construction and Mining

Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bin	Fuel	Fuel Consumption (g/yr)	ROG_tpd	NOx_tpd	CO_tpd	SOx_tpd	PM10_tpd	PM2.5_tpd	CO2_tpd	CO2e_MTY
Ventura	2022	Construction and Mining - Bore/Drill Rigs	Aggregate	Aggregate	Diesel	61468.21134	0.00047	0.005347	0.005552	1.75E-05	0.000188	0.000173	1.8946	6.27E+02
Ventura	2022	Construction and Mining - Cranes	Aggregate	Aggregate	Diesel	145504.5418	0.002817	0.029933	0.019987	4.14E-05	0.00138	0.001269	4.484804	1.49E+03
Ventura	2022	Construction and Mining - Crawler Tractors	Aggregate	Aggregate	Diesel	359345.3582	0.006819	0.070483	0.046005	0.000102	0.003502	0.003222	11.0759	3.67E+03
Ventura	2022	Construction and Mining - Excavators	Aggregate	Aggregate	Diesel	646881.0042	0.006652	0.058836	0.069409	0.000184	0.002348	0.00216	19.93845	6.60E+03
Ventura	2022	Construction and Mining - Graders	Aggregate	Aggregate	Diesel	243148.6614	0.005182	0.05549	0.028969	6.92E-05	0.002341	0.002154	7.494434	2.48E+03
Ventura	2022	Construction and Mining - Misc - Asphalt Pavers	Aggregate	Aggregate	Gasoline	4116.934135	0.000652	0.000546	0.024958	1.03E-06	0.000221	0.000167	0.067794	2.24E+01
Ventura	2022	Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	Aggregate	Gasoline	2717.7437	0.000182	0.000249	0.007005	6.73E-07	6.40E-05	4.84E-05	0.059976	1.99E+01
Ventura	2022	Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	Aggregate	Diesel	16.7897392	5.41E-05	0.000342	0.000199	4.90E-09	1.16E-05	8.74E-06	7.94E-07	2.63E-04
Ventura	2022	Construction and Mining - Misc - Cement And Mortar M	Aggregate	Aggregate	Gasoline	14161.8404	0.007717	0.004485	0.224655	3.67E-06	0.00199	0.001503	8.26E-06	2.74E-03
Ventura	2022	Construction and Mining - Misc - Cement And Mortar M	Aggregate	Aggregate	Diesel	24.68510328	6.66E-05	0.000417	0.000323	7.20E-09	1.47E-05	1.11E-05	9.95E-07	3.29E-04
Ventura	2022	Construction and Mining - Misc - Concrete/Industrial Sa	Aggregate	Aggregate	Gasoline	18665.58564	0.006079	0.004264	0.201675	4.82E-06	0.002269	0.001714	0.160079	5.30E+01
Ventura	2022	Construction and Mining - Misc - Concrete/Industrial Sa	Aggregate	Aggregate	Diesel	951.758786	3.69E-05	0.000258	0.000256	3.73E-07	1.00E-05	8.88E-06	0.028766	9.52E+00
Ventura	2022	Construction and Mining - Misc - Cranes	Aggregate	Aggregate	Gasoline	2244.75	6.93E-05	0.000172	0.003639	5.41E-07	3.71E-06	2.81E-06	0.053315	1.77E+01
Ventura	2022	Construction and Mining - Misc - Crushing/Proc. Equipm	Aggregate	Aggregate	Gasoline	95.74776024	4.42E-05	2.96E-05	0.001536	2.44E-08	1.82E-05	1.38E-05	5.63E-08	1.86E-05
Ventura	2022	Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Gasoline	1486.564412	0.000811	0.000516	0.02125	3.81E-07	0.000221	0.000167	0.003467	1.15E+00
Ventura	2022	Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Diesel	1.983450727	6.68E-06	4.22E-05	2.28E-05	5.79E-10	1.42E-06	1.08E-06	9.74E-08	3.22E-05
Ventura	2022	Construction and Mining - Misc - Excavators	Aggregate	Aggregate	Diesel	14.18688483	4.77E-05	0.000302	0.000163	4.14E-09	1.01E-05	7.67E-06	6.96E-07	2.31E-04
Ventura	2022	Construction and Mining - Misc - Other	Aggregate	Aggregate	Gasoline	3412.75	3.15E-05	0.000111	0.002948	8.50E-07	6.14E-06	4.64E-06	0.085587	2.83E+01
Ventura	2022	Construction and Mining - Misc - Other	Aggregate	Aggregate	Diesel	52.66549557	0.000141	0.000883	0.000693	1.54E-08	3.08E-05	2.33E-05	2.12E-06	7.00E-04
Ventura	2022	Construction and Mining - Misc - Pavers	Aggregate	Aggregate	Diesel	3.73673691	1.26E-05	7.95E-05	4.29E-05	1.09E-09	2.70E-06	2.04E-06	1.83E-07	6.07E-05
Ventura	2022	Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Gasoline	26554.87592	0.012909	0.008547	0.385248	6.84E-06	0.003913	0.002957	0.0611	2.02E+01
Ventura	2022	Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Diesel	6.344989195	2.14E-05	0.000135	7.29E-05	1.85E-09	4.54E-06	3.43E-06	3.11E-07	1.03E-04
Ventura	2022	Construction and Mining - Misc - Plate Compactors	Aggregate	Aggregate	Gasoline	9523.067302	0.005343	0.003301	0.15073	2.45E-06	0.001323	0.001	5.64E-06	1.87E-03
Ventura	2022	Construction and Mining - Misc - Plate Compactors	Aggregate	Aggregate	Diesel	17.73882082	4.54E-05	0.000284	0.000238	5.18E-09	1.00E-05	7.56E-06	6.87E-07	2.27E-04
Ventura	2022	Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Gasoline	13560.45967	0.002856	0.002359	0.100513	3.28E-06	0.000958	0.000724	0.192447	6.37E+01
Ventura	2022	Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Diesel	108.7869152	0.000314	0.001977	0.001375	3.17E-08	6.81E-05	5.14E-05	4.67E-06	1.55E-03
Ventura	2022	Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	Aggregate	Gasoline	15841	0.000437	0.001236	0.019641	3.77E-06	2.69E-05	2.04E-05	0.385903	1.28E+02
Ventura	2022	Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Gasoline	8387.7	0.00025	0.00063	0.012614	1.98E-06	1.40E-05	1.06E-05	0.200811	6.65E+01
Ventura	2022	Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Diesel	2.431228594	8.18E-06	5.17E-05	2.79E-05	7.09E-10	1.74E-06	1.31E-06	1.19E-07	3.95E-05
Ventura	2022	Construction and Mining - Misc - Signal Boards	Aggregate	Aggregate	Gasoline	269.9235382	0.000129	9.07E-05	0.004322	6.89E-08	5.09E-05	3.85E-05	1.63E-07	5.41E-05
Ventura	2022	Construction and Mining - Misc - Signal Boards	Aggregate	Aggregate	Diesel	700.6650147	0.000722	0.004533	0.003821	2.45E-07	0.00016	0.000121	0.012726	4.21E+00
Ventura	2022	Construction and Mining - Misc - Skid Steer Loaders	Aggregate	Aggregate	Gasoline	30237.02847	0.004373	0.003313	0.149936	7.80E-06	0.001425	0.001077	0.551165	1.83E+02
Ventura	2022	Construction and Mining - Misc - Skid Steer Loaders	Aggregate	Aggregate	Diesel	739.8384969	0.002495	0.015755	0.008485	2.16E-07	0.000544	0.000411	3.62E-05	1.20E-02
Ventura	2022	Construction and Mining - Misc - Surfacing Equipment	Aggregate	Aggregate	Gasoline	11571.47292	0.006973	0.00481	0.182094	2.96E-06	0.002061	0.001557	6.85E-06	2.27E-03
Ventura	2022	Construction and Mining - Misc - Tampers/Rammers	Aggregate	Aggregate	Gasoline	1508.057262	0.000633	0.000479	0.024338	3.92E-07	0.000345	0.000261	1.07E-06	3.53E-04
Ventura	2022	Construction and Mining - Misc - Tractors/Loaders/Back	Aggregate	Aggregate	Gasoline	5383.75	0.000103	0.000282	0.007805	1.25E-06	9.04E-06	6.83E-06	0.129715	4.30E+01
Ventura	2022	Construction and Mining - Misc - Tractors/Loaders/Back	Aggregate	Aggregate	Diesel	67.78358693	0.000228	0.001442	0.000779	1.98E-08	4.85E-05	3.36E-05	3.33E-06	1.10E-03
Ventura	2022	Construction and Mining - Misc - Trenchers	Aggregate	Aggregate	Gasoline	25217.58051	0.005267	0.004233	0.189674	6.33E-06	0.001808	0.001366	0.353372	1.17E+02

**Ventura County OFFROAD2021**

Source: OFFROAD 2021 <https://arb.ca.gov/emfac/emissions-inventory/>

Construction includes: Over 25 horsepower, self-propelled, diesel equipment only subjected to In-Use Regulation; AND Under 25 horsepower equipment not subject to the In-Use Regulation

Model Output: OFFROAD2021 (v1.0.3) Emissions Inventory

Region Type: County

Region: Ventura

Calendar Year: 2022

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2021 Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Ventura	2022	Construction and Mining - Misc - Trenchers	Aggregate	Aggregate	Diesel	91.1737326	0.000286	0.001806	0.001097	2.66E-08	6.14E-05	4.64E-05	4.21E-06	1.39E-03
Ventura	2022	Construction and Mining - Off-Highway Tractors	Aggregate	Aggregate	Diesel	136946.2864	0.002139	0.017006	0.018247	3.90E-05	0.000861	0.000792	4.221018	1.40E+03
Ventura	2022	Construction and Mining - Off-Highway Trucks	Aggregate	Aggregate	Diesel	821989.6505	0.010315	0.104332	0.06893	0.000234	0.003241	0.002982	25.33572	8.39E+03
Ventura	2022	Construction and Mining - Other	Aggregate	Aggregate	Diesel	183481.58	0.002919	0.028161	0.022021	5.22E-05	0.001394	0.001282	5.655349	1.87E+03
Ventura	2022	Construction and Mining - Pavers	Aggregate	Aggregate	Diesel	43149.81235	0.000636	0.006308	0.006284	1.23E-05	0.00033	0.000303	1.329982	4.40E+02
Ventura	2022	Construction and Mining - Paving Equipment	Aggregate	Aggregate	Diesel	25113.07618	0.000346	0.003465	0.003506	7.15E-06	0.00016	0.000148	0.774046	2.56E+02
Ventura	2022	Construction and Mining - Rollers	Aggregate	Aggregate	Diesel	111915.8783	0.00212	0.017666	0.020854	3.18E-05	0.000959	0.000882	3.44952	1.14E+03
Ventura	2022	Construction and Mining - Rough Terrain Forklifts	Aggregate	Aggregate	Diesel	121553.244	0.001114	0.014128	0.022298	3.46E-05	0.000499	0.000459	3.746567	1.24E+03
Ventura	2022	Construction and Mining - Rubber Tired Dozers	Aggregate	Aggregate	Diesel	71780.13833	0.002121	0.021029	0.015392	2.04E-05	0.001031	0.000948	2.212439	7.33E+02
Ventura	2022	Construction and Mining - Rubber Tired Loaders	Aggregate	Aggregate	Diesel	988692.8418	0.015338	0.143235	0.112541	0.000281	0.006243	0.005743	30.47392	1.01E+04
Ventura	2022	Construction and Mining - Scrapers	Aggregate	Aggregate	Diesel	643357.2603	0.010224	0.111565	0.076269	0.000183	0.004488	0.004129	19.82984	6.57E+03
Ventura	2022	Construction and Mining - Skid Steer Loaders	Aggregate	Aggregate	Diesel	117788.0329	0.001302	0.015967	0.022332	3.35E-05	0.00057	0.000524	3.630514	1.20E+03
Ventura	2022	Construction and Mining - Surfacing Equipment	Aggregate	Aggregate	Diesel	13501.68867	0.000124	0.001549	0.001142	3.84E-06	5.92E-05	5.44E-05	0.416155	1.38E+02
Ventura	2022	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	Aggregate	Diesel	899903.779	0.013158	0.128228	0.159939	0.000256	0.006418	0.005904	27.73723	9.18E+03
Ventura	2022	Construction and Mining - Trenchers	Aggregate	Aggregate	Diesel	37156.10967	0.000989	0.007827	0.006803	1.06E-05	0.000474	0.000437	1.145242	3.79E+02
TOTAL CONSTRUCTION OFFROAD						5.87E+06	1.44E-01	9.09E-01	2.46E+00	1.66E-03	5.42E-02	4.69E-02	1.77E+02	5.87E+04
ESTIMATED Moorpark (g/yr; tpd; MTY)						44,625	1.10E-03	6.91E-03	1.87E-02	1.27E-05	4.12E-04	3.57E-04	1.35E+00	446
ESTIMATED Moorpark (lbs/day)							2	14	37	0	1	1		

TOTAL HOUSING PERMITS: <a href="https://socs.huduser.gov/permits/">https://socs.huduser.gov/permits/</a>						
	2017	2018	2019	2020	2021	Average
Ventura County	2,565	1,204	1,146	1,501	1,477	1,579
Moorpark	63	28	4	4	17	12
Percent in the City	2.5%	2.3%	0.3%	0.3%	1.2%	0.8%

## Ventura County OFFROAD2021

Source: OFFROAD 2021 <https://arb.ca.gov/emfac/emissions-inventory/>

Construction includes: Over 25 horsepower, self-propelled, diesel equipment only subjected to In-Use Regulation; AND Under 25 horsepower equipment not subject to the In-Use Regulation

Model Output: OFFROAD2021 (v1.0.3) Emissions Inventory

Region Type: County

Region: Ventura

Calendar Year: 2022

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2021 Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Lawn and Garden														
Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bin	Fuel	Fuel Consumption (g/yr)	ROG_tpd	NOx_tpd	CO_tpd	SOx_tpd	PM10_tpd	PM2.5_tpd	CO2_tpd	CO2e_MTY
Ventura	2022	Lawn and Garden - Misc - Chainsaws	Aggregate	Aggregate	Gasoline	163808.7944	0.183723	0.005988	0.546152	4.19E-05	0.002303	0.00174	2.898865	9.60E+02
Ventura	2022	Lawn and Garden - Misc - Chainsaws	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	Aggregate	Gasoline	96748.17545	0.165242	0.005757	0.2941	2.47E-05	0.00124	0.000938	1.560925	5.17E+02
Ventura	2022	Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	Aggregate	Gasoline	1789.165322	0.000267	9.27E-05	0.01251	4.63E-07	6.34E-07	4.80E-07	0.027397	9.07E+00
Ventura	2022	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	Aggregate	Diesel	101.2599614	3.73E-06	2.36E-05	1.27E-05	2.95E-08	7.92E-07	5.99E-07	0.00309	1.02E+00
Ventura	2022	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Lawn and Garden - Misc - Lawn Mowers	Aggregate	Aggregate	Gasoline	398707.9502	0.053988	0.030804	2.474646	0.000107	0.000876	0.000661	6.614525	2.19E+03
Ventura	2022	Lawn and Garden - Misc - Lawn Mowers	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	Aggregate	Gasoline	426055.8404	0.310111	0.01076	1.564196	0.000108	0.004544	0.003436	7.89355	2.61E+03
Ventura	2022	Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Lawn and Garden - Misc - Other	Aggregate	Aggregate	Gasoline	8662.315114	0.001032	0.000411	0.05863	2.24E-06	3.35E-06	2.53E-06	0.13645	4.52E+01
Ventura	2022	Lawn and Garden - Misc - Other	Aggregate	Aggregate	Diesel	50.83695835	1.64E-06	1.14E-05	9.06E-06	1.48E-08	3.97E-07	3.00E-07	0.00155	5.13E-01
Ventura	2022	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	Aggregate	Gasoline	701712.4163	0.097626	0.048219	5.139476	0.000179	0.000495	0.000374	10.4001	3.44E+03
Ventura	2022	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	Aggregate	Diesel	40782.71599	0.001442	0.009367	0.005812	1.19E-05	0.000319	0.000241	1.243691	4.12E+02
Ventura	2022	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Lawn and Garden - Misc - Snowblowers	Aggregate	Aggregate	Gasoline	1218.000764	0.000145	6.81E-05	0.0095	3.27E-07	4.87E-07	3.68E-07	0.017228	5.70E+00
Ventura	2022	Lawn and Garden - Misc - Snowblowers	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Lawn and Garden - Misc - Tillers	Aggregate	Aggregate	Gasoline	7916.58635	0.00248	0.000391	0.046943	2.12E-06	5.53E-06	4.19E-06	0.129811	4.30E+01
Ventura	2022	Lawn and Garden - Misc - Tillers	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutte	Aggregate	Aggregate	Gasoline	317756.3144	0.197242	0.011991	1.201005	8.12E-05	0.001723	0.001302	5.950738	1.97E+03
Ventura	2022	Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutte	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Lawn and Garden - Misc - Wood Splitters	Aggregate	Aggregate	Gasoline	71726.35538	0.011011	0.004894	0.476801	1.86E-05	5.51E-05	4.17E-05	1.135903	3.76E+02
TOTAL LAWN & GARDEN						2.24E+06	1.02E+00	1.29E-01	1.18E+01	5.78E-04	1.16E-02	8.74E-03	3.80E+01	1.26E+04
ESTIMATED Moorpark						89,172	0	0	0	0	0	0	2	502
ESTIMATED Moorpark (lbs/day)							82	10	943	0	1	1	3,031	

HOUSING UNITS <a href="https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/">https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/</a>	Existing
Housing Units in Ventura County (2020)	289,425
Housing Units in Moorpark	11,537
Percent in the City	4.0%

**Ventura County OFFROAD2021**

Source: OFFROAD 2021 <https://arb.ca.gov/emfac/emissions-inventory/>

Construction includes: Over 25 horsepower, self-propelled, diesel equipment only subjected to In-Use Regulation; AND Under 25 horsepower equipment not subject to the In-Use Regulation

Model Output: OFFROAD2021 (v1.0.3) Emissions Inventory

Region Type: County

Region: Ventura

Calendar Year: 2022

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2021 Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Light Commercial and Industrial														
Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bin	Fuel	Fuel Consumption (g/yr)	ROG_tpd	NOx_tpd	CO_tpd	SOx_tpd	PM10_tpd	PM2.5_tpd	CO2_tpd	CO2e_MTY
Ventura	2022	Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Gasoline	656262.1325	0.07607	0.046256	4.537608	0.000167	0.000261	0.000282	10.17475	3.37E+03
Ventura	2022	Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Diesel	18155.96979	0.000685	0.003998	0.004592	6.84E-06	0.000183	0.000173	0.542505	1.80E+02
Ventura	2022	Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Light Commercial - Misc - Gas Compressors	Aggregate	Aggregate	Nat Gas	227143.15	0	0.012969	0.151814	0	0	0	4.136476	1.37E+03
Ventura	2022	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Gasoline	1079292.037	0.235645	0.086719	6.783245	0.00028	0.000639	0.000739	17.41843	5.77E+03
Ventura	2022	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Diesel	89089.87918	0.002763	0.019627	0.016192	3.03E-05	0.000687	0.000758	2.691936	8.91E+02
Ventura	2022	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Nat Gas	7292.7	0	0.000464	0.003791	0	0	0	0.13492	4.47E+01
Ventura	2022	Light Commercial - Misc - Pressure Washers	Aggregate	Aggregate	Gasoline	461806.5887	0.057916	0.024804	3.371131	0.000118	0.000101	0.000134	6.88386	2.28E+03
Ventura	2022	Light Commercial - Misc - Pressure Washers	Aggregate	Aggregate	Diesel	460.6323319	1.25E-05	0.000101	8.09E-05	1.56E-07	3.23E-06	3.68E-06	0.014013	4.64E+00
Ventura	2022	Light Commercial - Misc - Pressure Washers	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Light Commercial - Misc - Pumps	Aggregate	Aggregate	Gasoline	142831.1224	0.015575	0.008078	0.681525	3.64E-05	0.000116	0.000104	2.68453	8.89E+02
Ventura	2022	Light Commercial - Misc - Pumps	Aggregate	Aggregate	Diesel	49041.47332	0.001633	0.010814	0.009421	1.68E-05	0.000395	0.000429	1.479886	4.90E+02
Ventura	2022	Light Commercial - Misc - Pumps	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Light Commercial - Misc - Welders	Aggregate	Aggregate	Gasoline	292247.0897	0.036362	0.018395	1.942529	7.46E-05	0.000193	0.000199	4.633146	1.53E+03
Ventura	2022	Light Commercial - Misc - Welders	Aggregate	Aggregate	Diesel	95436.58289	0.003438	0.020917	0.021804	3.50E-05	0.000901	0.000886	2.861645	9.48E+02
Ventura	2022	Light Commercial - Misc - Welders	Aggregate	Aggregate	Electric	0	0	0	0	0	0	0	0	0.00E+00
Ventura	2022	Industrial - Aerial Lifts	Aggregate	Aggregate	Diesel	69496.71769	0.00048	0.007842	0.012264	1.98E-05	0.00011	0.000101	2.142058	7.09E+02
Ventura	2022	Industrial - Forklifts	Aggregate	Aggregate	Diesel	292609.2235	0.006121	0.053605	0.059721	8.32E-05	0.003358	0.00309	9.018929	2.99E+03
Ventura	2022	Industrial - Misc - Aerial Lifts	Aggregate	Aggregate	Gasoline	28393.23652	0.002414	0.002158	0.086401	7.22E-06	0.000652	0.000492	0.607468	2.01E+02
Ventura	2022	Industrial - Misc - Aerial Lifts	Aggregate	Aggregate	Diesel	43.19473776	0.000131	0.000828	0.000531	1.26E-08	2.95E-05	2.23E-05	1.93E-06	6.38E-04
Ventura	2022	Industrial - Misc - Aerial Lifts	Aggregate	Aggregate	Electric	478.083953	3.08E-05	0.000239	0.008705	1.86E-08	2.34E-05	1.77E-05	7.66E-07	2.54E-04
Ventura	2022	Industrial - Misc - Forklifts	Aggregate	Aggregate	Gasoline	892120.9569	0.019825	0.08902	2.199296	0.000201	0.001398	0.001056	20.04091	6.64E+03
Ventura	2022	Industrial - Misc - Forklifts	Aggregate	Aggregate	Electric	52.66928688	5.71E-06	2.53E-05	0.000908	2.05E-09	2.80E-06	2.12E-06	7.02E-08	2.33E-05
Ventura	2022	Industrial - Misc - Forklifts	Aggregate	Aggregate	Nat Gas	1769290.05	0	0.139797	1.295209	0	0.002848	0	32.02477	1.06E+04
Ventura	2022	Industrial - Misc - Other General Industrial Equipment	Aggregate	Aggregate	Gasoline	15426.79884	0.00103	0.001309	0.081928	3.88E-06	2.19E-05	1.65E-05	0.276481	9.15E+01
Ventura	2022	Industrial - Misc - Other General Industrial Equipment	Aggregate	Aggregate	Diesel	33.21429418	0.000101	0.000655	0.000408	9.69E-09	2.23E-05	1.69E-05	1.53E-06	5.07E-04
Ventura	2022	Industrial - Misc - Other Material Handling Equipment	Aggregate	Aggregate	Gasoline	6664.9	0.000156	0.000708	0.007944	1.59E-06	1.14E-05	8.62E-06	0.163655	5.42E+01
Ventura	2022	Industrial - Misc - Sweepers/Scrubbers	Aggregate	Aggregate	Gasoline	50734.79263	0.001373	0.003654	0.11713	1.29E-05	8.13E-05	6.14E-05	1.152793	3.82E+02
Ventura	2022	Industrial - Misc - Sweepers/Scrubbers	Aggregate	Aggregate	Diesel	8.972938385	2.57E-05	0.00017	0.000114	2.62E-09	5.83E-06	4.40E-06	4.00E-07	1.32E-04
Ventura	2022	Industrial - Other General Industrial Equipment	Aggregate	Aggregate	Diesel	141321.8594	0.002684	0.02029	0.022516	4.02E-05	0.001044	0.000961	4.355884	1.44E+03
Ventura	2022	Industrial - Other Material Handling Equipment	Aggregate	Aggregate	Diesel	82857.35446	0.00117	0.01087	0.010431	2.36E-05	0.000472	0.000435	2.553866	8.46E+02
TOTAL LIGHT COMMERCIAL + INDUSTRIAL OFFROAD						6.47E+06	4.66E-01	5.84E-01	2.14E+01	1.16E-03	1.36E-02	9.99E-03	1.26E+02	4.17E+04
ESTIMATED Moorpark						2.58E+05	1.86E-02	2.33E-02	8.55E-01	4.62E-05	5.41E-04	3.99E-04	5.03E+00	1,665
ESTIMATED Moorpark (lbs/day)							37	47	1,711	0	1	1	10,059	

EMPLOYMENT: <a href="http://lehd.ces.census.gov/">http://lehd.ces.census.gov/</a>		2021
Employment in Ventura County (Q4)		323,522
Employment in Moorpark		12,915
Percent in the City		3.99%

## Solid Waste Disposal

Source: CalRecycle Recycling and Disposal Reporting System Report (Overall Jurisdiction Tons For Disposal and Disposal Related Uses)

### Waste Generated Within Moorpark

Year	Quarter	Landfill
2021	1	6,411
2021	2	7,426
2021	3	7,001
2021	4	7,077
Total 2021		27,914

### Service Population in Moorpark

Existing 2022	Proposed GP 2050	% Increase
49,360	74,030	50%
Current GP	62,252	26%

Percent of Disposal	2021
Simi Valley Landfill and Recycling Center	96%

Notes:

Source: CalRecycle. 2022, August (accessed). RDRS Report 1: Overall Jurisdiction Tons for Disposal and Disposal Related Uses.  
<https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/OverallJurisdictionTonsForDisposal>.  
<https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/JurisdictionDisposalAndBeneficial>

**Landfill Emission Tool (version 1.09.24.2021) CH<sub>4</sub> Model Results.**

Based on the Simi Valley Landfill and Recycling Center K-Factor

	EXISTING		Proposed Project		Current GP	
	CH <sub>4</sub> Tons	MTCO <sub>2</sub> e w/LFG Capture	CH <sub>4</sub> Tons	MTCO <sub>2</sub> e w/LFG Capture	CH <sub>4</sub> Tons	MTCO <sub>2</sub> e w/LFG Capture
		2022 TOTAL		2050 TOTAL		2050 TOTAL
Year 1	76	482	114	722	96	607
Year 2	526	3,343	789	5,014	664	4,216
<b>Year 3 (PEAK)</b>	<b>591</b>	<b>3,752</b>	<b>886</b>	<b>5,627</b>	<b>745</b>	<b>4,732</b>
Year 4	579	3,678	869	5,516	730	4,638
Year 5	568	3,605	851	5,406	716	4,546
Year 6	556	3,533	835	5,299	702	4,456
Year 7	545	3,463	818	5,194	688	4,368
Year 8	535	3,395	802	5,092	674	4,282
Year 9	524	3,328	786	4,991	661	4,197
Year 10	514	3,262	770	4,892	648	4,114
Year 11	503	3,197	755	4,795	635	4,032
Year 12	493	3,134	740	4,700	622	3,952
Year 13	484	3,072	725	4,607	610	3,874
Year 14	474	3,011	711	4,516	598	3,797
Year 15	465	2,951	697	4,426	586	3,722
Year 16	456	2,893	683	4,339	575	3,648
Year 17	447	2,836	670	4,253	563	3,576
Year 18	438	2,779	656	4,169	552	3,505
Year 19	429	2,724	643	4,086	541	3,436
Year 20	421	2,670	631	4,005	530	3,368
Year 21	412	2,618	618	3,926	520	3,301
Year 22	404	2,566	606	3,848	510	3,236
Year 23	396	2,515	594	3,772	499	3,172
Year 24	388	2,465	582	3,697	490	3,109
Year 25	381	2,416	571	3,624	480	3,047
Year 26	373	2,369	559	3,552	470	2,987
Year 27	366	2,322	548	3,482	461	2,928
Year 28	358	2,276	537	3,413	452	2,870
Year 29	351	2,231	527	3,345	443	2,813
Year 30	344	2,186	516	3,279	434	2,757
Year 31	337	2,143	506	3,214	426	2,703
Year 32	331	2,101	496	3,151	417	2,649
Year 33	324	2,059	486	3,088	409	2,597
Year 34	318	2,018	477	3,027	401	2,545
Year 35	312	1,978	467	2,967	393	2,495
Year 36	305	1,939	458	2,908	385	2,446
Year 37	299	1,901	449	2,851	377	2,397
Year 38	293	1,863	440	2,794	370	2,350
Year 39	288	1,826	431	2,739	363	2,303
Year 40	282	1,790	423	2,685	356	2,258
Year 41	276	1,755	414	2,632	348	2,213
Year 42	271	1,720	406	2,579	342	2,169
Year 43	265	1,686	398	2,528	335	2,126
Year 44	260	1,652	390	2,478	328	2,084
Year 45	255	1,620	383	2,429	322	2,043
Year 46	250	1,588	375	2,381	315	2,002
Year 47	245	1,556	368	2,334	309	1,963
Year 48	240	1,525	360	2,288	303	1,924
Year 49	235	1,495	353	2,242	297	1,886
Year 50	231	1,466	346	2,198	291	1,848
Year 51	226	1,437	339	2,155	285	1,812
Year 52	222	1,408	333	2,112	280	1,776
Year 53	217	1,380	326	2,070	274	1,741
Year 54	213	1,353	320	2,029	269	1,706
Year 55	209	1,326	313	1,989	263	1,672
Year 56	205	1,300	307	1,950	258	1,639
Year 57	201	1,274	301	1,911	253	1,607
Year 58	197	1,249	295	1,873	248	1,575
Year 59	193	1,224	289	1,836	243	1,544
Year 60	189	1,200	283	1,800	238	1,513
<b>60 YR Avg (Average Annual)</b>	<b>351</b>	<b>2,232</b>	<b>527</b>	<b>3,347</b>	<b>443</b>	<b>2,815</b>

Waste, Landfill Emissions Tool Version 1.09.24.2021, and data from CalRecycle. Biogenic CO<sub>2</sub> emissions are not included.

Notes:

LFG capture Efficiency	0.75	AR5 CH <sub>4</sub> GWP	28	Tons to metric Tons	0.90718
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- <sup>1</sup> Waste generation based on three year average waste commitment for Moorpark obtained from CalRecycle.
- <sup>2</sup> Significant CH<sub>4</sub> production typically begins one or two years after waste disposal in a landfill and continues for 10 to 60 years or longer. Consequently, the highest CH<sub>4</sub> emissions from waste disposal in a given year are reported.
- <sup>3</sup> Decomposition based on an average annual rainfall of 18 inches per year average (anaerobic decomposition factor (k) of 0.02) for the Simi Valley Landfill and Recycling Center.
- <sup>4</sup> The Landfill Gas Estimator only includes the landfill gas (LFG) capture in the landfill gas heat output and therefore the reduction and emissions from landfill gas capture are calculated separately. Assumes 75 percent of fugitive GHG emissions are captured within the landfill's Landfill Gas Capture System with a landfill gas capture efficiency of 75 percent. The Landfill gas capture efficiency is based on the California Air Resources Board's (CARB) Local Government Operations Protocol (LGOP), Version 1.3.



## Refrigerants

Refrigerants	MTCO <sub>2</sub> e		
<b>2019 Statewide Refrigerant Use (AR4)</b>	MTCO <sub>2</sub> e		18,618,116
<b>US Census 2020 California Population</b>	People		39,346,023
	MT/person		0.47

	Existing	Proposed Project	Current GP
<b>Population</b>	36,445	53,781	45,335
<b>MTCO<sub>2</sub>e</b>	17,245	25,449	21,452

Source: CARB. Greenhouse Gas Emissions Inventory Query Tool for years 2000 to 2019 (14th Edition) - Query Results. Main Activity: Use of substitutes for ozone depleting substances Activity Subset: Refrigeration and Air Conditioning. AR 4.  
<https://ww2.arb.ca.gov/applications/greenhouse-gas-emission-inventory-0>

## City of Moorpark VMT

Source: Iteris 2022. Based on the Ventura County Transportation Model (VCTM)

	Daily VMT			Total Daily VMT	Total with RTAC		Service Population	VMT/SP	VMT/SP w RTAC
	IX	XI	II			%			
Existing (Year 2022)	415,853	401,949	63,885	881,687	472,786	100%	49,360	17.9	9.6
Passenger Vehicles	384,407	368,663	63,011	816,082	439,547	93%			
Light-Heavy Duty Trucks (LHDT)	6,381	8,037	327	14,745	7,536	2%			
Medium Heavy Duty Trucks (MHDT)	4,440	5,127	397	9,964	5,181	1%			
Heavy-Heavy Duty Trucks (HHDT)	20,625	20,122	150	40,897	20,523	4%			
Current GP (Year 2050)	462,080	450,197	76,096	988,373	532,234	100%	62,252	15.9	8.5
Passenger Vehicles	421,146	407,271	75,325	903,742	489,534	92%			
Light-Heavy Duty Trucks (LHDT)	11,840	14,695	281	26,815	13,548	3%			
Medium Heavy Duty Trucks (MHDT)	5,024	5,725	364	11,113	5,738	1%			
Heavy-Heavy Duty Trucks (HHDT)	24,070	22,506	126	46,702	23,414	4%			
GP Update (Year 2050)	509,595	494,180	100,597	1,104,372	602,485	100%	74,030	14.9	8.1
Passenger Vehicles	472,185	456,559	99,793	1,028,537	564,165	94%			
Light-Heavy Duty Trucks (LHDT)	8,366	9,492	312	18,171	9,241	2%			
Medium Heavy Duty Trucks (MHDT)	5,000	5,689	366	11,055	5,710	1%			
Heavy-Heavy Duty Trucks (HHDT)	24,044	22,439	126	46,610	23,368	4%			

Notes: Total may not add to 100% due to rounding.

IX = Internal-External

XI = External- Internal

II = Internal-Internal

Modeling of vehicle miles traveled (VMT) provided by Iteris is based on Ventura County Transportation Model (VCTM). VMT from passenger vehicles and trucks that have an origin or destination in the City using a transportation origin-destination methodology. Accounting of VMT is based on the recommendations of CARB's Regional Targets Advisory Committee (RTAC) created under Senate Bill 375 (SB 375). For accounting purposes, there are three types of trips:

- » Vehicle trips that originated and terminated within the City (Internal-Internal, I-I). Using the accounting rules established by RTAC, 100 percent of the length of these trips, and their emissions, are attributed to the City.
- » Vehicle trips that either originated or terminated (but not both) within the City (Internal-External or External-Internal, I-X and X-I). Using the accounting rules established by RTAC, 50 percent of the trip length for these trips is attributed to the City.
- » Vehicle trips that neither originated nor terminated within the City. These trips are commonly called pass-through trips (External-External, X-X). Using the accounting rules established by RTAC, these trips are not counted towards the City's VMT or emissions.

## Moorpark — TRANSPORTATION SECTOR

Source: EMFAC2022 V 1.0.3, Web Database - Emissions Rates. Orange County (South Coast AQMD) Sub Area. Based on the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) Global Warming Potentials (GWPs)

Note: MTons = metric tons; CO<sub>2</sub>e = carbon dioxide-equivalent.

<b>Criteria Air Pollutant Emissions</b>						
	<b>lbs/day</b>					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM10</b>	<b>PM2.5</b>
Existing (2022)	25	222	1,046	4	25	10
Existing (2050)	6	59	440	3	23	8
Proposed General Plan (2050)	8	69	568	3	28	9
<b>Change from Existing Land Uses (2050)</b>	<b>2</b>	<b>10</b>	<b>128</b>	<b>1</b>	<b>5</b>	<b>2</b>
Change from Existing Conditions (2022)	-17	-153	-478	-1	2	0
Current General Plan (2050)	7	66	495	3	26	9
Change from Current General Plan	1	3	72	0	2	1

<b>GHG EMISSIONS</b>				
	<b>MTons/year</b>			
	<b>CO<sub>2</sub></b>	<b>CH<sub>4</sub></b>	<b>N<sub>2</sub>O</b>	<b>CO<sub>2</sub>e</b>
Existing (2022)	64,050	1	3	64,925
Proposed General Plan (2050)	53,334	0	2	53,868
<b>Change from Existing</b>	<b>-10,716</b>	<b>-1</b>	<b>-1</b>	<b>-11,056</b>
Current General Plan (2050)	47,905	0	2	48,426
Change from Current General Plan	5,428	0	0	5,442

Note: MTons = metric tons; CO<sub>2</sub>e = carbon dioxide-equivalent.

**Year 2022 Existing: Criteria Air Pollutants**

Source: EMFAC2021 Version 1.0.2 web database, Emission Rates, Ventura County

Passenger Vehicles	LHDT	MHDT	HHDT
	92.12%	4.26%	1.41%
	Cell G7	Cell G8	Cell G9
			Cell G10

Daily VMT		472,786				lbs/day				
Vehicle Type	Fuel Type	Percent of VMT	Percent for Moorpark (Default)	ROG	NOx	CO	SOx	PM10	PM2.5	
All Other Buses	Diesel	0.03%	0.06%	0.0516	1.1557	0.1684	0.0059	0.0596	0.0365	
All Other Buses	Natural Gas	0.00%	0.00%	0.0001	0.0039	0.055	0.0000	0.0012	0.0004	
LDA	Gasoline	47.09%	47.52%	5.8532	26.3307	396.6751	1.4055	8.1586	2.8515	
LDA	Diesel	0.20%	0.20%	0.0605	0.5049	0.7129	0.0047	0.0695	0.0459	
LDA	Electricity	1.96%	1.98%	0.0000	0.0000	0.0000	0.0000	0.2552	0.0728	
LDA	Plug-in Hybrid	1.23%	1.25%	0.0180	0.0419	2.7330	0.0179	0.1631	0.0524	
LDT1	Gasoline	4.36%	4.40%	2.1540	9.8497	92.7447	0.1558	0.8783	0.3365	
LDT1	Diesel	0.00%	0.00%	0.0048	0.0258	0.0307	0.0001	0.0043	0.0039	
LDT1	Electricity	0.01%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0008	0.0002	
LDT1	Plug-in Hybrid	0.00%	0.00%	0.0000	0.0001	0.0053	0.0000	0.0003	0.0001	
LDT2	Gasoline	21.60%	21.79%	3.5239	21.9262	219.0218	0.8068	4.0232	1.4142	
LDT2	Diesel	0.10%	0.11%	0.0168	0.0709	0.1529	0.0034	0.0253	0.0125	
LDT2	Electricity	0.05%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0061	0.0017	
LDT2	Plug-in Hybrid	0.12%	0.13%	0.0017	0.0040	0.2623	0.0017	0.0162	0.0051	
LHD1	Gasoline	1.81%	0.68%	0.2657	1.8014	9.2210	0.0459	0.6158	0.2149	
LHD1	Diesel	1.54%	0.58%	0.7802	14.4940	2.6572	0.0279	0.7350	0.3682	
LHD2	Gasoline	0.29%	0.11%	0.0209	0.2288	0.9089	0.0084	0.1149	0.0399	
LHD2	Diesel	0.62%	0.23%	0.2626	4.2263	0.7684	0.0134	0.3136	0.1471	
MCY	Gasoline	0.44%	0.44%	6.1665	3.0618	71.7736	0.0088	0.0828	0.0324	
MDV	Gasoline	14.55%	14.68%	3.7736	23.5044	187.8570	0.6660	2.7624	0.9776	
MDV	Diesel	0.28%	0.29%	0.0490	0.4121	0.7513	0.0124	0.0751	0.0398	
MDV	Electricity	0.05%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0062	0.0018	
MDV	Plug-in Hybrid	0.08%	0.09%	0.0012	0.0028	0.1852	0.0012	0.0112	0.0036	
MH	Gasoline	0.16%	0.31%	0.1988	1.4357	6.3629	0.0548	0.1770	0.0604	
MH	Diesel	0.06%	0.11%	0.0772	4.5180	0.3567	0.0110	0.2145	0.1617	
Motor Coach	Diesel	0.01%	0.01%	0.0040	0.3001	0.0196	0.0025	0.0177	0.0080	
OBUS	Gasoline	0.05%	0.10%	0.0625	0.5474	1.6650	0.0174	0.0587	0.0197	
PTO	Diesel	0.05%	0.10%	0.0676	3.7399	0.4024	0.0217	0.0080	0.0076	
SBUS	Gasoline	0.02%	0.05%	0.0777	0.5123	1.5958	0.0045	0.0286	0.0102	
SBUS	Diesel	0.04%	0.09%	0.0900	4.3842	0.2308	0.0105	0.0793	0.0432	
SBUS	Natural Gas	0.00%	0.00%	0.0017	0.0227	0.4200	0.0000	0.0016	0.0006	
T6 CAIRP Class 4	Diesel	0.00%	0.00%	0.0000	0.0016	0.0001	0.0000	0.0002	0.0001	
T6 CAIRP Class 5	Diesel	0.00%	0.00%	0.0000	0.0019	0.0001	0.0000	0.0002	0.0001	
T6 CAIRP Class 6	Diesel	0.00%	0.00%	0.0001	0.0046	0.0004	0.0001	0.0005	0.0002	
T6 CAIRP Class 7	Diesel	0.01%	0.01%	0.0005	0.0331	0.0023	0.0005	0.0034	0.0013	
T6 Instate Delivery Class 4	Diesel	0.05%	0.04%	0.0167	0.5864	0.0569	0.0042	0.0315	0.0160	
T6 Instate Delivery Class 5	Diesel	0.05%	0.04%	0.0065	0.3069	0.0274	0.0043	0.0263	0.0110	
T6 Instate Delivery Class 6	Diesel	0.15%	0.12%	0.0263	1.0932	0.1017	0.0125	0.0819	0.0365	
T6 Instate Delivery Class 7	Diesel	0.04%	0.03%	0.0045	0.3043	0.0193	0.0031	0.0195	0.0080	
T6 Instate Other Class 4	Diesel	0.14%	0.11%	0.0641	2.0688	0.2034	0.0112	0.0963	0.0544	
T6 Instate Other Class 5	Diesel	0.30%	0.23%	0.0373	2.0074	0.1524	0.0249	0.1533	0.0637	
T6 Instate Other Class 6	Diesel	0.24%	0.19%	0.0766	2.4906	0.2580	0.0199	0.1529	0.0800	
T6 Instate Other Class 7	Diesel	0.13%	0.10%	0.0168	1.1321	0.0692	0.0106	0.0682	0.0287	
T6 Instate Tractor Class 6	Diesel	0.00%	0.00%	0.0007	0.0198	0.0024	0.0001	0.0011	0.0006	
T6 Instate Tractor Class 7	Diesel	0.05%	0.04%	0.0073	0.4514	0.0267	0.0036	0.0243	0.0103	
T6 OOS Class 4	Diesel	0.00%	0.00%	0.0000	0.0008	0.0001	0.0000	0.0001	0.0000	
T6 OOS Class 5	Diesel	0.00%	0.00%	0.0000	0.0009	0.0001	0.0000	0.0001	0.0000	
T6 OOS Class 6	Diesel	0.00%	0.00%	0.0001	0.0024	0.0002	0.0000	0.0003	0.0001	
T6 OOS Class 7	Diesel	0.00%	0.00%	0.0003	0.0189	0.0013	0.0003	0.0019	0.0007	
T6 Public Class 4	Diesel	0.01%	0.01%	0.0022	0.3592	0.0071	0.0006	0.0046	0.0024	
T6 Public Class 5	Diesel	0.01%	0.01%	0.0026	0.2799	0.0085	0.0011	0.0075	0.0034	
T6 Public Class 6	Diesel	0.01%	0.01%	0.0043	0.5117	0.0130	0.0011	0.0091	0.0049	
T6 Public Class 7	Diesel	0.04%	0.03%	0.0154	1.7979	0.0458	0.0031	0.0278	0.0164	
T6 Utility Class 5	Diesel	0.01%	0.01%	0.0007	0.0476	0.0029	0.0007	0.0043	0.0017	
T6 Utility Class 6	Diesel	0.00%	0.00%	0.0001	0.0105	0.0006	0.0001	0.0008	0.0003	
T6 Utility Class 7	Diesel	0.00%	0.00%	0.0001	0.0104	0.0007	0.0002	0.0011	0.0004	
T6TS	Gasoline	0.16%	0.13%	0.1192	0.9448	3.2200	0.0215	0.0735	0.0249	
T7 CAIRP Class 8	Diesel	0.34%	0.68%	0.1469	12.6680	0.6643	0.1029	1.0126	0.4495	

T7 CAIRP Class 8	Natural Gas	0.00%	0.00%	0.0003	0.0029	0.0655	0.0000	0.0022	0.0007
T7 NNOOS Class 8	Diesel	0.41%	0.80%	0.1322	12.9136	0.6172	0.1226	1.1798	0.5144
T7 NOOS Class 8	Diesel	0.15%	0.29%	0.0667	5.6163	0.2956	0.0443	0.4385	0.1958
T7 Other Port Class 8	Diesel	0.08%	0.15%	0.0694	4.3142	0.2529	0.0237	0.2263	0.0985
T7 POLA Class 8	Diesel	0.01%	0.01%	0.0103	0.5518	0.0330	0.0021	0.0206	0.0092
T7 Public Class 8	Diesel	0.08%	0.16%	0.1108	15.0729	0.4478	0.0256	0.3015	0.1535
T7 Public Class 8	Natural Gas	0.00%	0.00%	0.0004	0.0116	0.2220	0.0000	0.0036	0.0012
T7 Single Concrete/Transit Mix	Diesel	0.02%	0.05%	0.0044	0.4624	0.0290	0.0077	0.0658	0.0258
T7 Single Concrete/Transit Mix	Natural Gas	0.00%	0.00%	0.0002	0.0047	0.0906	0.0000	0.0015	0.0005
T7 Single Dump Class 8	Diesel	0.07%	0.14%	0.0295	2.4342	0.1457	0.0221	0.1946	0.0782
T7 Single Dump Class 8	Natural Gas	0.00%	0.00%	0.0006	0.0214	0.3938	0.0000	0.0053	0.0017
T7 Single Other Class 8	Diesel	0.16%	0.32%	0.0734	5.3433	0.3177	0.0499	0.4401	0.1760
T7 Single Other Class 8	Natural Gas	0.00%	0.01%	0.0013	0.0419	0.7860	0.0000	0.0119	0.0039
T7 SWCV Class 8	Diesel	0.04%	0.07%	0.0036	9.7063	0.0113	0.0262	0.1963	0.0726
T7 SWCV Class 8	Natural Gas	0.03%	0.07%	0.0629	2.0366	5.1404	0.0000	0.1728	0.0592
T7 Tractor Class 8	Diesel	0.26%	0.52%	0.1612	11.5316	0.6352	0.0793	0.7614	0.3242
T7 Tractor Class 8	Natural Gas	0.00%	0.00%	0.0002	0.0080	0.1499	0.0000	0.0019	0.0006
T7 Utility Class 8	Diesel	0.01%	0.01%	0.0024	0.1975	0.0111	0.0022	0.0184	0.0070
T7IS	Gasoline	0.00%	0.00%	0.0228	0.1163	1.2112	0.0002	0.0009	0.0003
UBUS	Gasoline	0.02%	0.03%	0.0046	0.0671	0.1250	0.0055	0.0378	0.0132
UBUS	Diesel	0.03%	0.06%	0.0596	0.4330	0.0756	0.0102	0.1008	0.0360
UBUS	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
UBUS	Natural Gas	0.06%	0.12%	0.0407	0.4198	32.0215	0.0000	0.1692	0.0569
		100%	100%	24.99	221.57	1045.70	3.96	25.12	9.62

## Year 2022 Existing: Greenhouse Gas Emissions

Source: EMFAC2021 Version 1.0.2 web database. Ventura County

Adjusted Daily vehicles miles traveled (VMT) multiplied by 347 days/year to account for reduced traffic on weekends and holidays. This assumption is consistent with the California Air Resources Board's (CARB) methodology within the 2008 Climate Change Scoping Plan Measure Documentation Supplement.

Passenger Vehicles					CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	
	LHDT	MHDT	HHDT		AR5 GWP	AR5 GWP	AR5 GWP	
	92.12%	4.26%	1.41%	2.21%				
	Cell G7	Cell G8	Cell G9	Cell G10				
Annual VMT					1	28	265	
Vehicle Type	Fuel Type	Percent of VMT	Percent for Moorpark (Default)		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
All Other Buses	Diesel	0.03%	0.06%		98	0.000	0.015	102
All Other Buses	Natural Gas	0.00%	0.00%		3	0.001	0.001	3
LDA	Gasoline	47.09%	47.52%		22,377	0.232	0.419	22,495
LDA	Diesel	0.20%	0.20%		78	0.000	0.012	82
LDA	Electricity	1.96%	1.98%		0	0.000	0.000	0
LDA	Plug-in Hybrid	1.23%	1.25%		285	0.001	0.001	286
LDT1	Gasoline	4.36%	4.40%		2,480	0.074	0.103	2,510
LDT1	Diesel	0.00%	0.00%		1	0.000	0.000	1
LDT1	Electricity	0.01%	0.01%		0	0.000	0.000	0
LDT1	Plug-in Hybrid	0.00%	0.00%		1	0.000	0.000	1
LDT2	Gasoline	21.60%	21.79%		12,845	0.136	0.267	12,919
LDT2	Diesel	0.10%	0.11%		57	0.000	0.009	59
LDT2	Electricity	0.05%	0.05%		0	0.000	0.000	0
LDT2	Plug-in Hybrid	0.12%	0.13%		27	0.000	0.000	27
LHD1	Gasoline	1.81%	0.68%		731	0.008	0.016	735
LHD1	Diesel	1.54%	0.58%		463	0.006	0.073	483
LHD2	Gasoline	0.29%	0.11%		133	0.001	0.002	134
LHD2	Diesel	0.62%	0.23%		223	0.002	0.035	232
MCY	Gasoline	0.44%	0.44%		140	0.142	0.032	152
MDV	Gasoline	14.55%	14.68%		10,603	0.136	0.252	10,674
MDV	Diesel	0.28%	0.29%		205	0.000	0.032	214
MDV	Electricity	0.05%	0.05%		0	0.000	0.000	0
MDV	Plug-in Hybrid	0.08%	0.09%		19	0.000	0.000	19
MH	Gasoline	0.16%	0.31%		872	0.007	0.013	875
MH	Diesel	0.06%	0.11%		183	0.001	0.029	191
Motor Coach	Diesel	0.01%	0.01%		41	0.000	0.006	43
OBUS	Gasoline	0.05%	0.10%		277	0.002	0.004	278
PTO	Diesel	0.05%	0.10%		361	0.000	0.057	376
SBUS	Gasoline	0.02%	0.05%		72	0.002	0.004	73
SBUS	Diesel	0.04%	0.09%		174	0.001	0.027	181
SBUS	Natural Gas	0.00%	0.00%		7	0.019	0.001	8
T6 CAIRP Class 4	Diesel	0.00%	0.00%		0	0.000	0.000	0
T6 CAIRP Class 5	Diesel	0.00%	0.00%		1	0.000	0.000	1
T6 CAIRP Class 6	Diesel	0.00%	0.00%		2	0.000	0.000	2
T6 CAIRP Class 7	Diesel	0.01%	0.01%		9	0.000	0.001	9
T6 Instate Delivery Class 4	Diesel	0.05%	0.04%		70	0.000	0.011	73
T6 Instate Delivery Class 5	Diesel	0.05%	0.04%		71	0.000	0.011	74
T6 Instate Delivery Class 6	Diesel	0.15%	0.12%		208	0.000	0.033	216
T6 Instate Delivery Class 7	Diesel	0.04%	0.03%		52	0.000	0.008	54
T6 Instate Other Class 4	Diesel	0.14%	0.11%		186	0.000	0.029	194
T6 Instate Other Class 5	Diesel	0.30%	0.23%		414	0.000	0.065	432
T6 Instate Other Class 6	Diesel	0.24%	0.19%		330	0.001	0.052	344
T6 Instate Other Class 7	Diesel	0.13%	0.10%		177	0.000	0.028	184
T6 Instate Tractor Class 6	Diesel	0.00%	0.00%		2	0.000	0.000	2
T6 Instate Tractor Class 7	Diesel	0.05%	0.04%		60	0.000	0.010	63
T6 OOS Class 4	Diesel	0.00%	0.00%		0	0.000	0.000	0
T6 OOS Class 5	Diesel	0.00%	0.00%		0	0.000	0.000	0
T6 OOS Class 6	Diesel	0.00%	0.00%		1	0.000	0.000	1
T6 OOS Class 7	Diesel	0.00%	0.00%		5	0.000	0.001	5
T6 Public Class 4	Diesel	0.01%	0.01%		10	0.000	0.002	10
T6 Public Class 5	Diesel	0.01%	0.01%		19	0.000	0.003	20
T6 Public Class 6	Diesel	0.01%	0.01%		19	0.000	0.003	20
T6 Public Class 7	Diesel	0.04%	0.03%		52	0.000	0.008	54
T6 Utility Class 5	Diesel	0.01%	0.01%		12	0.000	0.002	12
T6 Utility Class 6	Diesel	0.00%	0.00%		2	0.000	0.000	2

## Year 2022 Existing: Greenhouse Gas Emissions

Source: EMFAC2021 Version 1.0.2 web database. Ventura County

Adjusted Daily vehicles miles traveled (VMT) multiplied by 347 days/year to account for reduced traffic on weekends and holidays. This assumption is consistent with the California Air Resources Board's (CARB) methodology within the 2008 Climate Change Scoping Plan Measure Documentation Supplement.

Passenger Vehicles				CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	
	LHDT	MHDT	HHDT	AR5 GWP	AR5 GWP	AR5 GWP	
Cell G7	Cell G8	Cell G9	Cell G10				
92.12%	4.26%	1.41%	2.21%	1	28	265	
<b>Annual VMT</b>	<b>164,056,866</b>						
Vehicle Type	Fuel Type	Percent of VMT	Percent for Moorpark (Default)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
T6 Utility Class 7	Diesel	0.00%	0.00%	3	0.000	0.000	3
T6TS	Gasoline	0.16%	0.13%	343	0.004	0.007	344
T7 CAIRP Class 8	Diesel	0.34%	0.68%	1,710	0.001	0.269	1,781
T7 CAIRP Class 8	Natural Gas	0.00%	0.00%	4	0.003	0.001	4
T7 NNOOS Class 8	Diesel	0.41%	0.80%	2,037	0.001	0.321	2,122
T7 NOOS Class 8	Diesel	0.15%	0.29%	737	0.000	0.116	767
T7 Other Port Class 8	Diesel	0.08%	0.15%	394	0.001	0.062	411
T7 POLA Class 8	Diesel	0.01%	0.01%	34	0.000	0.005	36
T7 Public Class 8	Diesel	0.08%	0.16%	425	0.001	0.067	443
T7 Public Class 8	Natural Gas	0.00%	0.00%	6	0.005	0.001	6
T7 Single Concrete/Transit Mix	Diesel	0.02%	0.05%	128	0.000	0.020	134
T7 Single Concrete/Transit Mix	Natural Gas	0.00%	0.00%	2	0.002	0.001	3
T7 Single Dump Class 8	Diesel	0.07%	0.14%	368	0.000	0.058	383
T7 Single Dump Class 8	Natural Gas	0.00%	0.00%	9	0.007	0.002	10
T7 Single Other Class 8	Diesel	0.16%	0.32%	830	0.001	0.131	864
T7 Single Other Class 8	Natural Gas	0.00%	0.01%	20	0.015	0.004	21
T7 SWCV Class 8	Diesel	0.04%	0.07%	436	0.000	0.069	455
T7 SWCV Class 8	Natural Gas	0.03%	0.07%	131	0.152	0.027	142
T7 Tractor Class 8	Diesel	0.26%	0.52%	1,318	0.001	0.208	1,373
T7 Tractor Class 8	Natural Gas	0.00%	0.00%	3	0.002	0.001	4
T7 Utility Class 8	Diesel	0.01%	0.01%	36	0.000	0.006	38
T7IS	Gasoline	0.00%	0.00%	3	0.001	0.000	3
UBUS	Gasoline	0.02%	0.03%	88	0.000	0.001	88
UBUS	Diesel	0.03%	0.06%	169	0.000	0.027	176
UBUS	Electricity	0.00%	0.00%	0	0.000	0.000	0
UBUS	Natural Gas	0.06%	0.12%	356	0.408	0.073	386
		<b>100%</b>	<b>100%</b>	<b>64049.85</b>	<b>1.38</b>	<b>3.16</b>	<b>64924.63</b>





Source: EMFAC2021 (v1.0.2) Emi:

Region Type: County
Region: Ventura
Calendar Year: 2022
Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EMMI, trips/day for Trips, 1/

Table with columns for Vehicle Category, Fuel, ROG, ROG\_RUNEX, NOx, NOx\_RUNEX, CO, CO\_RUNEX, SOx, SOx\_RUNEX, PM10, PM10\_PMTW, PM10\_PMBW, PM10\_RUNEX, PM10\_Total, PM2.5, PM2.5\_PMTW, PM2.5\_PMB, PM2.5\_RUNEX, PM2.5\_Total, CO2\_RUNEX, CH4\_RUNEX, N2O\_RUNEX. Rows include categories like All Other Buses, Natural Gas, Diesel, Gasoline, and various vehicle types.

1,000E-06



# Year 2050 Current General Plan: Criteria Air Pollutants

Source: EMFAC2021 Version 1.0.2 web database. Emission Rates. Ventura County

Passenger Vehicles	LHDT	MHDT	HHDT
	90.83%	3.89%	1.94%
	Cell G12	Cell G13	Cell G14
			Cell G15
			3.34%

Daily VMT		532,234		lbs/day					
Vehicle Type	Fuel Type	Percent of VMT	Percent for Moorpark (Default)	ROG	NOx	CO	SOx	PM10	PM2.5
All Other Buses	Diesel	0.03%	0.04%	0.0041	0.2063	0.0255	0.0037	0.0258	0.0102
All Other Buses	Natural Gas	0.00%	0.00%	0.0002	0.0014	0.0554	0.0000	0.0016	0.0005
LDA	Gasoline	43.36%	43.90%	1.4343	9.8420	222.3187	1.1323	7.8416	2.4740
LDA	Diesel	0.03%	0.03%	0.0012	0.0029	0.0366	0.0005	0.0048	0.0016
LDA	Electricity	6.36%	6.44%	0.0000	0.0000	0.0000	0.0000	0.9363	0.2673
LDA	Plug-in Hybrid	2.07%	2.10%	0.0262	0.0615	3.9970	0.0264	0.2974	0.0872
LDT1	Gasoline	2.77%	2.81%	0.1001	0.6761	15.2029	0.0839	0.5458	0.1744
LDT1	Diesel	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LDT1	Electricity	0.09%	0.09%	0.0000	0.0000	0.0000	0.0000	0.0138	0.0039
LDT1	Plug-in Hybrid	0.07%	0.07%	0.0009	0.0020	0.1332	0.0009	0.0099	0.0029
LDT2	Gasoline	21.58%	21.85%	0.9873	5.4872	129.2364	0.6771	4.2085	1.3397
LDT2	Diesel	0.08%	0.08%	0.0112	0.0262	0.1174	0.0024	0.0197	0.0085
LDT2	Electricity	0.65%	0.65%	0.0000	0.0000	0.0000	0.0000	0.0952	0.0272
LDT2	Plug-in Hybrid	0.60%	0.61%	0.0076	0.0179	1.1621	0.0077	0.0865	0.0254
LHD1	Gasoline	0.87%	0.57%	0.0091	0.1100	3.9926	0.0309	0.5807	0.2022
LHD1	Diesel	0.68%	0.45%	0.1850	0.8604	0.3363	0.0225	0.5272	0.2119
LHD1	Electricity	1.49%	0.98%	0.0000	0.0000	0.0000	0.0000	0.5398	0.1797
LHD2	Gasoline	0.12%	0.08%	0.0011	0.0207	0.5596	0.0048	0.0920	0.0321
LHD2	Diesel	0.33%	0.21%	0.1134	0.6202	0.2103	0.0126	0.2936	0.1207
LHD2	Electricity	0.40%	0.26%	0.0000	0.0000	0.0000	0.0000	0.1627	0.0545
MCY	Gasoline	0.35%	0.36%	3.2302	1.9292	39.0550	0.0077	0.0763	0.0303
MDV	Gasoline	11.74%	11.89%	0.5542	3.0833	72.3028	0.4469	2.3054	0.7347
MDV	Diesel	0.13%	0.13%	0.0063	0.0171	0.1978	0.0048	0.0260	0.0088
MDV	Electricity	0.59%	0.59%	0.0000	0.0000	0.0000	0.0000	0.0863	0.0247
MDV	Plug-in Hybrid	0.36%	0.36%	0.0046	0.0107	0.6949	0.0046	0.0517	0.0152
MH	Gasoline	0.05%	0.06%	0.0040	0.1384	0.0903	0.0120	0.0384	0.0130
MH	Diesel	0.03%	0.04%	0.0132	0.7416	0.0406	0.0040	0.0333	0.0163
Motor Coach	Diesel	0.01%	0.01%	0.0012	0.1161	0.0074	0.0018	0.0157	0.0066
OBUS	Gasoline	0.01%	0.02%	0.0009	0.0437	0.0277	0.0026	0.0103	0.0035
OBUS	Electricity	0.02%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0080	0.0025
PTO	Diesel	0.04%	0.05%	0.0085	1.4724	0.1053	0.0099	0.0023	0.0022
PTO	Electricity	0.04%	0.06%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SBUS	Gasoline	0.01%	0.01%	0.0016	0.0136	0.0289	0.0012	0.0085	0.0030
SBUS	Diesel	0.02%	0.03%	0.0030	0.1196	0.0200	0.0033	0.0193	0.0070
SBUS	Electricity	0.03%	0.04%	0.0000	0.0000	0.0000	0.0000	0.0172	0.0055
SBUS	Natural Gas	0.00%	0.00%	0.0005	0.0024	0.1010	0.0000	0.0007	0.0003
T6 CAIRP Class 4	Diesel	0.00%	0.00%	0.0000	0.0002	0.0000	0.0000	0.0001	0.0000
T6 CAIRP Class 4	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
T6 CAIRP Class 5	Diesel	0.00%	0.00%	0.0000	0.0003	0.0000	0.0000	0.0001	0.0000
T6 CAIRP Class 5	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
T6 CAIRP Class 6	Diesel	0.00%	0.00%	0.0000	0.0007	0.0001	0.0000	0.0002	0.0001
T6 CAIRP Class 6	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001
T6 CAIRP Class 7	Diesel	0.01%	0.00%	0.0002	0.0089	0.0015	0.0004	0.0029	0.0011
T6 CAIRP Class 7	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0005	0.0002
T6 Instate Delivery Class 4	Diesel	0.03%	0.02%	0.0010	0.0390	0.0067	0.0019	0.0123	0.0046
T6 Instate Delivery Class 4	Electricity	0.04%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0089	0.0028
T6 Instate Delivery Class 5	Diesel	0.03%	0.02%	0.0010	0.0386	0.0067	0.0019	0.0123	0.0046
T6 Instate Delivery Class 5	Electricity	0.04%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0090	0.0028
T6 Instate Delivery Class 6	Diesel	0.10%	0.05%	0.0030	0.1161	0.0199	0.0057	0.0364	0.0136
T6 Instate Delivery Class 6	Electricity	0.12%	0.07%	0.0000	0.0000	0.0000	0.0000	0.0265	0.0083
T6 Instate Delivery Class 7	Diesel	0.03%	0.02%	0.0013	0.0671	0.0082	0.0020	0.0125	0.0048
T6 Instate Delivery Class 7	Electricity	0.02%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0050	0.0016
T6 Instate Other Class 4	Diesel	0.08%	0.05%	0.0026	0.0997	0.0173	0.0051	0.0321	0.0120
T6 Instate Other Class 4	Electricity	0.11%	0.06%	0.0000	0.0000	0.0000	0.0000	0.0243	0.0076
T6 Instate Other Class 5	Diesel	0.19%	0.10%	0.0057	0.2187	0.0380	0.0111	0.0707	0.0264
T6 Instate Other Class 5	Electricity	0.25%	0.14%	0.0000	0.0000	0.0000	0.0000	0.0534	0.0168
T6 Instate Other Class 6	Diesel	0.15%	0.08%	0.0046	0.1770	0.0304	0.0089	0.0565	0.0211
T6 Instate Other Class 6	Electricity	0.20%	0.11%	0.0000	0.0000	0.0000	0.0000	0.0426	0.0134
T6 Instate Other Class 7	Diesel	0.10%	0.06%	0.0040	0.2057	0.0253	0.0062	0.0401	0.0154

T6 Instate Other Class 7	Electricity	0.09%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0188	0.0059
T6 Instate Tractor Class 6	Diesel	0.00%	0.00%	0.0000	0.0011	0.0002	0.0001	0.0004	0.0001
T6 Instate Tractor Class 6	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0003	0.0001
T6 Instate Tractor Class 7	Diesel	0.05%	0.03%	0.0020	0.0962	0.0129	0.0030	0.0210	0.0080
T6 Instate Tractor Class 7	Electricity	0.01%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0029	0.0009
T6 OOS Class 4	Diesel	0.00%	0.00%	0.0000	0.0003	0.0000	0.0000	0.0001	0.0000
T6 OOS Class 5	Diesel	0.00%	0.00%	0.0000	0.0004	0.0001	0.0000	0.0001	0.0000
T6 OOS Class 6	Diesel	0.00%	0.00%	0.0000	0.0010	0.0001	0.0000	0.0003	0.0001
T6 OOS Class 7	Diesel	0.01%	0.00%	0.0002	0.0078	0.0011	0.0003	0.0021	0.0008
T6 Public Class 4	Diesel	0.00%	0.00%	0.0001	0.0052	0.0006	0.0002	0.0013	0.0005
T6 Public Class 4	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0008	0.0002
T6 Public Class 5	Diesel	0.01%	0.00%	0.0002	0.0100	0.0012	0.0004	0.0024	0.0009
T6 Public Class 5	Electricity	0.01%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0014	0.0005
T6 Public Class 6	Diesel	0.01%	0.00%	0.0002	0.0087	0.0012	0.0004	0.0025	0.0009
T6 Public Class 6	Electricity	0.01%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0014	0.0005
T6 Public Class 7	Diesel	0.02%	0.01%	0.0006	0.0247	0.0036	0.0012	0.0074	0.0028
T6 Public Class 7	Electricity	0.02%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0034	0.0011
T6 Utility Class 5	Diesel	0.00%	0.00%	0.0001	0.0027	0.0005	0.0002	0.0013	0.0005
T6 Utility Class 5	Electricity	0.01%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0011	0.0003
T6 Utility Class 6	Diesel	0.00%	0.00%	0.0000	0.0005	0.0001	0.0000	0.0002	0.0001
T6 Utility Class 6	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001
T6 Utility Class 7	Diesel	0.00%	0.00%	0.0000	0.0007	0.0001	0.0001	0.0003	0.0001
T6 Utility Class 7	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0003	0.0001
T6TS	Gasoline	0.08%	0.04%	0.0037	0.0302	0.0717	0.0069	0.0280	0.0095
T6TS	Electricity	0.10%	0.06%	0.0000	0.0000	0.0000	0.0000	0.0226	0.0071
T7 CAIRP Class 8	Diesel	0.50%	0.65%	0.0778	8.4040	0.3263	0.0906	1.1268	0.4829
T7 CAIRP Class 8	Electricity	0.14%	0.19%	0.0000	0.0000	0.0000	0.0000	0.1750	0.0533
T7 CAIRP Class 8	Natural Gas	0.00%	0.00%	0.0003	0.0030	0.0643	0.0000	0.0024	0.0008
T7 NNOOS Class 8	Diesel	0.76%	1.00%	0.1156	14.1795	0.4846	0.1324	1.7172	0.7341
T7 NOOS Class 8	Diesel	0.27%	0.36%	0.0433	5.3010	0.1817	0.0481	0.6300	0.2726
T7 Other Port Class 8	Diesel	0.10%	0.13%	0.0140	1.5260	0.0598	0.0199	0.2233	0.0911
T7 Other Port Class 8	Electricity	0.03%	0.03%	0.0000	0.0000	0.0000	0.0000	0.0314	0.0096
T7 POLA Class 8	Diesel	0.01%	0.01%	0.0013	0.1517	0.0057	0.0018	0.0203	0.0085
T7 POLA Class 8	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0021	0.0007
T7 Public Class 8	Diesel	0.04%	0.05%	0.0083	0.6304	0.0312	0.0087	0.0856	0.0332
T7 Public Class 8	Electricity	0.03%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0427	0.0130
T7 Public Class 8	Natural Gas	0.00%	0.00%	0.0004	0.0049	0.1033	0.0000	0.0033	0.0011
T7 Single Concrete/Transit Mix	Diesel	0.01%	0.02%	0.0014	0.1190	0.0059	0.0024	0.0243	0.0093
T7 Single Concrete/Transit Mix	Electricity	0.02%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0205	0.0063
T7 Single Concrete/Transit Mix	Natural Gas	0.00%	0.00%	0.0001	0.0009	0.0204	0.0000	0.0007	0.0002
T7 Single Dump Class 8	Diesel	0.04%	0.05%	0.0054	0.5342	0.0243	0.0083	0.0847	0.0337
T7 Single Dump Class 8	Electricity	0.04%	0.06%	0.0000	0.0000	0.0000	0.0000	0.0523	0.0159
T7 Single Dump Class 8	Natural Gas	0.00%	0.00%	0.0003	0.0035	0.0744	0.0000	0.0025	0.0008
T7 Single Other Class 8	Diesel	0.14%	0.18%	0.0181	1.7630	0.0801	0.0292	0.2986	0.1178
T7 Single Other Class 8	Electricity	0.16%	0.21%	0.0000	0.0000	0.0000	0.0000	0.1986	0.0605
T7 Single Other Class 8	Natural Gas	0.00%	0.01%	0.0010	0.0117	0.2540	0.0000	0.0089	0.0029
T7 SWCV Class 8	Diesel	0.00%	0.00%	0.0004	0.0763	0.0006	0.0006	0.0053	0.0021
T7 SWCV Class 8	Electricity	0.03%	0.04%	0.0000	0.0000	0.0000	0.0000	0.0677	0.0220
T7 SWCV Class 8	Natural Gas	0.04%	0.05%	0.0010	0.0550	2.9276	0.0000	0.1354	0.0456
T7 Tractor Class 8	Diesel	0.41%	0.53%	0.0586	6.5719	0.2476	0.0740	0.8993	0.3739
T7 Tractor Class 8	Electricity	0.09%	0.11%	0.0000	0.0000	0.0000	0.0000	0.1045	0.0318
T7 Tractor Class 8	Natural Gas	0.00%	0.00%	0.0002	0.0023	0.0505	0.0000	0.0018	0.0006
T7 Utility Class 8	Diesel	0.00%	0.00%	0.0004	0.0406	0.0022	0.0008	0.0074	0.0028
T7 Utility Class 8	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0038	0.0012
T7IS	Gasoline	0.00%	0.00%	0.0012	0.0095	0.1043	0.0001	0.0004	0.0002
T7IS	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0003	0.0001
UBUS	Gasoline	0.01%	0.01%	0.0002	0.0026	0.0675	0.0006	0.0118	0.0041
UBUS	Electricity	0.17%	0.22%	0.0000	0.0000	0.0000	0.0000	0.2138	0.0679
UBUS	Natural Gas	0.01%	0.01%	0.0041	0.0119	0.0041	0.0000	0.0125	0.0046
		100.00%	100.00%	7.09	66.19	495.42	2.98	25.77	8.80

## Year 2050 General Plan Update: Criteria Air Pollutants

Source: EMFAC2021 Version 1.0.2 web database, Emission Rates, Ventura County

Passenger Vehicles	LHDT	MHDT	HHDT
90.83%	3.89%	1.94%	3.34%
Cell G17	Cell G18	Cell G19	Cell G20

Daily VMT	602,485	lbs/day
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Vehicle Type	Fuel Type	Percent of VMT	Percent for Moorpark (Default)	ROG	NOx	CO	SOx	PM10	PM2.5
All Other Buses	Diesel	0.03%	0.03%	0.0041	0.2059	0.0254	0.0037	0.0257	0.0101
All Other Buses	Natural Gas	0.00%	0.00%	0.0002	0.0014	0.0553	0.0000	0.0016	0.0005
LDA	Gasoline	43.36%	44.70%	1.6530	11.3424	256.2121	1.3049	9.0371	2.8512
LDA	Diesel	0.03%	0.03%	0.0013	0.0033	0.0422	0.0006	0.0055	0.0018
LDA	Electricity	6.36%	6.56%	0.0000	0.0000	0.0000	0.0000	1.0790	0.3080
LDA	Plug-in Hybrid	2.07%	2.14%	0.0302	0.0708	4.6064	0.0304	0.3428	0.1005
LDT1	Gasoline	2.77%	2.86%	0.1154	0.7792	17.5207	0.0966	0.6290	0.2010
LDT1	Diesel	0.00%	0.00%	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
LDT1	Electricity	0.09%	0.10%	0.0000	0.0000	0.0000	0.0000	0.0159	0.0045
LDT1	Plug-in Hybrid	0.07%	0.07%	0.0010	0.0024	0.1535	0.0010	0.0114	0.0034
LDT2	Gasoline	21.58%	22.25%	1.1378	6.3238	148.9390	0.7803	4.8501	1.5440
LDT2	Diesel	0.08%	0.09%	0.0130	0.0302	0.1353	0.0028	0.0227	0.0098
LDT2	Electricity	0.65%	0.67%	0.0000	0.0000	0.0000	0.0000	0.1097	0.0313
LDT2	Plug-in Hybrid	0.60%	0.62%	0.0088	0.0206	1.3393	0.0088	0.0997	0.0292
LHD1	Gasoline	0.87%	0.34%	0.0062	0.0750	2.7234	0.0211	0.3961	0.1379
LHD1	Diesel	0.68%	0.27%	0.1262	0.5869	0.2294	0.0153	0.3596	0.1445
LHD1	Electricity	1.49%	0.59%	0.0000	0.0000	0.0000	0.0000	0.3682	0.1226
LHD2	Gasoline	0.12%	0.05%	0.0008	0.0141	0.3817	0.0033	0.0628	0.0219
LHD2	Diesel	0.33%	0.13%	0.0773	0.4230	0.1434	0.0086	0.2003	0.0823
LHD2	Electricity	0.40%	0.16%	0.0000	0.0000	0.0000	0.0000	0.1110	0.0372
MCY	Gasoline	0.35%	0.36%	3.7227	2.2233	45.0091	0.0089	0.0879	0.0349
MDV	Gasoline	11.74%	12.10%	0.6387	3.5533	83.3257	0.5151	2.6569	0.8467
MDV	Diesel	0.13%	0.13%	0.0072	0.0197	0.2279	0.0056	0.0300	0.0101
MDV	Electricity	0.59%	0.60%	0.0000	0.0000	0.0000	0.0000	0.0995	0.0284
MDV	Plug-in Hybrid	0.36%	0.37%	0.0052	0.0123	0.8009	0.0053	0.0596	0.0175
MH	Gasoline	0.05%	0.05%	0.0039	0.1381	0.0901	0.0120	0.0384	0.0130
MH	Diesel	0.03%	0.03%	0.0132	0.7402	0.0405	0.0040	0.0333	0.0163
Motor Coach	Diesel	0.01%	0.01%	0.0012	0.1159	0.0073	0.0018	0.0157	0.0065
OBUS	Gasoline	0.01%	0.01%	0.0009	0.0436	0.0276	0.0026	0.0102	0.0035
OBUS	Electricity	0.02%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0080	0.0025
PTO	Diesel	0.04%	0.05%	0.0084	1.4695	0.1051	0.0099	0.0023	0.0022
PTO	Electricity	0.04%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SBUS	Gasoline	0.01%	0.01%	0.0016	0.0136	0.0289	0.0011	0.0085	0.0030
SBUS	Diesel	0.02%	0.02%	0.0030	0.1194	0.0200	0.0033	0.0193	0.0070
SBUS	Electricity	0.03%	0.04%	0.0000	0.0000	0.0000	0.0000	0.0172	0.0055
SBUS	Natural Gas	0.00%	0.00%	0.0005	0.0024	0.1008	0.0000	0.0007	0.0003
T6 CAIRP Class 4	Diesel	0.00%	0.00%	0.0000	0.0002	0.0000	0.0000	0.0001	0.0000
T6 CAIRP Class 4	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
T6 CAIRP Class 5	Diesel	0.00%	0.00%	0.0000	0.0003	0.0000	0.0000	0.0001	0.0000
T6 CAIRP Class 5	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
T6 CAIRP Class 6	Diesel	0.00%	0.00%	0.0000	0.0007	0.0001	0.0000	0.0002	0.0001
T6 CAIRP Class 6	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001
T6 CAIRP Class 7	Diesel	0.01%	0.00%	0.0002	0.0089	0.0015	0.0004	0.0028	0.0011
T6 CAIRP Class 7	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0005	0.0002
T6 Instate Delivery Class 4	Diesel	0.03%	0.02%	0.0010	0.0388	0.0067	0.0019	0.0122	0.0046
T6 Instate Delivery Class 4	Electricity	0.04%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0089	0.0028
T6 Instate Delivery Class 5	Diesel	0.03%	0.02%	0.0010	0.0384	0.0067	0.0019	0.0122	0.0046
T6 Instate Delivery Class 5	Electricity	0.04%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0089	0.0028
T6 Instate Delivery Class 6	Diesel	0.10%	0.05%	0.0030	0.1156	0.0198	0.0057	0.0362	0.0135
T6 Instate Delivery Class 6	Electricity	0.12%	0.06%	0.0000	0.0000	0.0000	0.0000	0.0263	0.0083
T6 Instate Delivery Class 7	Diesel	0.03%	0.02%	0.0013	0.0667	0.0082	0.0020	0.0124	0.0048
T6 Instate Delivery Class 7	Electricity	0.02%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0050	0.0016
T6 Instate Other Class 4	Diesel	0.08%	0.04%	0.0026	0.0992	0.0172	0.0050	0.0320	0.0119
T6 Instate Other Class 4	Electricity	0.11%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0241	0.0076
T6 Instate Other Class 5	Diesel	0.19%	0.09%	0.0057	0.2176	0.0379	0.0111	0.0704	0.0262
T6 Instate Other Class 5	Electricity	0.25%	0.12%	0.0000	0.0000	0.0000	0.0000	0.0532	0.0167
T6 Instate Other Class 6	Diesel	0.15%	0.07%	0.0046	0.1761	0.0303	0.0089	0.0563	0.0210
T6 Instate Other Class 6	Electricity	0.20%	0.10%	0.0000	0.0000	0.0000	0.0000	0.0424	0.0133
T6 Instate Other Class 7	Diesel	0.10%	0.05%	0.0040	0.2046	0.0251	0.0062	0.0399	0.0153
T6 Instate Other Class 7	Electricity	0.09%	0.04%	0.0000	0.0000	0.0000	0.0000	0.0187	0.0059
T6 Instate Tractor Class 6	Diesel	0.00%	0.00%	0.0000	0.0011	0.0002	0.0001	0.0004	0.0001
T6 Instate Tractor Class 6	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0003	0.0001

T6 Instate Tractor Class 7	Diesel	0.05%	0.03%	0.0020	0.0958	0.0129	0.0029	0.0209	0.0080
T6 Instate Tractor Class 7	Electricity	0.01%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0029	0.0009
T6 OOS Class 4	Diesel	0.00%	0.00%	0.0000	0.0003	0.0000	0.0000	0.0001	0.0000
T6 OOS Class 5	Diesel	0.00%	0.00%	0.0000	0.0004	0.0001	0.0000	0.0001	0.0000
T6 OOS Class 6	Diesel	0.00%	0.00%	0.0000	0.0010	0.0001	0.0000	0.0003	0.0001
T6 OOS Class 7	Diesel	0.01%	0.00%	0.0002	0.0078	0.0011	0.0003	0.0021	0.0008
T6 Public Class 4	Diesel	0.00%	0.00%	0.0001	0.0052	0.0006	0.0002	0.0013	0.0005
T6 Public Class 4	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0008	0.0002
T6 Public Class 5	Diesel	0.01%	0.00%	0.0002	0.0099	0.0012	0.0004	0.0024	0.0009
T6 Public Class 5	Electricity	0.01%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0014	0.0004
T6 Public Class 6	Diesel	0.01%	0.00%	0.0002	0.0087	0.0012	0.0004	0.0024	0.0009
T6 Public Class 6	Electricity	0.01%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0014	0.0005
T6 Public Class 7	Diesel	0.02%	0.01%	0.0006	0.0246	0.0035	0.0012	0.0074	0.0028
T6 Public Class 7	Electricity	0.02%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0034	0.0011
T6 Utility Class 5	Diesel	0.00%	0.00%	0.0001	0.0027	0.0005	0.0002	0.0012	0.0005
T6 Utility Class 5	Electricity	0.01%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0011	0.0003
T6 Utility Class 6	Diesel	0.00%	0.00%	0.0000	0.0005	0.0001	0.0000	0.0002	0.0001
T6 Utility Class 6	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001
T6 Utility Class 7	Diesel	0.00%	0.00%	0.0000	0.0007	0.0001	0.0001	0.0003	0.0001
T6 Utility Class 7	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0003	0.0001
T6TS	Gasoline	0.08%	0.04%	0.0037	0.0301	0.0713	0.0068	0.0279	0.0094
T6TS	Electricity	0.10%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0224	0.0070
T7 CAIRP Class 8	Diesel	0.50%	0.57%	0.0777	8.3874	0.3257	0.0904	1.1246	0.4819
T7 CAIRP Class 8	Electricity	0.14%	0.17%	0.0000	0.0000	0.0000	0.0000	0.1747	0.0532
T7 CAIRP Class 8	Natural Gas	0.00%	0.00%	0.0003	0.0030	0.0642	0.0000	0.0024	0.0008
T7 NNOOS Class 8	Diesel	0.76%	0.88%	0.1154	14.1516	0.4837	0.1322	1.7138	0.7326
T7 NOOS Class 8	Diesel	0.27%	0.32%	0.0432	5.2906	0.1813	0.0480	0.6288	0.2721
T7 Other Port Class 8	Diesel	0.10%	0.12%	0.0140	1.5230	0.0597	0.0199	0.2228	0.0910
T7 Other Port Class 8	Electricity	0.03%	0.03%	0.0000	0.0000	0.0000	0.0000	0.0313	0.0095
T7 POLA Class 8	Diesel	0.01%	0.01%	0.0013	0.1514	0.0057	0.0018	0.0203	0.0085
T7 POLA Class 8	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0021	0.0007
T7 Public Class 8	Diesel	0.04%	0.05%	0.0083	0.6292	0.0312	0.0087	0.0855	0.0331
T7 Public Class 8	Electricity	0.03%	0.04%	0.0000	0.0000	0.0000	0.0000	0.0426	0.0130
T7 Public Class 8	Natural Gas	0.00%	0.00%	0.0004	0.0049	0.1031	0.0000	0.0033	0.0011
T7 Single Concrete/Transit Mi	Diesel	0.01%	0.01%	0.0014	0.1188	0.0058	0.0024	0.0243	0.0093
T7 Single Concrete/Transit Mi	Electricity	0.02%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0205	0.0062
T7 Single Concrete/Transit Mi	Natural Gas	0.00%	0.00%	0.0001	0.0009	0.0203	0.0000	0.0007	0.0002
T7 Single Dump Class 8	Diesel	0.04%	0.05%	0.0054	0.5332	0.0242	0.0083	0.0845	0.0336
T7 Single Dump Class 8	Electricity	0.04%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0522	0.0159
T7 Single Dump Class 8	Natural Gas	0.00%	0.00%	0.0003	0.0035	0.0743	0.0000	0.0025	0.0008
T7 Single Other Class 8	Diesel	0.14%	0.16%	0.0181	1.7595	0.0800	0.0292	0.2980	0.1175
T7 Single Other Class 8	Electricity	0.16%	0.19%	0.0000	0.0000	0.0000	0.0000	0.1983	0.0604
T7 Single Other Class 8	Natural Gas	0.00%	0.01%	0.0010	0.0117	0.2535	0.0000	0.0089	0.0029
T7 SWCV Class 8	Diesel	0.00%	0.00%	0.0004	0.0762	0.0006	0.0006	0.0053	0.0021
T7 SWCV Class 8	Electricity	0.03%	0.04%	0.0000	0.0000	0.0000	0.0000	0.0676	0.0219
T7 SWCV Class 8	Natural Gas	0.04%	0.04%	0.0010	0.0549	2.9218	0.0000	0.1352	0.0455
T7 Tractor Class 8	Diesel	0.41%	0.47%	0.0585	6.5590	0.2471	0.0738	0.8975	0.3731
T7 Tractor Class 8	Electricity	0.09%	0.10%	0.0000	0.0000	0.0000	0.0000	0.1043	0.0318
T7 Tractor Class 8	Natural Gas	0.00%	0.00%	0.0002	0.0023	0.0504	0.0000	0.0018	0.0006
T7 Utility Class 8	Diesel	0.00%	0.00%	0.0004	0.0405	0.0022	0.0008	0.0074	0.0028
T7 Utility Class 8	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0038	0.0012
T7IS	Gasoline	0.00%	0.00%	0.0012	0.0095	0.1041	0.0001	0.0004	0.0002
T7IS	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0003	0.0001
UBUS	Gasoline	0.01%	0.01%	0.0002	0.0026	0.0674	0.0006	0.0117	0.0041
UBUS	Electricity	0.17%	0.20%	0.0000	0.0000	0.0000	0.0000	0.2133	0.0678
UBUS	Natural Gas	0.01%	0.01%	0.0041	0.0118	0.0041	0.0000	0.0125	0.0046
		100.00%	100.00%	7.97	68.81	567.65	3.32	27.58	9.34

# Year 2050 Existing: Criteria Air Pollutants

Source: EMFAC2021 Version 1.0.2 web database. Emission Rates. Ventura County

Passenger Vehicles	LHDT	MHDT	HHDT
90.83%	3.89%	1.94%	3.34%
Cell G7	Cell G8	Cell G9	Cell G10

Daily VMT		472,786				lbs/day				
Vehicle Type	Fuel Type	Percent of VMT	Percent for Moorpark (Default)	ROG	NOx	CO	SOx	PM10	PM2.5	
All Other Buses	Diesel	0.03%	0.04%	0.0037	0.1833	0.0226	0.0033	0.0229	0.0090	
All Other Buses	Natural Gas	0.00%	0.00%	0.0002	0.0013	0.0492	0.0000	0.0014	0.0005	
LDA	Gasoline	43.36%	43.90%	1.2741	8.7427	197.4868	1.0058	6.9658	2.1977	
LDA	Diesel	0.03%	0.03%	0.0010	0.0026	0.0326	0.0005	0.0042	0.0014	
LDA	Electricity	6.36%	6.44%	0.0000	0.0000	0.0000	0.0000	0.8317	0.2374	
LDA	Plug-in Hybrid	2.07%	2.10%	0.0233	0.0546	3.5506	0.0234	0.2642	0.0774	
LDT1	Gasoline	2.77%	2.81%	0.0889	0.6006	13.5048	0.0745	0.4849	0.1549	
LDT1	Diesel	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
LDT1	Electricity	0.09%	0.09%	0.0000	0.0000	0.0000	0.0000	0.0123	0.0035	
LDT1	Plug-in Hybrid	0.07%	0.07%	0.0008	0.0018	0.1183	0.0008	0.0088	0.0026	
LDT2	Gasoline	21.58%	21.85%	0.8770	4.8743	114.8013	0.6014	3.7384	1.1901	
LDT2	Diesel	0.08%	0.08%	0.0100	0.0233	0.1043	0.0021	0.0175	0.0076	
LDT2	Electricity	0.65%	0.65%	0.0000	0.0000	0.0000	0.0000	0.0846	0.0241	
LDT2	Plug-in Hybrid	0.60%	0.61%	0.0068	0.0159	1.0323	0.0068	0.0769	0.0225	
LHD1	Gasoline	0.87%	0.57%	0.0080	0.0977	3.5466	0.0275	0.5159	0.1796	
LHD1	Diesel	0.68%	0.45%	0.1643	0.7643	0.2988	0.0200	0.4683	0.1882	
LHD1	Electricity	1.49%	0.98%	0.0000	0.0000	0.0000	0.0000	0.4795	0.1597	
LHD2	Gasoline	0.12%	0.08%	0.0010	0.0184	0.4971	0.0043	0.0817	0.0285	
LHD2	Diesel	0.33%	0.21%	0.1007	0.5509	0.1868	0.0112	0.2608	0.1072	
LHD2	Electricity	0.40%	0.26%	0.0000	0.0000	0.0000	0.0000	0.1445	0.0484	
MCY	Gasoline	0.35%	0.36%	2.8694	1.7137	34.6928	0.0068	0.0678	0.0269	
MDV	Gasoline	11.74%	11.89%	0.4923	2.7389	64.2270	0.3970	2.0479	0.6527	
MDV	Diesel	0.13%	0.13%	0.0056	0.0152	0.1757	0.0043	0.0231	0.0078	
MDV	Electricity	0.59%	0.59%	0.0000	0.0000	0.0000	0.0000	0.0767	0.0219	
MDV	Plug-in Hybrid	0.36%	0.36%	0.0040	0.0095	0.6173	0.0041	0.0460	0.0135	
MH	Gasoline	0.05%	0.06%	0.0035	0.1229	0.0802	0.0107	0.0341	0.0116	
MH	Diesel	0.03%	0.04%	0.0118	0.6588	0.0360	0.0035	0.0296	0.0145	
Motor Coach	Diesel	0.01%	0.01%	0.0011	0.1031	0.0065	0.0016	0.0140	0.0058	
OBUS	Gasoline	0.01%	0.02%	0.0008	0.0388	0.0246	0.0023	0.0091	0.0031	
OBUS	Electricity	0.02%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0071	0.0022	
PTO	Diesel	0.04%	0.05%	0.0075	1.3079	0.0935	0.0088	0.0021	0.0020	
PTO	Electricity	0.04%	0.06%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
SBUS	Gasoline	0.01%	0.01%	0.0014	0.0121	0.0257	0.0010	0.0076	0.0027	
SBUS	Diesel	0.02%	0.03%	0.0027	0.1062	0.0178	0.0029	0.0171	0.0062	
SBUS	Electricity	0.03%	0.04%	0.0000	0.0000	0.0000	0.0000	0.0153	0.0049	
SBUS	Natural Gas	0.00%	0.00%	0.0005	0.0021	0.0897	0.0000	0.0007	0.0002	
T6 CAIRP Class 4	Diesel	0.00%	0.00%	0.0000	0.0002	0.0000	0.0000	0.0001	0.0000	
T6 CAIRP Class 4	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	
T6 CAIRP Class 5	Diesel	0.00%	0.00%	0.0000	0.0002	0.0000	0.0000	0.0001	0.0000	
T6 CAIRP Class 5	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	
T6 CAIRP Class 6	Diesel	0.00%	0.00%	0.0000	0.0006	0.0001	0.0000	0.0002	0.0001	
T6 CAIRP Class 6	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	
T6 CAIRP Class 7	Diesel	0.01%	0.00%	0.0002	0.0079	0.0013	0.0004	0.0025	0.0010	
T6 CAIRP Class 7	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0005	0.0001	
T6 Instate Delivery Class 4	Diesel	0.03%	0.02%	0.0009	0.0346	0.0060	0.0017	0.0109	0.0041	
T6 Instate Delivery Class 4	Electricity	0.04%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0079	0.0025	
T6 Instate Delivery Class 5	Diesel	0.03%	0.02%	0.0009	0.0343	0.0060	0.0017	0.0109	0.0041	
T6 Instate Delivery Class 5	Electricity	0.04%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0080	0.0025	
T6 Instate Delivery Class 6	Diesel	0.10%	0.05%	0.0026	0.1032	0.0177	0.0051	0.0324	0.0121	
T6 Instate Delivery Class 6	Electricity	0.12%	0.07%	0.0000	0.0000	0.0000	0.0000	0.0235	0.0074	
T6 Instate Delivery Class 7	Diesel	0.03%	0.02%	0.0011	0.0596	0.0073	0.0017	0.0111	0.0043	
T6 Instate Delivery Class 7	Electricity	0.02%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0045	0.0014	
T6 Instate Other Class 4	Diesel	0.08%	0.05%	0.0023	0.0885	0.0154	0.0045	0.0285	0.0106	
T6 Instate Other Class 4	Electricity	0.11%	0.06%	0.0000	0.0000	0.0000	0.0000	0.0215	0.0068	
T6 Instate Other Class 5	Diesel	0.19%	0.10%	0.0051	0.1942	0.0338	0.0099	0.0628	0.0234	
T6 Instate Other Class 5	Electricity	0.25%	0.14%	0.0000	0.0000	0.0000	0.0000	0.0475	0.0149	
T6 Instate Other Class 6	Diesel	0.15%	0.08%	0.0041	0.1572	0.0270	0.0079	0.0502	0.0187	
T6 Instate Other Class 6	Electricity	0.20%	0.11%	0.0000	0.0000	0.0000	0.0000	0.0379	0.0119	
T6 Instate Other Class 7	Diesel	0.10%	0.06%	0.0036	0.1827	0.0224	0.0055	0.0357	0.0137	

T6 Instate Other Class 7	Electricity	0.09%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0167	0.0052
T6 Instate Tractor Class 6	Diesel	0.00%	0.00%	0.0000	0.0010	0.0002	0.0001	0.0003	0.0001
T6 Instate Tractor Class 6	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001
T6 Instate Tractor Class 7	Diesel	0.05%	0.03%	0.0018	0.0855	0.0115	0.0026	0.0187	0.0071
T6 Instate Tractor Class 7	Electricity	0.01%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0026	0.0008
T6 OOS Class 4	Diesel	0.00%	0.00%	0.0000	0.0003	0.0000	0.0000	0.0001	0.0000
T6 OOS Class 5	Diesel	0.00%	0.00%	0.0000	0.0003	0.0000	0.0000	0.0001	0.0000
T6 OOS Class 6	Diesel	0.00%	0.00%	0.0000	0.0009	0.0001	0.0000	0.0003	0.0001
T6 OOS Class 7	Diesel	0.01%	0.00%	0.0002	0.0069	0.0010	0.0002	0.0019	0.0007
T6 Public Class 4	Diesel	0.00%	0.00%	0.0001	0.0046	0.0006	0.0002	0.0011	0.0004
T6 Public Class 4	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0007	0.0002
T6 Public Class 5	Diesel	0.01%	0.00%	0.0002	0.0089	0.0011	0.0003	0.0022	0.0008
T6 Public Class 5	Electricity	0.01%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0013	0.0004
T6 Public Class 6	Diesel	0.01%	0.00%	0.0002	0.0077	0.0011	0.0003	0.0022	0.0008
T6 Public Class 6	Electricity	0.01%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0013	0.0004
T6 Public Class 7	Diesel	0.02%	0.01%	0.0005	0.0220	0.0032	0.0010	0.0066	0.0025
T6 Public Class 7	Electricity	0.02%	0.01%	0.0000	0.0000	0.0000	0.0000	0.0030	0.0010
T6 Utility Class 5	Diesel	0.00%	0.00%	0.0001	0.0024	0.0005	0.0002	0.0011	0.0004
T6 Utility Class 5	Electricity	0.01%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0010	0.0003
T6 Utility Class 6	Diesel	0.00%	0.00%	0.0000	0.0004	0.0001	0.0000	0.0002	0.0001
T6 Utility Class 6	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001
T6 Utility Class 7	Diesel	0.00%	0.00%	0.0000	0.0006	0.0001	0.0000	0.0003	0.0001
T6 Utility Class 7	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0003	0.0001
T6TS	Gasoline	0.08%	0.04%	0.0033	0.0269	0.0637	0.0061	0.0249	0.0084
T6TS	Electricity	0.10%	0.06%	0.0000	0.0000	0.0000	0.0000	0.0200	0.0063
T7 CAIRP Class 8	Diesel	0.50%	0.65%	0.0691	7.4653	0.2899	0.0805	1.0010	0.4289
T7 CAIRP Class 8	Electricity	0.14%	0.19%	0.0000	0.0000	0.0000	0.0000	1.1555	0.0473
T7 CAIRP Class 8	Natural Gas	0.00%	0.00%	0.0002	0.0026	0.0571	0.0000	0.0021	0.0007
T7 NNOOS Class 8	Diesel	0.76%	1.00%	0.1027	12.5957	0.4305	0.1176	1.5254	0.6521
T7 NOOS Class 8	Diesel	0.27%	0.36%	0.0385	4.7089	0.1614	0.0427	0.5597	0.2422
T7 Other Port Class 8	Diesel	0.10%	0.13%	0.0125	1.3556	0.0531	0.0177	0.1983	0.0810
T7 Other Port Class 8	Electricity	0.03%	0.03%	0.0000	0.0000	0.0000	0.0000	0.0279	0.0085
T7 POLA Class 8	Diesel	0.01%	0.01%	0.0012	0.1347	0.0051	0.0016	0.0181	0.0076
T7 POLA Class 8	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0019	0.0006
T7 Public Class 8	Diesel	0.04%	0.05%	0.0073	0.5600	0.0277	0.0077	0.0761	0.0295
T7 Public Class 8	Electricity	0.03%	0.05%	0.0000	0.0000	0.0000	0.0000	0.0379	0.0115
T7 Public Class 8	Natural Gas	0.00%	0.00%	0.0003	0.0044	0.0917	0.0000	0.0029	0.0010
T7 Single Concrete/Transit Mix ( Diesel		0.01%	0.02%	0.0012	0.1057	0.0052	0.0021	0.0216	0.0083
T7 Single Concrete/Transit Mix ( Electricity		0.02%	0.02%	0.0000	0.0000	0.0000	0.0000	0.0182	0.0056
T7 Single Concrete/Transit Mix ( Natural Gas		0.00%	0.00%	0.0001	0.0008	0.0181	0.0000	0.0007	0.0002
T7 Single Dump Class 8	Diesel	0.04%	0.05%	0.0048	0.4746	0.0216	0.0074	0.0752	0.0299
T7 Single Dump Class 8	Electricity	0.04%	0.06%	0.0000	0.0000	0.0000	0.0000	0.0465	0.0142
T7 Single Dump Class 8	Natural Gas	0.00%	0.00%	0.0002	0.0031	0.0661	0.0000	0.0022	0.0007
T7 Single Other Class 8	Diesel	0.14%	0.18%	0.0161	1.5660	0.0712	0.0260	0.2652	0.1046
T7 Single Other Class 8	Electricity	0.16%	0.21%	0.0000	0.0000	0.0000	0.0000	0.1765	0.0537
T7 Single Other Class 8	Natural Gas	0.00%	0.01%	0.0009	0.0104	0.2256	0.0000	0.0079	0.0026
T7 SWCV Class 8	Diesel	0.00%	0.00%	0.0003	0.0678	0.0005	0.0006	0.0047	0.0018
T7 SWCV Class 8	Electricity	0.03%	0.04%	0.0000	0.0000	0.0000	0.0000	0.0601	0.0195
T7 SWCV Class 8	Natural Gas	0.04%	0.05%	0.0009	0.0489	2.6006	0.0000	0.1203	0.0405
T7 Tractor Class 8	Diesel	0.41%	0.53%	0.0521	5.8378	0.2199	0.0657	0.7988	0.3321
T7 Tractor Class 8	Electricity	0.09%	0.11%	0.0000	0.0000	0.0000	0.0000	0.0929	0.0283
T7 Tractor Class 8	Natural Gas	0.00%	0.00%	0.0002	0.0021	0.0448	0.0000	0.0016	0.0005
T7 Utility Class 8	Diesel	0.00%	0.00%	0.0004	0.0360	0.0020	0.0007	0.0066	0.0025
T7 Utility Class 8	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0034	0.0010
T7IS	Gasoline	0.00%	0.00%	0.0010	0.0084	0.0927	0.0001	0.0004	0.0001
T7IS	Electricity	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	0.0003	0.0001
UBUS	Gasoline	0.01%	0.01%	0.0001	0.0023	0.0600	0.0005	0.0105	0.0036
UBUS	Electricity	0.17%	0.22%	0.0000	0.0000	0.0000	0.0000	0.1899	0.0603
UBUS	Natural Gas	0.01%	0.01%	0.0037	0.0105	0.0036	0.0000	0.0111	0.0041
		100.00%	100.00%	6.30	58.79	440.09	2.65	22.89	7.82



## Year 2050 General Plan Update: Greenhouse Gas Emissions

Source: EMFAC2021 Version 1.0.2 web database. Ventura County

Adjusted Daily vehicles miles traveled (VMT) multiplied by 347 days/year to account for reduced traffic on weekends and holidays. This assumption is consistent with the California Air Resources Board's (CARB) methodology within the 2008 Climate Change Scoping Plan Measure Documentation Supplement.

Passenger Vehicles	LHDT	MHDT	HHDT				
	90.83%	3.89%	1.94%	3.34%	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
				AR5 GWP	AR5 GWP	AR5 GWP	
Annual VMT	209,062,178				1	28	265
Vehicle Type	Fuel Type	Percent of VMT	Percent for Moorpark (Default)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
All Other Buses	Diesel	0.03%	0.03%	62	0.000	0.010	65
All Other Buses	Natural Gas	0.00%	0.00%	3	0.003	0.001	3
LDA	Gasoline	43.36%	44.70%	20,776	0.091	0.297	20,857
LDA	Diesel	0.03%	0.03%	10	0.000	0.002	11
LDA	Electricity	6.36%	6.56%	0	0.000	0.000	0
LDA	Plug-in Hybrid	2.07%	2.14%	484	0.001	0.002	484
LDT1	Gasoline	2.77%	2.86%	1,539	0.006	0.020	1,544
LDT1	Diesel	0.00%	0.00%	0	0.000	0.000	0
LDT1	Electricity	0.09%	0.10%	0	0.000	0.000	0
LDT1	Plug-in Hybrid	0.07%	0.07%	16	0.000	0.000	16
LDT2	Gasoline	21.58%	22.25%	12,423	0.060	0.157	12,467
LDT2	Diesel	0.08%	0.09%	46	0.000	0.007	48
LDT2	Electricity	0.65%	0.67%	0	0.000	0.000	0
LDT2	Plug-in Hybrid	0.60%	0.62%	141	0.000	0.001	141
LHD1	Gasoline	0.87%	0.34%	336	0.000	0.001	336
LHD1	Diesel	0.68%	0.27%	255	0.001	0.040	265
LHD1	Electricity	1.49%	0.59%	0	0.000	0.000	0
LHD2	Gasoline	0.12%	0.05%	52	0.000	0.000	52
LHD2	Diesel	0.33%	0.13%	143	0.001	0.023	149
LHD2	Electricity	0.40%	0.16%	0	0.000	0.000	0
MCY	Gasoline	0.35%	0.36%	141	0.099	0.027	151
MDV	Gasoline	11.74%	12.10%	8,201	0.033	0.086	8,225
MDV	Diesel	0.13%	0.13%	93	0.000	0.015	97
MDV	Electricity	0.59%	0.60%	0	0.000	0.000	0
MDV	Plug-in Hybrid	0.36%	0.37%	84	0.000	0.000	84
MH	Gasoline	0.05%	0.05%	191	0.000	0.002	192
MH	Diesel	0.03%	0.03%	66	0.000	0.010	69
Motor Coach	Diesel	0.01%	0.01%	31	0.000	0.005	32
OBUS	Gasoline	0.01%	0.01%	41	0.000	0.000	41
OBUS	Electricity	0.02%	0.02%	0	0.000	0.000	0
PTO	Diesel	0.04%	0.05%	164	0.000	0.026	171
PTO	Electricity	0.04%	0.05%	0	0.000	0.000	0
SBUS	Gasoline	0.01%	0.01%	18	0.000	0.000	18
SBUS	Diesel	0.02%	0.02%	54	0.000	0.009	56
SBUS	Electricity	0.03%	0.04%	0	0.000	0.000	0
SBUS	Natural Gas	0.00%	0.00%	3	0.006	0.001	3
T6 CAIRP Class 4	Diesel	0.00%	0.00%	0	0.000	0.000	0
T6 CAIRP Class 4	Electricity	0.00%	0.00%	0	0.000	0.000	0
T6 CAIRP Class 5	Diesel	0.00%	0.00%	0	0.000	0.000	0
T6 CAIRP Class 5	Electricity	0.00%	0.00%	0	0.000	0.000	0
T6 CAIRP Class 6	Diesel	0.00%	0.00%	1	0.000	0.000	1
T6 CAIRP Class 6	Electricity	0.00%	0.00%	0	0.000	0.000	0
T6 CAIRP Class 7	Diesel	0.01%	0.00%	7	0.000	0.001	7
T6 CAIRP Class 7	Electricity	0.00%	0.00%	0	0.000	0.000	0
T6 Instate Delivery Class 4	Diesel	0.03%	0.02%	32	0.000	0.005	33
T6 Instate Delivery Class 4	Electricity	0.04%	0.02%	0	0.000	0.000	0
T6 Instate Delivery Class 5	Diesel	0.03%	0.02%	32	0.000	0.005	33
T6 Instate Delivery Class 5	Electricity	0.04%	0.02%	0	0.000	0.000	0
T6 Instate Delivery Class 6	Diesel	0.10%	0.05%	95	0.000	0.015	99
T6 Instate Delivery Class 6	Electricity	0.12%	0.06%	0	0.000	0.000	0
T6 Instate Delivery Class 7	Diesel	0.03%	0.02%	32	0.000	0.005	34
T6 Instate Delivery Class 7	Electricity	0.02%	0.01%	0	0.000	0.000	0
T6 Instate Other Class 4	Diesel	0.08%	0.04%	84	0.000	0.013	87
T6 Instate Other Class 4	Electricity	0.11%	0.05%	0	0.000	0.000	0

## Year 2050 General Plan Update: Greenhouse Gas Emissions

Source: EMFAC2021 Version 1.0.2 web database. Ventura County

Adjusted Daily vehicles miles traveled (VMT) multiplied by 347 days/year to account for reduced traffic on weekends and holidays. This assumption is consistent with the California Air Resources Board's (CARB) methodology within the 2008 Climate Change Scoping Plan Measure Documentation Supplement.

Passenger Vehicles	LHDT	MHDT	HHDT				
	90.83%	3.89%	1.94%	3.34%	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
				AR5 GWP	AR5 GWP	AR5 GWP	
Annual VMT	209,062,178			1	28	265	
Vehicle Type	Fuel Type	Percent of VMT	Percent for Moorpark (Default)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2e</sub>
T6 Instate Other Class 5	Diesel	0.19%	0.09%	184	0.000	0.029	192
T6 Instate Other Class 5	Electricity	0.25%	0.12%	0	0.000	0.000	0
T6 Instate Other Class 6	Diesel	0.15%	0.07%	147	0.000	0.023	153
T6 Instate Other Class 6	Electricity	0.20%	0.10%	0	0.000	0.000	0
T6 Instate Other Class 7	Diesel	0.10%	0.05%	103	0.000	0.016	108
T6 Instate Other Class 7	Electricity	0.09%	0.04%	0	0.000	0.000	0
T6 Instate Tractor Class 6	Diesel	0.00%	0.00%	1	0.000	0.000	1
T6 Instate Tractor Class 6	Electricity	0.00%	0.00%	0	0.000	0.000	0
T6 Instate Tractor Class 7	Diesel	0.05%	0.03%	49	0.000	0.008	51
T6 Instate Tractor Class 7	Electricity	0.01%	0.01%	0	0.000	0.000	0
T6 OOS Class 4	Diesel	0.00%	0.00%	0	0.000	0.000	0
T6 OOS Class 5	Diesel	0.00%	0.00%	0	0.000	0.000	0
T6 OOS Class 6	Diesel	0.00%	0.00%	1	0.000	0.000	1
T6 OOS Class 7	Diesel	0.01%	0.00%	5	0.000	0.001	5
T6 Public Class 4	Diesel	0.00%	0.00%	3	0.000	0.001	3
T6 Public Class 4	Electricity	0.00%	0.00%	0	0.000	0.000	0
T6 Public Class 5	Diesel	0.01%	0.00%	6	0.000	0.001	7
T6 Public Class 5	Electricity	0.01%	0.00%	0	0.000	0.000	0
T6 Public Class 6	Diesel	0.01%	0.00%	7	0.000	0.001	7
T6 Public Class 6	Electricity	0.01%	0.00%	0	0.000	0.000	0
T6 Public Class 7	Diesel	0.02%	0.01%	19	0.000	0.003	20
T6 Public Class 7	Electricity	0.02%	0.01%	0	0.000	0.000	0
T6 Utility Class 5	Diesel	0.00%	0.00%	3	0.000	0.001	3
T6 Utility Class 5	Electricity	0.01%	0.00%	0	0.000	0.000	0
T6 Utility Class 6	Diesel	0.00%	0.00%	1	0.000	0.000	1
T6 Utility Class 6	Electricity	0.00%	0.00%	0	0.000	0.000	0
T6 Utility Class 7	Diesel	0.00%	0.00%	1	0.000	0.000	1
T6 Utility Class 7	Electricity	0.00%	0.00%	0	0.000	0.000	0
T6TS	Gasoline	0.08%	0.04%	109	0.000	0.000	109
T6TS	Electricity	0.10%	0.05%	0	0.000	0.000	0
T7 CAIRP Class 8	Diesel	0.50%	0.57%	1,503	0.001	0.237	1,565
T7 CAIRP Class 8	Electricity	0.14%	0.17%	0	0.000	0.000	0
T7 CAIRP Class 8	Natural Gas	0.00%	0.00%	3	0.003	0.001	3
T7 NNOOS Class 8	Diesel	0.76%	0.88%	2,197	0.001	0.346	2,289
T7 NOOS Class 8	Diesel	0.27%	0.32%	798	0.000	0.126	831
T7 Other Port Class 8	Diesel	0.10%	0.12%	330	0.000	0.052	344
T7 Other Port Class 8	Electricity	0.03%	0.03%	0	0.000	0.000	0
T7 POLA Class 8	Diesel	0.01%	0.01%	30	0.000	0.005	31
T7 POLA Class 8	Electricity	0.00%	0.00%	0	0.000	0.000	0
T7 Public Class 8	Diesel	0.04%	0.05%	144	0.000	0.023	150
T7 Public Class 8	Electricity	0.03%	0.04%	0	0.000	0.000	0
T7 Public Class 8	Natural Gas	0.00%	0.00%	5	0.004	0.001	5
T7 Single Concrete/Transit Mix ( Diesel		0.01%	0.01%	40	0.000	0.006	41
T7 Single Concrete/Transit Mix ( Electricity		0.02%	0.02%	0	0.000	0.000	0
T7 Single Concrete/Transit Mix ( Natural Gas		0.00%	0.00%	1	0.001	0.000	1
T7 Single Dump Class 8	Diesel	0.04%	0.05%	138	0.000	0.022	143
T7 Single Dump Class 8	Electricity	0.04%	0.05%	0	0.000	0.000	0
T7 Single Dump Class 8	Natural Gas	0.00%	0.00%	3	0.003	0.001	4
T7 Single Other Class 8	Diesel	0.14%	0.16%	485	0.000	0.076	505
T7 Single Other Class 8	Electricity	0.16%	0.19%	0	0.000	0.000	0
T7 Single Other Class 8	Natural Gas	0.00%	0.01%	12	0.011	0.002	13
T7 SWCV Class 8	Diesel	0.00%	0.00%	10	0.000	0.002	11
T7 SWCV Class 8	Electricity	0.03%	0.04%	0	0.000	0.000	0
T7 SWCV Class 8	Natural Gas	0.04%	0.04%	79	0.011	0.016	84

## Year 2050 General Plan Update: Greenhouse Gas Emissions

Source: EMFAC2021 Version 1.0.2 web database. Ventura County

Adjusted Daily vehicles miles traveled (VMT) multiplied by 347 days/year to account for reduced traffic on weekends and holidays. This assumption is consistent with the California Air Resources Board's (CARB) methodology within the 2008 Climate Change Scoping Plan Measure Documentation Supplement.

Passenger Vehicles	LHDT	MHDT	HHDT				
	90.83%	3.89%	1.94%	3.34%	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
	Cell G17	Cell G18	Cell G19	Cell G20	AR5 GWP	AR5 GWP	AR5 GWP
<b>Annual VMT</b>	<b>209,062,178</b>				1	28	265
Vehicle Type	Fuel Type	Percent of VMT	Percent for Moorpark (Default)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
T7 Tractor Class 8	Diesel	0.41%	0.47%	1,227	0.000	0.193	1,278
T7 Tractor Class 8	Electricity	0.09%	0.10%	0	0.000	0.000	0
T7 Tractor Class 8	Natural Gas	0.00%	0.00%	2	0.002	0.000	3
T7 Utility Class 8	Diesel	0.00%	0.00%	13	0.000	0.002	13
T7 Utility Class 8	Electricity	0.00%	0.00%	0	0.000	0.000	0
T7IS	Gasoline	0.00%	0.00%	1	0.000	0.000	1
T7IS	Electricity	0.00%	0.00%	0	0.000	0.000	0
UBUS	Gasoline	0.01%	0.01%	10	0.000	0.000	10
UBUS	Electricity	0.17%	0.20%	0	0.000	0.000	0
UBUS	Natural Gas	0.01%	0.01%	10	0.000	0.002	10
		100.00%	100.00%	53,334	0	2	53,868















## **Appendix E      Biological Resources Report**

## Appendices

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# Biological Resources Technical Report

Existing Conditions – Final Report

September 28, 2022

Citation: ECORP Consulting, Inc. 2022. *Biological Resources Technical Report for the City of Moorpark General Plan Update – Final Report*. Ventura County, California. Prepared for the City of Moorpark, California. September 28.

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**LIST OF ACRONYMS AND ABBREVIATIONS**

<b>Term</b>	<b>Definition</b>
°F	degrees Fahrenheit
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act

<b>Term</b>	<b>Definition</b>
CWPA	Critical Wildlife Passage Areas
EIR	Environmental Impact Report
ESU	Evolutionary Significant Unit
FESA	Federal Endangered Species Act
GIS	Geographic Information System
HCP	Habitat Conservation Plan
HFA	Hazardous Fire Areas
MBTA	Migratory Bird Treaty Act
NHD	National Hydrography Dataset
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NVCS	National Vegetation Classification Standard
NWI	National Wetland Inventory
OHWM	ordinary high-water mark"
RWQCB	Regional Water Quality Control Boards
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USC	U.S. Code
USDA	United States Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VCFD	Ventura County Fire Department
WUI	Wildland-Urban Interface



## 1.0 INTRODUCTION

The City of Moorpark's General Plan was originally adopted in 1986. Although the Land Use and Circulation Elements were updated significantly in 1992, the General Plan has not been comprehensively updated since its original adoption. A majority of elements comprising the General Plan are more than 20 years old. As a result, the General Plan does not maintain an internally consistent baseline of existing conditions, nor reliable projections for growth and development of the City. The City intends for the development of a comprehensive General Plan and associated Environmental Impact Report (EIR) to allow for the tiering of environmental review for future projects involving discretionary actions by the City, pursuant to Sections 15152 and 15168 of California Environmental Quality Act (CEQA). Streamlining CEQA analysis in this manner will allow for an expedited, consistent and predictable process for the review of the potential impacts associated with new development and major programs, as outlined by Section 21093 of the State Public Resources Code. This report summarizes the existing biological conditions that will serve as the basis for development of the comprehensive General Plan Update and associated Programmatic EIR.

### 1.1 Project Location

The City of Moorpark is located in the southeastern part of Ventura County, an approximately one-hour drive from Los Angeles to the south and Santa Barbara to the north. The land area within the City's boundaries is approximately 13 square miles (Appendix A - Figures 1 and 2). The area within the City's boundary (General Plan Area or Plan Area) is located within all or portions of Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 16, 17, 18 of Township 02 North and Range 19 West; and Sections 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 of Township 03 North and Range 19 West depicted on the United States Geological Survey (USGS) Moorpark and Simi 7.5-minute topographic quadrangles (Appendix A - Figure 3).

## 2.0 REGULATORY REQUIREMENTS

### 2.1 Federal Regulations

#### 2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and animals that are listed as endangered or threatened by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of FESA prohibits the "take" of endangered wildlife, where take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code [USC] 1538). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of FESA

provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

### **2.1.2 Migratory Bird Treaty Act**

Nesting birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703- 711). The MBTA provides protection for nesting birds that are both residents and migrants whether or not they are considered sensitive by resource agencies. The MBTA prohibits take of nearly all native birds. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. The USFWS is responsible for enforcing the MBTA.

### **2.1.3 Federal Clean Water Act**

The federal Clean Water Act (CWA) (33 USC 1344 et seq.) provides for the restoration and maintenance of the physical, chemical, and biological integrity of the nation’s waters. The United States Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into waters of the United States under Section 404 of the CWA. “Discharges of fill material” is defined as the addition of fill material into Waters of the United States, including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes, and subaqueous utility lines [33 CFR §328.2(f)]. In addition, Section 401 of the CWA (33 USC 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the United States that are currently regulated under the CWA include the following:

- Wetlands. Wetlands are “those areas that are inundated or saturated by surface or ground-water 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” (USACE and U.S. Environmental Protection Agency [USEPA] 2019). Wetlands can be perennial, intermittent or adjacent to other waters.
- Other Waters. Other waters that may be identified in the site are non-tidal, perennial, and intermittent watercourses and tributaries to such watercourses (USACE and U.S. Environmental Protection Agency [USEPA] 2019). The limit of USACE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 CFR 328.4(c)(1) as the “ordinary high-water mark” (OHWM). The OHWM is defined as the “line on the shore established by the fluctuations of water and indicated by physical characteristics such as 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 areas”

approximation of the lateral limit of USACE jurisdiction. The upstream limits of other waters are defined as the point where the OHWM is no longer perceptible.

Substantial impacts to wetlands over 0.5 acre of impact may require an individual permit. Projects that only minimally affect wetlands less than 0.5 acre of impact may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by one of nine Regional Water Quality Control Boards (RWQCB) that operate under the State Water Resources Control Board (SWRCB). The Plan Area is in the jurisdiction of the Los Angeles (Region 4) RWQCB.

## **2.2 State Regulations**

### **2.2.1 California Endangered Species Act**

The California Endangered Species Act (CESA) generally parallels the main provisions of FESA, but unlike its federal counterpart, CESA applies the take prohibitions to species proposed for listing (called “candidates” by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

### **2.2.2 Fully Protected Species**

The State of California first began to designate species as “fully protected” prior to the creation of CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

### **2.2.3 Native Plant Protection Act**

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code Sections 1900-1913) was created with the intent to “preserve, protect, and enhance rare and endangered plants in this State.” The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as “endangered” or “rare” and to protect endangered and rare plants from take. The CESA of 1984 (California Fish and Game Code Section 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

#### **2.2.4 California Fish and Game Code Section 1600**

Under Section 1602 of the California Fish and Game Code, the CDFW regulates activities that may (1) divert, obstruct, or change the natural flow or change the bed, channel, or bank or any river stream or lake; (2) use materials from streambeds; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. It should be noted that within the California Code of Regulations, a streambed is defined as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life” (Title 14, § 1.72). The definition further states “This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (ibid.). This definition does not supersede or replace the definition within Section 1602, but rather is additive to it.

Regulated activities require submittal of a Notification of Lake or Streambed Alteration to CDFW. CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is the Streambed Alteration Agreement. Often, projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

#### **2.2.5 California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513**

Several sections of the California Fish and Game Code provides for the protection of native birds and raptors. Section 3503 prohibits the take, possession, or needless destruction of the nest of eggs or any bird, except as otherwise provided by the code and all raptor species are protected from take pursuant to Section 3503.5. Section 3511(a)(1) specifies that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 prohibits the possession or take of any migratory nongame birds listed under the MBTA. These sections mandate the protection of California nongame native birds’ nests and also make it unlawful to take these birds.

#### **2.2.6 California Fish and Game Code Section 4150**

A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. Bats are considered nongame mammals and are afforded protection by state law from take and/or harassment. Any activities resulting in bat mortality (e.g., the destruction of an occupied bat roost that results in the death of bats), disturbance that causes the loss of a maternity colony of bats (resulting in the abandonment and subsequent death of young), or various modes of nonlethal pursuit or capture may be considered take as defined in Section 86 of the California Fish and Game Code. In addition, impacts to bat maternity colonies, which are considered native wildlife nursery sites, could be considered significant under CEQA.

#### **2.2.7 California Fish and Game Code Section 4800**

The mountain lion (genus Puma) is a specially protected mammal under the laws of this state. It is unlawful to take, injure, possess, transport, import, or sell a mountain lion or a product of a mountain lion, except as

specifically provided in Chapter 10 of Division 4 Part 3 (Mammals) or in Division 3 Chapter 2 (Importation, Transportation, and Sheltering of Restricted Live Wild Animals).

## **2.2.8 Porter Cologne Water Quality Control Act**

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of storm water runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan. Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, with any region that could affect the water of the state” [Water Code 13260(a)].

Waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code 13050[e]). The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State that are not regulated by the USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of Waste Discharge Requirements for these activities.

On April 2, 2019, the SWRCB adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (referred to as the Procedures) for inclusion in the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Resolution No. 2019-0015). The new Procedures include:

- definition of wetlands and aquatic resources that are Waters of the State,
- description of application requirements for individual orders (not general orders) for water quality certification, or waste discharge requirements,
- description of information required in compensatory mitigation plans, and
- definition of exemptions to application procedures.

The Office of Administrative Law approved the procedures on August 28, 2019, and the rule went into effect May 28, 2020.

## **2.3 Regional Policies and Regulations**

### **2.3.1 Ventura County Fire Protection District Ordinance Number 31**

The Ventura County Fire Department (VCFD) is responsible for the protection of lives and property within Ventura County. The VCFD’s area of jurisdiction includes all unincorporated areas of Ventura County along with the cities of Camarillo, Moorpark, Ojai, Port Hueneme, Simi Valley, Thousand Oaks, and Santa Paula. Per Section 304.1.2 (Vegetation) clearance requirements in Wildland-Urban Interface (WUI) Fire Areas, Hazardous Fire Areas (HFA) and any other parcels declared a Public Nuisance by the Fire Code Official shall be in accordance with Appendix W. In addition, properties within said areas would be subject to guidelines provided in Appendix V (Fire Safety Provisions for Hazardous Fire Areas) including:

- V108.1 - new structures and additions to existing structures shall not be constructed less than 100 feet (30,480 mm) from any protected habitat, whether on the same or adjacent Parcels, where the 100 foot (30,480 mm) Defensible Space required under Appendix W cannot be provided, unless an alternate method of construction and protection is provided that can ensure the safety of the structure and emergency responders as approved by the Fire Code Official. Protected habitat includes lands restricted from brush clearance or modification due to federal or state listed endangered species;
- W105.1 - Minimum 100-foot defensible space zone around each qualifying structure (excluding single specimens or stands of protected species of trees, ornamental landscape or similar plants used in landscaping and ground covers, provided that they do not form a means of rapidly transmitting a fire from the native growth to any building and are in accordance with the requirements of Defensible Space and Fuel Modification Standards as issued and approved by the Fire Code Official);
- W106.2.1 - removal of slash, snags, vegetation that may grow into overhead electrical lines, other ground fuels, ladder fuels and dead trees, and the thinning of live trees; and
- W106.4 - continuous maintenance of the approved Fuel Modification zone at all times.

Per Section 105.7.26 (Fuel Modification plans) of the VCFD Fire Code, a construction permit is required for installation of or modification to a Fuel Modification zone located within an HFA, WUI Zone or Fire Hazard Severity Zone.

## 2.4 Local Ordinances and Policies

Several ordinances in the Moorpark Municipal Code provide regulations to protect trees, native plants, and other biological resources within the City limits. The following excerpts summarize chapters and sections that apply to biological resource protection measures:

### **Chapter 12.04 Encroachments.**

- **Section 12.04.890 Removal or trimming of trees.** Trimming of trees shall be permitted only when and in the manner authorized by a permit so that the shapeliness of the tree may be preserved. Removal of live trees requires board of supervisors' approval, dead trees may be removed at the discretion of the commissioner. The removal of trees will be approved and a permit issued only when a necessity for removal exists. When a tree is removed, the entire stump shall be taken out at least one (1) foot below the existing or proposed subgrade unless otherwise specified in the permit, and the hole backfilled and compacted. All debris from trimming or removal shall be removed from the site and the right-of-way restored to its former condition. (Ord. 6 § 16 (part), 1983)

### **Chapter 12.08 Trees, Shrubs, and Plants.**

- **Section 12.08.010 City Policy:** Consistent with Chapter 12.12 of this title regulating the preservation, cutting and removal of historic trees, native oak trees and mature trees and with Resolution 88-520 setting forth Guidelines for a Master Tree Plan, it shall be the city's policy to utilize whatever techniques, methods and procedures are required to preserve, whenever feasible, all trees in the city including, but not limited to, trees which are creating damage to surface

improvements or underground facilities or which are diseased, or located where construction is being considered or will occur. (Ord. 102 § 1, 1988)

■ **Section 12.08.050 Diseased or infested trees—Removal or replacement.**

- A. If any tree on public property is infected or infested with insects, pests or disease, the director shall cause such condition to be treated or, if any such tree is infected or infested to such a degree that the condition cannot be eradicated by treatment, the director may order the removal and/or replacement of the tree.
- B. The director, after unsuccessfully utilizing all techniques, methods and procedures which he deems reasonable to save trees planted on public property which are dead, dying, in a dangerous condition, unsafe or likely to cause damage, shall remove and/or replace such trees. (Ord. 102 § 1, 1988)

■ **12.08.060 Prohibited acts.** No person, except authorized city personnel, shall remove, destroy, deface or injure any tree on public property by any means including, but not limited to, the following:

- A. By pouring any material on any tree or on the ground which would be harmful to the tree;
- B. By attaching any sign or notice or other object on any tree or fastening any guy wire, cable, rope, nails or screws or any other device to any tree, except that agencies may, under the supervision of the director, temporarily affix no-parking signs to trees when necessary in conjunction with activities in the public interest, such as street improvement work, tree maintenance work or parades;
- C. By causing or encouraging any unnecessary fire or burning near or around any tree;
- D. By constructing a concrete, asphalt, brick or gravel surface, or otherwise covering the ground within a one (1) foot radius of any tree so as to shut off air or water from the roots, except under written authority from the director. (Ord. 102 § 1, 1988)

■ **Section 12.08.070 Native plants.** It is unlawful for any person to dig up, pick, break off, cut or destroy any native tree, plant, berry-bearing shrub, fern or any wild flower, or to pick, break off or cut any bud, bloom or blossom from any of said plants, trees or shrubs within three hundred (300) feet of the middle of any leveled road or highway within the county, unless, in the case of private lands, the owner thereof gives his written consent thereto. (Ord. 6 § 14 (part), 1983)

■ **Section 12.08.100 Excavations or street work—Protection of trees.**

- A. Any tree growing upon public property near any excavation, construction or street work shall be sufficiently guarded and protected by those responsible for such work so as to prevent any injury to the tree.
- B. No person shall excavate any ditches, tunnels or trenches, or install pavement within a radius of four (4) feet from any tree on public property without the written permission of the director. (Ord. 102 § 1, 1988)

## Chapter 12.12 Historic Trees, Native Oak Trees, and Mature Trees.

- **12.12.010 Purpose of provisions.** It is the determination of the council that proper and necessary steps should be taken in order to protect and preserve, to the greatest extent possible, mature trees, native oak trees and historic trees, especially where such trees are associated with proposals for urban development, as such trees are a significant, historical, aesthetic and valuable ecological resource. It is the intent of this chapter to maintain and enhance the general health, safety and welfare of the citizens of the city by assisting in counteracting air pollution, by minimizing soil erosion and other related environmental damage and by enhancing the aesthetic environment of the city. (Ord. 101 § 1, 1988)
- **Section 12.12.020 Applicability of provisions.** The provisions of this chapter shall apply to all living historic trees, native oak trees and mature trees, including but not limited to, where those trees are associated with proposals for urban development, on all public or private property within the limits of the city, except as specified in Section 12.12.090 of this chapter. (Ord. 101 § 1, 1988)
- **Section 12.12.040 Removal—Prohibitions.** No native oak tree, historic tree or mature tree shall be removed, cut down, or otherwise destroyed, except as provided for in Sections 12.12.070 through 12.12.090. (Ord. 101 § 1, 1988)
- **Section 12.12.050 Urban development proposals—Report guidelines.**
  - A. Where one or more native oak trees, historic trees or mature trees are associated with any proposal for urban development, the director of community development or his or her designated representative, shall cause a report to be prepared on those trees, otherwise, tree removals (public and private) shall be processed through the community services department.
  - B. An applicant for a proposal for urban development shall provide to the city the precise vertical and horizontal location within plus or minus one (1) foot of each mature tree on the subject parcel and the generalized locations of all mature trees within twenty (20) feet of the project boundary.
  - C. Tree reports shall be prepared by an arborist, horticulturist or registered landscape architect who are on a list approved by resolution of the city council. Tree reports shall include the following information:
    1. Tree type by common name and genus and species;
    2. The diameter of trunks or main stems as measured four and one-half (4½) feet above the root crown;
    3. The average spread of each tree;
    4. A letter grade for the health of each tree. Grades employed shall be "A" for outstanding, "B" for good, "C" for average, "D" for below average;
    5. A letter grade for the aesthetic quality of each tree employing those grades defined in subsection (C)(4) of this section;
    6. Disclosure of any significant disease or insect infestations, heart rot, fire, mechanical or wind damage;



7. Recommended tree surgery, chemical treatment or other remedial measures intended to improve the health, safety or life expectancy of the tree;
  8. Appraisal value of each tree which shall be established and provided to the city using the most recent edition of the Guide for Establishing Values of Trees and Other Plants, prepared by the Council of Tree Landscape Appraisers.
- D. The director of community development, or his or her designated representative, may waive the requirement for a tree report or may waive the requirement for survey of one (1) or more trees based upon the director's judgment that the tree(s) would have little or no value in that location. (Ord. 101 § 1, 1988)
- **Section 12.12.060 Urban development proposals—Tree preservation guidelines.**
- A. Initial project layout, design and grading shall recognize the desirability of preserving native oak trees, historic trees or mature trees with appropriate modifications and adjustments to accommodate preservation and maintenance by locating the best candidates in areas where preservation is feasible. Design of the grading and other improvements shall reflect consideration of the following safeguards:
1. Location in minimum growing areas as required by individual species;
  2. No disruption or removal of structural feeder roots;
  3. Fencing of trees at or beyond their driplines during grading and construction activities;
  4. No filling, cutting, development or compaction of soils within the dripline;
  5. Such other measures required by the species of tree to be preserved as recommended by the consulting arborist, horticulturist or landscape architect.
- B. It is recognized that the complete preservation of healthy trees may sometimes conflict with normal land developmental considerations such as proper drainage, grading, circulation, safety and provision of utilities. Within a given development, it may not be practical to preserve all healthy trees, and therefore, the city and the developer must be willing to compromise the goal of complete tree preservation in order to address other public safety and design concerns. In such instances, the design of the development must address preservation of the most desirable and significant of the healthy trees and the developer is encouraged to utilize creative land planning techniques to achieve this end.
- C. The planning commission of the city, when reviewing development plans, shall determine the adequacy and appropriateness of the proposed preservation plan.
- D. Following approval of such a development, the developer shall submit grading, improvement and precise landscaping plans detailing the approved preservation plan. Such plans shall be approved by the city engineer and/or the director of community development, as appropriate. Prior to use inauguration, the preserved trees shall be trimmed for balance, structural integrity, ornamental appearance and treated for any diseases.

- E. The precise vertical and horizontal locations plus or minus one (1) foot of all mature trees shall be shown on an exhibit as part of the initial application for any project unless that project would involve no exterior construction activities. (Ord. 101 § 1, 1988)
- **Section 12.12.070 Tree removal permits—Requirements.** The appropriate department shall give priority to inspection of those requests based upon hazardous conditions, and may refer any request to the appropriate commission for determination.
- A. Permit Required. No native oak tree, historic tree or other mature tree, where that tree is on public or private property, except as provided for in subsection B of this section, or is associated with a proposal for urban development, shall be removed, cut down, or otherwise destroyed, unless a tree removal permit has been issued by the city. The director of community services shall establish the format and information required for a tree removal permit consistent with this chapter. In no event shall a permit be denied if to do so would cause interference with the economic use and enjoyment of the property.
- B. Single Parcel Review Requirement. Permits for removal of trees on any single parcel shall be required from the appropriate commission or director or designee as follows:
1. For any historic tree on the parcel;
  2. For removal of one or more historic trees, mature trees or native oak trees when such trees are in the front yard, side yard or rear yard which abuts a public street. For purposes of this section only, "front yard" means that portion of the property extending from the front of a structure, forward to the front property line; the "side yard" means that portion of the property extending from the side of a structure in front to the rear property line; "rear yard" means that portion of the property extending from the rear of a structure backward to the rear property line.
- C. Site Inspection. Prior to the issuance of such permit, the appropriate director, or designee, shall inspect the premises involved and shall designate the tree(s) to be removed or moved. Failure to provide access to the premises shall be grounds for denial of the permit.
- D. Project Approval Required. No tree removal permit shall be issued for the removal of any tree on any lot associated with a proposal for urban development unless the project has been approved by the city or unless the director of community development, or designee, determines that the immediate removal of the tree is required because of the condition of the tree with respect to disease, danger of collapse of all or any portion of the tree, proximity to an existing structure, or interference with utility services.
- E. Removal Not Associated with a Proposal for Urban Development. Where tree(s) are proposed for removal that are not associated with a proposal for urban development, the director of community services, or designee, may condition a tree removal permit upon the replacement of the certain tree(s). Any applicant for a tree removal permit shall not be required to expend more on the replacement tree(s) than the appraised value of the tree(s) for which a permit is required. An appraisal shall be done in accordance with Section 12.12.050(C).

- F. Removal Associated with a Proposal for Urban Development. Where tree(s) are proposed for removal that are associated with a proposal for urban development, the director of community development, or designee, shall cause an appraisal of the value of said tree(s) to be prepared in accordance with Section 12.12.050(C).

The resulting value shall be applied to upgrading the size of tree plantings associated with the project. Trees for which no tree report has been required pursuant to Section 12.12.050(D) shall not be subject to appraisal or replacement by value.

- G. Tree Replacement Waiver. In no case shall an applicant for a tree removal permit be required to replace or otherwise pay for the value of any tree which:
  1. The city has directed the applicant to remove so that a public street may be constructed along an alignment determined or approved by the city engineer or adequate line-of-sight distance may be achieved in order to assure public safety; or
  2. Removal was necessitated due to the health of the tree. (Ord. 107 § 1, 1989; Ord. 101 § 1, 1988)

- **Section 12.12.080 Tree removal permits—Standards for grant or denial.** Determination by the city to issue a tree removal permit, shall be based upon the following criteria:

- A. The condition of the tree with respect to disease, danger of collapse of all or any portion of the tree, proximity to an existing structure, or interference with utility services or, in the case of a native oak tree, interference with an addition to an existing single-family detached home;
- B. The necessity to remove a historic tree, native oak tree or mature tree in order to construct improvements which allow economic enjoyment of the property;
- C. The number of historic trees, native oak trees and mature trees existing in the neighborhood;
- D. Good forestry practices, i.e., the number of healthy mature trees that a given parcel of land will support;
- E. Whether or not removal of the tree is necessary to construct required improvement within the public street right-of-way or within a flood control or utility right-of-way; and
- F. The suitability of the tree species for use in that location. (Ord. 101 § 1, 1988)

- **Section 12.12.090 Exemptions. The following are exempt from the provisions of this chapter:**

- A. Emergency Situation. Cases of emergency where the director of community services or designee, or any member of a law enforcement agency or the Ventura County Fire Protection District, in the performance of his or her duties, determines that a tree poses an imminent threat to the public safety, or general welfare. If conditions and circumstances permit, the public official shall consult with the director of community development, or designee, prior to ordering the removal of any mature tree;

- B. Traffic Engineer. Removal or relocation of trees necessary to obtain adequate line-of-sight distances as required by the city traffic engineer;
  - C. Public Improvement Damage. Removal of trees from within public right-of-way, which in the opinion of the director of public works, or designee, will cause damage to existing public improvements;
  - D. Public Utility Damage. Actions taken for the protection of existing electrical power or communication lines or other property of a public utility;
  - E. Trees for Sale. Trees planted, grown or held for sale by a private individual or nursery;
  - F. Pruning and Trimming. Pruning or trimming which does not endanger the life of the tree. (Ord. 101 § 1, 1988)
- **Section 12.12.100 Damaging of trees prohibited.** No person shall injure, deface or scar any historic tree, native oak tree or mature tree. (Ord. 101 § 1, 1988)

### **Chapter 12.16 Parks and Open Space**

- **Section 12.16.130 Damaging of property prohibited.** No person shall cut, break, injure, tamper with, deface, remove or disturb any tree, shrub, plant, rock, building, wall, fence, bench, sign structure, apparatus or property in any park or open space. (Ord. 439 § 3, 2016; Ord. 392 § 1, 2010)
- **Section 12.16.220 Trails.** The following provisions for trail use are in addition to the other requirements of this chapter.
  - A. No person shall enter or exit a trail except at designated entry and exit points. This provision does not apply to law enforcement and emergency personnel engaged in the performance of their official duties or city employees and city contractors engaged in authorized city business.
  - B. All persons shall observe posted right-of-way restrictions and "trail courtesy" right-of-way regulations. Unless otherwise posted, pedestrians shall yield to equestrians and bicyclists shall yield to equestrians and pedestrians.
  - C. Unless otherwise posted, the speed limit on trails is fifteen (15) miles per hour.
  - D. A person may only lead or ride a riding animal on designated trails. No person owning or having charge, care, custody or control of any riding animal shall leave said animal unsupervised or unattended at any time. Riding animals must be adequately and safely equipped for riding. Untrained, unmanageable, or vicious riding animals are prohibited from entering or using trails.
  - E. Trails shall only be used by pedestrians, bicyclists, and persons riding or walking with dogs or riding animals. Animals on trails are subject to the requirements of Section 12.16.040. (Ord. 439 § 3, 2016)

### **Chapter 17.38 Hillside Management**

- **Section 17.38.050 Processing procedures and submittal requirements.**
  - C. Application submittals for development projects in hillside areas may include, but are not limited to, the requirements listed below. Additional information or studies may be

required if deemed necessary under California Environmental Quality Act (CEQA) review procedures and other local, state, or federal laws.

8. Biological (Flora and Fauna) Analysis. A biological resources report shall map the habitat areas of the property. Potential presence within the project area of any sensitive habitat and any unique, rare or endangered plant or animal species shall be determined and mapped;

### **Chapter 17.74 Specific Plan No. 2/Specific Plan 95-2, Moorpark Highlands Specific Plan**

- **Section 17.74.050 Open-space development regulations.** It is the intent of these regulations to promote the preservation of the natural landforms of specific plan No. 2 area by allowing only limited improvements within private open space areas and prohibiting all development (including structures and trails) within the natural open space, except that required for remedial grading and arterial roadway construction.
  - A. Private Open Space Permitted Uses. For the purposes of this chapter, the following is a listing of the permitted uses allowed within the private open space areas within specific plan No. 2:
    1. Trails. Trails shall be developed as shown on the approved exhibits of the adopted specific plan No. 2.
    2. Only signage identifying trail direction and use restrictions will be permitted.
  - B. Private Open Space Development Regulations.
    1. Structures shall not be allowed.
    2. Fences and walls shall comply with the provisions of the Moorpark Municipal Code, with the exception that sound attenuation walls shall be constructed to a height as required by a city-approved noise study for the residential planned development permit.
  - C. Natural Open Space Development Regulations. The natural open space zone areas shall be reserved for visual open space and are planned to be part of a habitat conservation plan (HCP), as defined in the EIR document, Appendix J. These areas shall remain ungraded and shall not be developed, with the exception of roadway and infrastructure improvements necessary for the construction of Spring Road. The natural open space zone areas impacted by grading for Spring Road shall be recontoured and revegetated to the standards as defined in the design guidelines, Section 8, of specific plan No. 2. Subsequent revegetation and/or maintenance activities within the natural open space areas shall be limited to those activities, as prescribed in the HCP, Appendix J of the EIR. Terms and conditions of the final HCP as approved by the U.S. Fish and Wildlife Service shall regulate NOS usage. (Ord. 262 § 2, 1999)

### 3.0 LITERATURE REVIEW

Information regarding biological resources within the Plan Area was obtained from a search of sensitive species databases, a review of pertinent literature, prior environmental documents, and aerial photographs. The main sources of information are listed below. Biological information obtained from these sources was utilized to perform a programmatic evaluation of existing biological conditions and identify sensitive biological resources that have potential to occur.

#### 3.1 Databases

Databases reviewed for this report included:

- CDFW California Natural Diversity Database (CNDDDB; CNDDDB 2022a, 2022b, 2022c)
- Calflora Plant Database (Calflora 2022)
- California Native Plant Society's (CNPS) Electronic Inventory (CNPS 2022)
- USFWS Information Planning and Consultation (IPaC) System (USFWS 2022)
- USFWS National Wetland Inventory (NWI) (USFWS 2020)
- United States Department of Agriculture (USDA), Natural Resources Conservation Web Soil Survey (USDA 2020)
- USGS National Hydrography Dataset (NHD) (USGS 2017)

#### 3.2 Literature Review

Literature reviewed for this report include:

- City of Moorpark General Plan Land Use Element (City of Moorpark 1992)
- City of Moorpark General Plan Open Space, Conservation & Recreation Element (City of Moorpark 1986)
- Draft EIR Carlsberg Specific Plan (Impact Sciences, Inc. 1993a)
- Final EIR Carlsberg Specific Plan Amendment SCH#92061076 (Impact Sciences, Inc. 1993b)
- Screen Check Final EIR & Environmental Assessment West Point Homes 250 Unit Subdivision in Walnut Canyon (Planning Corporation 2001)
- County of Ventura Vegetation Map (Ventura County 2008)
- Draft Environmental Impact Report for the Proposed Hitch Ranch Specific Plan SCH # 2019070253 (Impact Sciences 2022a)
- Final Environmental Impact Report for the Proposed Hitch Ranch Specific Plan SCH # 2019070253 (Impact Sciences 2022b)

### 4.0 RESULTS

#### 4.1 Hydrology and Climate

The Plan Area is located within the Calleguas Creek Watershed (10-digit Hydrologic Unit Code 1807010301). The northern boundary of the watershed is formed by the Santa Susana Mountains, South Mountain, and Oak Ridge and the southern boundary is formed by the Simi Hills and the Santa Monica Mountains

(Appendix A - Figure 4). Calleguas Creek and its major tributaries, including Revolon Slough, Conejo Creek, Arroyo Santa Rosa, and Arroyo Simi, drains approximately 343 square miles in southeastern Ventura County. Arroyo Simi enters the eastern City limits by Oak Park at the western end of Simi Valley, and flows westward, where it merges with Arroyo Las Posas west of the City limits by Hitch Boulevard. Historically, Calleguas Creek and its tributaries (including Arroyo Simi) were all intermittent streams that only flowed seasonally. Today, they have a perennial flow fed largely by waters from wastewater treatment plants, urban runoff, and agricultural drainage (City of Moorpark 2020). The Calleguas Creek Watershed ultimately drains into the Pacific Ocean through the Mugu Lagoon, located at the mouth of the watershed.

The temperature is mild averaging between 49 to 78 degrees Fahrenheit (°F) annually. Precipitation averages 15.85 inches per year with the rainy season occurring in winter.

## 4.2 Soils

Soils types were determined using the Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2020). A total of 54 soil types were identified in the Plan Area (Table 1 and Figure 5). *Natural Resources Conservation Soil Map*). Three of the mapped soils are listed as hydric soils for the Ventura County (USDA 2020).

**Table 1. NRCS Soil Types Mapped in the Plan Area**

Soil Map Unit	Soil Name	Hydric (Yes/No)
AcC	Anacapa sandy loam, 2 to 9 percent slopes	Yes
AsF	Arnold sand, 9 to 50 percent slopes	No
AuC2	Azule loam, 2 to 9 percent slopes, eroded	No
AuD	Azule loam, 9 to 15 percent slopes, warm	No
BdG	osBadland	Yes
CaE2	Calleguas shaly loam, 9 to 30 percent slopes, eroded	No
CaF	Calleguas very channery loam, 30 to 50 percent slopes	No
CbF2	Calleguas-Arnold complex, 30 to 50 percent slopes, eroded	No
Cff2	Castaic-Balcom complex, 30 to 50 percent slopes, eroded	No
CfD2	Castaic-Balcom complex, 9 to 15 percent slopes, eroded	No
ChD2	Chesterton coarse sandy loam, 5 to 15 percent slopes, eroded	No
CkE3	Chesterton sandy loam, 9 to 30 percent slopes, severely eroded	No
CmE	Cibo clay, 15 to 30 percent slopes, MLRA 20	No
CoC	Corralitos loamy sand, 2 to 9 percent slopes	No
CyC	Cropley clay, 2 to 9 percent slopes, warm MAAT, MLRA 19	No
DbD	Diablo clay, 9 to 15 percent slopes, warm MAAT, MLRA 20	No
DbE	Diablo clay, 15 to 30 percent slopes	No
DbF	Diablo clay, 30 to 50 percent slopes, warm MAAT, MLRA 20	No
GaC	Garretson loam, 2 to 9 percent slopes	No
GvF	Gilroy loam, 15 to 50 percent slopes, very rocky	No
GxG	Gullied land	No

**Table 1. NRCS Soil Types Mapped in the Plan Area**

Soil Map Unit	Soil Name	Hydric (Yes/No)
HbF	Hambright rocky clay loam, 30 to 50 percent slopes	No
HuB	Huerhuero very fine sandy loam, 0 to 5 percent slopes	No
HuC2	Huerhuero very fine sandy loam, 5 to 9 percent slopes, eroded	No
HuD2	Huerhuero very fine sandy loam, 9 to 15 percent slopes, eroded	No
LeE2	Linne silty clay loam, 15 to 30 percent slopes, eroded	No
McA	Metz loamy fine sand, 0 to 2 percent slopes, warm MAAT, MLRA 19	No
McC	Metz loamy fine sand, 2 to 9 percent slopes	No
MeA	Metz loamy sand, 0 to 2 percent slopes	No
MeC	Metz loamy sand, 2 to 9 percent slopes	No
MfA	Metz loamy sand, loamy substratum, 0 to 2 percent slopes	No
MoA	Mocho loam, 0 to 2 percent slopes, warm MAAT, MLRA 19	No
MoC	Mocho loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	No
NaF	Nacimiento silty clay loam, 30 to 50 percent slopes, warm MAAT, MLRA 20	No
NaD2	Nacimiento silty clay loam, 9 to 15 percent slopes, eroded	No
PcA	Pico sandy loam, 0 to 2 percent slopes	No
PcC	Pico sandy loam, 2 to 9 percent slopes	No
PsA	Pico loam, sandy substratum, 0 to 2 percent slopes	No
RcE2	Rincon silty clay loam, 15 to 30 percent slopes, eroded	No
RcC	Rincon silty clay loam, 2 to 9 percent slopes, MLRA 19	No
RcD2	Rincon silty clay loam, 9 to 15 percent slopes, eroded, warm MAAT, MLRA	No
Rw	Riverwash	Yes
SbF	San Andreas sandy loam, 30 to 50 percent slopes	No
ScE2	San Benito clay loam, 15 to 30 percent slopes, eroded, MLRA 20	No
ScF2	San Benito clay loam, 30 to 50 percent slopes, eroded, MLRA 20	No
Sd	Sandy alluvial land	No
SnG	Sedimentary rock land	No
SsE2	Soper loam, 15 to 30 percent slopes, eroded	No
SvF2	Soper gravelly loam, 30 to 50 percent slopes, eroded, MLRA 20	No
SwA	Sorrento loam, 0 to 2 percent slopes, MLRA 14	No
SwC	Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	No
SxC	Sorrento silty clay loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	No
1159	Topdeck loam, 10 to 35 percent slopes	No
W	Water	N/A

### 4.3 Vegetation Communities and Other Land Cover Types

A review of the County's vegetation cover Geographic Information System (GIS) database was conducted to determine general vegetation communities that occur within the City limits. The County layer combines numerous vegetation/land cover maps that have been created for parts of Ventura County, at different



scales, using different classification schemes to create one GIS vegetation/land cover database and map. The County mapping layer uses the currently accepted vegetation classification system (the National Vegetation Classification Standard [NVCS]) in the *Manual of California Vegetation, 2nd edition* (Sawyer et al. 2009). For purposes of the General Plan Update, vegetation communities mapped within the City limits were overlaid on recent aerial imagery and boundaries were adjusted or changed to a different cover type, and communities were generalized. A field verification survey of vegetation communities and land cover types was not conducted. Table 2 lists the vegetation communities within the Plan Area; other land cover types; general acreages within the Plan Area; and the State Conservation Ranking (CA Rank). The generalized communities and land cover types are shown in Appendix A – Figure 6 and described below in alphabetical order.

**Table 1. Vegetation Communities and Other Land Cover Types Mapped in the Plan Area**

Vegetation Community/Land Cover		CA Rank	Amount (acres)
Scientific Name	Common Name		
<b>Agriculture</b>			<b>281.7</b>
–	Agriculture <sup>1</sup>		
<b>Alluvial Scrub</b>			<b>14.9</b>
<i>Lepidospartum squamatum</i> <sup>1</sup>	Scale broom scrub	S3	
–	Streambed <sup>1</sup>		
<b>Channel</b>			<b>6.4</b>
–	Developed <sup>1</sup>	–	
–	Urban/Disturbed or Built-Up <sup>1</sup>		
<b>Chaparral</b>			<b>12.0</b>
<i>Adenostoma fasciculatum</i> <sup>1</sup>	Chamise chaparral	S5	
<i>Adenostoma fasciculatum</i> – <i>Salvia mellifera</i> <sup>1</sup>	Chamise – black sage chaparral	S4	
<b>Developed</b>			<b>4436.6</b>
–	Developed <sup>1</sup>	–	
–	Post fire or post clearing regeneration unidentifiable shrubs <sup>1</sup>	–	
–	Urban/disturbed or built-up <sup>1</sup>	–	
<b>Disturbed</b>			<b>345.4</b>
–	Cleared land <sup>1</sup>	–	
–	Native and non-native herbaceous Mapping Unit <sup>1</sup>	–	
–	Urban – herbaceous/cleared <sup>1</sup>	–	
<b>Eucalyptus Woodland</b>			<b>1.5</b>
<i>Eucalyptus</i> <sup>1</sup> spp.	Eucalyptus groves	–	
<b>Mixed Scrub</b>			<b>1894.9</b>
<i>Artemisia californica</i> <sup>1</sup>	California sagebrush scrub	S4	
<i>Artemisia californica</i> – <i>Eriogonum fasciculatum</i> <sup>1</sup>	California sagebrush – California buckwheat scrub	S4	
<i>Artemisia californica</i> – <i>Salvia leucophylla</i> <sup>1</sup>	California sagebrush – purple sage scrub	S4	
<i>Artemisia californica</i> – <i>Salvia mellifera</i> <sup>1</sup>	California sagebrush – black sage scrub	S4	
<i>Baccharis pilularis</i> <sup>1</sup>	Coyote brush scrub	S5	

**Table 1. Vegetation Communities and Other Land Cover Types Mapped in the Plan Area**

Vegetation Community/Land Cover		CA Rank	Amount (acres)
Scientific Name	Common Name		
<i>Baccharis pilularis</i> alliance <sup>1</sup>	Coyote brush scrub	S5	
<i>Encelia californica</i> <sup>1</sup>	California brittle bush scrub	–	
<i>Eriogonum fasciculatum</i> <sup>1</sup>	California buckwheat scrub	S5	
<i>Lotus scoparius</i> <sup>1</sup>	Deer weed scrub	S5	
<i>Malosma laurina</i> <sup>1</sup>	Laurel sumac scrub	S4	
<i>Malosma laurina</i> alliance <sup>1</sup>	Laurel sumac scrub	S4	
<i>Opuntia littoralis</i> alliance <sup>1</sup>	Coast prickly pear scrub	S3	
<i>Opuntia</i> spp. <sup>1</sup>	Coast prickly pear scrub	S3	
<i>Rhus integrifolia</i> <sup>1</sup>	Lemonade berry scrub	S3	
–	Rock outcrop Mapping Unit <sup>1</sup>	–	
<i>Salvia leucophylla</i> <sup>1</sup>	Purple sage scrub	S4	
<i>Salvia leucophylla</i> alliance <sup>1</sup>	Purple sage scrub	S4	
<i>Salvia mellifera</i> <sup>1</sup>	Black sage scrub	S4	
<i>Salvia mellifera</i> – <i>Salvia leucophylla</i> alliance <sup>1</sup>	Sage scrub	S4	
<b>Native Bunchgrass Grassland</b>			<b>167.2</b>
<i>Nassella pulchra</i> <sup>1</sup>	Purple needlegrass grassland	–	
<b>Oak Woodland</b>			<b>138.6</b>
<i>Quercus agrifolia</i> <sup>1</sup>	Coast live oak woodland and forest	S4	
<i>Quercus agrifolia</i> alliance <sup>1</sup>	Coast live oak woodland and forest	S4	
<b>Open Water</b>			<b>7.0</b>
–	Water <sup>1</sup>	–	
<b>Ornamental</b>			<b>168.7</b>
–	Exotic trees undifferentiated <sup>1</sup>	–	
<i>Schinus molle</i> <sup>1</sup>	Peppertree groves	–	
<b>Landscaped</b>			<b>279.2</b>
–	Predominantly shrubs/herbaceous on artificial cuts/embankments <sup>1</sup>	–	
–	Urban - shrub <sup>1</sup>	–	
<b>Riparian</b>			<b>237.1</b>
<i>Arundo donax</i> <sup>1</sup>	Giant reed marsh	–	
<i>Baccharis salicifolia</i> <sup>1</sup>	Mulefat thickets	S4	
<i>Baccharis salicifolia</i> alliance <sup>1</sup>	Mulefat thickets	S4	
<i>Platanus racemosa</i> <sup>1</sup>	California sycamore woodlands	S3	
<i>Platanus racemosa</i> alliance <sup>1</sup>	California sycamore woodlands	S3	
–	Riverine, lacustrine, and tidal mudflat mapping unit <sup>1</sup>	–	
<i>Salix laevigata</i> – <i>Salix lasiolepis</i> <sup>1</sup>	Willow riparian woodlands	–	
<i>Salix lasiolepis</i> <sup>1</sup>	Arroyo willow thickets	S4	
–	Unknown riparian <sup>1</sup>	–	

**Table 1. Vegetation Communities and Other Land Cover Types Mapped in the Plan Area**

Vegetation Community/Land Cover		CA Rank	Amount (acres)
Scientific Name	Common Name		
<sup>1</sup> Ventura County Vegetation Community (Ventura County 2008) State Rank Designations: S1: Critically Imperiled – extreme rarity (often 5 or fewer populations) or because of factors, such as very steep declines, making it especially vulnerable to extirpation from California. S2: Imperiled – rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it vulnerable to extirpation California. S3: Vulnerable – restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state. S4: Apparently Secure – uncommon, but not rare, in California S5: Secure – common, widespread, and abundant in California			

**Agriculture**

Areas mapped as Agriculture include crop fields and orchards. This vegetation type occurs in various locations throughout the General Plan Area. Some areas mapped as Agriculture are within electrical transmission line corridors.

**Alluvial Scrub**

Alluvial Scrub is mapped in certain stream courses of the General Plan Area. These areas vary from being unvegetated or contain alluvial fan sage scrub species, such as scale broom (*Lepidospartum squamatum*). The substrate of Alluvial Scrub areas is sandy to cobbly.

**Channel**

Channels occur throughout the General Plan Area. These are mostly concrete-lined, however some have banks that are lined with riprap. Standing water occurs in some channels, however others are dry.

**Chaparral**

Areas mapped as Chaparral are mainly present in the eastern section of the General Plan Area. The Chaparral vegetation community is mainly dominated by chamise (*Adenostoma fasciculatum*), with black sage (*Salvia mellifera*) as a co-dominant species for some locations. Chaparral is mostly present in open natural areas, away from developed locations.

**Developed**

The majority of the General Plan Area is mapped as Developed. These areas consist of commercial, industrial, and residential structures and associated landscaping. Paved roads are also included in this mapping unit.

**Disturbed**

Disturbed areas occur throughout the General Plan Area. They primarily comprise areas with exposed soil with little or no vegetation. Some of these areas have been disturbed in the past and are now vegetated with a mix of native and nonnative herbaceous plant and grass species.

### ***Eucalyptus Woodland***

Eucalyptus Woodland occur in one location in the southern extent of the General Plan Area. The trees are adjacent to a residential neighborhood and are scattered throughout a relatively small area (1.5 acres). To the south of this location are rural homes and agricultural areas.

### ***Landscaped***

Areas mapped as Landscaped occur throughout the General Plan Area. Landscaped areas generally include areas adjacent to homes and structures that mainly comprise a mix of low-growing native and nonnative species. These areas are typically maintained and irrigated. Certain Landscaped areas include cut slopes adjacent to major thoroughfares, which are typically only irrigated until revegetated.

### ***Mixed Scrub***

Mixed Scrub has been mapped throughout the General Plan Area, in small patches and also in large contiguous areas. The dominant species for this vegetation type include California sagebrush (*Artemisia californica*), California brittle bush (*Encelia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), prickly-pear cactus (*Opuntia littoralis*), purple sage (*Salvia leucophylla*), black sage, and lemonade berry (*Rhus integrifolia*). Mixed Scrub areas typically include various levels of cover by nonnative vegetation.

### ***Native Bunchgrass Grassland***

This group includes native and nonnative annual forb/grass vegetation, as well as native perennial grasslands growing within the California Mediterranean climate. Areas mapped as Native Bunchgrass Grassland are primarily located in the northeastern section of the General Plan Area. Native Bunchgrass Grassland is dominated by purple needlegrass (*Nassella pulchra*), with other native and nonnative herbaceous and grass species. This vegetation type is present both adjacent to urban housing development as well as within open space (natural) areas.

### ***Oak Woodlands***

Areas mapped as Oak Woodlands primarily exist in the northern and eastern sections of the General Plan Area. Coast live oak (*Quercus agrifolia*) is the dominant oak species for this vegetation type. The distribution of oaks in these areas are somewhat dense to sparse, and the understory comprises a variety of plant types. Typically, the understory is dominated by grasses and herbaceous plants; however shrubs may be co-dominant in some areas.

### ***Open Water***

Open Water occurs in just a few areas of the General Plan Area. Golf course water features were also included in this mapping unit. Open Water may be present in some areas mapped as Riparian or Channel, however these areas were not mapped as Open Water.

## Ornamental

Ornamental vegetation occurs throughout the General Plan Area and is generally associated with urban housing developments and parkways. Areas mapped as Ornamental also include recreational areas (e.g., golf courses, parks, sports fields). Vegetation in these areas is varied and typically dominated by nonnative species, with some locations comprising native or a mix of native/nonnative species.

## Riparian

Areas mapped as Riparian occur throughout the General Plan Area and are associated with creeks, streambeds, earthen-bottom channels, and certain other depressional features that are subjected to urban runoff. Riparian includes a variety of vegetation communities that include woodland, scrub, thickets, and emergent freshwater marsh. Representative riparian species included in this vegetation category include mulefat (*Baccharis salicifolia*), western sycamore (*Platanus racemosa*), arroyo willow (*Salix lasiolepis*), and non-native giant reed (*Arundo donax*).

## 4.4 Special-Status Biological Resources

For the purpose of this assessment, special-status biological resources are defined as:

- vegetation communities that are unique, or relatively limited distribution, or of particular value to wildlife;
- plant and animal species that have been designated as either rare, threatened, or endangered by CDFW or the USFWS, and are protected under either the CESA or FESA;
- plant and animal species being considered or proposed for listing under CESA or FESA; and
- plant and animal species that are of expressed concern to resource and regulatory agencies or local jurisdictions.

### 4.4.1 Sensitive Natural Communities

Five sensitive vegetation communities were identified by the CNDDDB within the Moorpark and Simi topographic quadrangles (Appendix B). Sensitive vegetation communities identified in the CNDDDB utilize Holland vegetation community names and most do not directly coincide with the currently accepted NVCS system. Five additional sensitive vegetation communities were mapped within the Plan Area by the County's vegetation cover GIS database which uses the NVCS system. Individual project surveys would be required to conduct project-level mapping utilizing the NVCS system to determine the extent of sensitive vegetation communities within the Plan Area. These sensitive communities are described below.

**California brittlebush scrub alliance** is characterized by a sparse to intermittent shrub layer with a dominance of California brittlebush. Other characteristic shrubs include burrobush (*Ambrosia dumosa*), California sagebrush, and ephedras (*Ephedra* spp.). The herbaceous cover is sparse and is typically composed of annuals. Stands are found at elevations between 200 and 1,000 meters on various landforms and often found on south- to west-facing aspects along upper bajadas and lower mountain slopes; usually in rocky substrates (Sawyer et al. 2009).

**California sycamore woodland alliance** is a riparian woodland dominated by California sycamores with wetland understory indicators. Other trees present may include coast live oak, White alder (*Alnus rhombifolia*), California walnut (*Juglans californica*), Fremont cottonwood (*Populus fremontii*), California laurel (*Umbellularia californica*), and willows (*Salix* spp.). This vegetation community occurs at elevations between 0 and 2,400 meters and is found in gullies, intermittent streams, springs, seeps, streambanks, and terraces adjacent to floodplains that are subject to flooding and seasonal saturation. Soils are rocky or cobbly alluvium with permanent moisture at depth (Sawyer et al. 2009).

**California walnut woodland** is a Holland vegetation community (Element Code 71210) described as an open tree canopy that is locally dominated by Southern California black walnut (*Juglans californica*). The open tree canopy allows development of a grassy understory (Holland 1986). This community would be the equivalent of California Walnut groves – *Juglans californica* alliance identified by the Manual of California Vegetation, 2nd edition (Sawyer et al. 2009) which is not currently mapped within the Plan Area at the County review level. California walnut woodland is mapped within the southeast corner and near the eastern boundary of the West Point Homes Specific Plan Area (Planning Corporation 2001).

**Coastal prickly pear succulent scrub alliance** is characterized by a shrub community with an intermittent or continuous canopy, less than two meters in height, dominated by coast prickly pear species. Other characteristic shrubs include California sagebrush, California buckwheat, black sage, and Mexican elderberry (*Sambucus mexicana*). The herbaceous layer is open to continuous and diverse. This alliance occurs at elevations below 1,200 meters and is often found on steep, south-facing slopes and headlands with low water-holding capacity.

**Lemonade berry scrub alliance** is characterized by a two-tiered, open to continuous shrub canopy, dominated by lemonade berry. Other shrub associates may include California sagebrush, California buckwheat, and cacti. Scattered species of trees, including California walnut and coast live oak, may occur. The herbaceous layer is open. This shrubland occurs on gentle to abrupt slopes, at elevations between 5 to 750 meters.

**Scale broom scrub alliance** has an open to continuous shrub community less than seven meters in height dominated by scale broom and a variable, grassy herbaceous layer (Sawyer et al. 2009). Other characteristic shrubs include California buckwheat, rabbitbrush (*Ericameria palmeri*), and laurel sumac (Sawyer et al. 2009). This alliance is found in alluvial deposits along washes, river terraces, and alluvial fans below 1,500 meters.

**Southern coast live oak riparian forest** is a Holland vegetation community (Element Code 61310) described as an open, locally dense evergreen sclerophyllous riparian woodland dominated by coast live oak (Holland 1986). This type of habitat appears to be richer in herbs and poorer in understory shrubs compared to other communities and is distinct from the central coast live oak riparian forest (Holland 1986). This habitat can be found in canyons and valleys of coastal southern California, mostly south of Point Conception (Holland 1986).

**Southern riparian scrub** is a Holland vegetation community (Element Code 63300) is a generalized plant community that occurs in association with watercourses and water bodies. The representative plant species are typically well adapted to a hydrological regime ranging from semi-permanent inundation to occasional soil saturation on or near the surface during at least a portion of the growing season. This community

typically consists of a relatively dense tangle of broad-leaved, winter-deciduous riparian thickets. This community is currently categorized as California rose briar patches (*Rosa californica* shrubland alliance) and pepper tree and Myoporum groves (*Schinus [molle, terebinthifolius]* – *Myoporum laetum* forest and woodland semi-natural alliance) by the *Manual of California Vegetation, 2nd edition* (Sawyer et al. 2009). Although not mapped within the Plan Area at the County review level, this community has potential to occur along the non-channelized portions of the various drainages and washes that occur since it has been previously identified by the database search in the Moorpark vicinity.

**Southern willow scrub** is a Holland vegetation community (Element Code 63320) described as a dense, broadleaved, winter-deciduous riparian thicket dominated by several willow species with scattered emergent cottonwood and sycamores (Holland 1986). Most stands are too dense to allow much understory development. This community requires repeated flooding to prevent succession to riparian woodland habitat. This community would currently be categorized as any of the specific *Salix*-dominated alliances identified by the *Manual of California Vegetation, 2nd edition* (Sawyer et al. 2009). Although not mapped within the Plan Area at the County review level, this community has potential to occur along the non-channelized portions of the various drainages and washes that occur since it has been previously identified by the database search in the Moorpark vicinity.

**Valley oak woodland** was identified by the CNDDDB as a Holland vegetation community (Element Code 71330), described as a relatively open woodland with a grassy-understoried savannah and, where dominated by valley oak (*Q. lobata*), is typically the only tree present (Holland 1986). This community is the equivalent of the Valley Oak Woodland – *Quercus lobata* Alliance identified by the *Manual of California Vegetation, 2nd edition* (Sawyer et al. 2009) which is not currently mapped within the Plan Area at the County review level.

#### 4.4.2 Special-Status Plants

Special-status plant species include those classified as endangered or threatened, proposed or candidate species for listing by the USFWS or CDFW, monitored by CNPS and considered to be those of greatest conservation need. Plant species with a documented occurrence within the City of Moorpark and considered to be a County of Ventura-locally important species (Appendix C), are also included.

Thirty-three special-status plant species known to occur in the vicinity of the General Plan Area were identified. In addition, three species whose ranges include the Moorpark area were identified by the informal USFWS IPaC search. Results of the CNDDDB, CNPS, and USFWS IPaC database searches are included as Appendix B. Table 3 summarizes the special-status plant species, associated habitats, and designated Critical Habitat within the General Plan Area. Plant species listed under FESA and/or CESA are discussed in more detail below and displayed on the photo page at the end of the discussion.

**Table 2. Special Status Plant Species Known to Occur in the Vicinity of the the General Plan Area**

Species	Status			Occurrence information (year recorded)	Critical habitat
	Fed	CA	Other		
<i>Acmispon parviflorus</i> hill lotus	-	-	LIS	Historically reported in the Big Mountain foothills, just northeast of Moorpark (1861)	-
<i>Ammannia robusta</i> grand redstem	-	-	LIS	Reported in the Tierra Rejada Vernal Pool Preserve, Moorpark (1996 and 2011)	-
<i>Arenaria paludicola</i> marsh sandwort	END	END	CNPS 1B.1	No records occur within Ventura County but Moorpark is within the USFWS "known or expected range" for this species	-
<i>Astragalus pomonensis</i> <i>Pomona milkvetch</i>	-	-	LIS	Reported in Arroyo Simi, Moorpark (2011); and Big Mountain, north of Moorpark (2002)	-
<i>Calochortus catalinae</i> Catalina mariposa lily	-	-	CNPS 4.2	Reported in multiple locations along the Big Mountain foothills, north of Moorpark (1934, 2003, and 2019); the Tierra Rejada Valley southeast of Moorpark (1998); and historically reported west of Moorpark (1947). "Observed to be scattered throughout the coastal sagebrush habitat on the project site" by the Carlsberg Specific Plan EIR (1992)	-
<i>Calochortus clavatus var. clavatus</i> club-haired mariposa lily	-	-	CNPS 4.3	Reported east of Long Canyon, west of Moorpark (2019)	-
<i>Calochortus clavatus var. gracilis</i> slender mariposa-lily	-	-	CNPS 1B.2	Clifton Smith Herbarium specimen collected from "burned hills around Matilija Nursery in 2004 (Calflora 2022)	-
<i>Calochortus plummerae</i> Plummer's mariposa lily	-	-	CNPS 4.2 LIS	Reported in Oak Park, just east of Moorpark (2004); north of Bard Lake, just west of Simi Valley (2007); and at the Simi Valley Landfill, north of Simi Valley (1998)	-



**Table 2. Special Status Plant Species Known to Occur in the Vicintiy of the the General Plan Area**

Species	Status			Occurrence information (year recorded)	Critical habitat
	Fed	CA	Other		
<i>Cardionema ramosissimum</i> sand mat	–	–	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (2011); and Oak Ridge, north of Moorpark (2000)	–
<i>Carex fracta</i> fragile-sheathed sedge	–	–	LIS	Potentially present	–
<i>Carex rossii</i> Ross sedge	–	–	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (2011)	–
<i>Chaenactis glabriuscula</i> var. <i>megacephala</i> big-flowered yellow pincushion	–	–	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (2008)	–
<i>Chamaesyce melanadenia</i> red-gland spurge	–	–	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (2003)	–
<i>Clarkia purpurea</i> ssp. <i>viminea</i> large purple clarkia	–	–	LIS	Historically reported in the Big Mountain foothills, northeast of Moorpark (1916)	–
<i>Convolvulus simulans</i> small-flowered morning glory	–	–	CNPS 4.2	Reported in the Big Mountain foothills, northeast of Moorpark (2019); in the Tierra Rejada Valley, southeast of Moorpark (2003); and north of Canada Park, southeast of Moorpark (1998)	–
<i>Diplacus rutilus</i> red sticky bush monkeyflower	–	–	LIS	Historically reported in Moorpark (1916); north of Moorpark (2020); and Simi Valley (2020)	–
<i>Dudleya parva</i> Conejo dudleya	THR	–	CNPS 1B.2 LIS	Reported in the Tierra Rejada Valley, southeast of Moorpark (1998); and just west of Simi Valley (1988)	–
<i>Eriogonum thurberi</i> Thurber's wild buckwheat	–	–	LIS	Reported in multiple locations along the foothills of Big Mountain, northeast of Moorpark (2003)	–

**Table 2. Special Status Plant Species Known to Occur in the Vicinity of the the General Plan Area**

Species	Status			Occurrence information (year recorded)	Critical habitat
	Fed	CA	Other		
<i>Euphorbia polycarpa</i> var. <i>hirtella</i> hairy golondrina	-	-	LIS	Reported in the Arroyo Simi and in multiple locations in the Tierra Rejada Valley, Moorpark (2007, 2011, and 2019 records); and in Happy Camp Canyon Park, north of Moorpark (2002 and 2008)	-
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	-	-	CNPS 1B.1	Reported along the Arroyo Simi, Moorpark (2011); west of Happy Camp Canyon Park, Moorpark (1995); and in the Big Mountain area; northeast of Moorpark (2002)	-
<i>Juglans californica</i> Southern California black walnut	-	-	CNPS 4.2	Known to occur within the Hitch Ranch Specific Plan Area (Impact Sciences 2022a)	-
<i>Juncus acutus</i> ssp. <i>leopoldii</i> Southwestern spiny rush	-	-	CNPS 4.2	UCSB Specimen collected in 1991 from along Arroyo Simi in Moorpark (Calflora 2022)	-
<i>Lupinus paynei</i> Payne's bush lupine	-	-	CNPS 1B.1	Reported near Oak Park, Simi Valley (2008); and in Grimes Canyon, north of Moorpark (2008)	-
<i>Marsilea vestita</i> ssp. <i>vestita</i> hairy pepperwort	-	-	LIS	Reported in the Tierra Rejada Valley, Moorpark (2011)	-
<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i> white-veined monardella	-	-	CNPS 1B.3	Returned by CNPS literature review of Simi and Moorpark quadrangles, but no records found within Plan Area (Calflora 2022)	-
<i>Monardella sinuata</i> ssp. <i>gerryi</i> Gerry's curly-leaved monardella	-	-	CNPS 1B.1	Reported in Los Posas Hills, southwest of Moorpark (2013 and 2015); and in the Santa Rosa Valley (1976)	-
<i>Mucronea californica</i> California spineflower	-	-	CNPS 4.2 LIS	Reported in Moorpark (1995); Big Mountain foothills, north of Moorpark (2003); and the Las Posas Hills, southwest of Moorpark (2013)	-

**Table 2. Special Status Plant Species Known to Occur in the Vicinity of the the General Plan Area**

Species	Status			Occurrence information (year recorded)	Critical habitat
	Fed	CA	Other		
<i>Navarretia fossalis</i> spreading navarretia	THR	–	CNPS 1B.1	No records occur within Ventura County but Moorpark is within the USFWS “known or expected range” for this species	The Plan Area does not contain designated Critical Habitat for this species.
<i>Orcuttia californica</i> California Orcutt grass	END	END	CNPS 1B.1  LIS	Reported in the Tierra Rejada Vernal Pool Preserve, Moorpark (1992, 2005, and 2011); and the Tierra Rejada Valley, southeast of Moorpark (2003). Determined present in the southeastern portion of the Carlsberg Specific Plan Area in the EIR (1992)	–
<i>Pentachaeta lyonii</i> Lyon’s pentachaeta	END	END	CNPS 1B.1	Reported in the Tierra Rejada Vernal Pool Preserve, Moorpark (1991,1995, 1997, 2004, 2005, 2007, 2008, and 2011); north of Tierra Rejada Golf Club, east of Moorpark (1991); and just west of Simi Valley (1989, 1998, and 1994). Determined present in the southeastern portion of the Carlsberg Specific Plan Area in the EIR (1992)	Designated Critical Habitat for this species (Unit 1: Simi Valley Unit) is located within the southeast portion of the Plan Area.
<i>Quercus palmeri</i> Palmer’s oak	–	–	LIS	Reported in the Big Mountain foothills, north of Moorpark (2002 and 2003); and Sunset Hills near Bard Lake, south of Moorpark (2003 and 2016)	–
<i>Rorippa [Nasturtium] gambellii</i> Gambel’s watercress	END	THR	CNPS 1B.1	No records occur within Ventura County but Moorpark is within the USFWS “known or expected range” for this species	–
<i>Salvia carduacea</i> thistle sage	–	–	LIS	Reported in the Happy Camp Canyon Park, north of Moorpark (2016)	–
<i>Senecio aphanactis</i> California groundsel	–	–	CNPS 2B.2  LIS	Reported in Sunset Hills, south of Moorpark (1976); and Arroyo Conejo Open Space and Wildwood Regional Park, Thousand Oaks (2003 and 2009)	–

**Table 2. Special Status Plant Species Known to Occur in the Vicinity of the the General Plan Area**

Species	Status			Occurrence information (year recorded)	Critical habitat
	Fed	CA	Other		
<i>Suaeda taxifolia</i> woolly seablite	-	-	CNPS 4.2	Returned by CNPS literature review of Simi and Moorpark quadrangles, but no records found within Plan Area (Calflora 2022)	-
<i>Verbena bracteata</i> bracted verbena	-	-	LIS	Reported in the Tierra Rejada Valley, Moorpark (1996 and 2011); and the Big Mountain foothills, north of Moorpark (2003)	-
<p>Federal Designation (Federal Endangered Species Act, USFWS)                      END Federally listed, endangered                      THR Federally listed, threatened</p> <p>State Designation (California Endangered Species Act, CDFW)                      END State listed Endangered</p> <p>Other Designations                      CNPS California Native Plant Society                      CNPS List Designations                      1B: Plants rare, threatened, or endangered in California and elsewhere                      2B: Plants rare, threatened, or endangered in California, but more elsewhere                      3: Plants about which we need more information; a review list                      4: Plants of limited distribution; a watch list</p> <p>List Extensions                      .1: Seriously threatened in California (over 80 percent of occurrences threatened)                      .2: Moderately threatened in California (20 to 80 percent of occurrences threatened)                      .3: Not very threatened in California (less than 20 percent of occurrences threatened)</p> <p>LIS Ventura County, locally important species                      - Indicates information that is not applicable to the species.</p> <p><b>Sources:</b>                      California Native Plant Society (CNPS), Rare Plant Program. 2022. <i>Inventory of Rare and Endangered Plants of California</i> (online edition, v8-03 0.39). Available at <a href="http://www.rareplants.cnps.org">http://www.rareplants.cnps.org</a>. Accessed on September 6, 2022.                      California Natural Diversity Database (CNDDB) RareFind 5. 2022a. <a href="https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data">https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data</a>, Commercial Version dated September 4, 2022.                      United States Fish and Wildlife Service (USFWS) 2022. <i>Information Planning and Conservation (IPaC) System</i>. Available at <a href="https://ecos.fws.gov/ipac/location/index">https://ecos.fws.gov/ipac/location/index</a>. Accessed on September 6, 2022.                      Ventura County Resource Management Agency Locally Important Plant List. 2018. <a href="https://www.vcrma.org/ventura-county-locally-important-species-list">https://www.vcrma.org/ventura-county-locally-important-species-list</a>. Accessed on September 6, 2022.                      Calflora Plant Distribution Database. <a href="https://www.calflora.org">https://www.calflora.org</a>. Accessed on September 15, 2022.</p>					

Marsh sandwort (*Arenaria paludicola*) is a state and federally listed endangered species and is CNPS-listed as 1B.1. This species is a perennial stoloniferous herb that flowers between May and August and is known to occur in sandy openings of marshes and swamps and areas that are wet year-round. This species is found at elevations between 3 and 170 meters. This species' known current range is limited to one known, extant wild population, at Oso Flaco Lake, and one, extant, introduced population, at Sweet Springs Marsh on the southern edge of Morro Bay (USFWS 2008).

Conejo dudleya (*Dudleya parva*) is a federally listed threatened species and is CNPS-listed as 1B.2. Conejo dudleya is a perennial herb native to Conejo Valley and surrounding regions. This species is found at elevations between 90 and 38 meters and occurs on rocky slopes and grassy hillsides with clay or volcanic soils. It is associated with coastal scrub and valley and foothill grassland habitats. Conejo dudleya has been recorded in the southeastern portion of the Plan Area.

Spreading navarretia (*Navarretia fossalis*) is a federally listed threatened species and is CNPS-listed as 1B.1. This species is an annual herb that flowers between April and June and is known to occur in chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools. This species is found at elevations between 30 and 665 meters. During the most recent five-year review, this species' known range extended from northwestern Los Angeles County to western Riverside County, and coastal San Diego County in California, to San Quintin in northwestern Baja California, Mexico (USFWS 2009).

California Orcutt grass (*Orcuttia californica*) is a state and federally listed endangered species and is CNPS-listed as 1B.1. California Orcutt grass is an annual grass that is native to California. This species is associated with deep, ephemeral vernal pools underlain by clay soils and is found at elevations between 10 and 660 meters. California Orcutt grass has been recorded in the Terra Rejada Vernal Pool Preserve in the southeastern portion of the Plan Area within the Carlsberg Specific Plan Area (Impact Sciences, Inc. 1993a).

Lyon's pentachaeta (*Pentachaeta lyonii*) is a state and federally listed endangered species and is CNPS-listed as 1B.1. Lyon's pentachaeta is an annual herb that is endemic to California. This species is associated with openings in chaparral, coastal scrub, and valley and foothill grassland habitats and is found at elevations between 30 and 670 meters. It typically occurs in compact soil and exposed, rocky clay soils. Lyon's pentachaeta has been recorded in scattered locations throughout the Plan Area, and was identified in the southeastern portion of the Carlsberg Specific Plan Area (Impact Sciences, Inc. 1993a).

#### Critical Habitat

The USFWS designated areas of Critical Habitat for Lyon's pentachaeta in 2006 (USFWS 2006). Unit 1 (Simi Valley) of the designated critical habitat occurs in two locations within the southeastern portion of the Plan Area on either side of SR-23, one within the Tierra Rejada Vernal Pool Preserve within the Carlsberg Specific Plan area (Appendix A – Figure 7).

Gambel's watercress (*Rorippa [Nasturtium] gambellii*) is a federally listed endangered species, state listed threatened species, and is CNPS-listed as 1B.1. Gambel's watercress is a perennial rhizomatous herb that is associated with freshwater or brackish marshes and swamps. This species is found at elevations between 5 and 330 meters. During the most recent five-year review, this species' known distribution was limited to one remaining wild population discovered in 1996 on Vandenberg Air Force Base in Santa Barbara County, and one population that was introduced in October 2008 on the Refuge in San Luis Obispo County (USFWS 2011).

### Federal & State Listed Plant Species With Potential to Occur



© 2012 Chris Winchell  
*Arenaria paludicola*  
(marsh sandwort)



© 2011 Andreas Kettenburg  
*Dudleya parva*  
(Conejo dudleya)



© 2013 Dale Ritenour  
*Navarretia fossalis*  
(spreading navarretia)



© 2005 Jasmine J. Watts  
*Orcuttia californica*  
(California Orcutt grass)



© 2003 Michael Charters  
*Pentachaeta lyonii*  
(Lyon's pentachaeta)



© 2014 CNPS, San Luis Obispo Chapter  
*Nasturtium gambelii*  
(Gambel's watercress)

### 4.4.3 Special-Status Wildlife

Special-status wildlife species include those classified as endangered or threatened, proposed or candidate species for listing by the USFWS or CDFW, or considered a CDFW Fully Protected (FP) or Species of Special Concern (SSC). Animal species with potential habitat within the City of Moorpark and considered to be a County of Ventura locally important species (Appendix C), are also included.

Twenty-eight special-status wildlife species known to occur in the vicinity of the General Plan Area were identified by the CNDDDB search and review of locally important species. Two additional species were identified by an informal review of the USFWS IPaC database (Appendix B), three additional species were documented during EIR studies, and the Plan Area occurs within the proposed Evolutionary Significant Unit (ESU) of one state candidate species (mountain lion [*Felis concolor*]). One additional species, Crotch bumble bee (*Bombus crotchii*) was recently removed as a state candidate species, but is included for consideration as recent litigation will likely reinstate this species' candidacy and the Plan Area occurs within the known current range for this species. Table 4 summarizes the special-status wildlife, associated habitats, and designated critical habitat within the General Plan Area. Wildlife species listed or proposed for listing under FESA and/or CESA are discussed in more detail below and displayed on the photo page at the end of the discussion.

**Table 3. Special-Status Wildlife Species Known to Occur in the Plan Area**

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
<b>Invertebrates</b>					
<i>Bombus crotchii</i> * Crotch bumble bee	–	–	–	Two historic records occur within 9 miles of the Plan Area (1939 and 1963)	–
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	THR	–	–	Potentially present	The Plan Area does not contain designated Critical Habitat for this species.
<i>Danaus plexippus</i> pop. 1 monarch butterfly (CA overwintering population)	CAN	–	–	Potentially present	–
<i>Haplotrema caelatum</i> slotted lancetooth snail	–	–	LIS	Potentially present	–
<i>Helminthoglypta phlyctaena</i> zaca shoulderband snail	–	–	LIS	Potentially present	–

Table 3. Special-Status Wildlife Species Known to Occur in the Plan Area

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
<i>Helminthoglypta salviae</i> sage shoulderband snail	–	–	LIS	Potentially present	–
<i>Helminthoglypta venturensis</i> Ventura shoulderband snail	–	–	LIS	Potentially present	–
<i>Helminthoglypta willeti</i> Matilija shoulderband snail	–	–	LIS	Potentially present	–
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	END	–	–	Reported within the Tierra Rejada Vernal Pool Preserve, Moorpark (1998, 2001, and 2011)	Designated Critical Habitat for this species (Subunit 1a: Tierra Rejada Preserve) is located within the southeastern portion of the proposed Plan Area
<i>Timema monikense</i> walking stick	–	–	LIS	Potentially present	–
<b>Fish</b>					
<i>Cottus asper</i> prickly sculpin	–	–	LIS	Potentially present	–
<i>Catostomus santaanae</i> Santa Ana sucker	THR	–	AFS(TH)	Reported in various locations along the Santa Clara River, Sespe Creek, Piru Creek, and Castaic Creek (1975, 1992, 1996-2000, 2003-2005, and 2007)	The Plan Area does not contain designated Critical Habitat for this species.
<i>Gasterosteus aculeatus williamsoni</i> unarmored threespine stickleback	END	END FP	AFS(EN) LIS	Reported in various location along the Santa Clara River, from Santa Clarita to Saticoy (1994, 1995, 1997, 1998, 2000, and 2003-2007)	–



**Table 3. Special-Status Wildlife Species Known to Occur in the Plan Area**

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
<i>Gila orcuttii</i> arroyo chub	–	SSC	AFS(VU) USFS	Transplanted populations (outside native habitat/range) reported at various locations along the Arroyo Simi, Moorpark (2000)	–
<b>Amphibians</b>					
<i>Spea hammondi</i> western spadefoot	–	SSC	–	Reported in the Big Mountain foothills, Moorpark (2003); Happy Camp Canyon Regional Park, north of Moorpark (2019); mine site northwest of Moorpark (2004); locations just north of Simi Valley (2000 and 2017); and Arroyo Simi, Simi Valley (2013)	–
<b>Reptiles</b>					
<i>Actinemys marmorata</i> western pond turtle	–	SSC	–	Reported at Arroyo Simi, Simi Valley (2010)	–
<i>Anniella spp.</i> California legless lizard	–	SSC	–	Reported along Arroyo Simi, Moorpark and Simi Valley (1982 and 1983); Happy Camp Canyon Park, north of Moorpark (1990 and 1993); and Las Posas Hills, Camarillo (2014)	–
<i>Arizona elegans occidentalis</i> California glossy snake	–	SSC	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (1995)	–
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	–	SSC	–	Multiple locations reported in Simi Valley (1996). Observed throughout the Carlsberg Specific Plan Area (1992)	–

**Table 3. Special-Status Wildlife Species Known to Occur in the Plan Area**

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
<i>Phrynosoma blainvillii</i> coast horned lizard	–	SSC	–	Reported in various unnamed canyons in Happy Camp Canyon Park, northwest of Moorpark (2002); east of Alamos Canyon Road, Simi Valley (2008); and in a dry streambed, southwest of Filmore (2003)	–
<i>Thamnophis hammondi</i> two-striped gartersnake	–	SSC	–	Reported in the Arroyo Simi, Simi Valley (1993)	–
<b>Birds</b>					
<i>Athene cucularia</i> burrowing owl	–	SSC	BCC	Reported on Oak Ridge, northeast of Moorpark (2006); and in Simi Valley (1990)	–
<i>Campylorhynchus brunneicapillus couesi</i> coastal cactus wren	–	SSC	BCC	Heard calling within Hitch Ranch Specific Plan Area (2005 and 2021)	–
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	THR	END	BCC	Reported in the Santa Clara River, northeast of Santa Paula (2018)	The Plan Area does not contain designated Critical Habitat for this species.
<i>Elanus leucurus</i> white-tailed kite	–	FP	–	Reported along the Arroyo Simi, just southwest of Moorpark (2011). Observed foraging within the West Point Homes Specific Plan Area (1999). Reported foraging within the Hitch Ranch Specific Plan Area (1998 and 2021)	–
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	END	END	–	Reported along the Santa Clara River, east of Santa Paula (2009)	The Plan Area does not contain designated Critical Habitat for this species.

**Table 3. Special-Status Wildlife Species Known to Occur in the Plan Area**

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
<i>Gymnogyps californianus</i> California condor	END	END FP	–	Unlikely to nest but potentially present as foraging species	The Plan Area does not contain designated Critical Habitat for this species.
<i>Icteria virens</i> yellow-breasted chat (nesting)	–	SSC	–	Observed just south of the West Point Homes Specific Plan Area (1998) and a single chat within the Hitch Ranch Specific Plan Area (1998)	–
<i>Lanius ludovicianus</i> loggerhead shrike (nesting)	–	SSC	BCC	Observed just south of the West Point Homes Specific Plan Area (1998) observed in Hitch Ranch Specific Plan Area (1993, 1998, 2007, and 2011)	–
<i>Polioptila californica californica</i> coastal California gnatcatcher	THR	SSC	–	Reported in various locations in Moorpark (1995, 1997, 1998, 2008, 2012, and 2015); west of Simi Valley (2010-2012); and north of Simi Valley (2015); detected during protocol surveys for Hitch Ranch Specific Plan Area (1998, 2000, 2003, 2005, 2009, 2011, 2016, and 2021)	Designated Critical Habitat for this species (Unit 13) is located within the eastern portion of the proposed Plan Area
<i>Riparia riparia</i> bank swallow	–	THR	–	Historically reported along the Santa Clara River, southwest of Fillmore (1904, 1910, and 1926); and along the Arroyo Simi, Simi Valley (1897); currently presumed to be extirpated as a breeder in Southern California	–

**Table 3. Special-Status Wildlife Species Known to Occur in the Plan Area**

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
<i>Vireo bellii pusillus</i> least Bell's vireo	END	END	–	Reported at multiple locations along the Santa Clara River, near Santa Paula (1925, 1990-1993, 2009-2011, and 2015); Arroyo Los Posas Creek, west of Moorpark (2007 and 2009); multiple locations along the Arroyo Simi, in Moorpark and Simi Valley (1983, 1985, 2008, 2015, and 2017)	The Plan Area does not contain designated Critical Habitat for this species.
<b>Mammals</b>					
<i>Felis concolor</i> ** mountain lion	–	CAN THR	–	Potentially present. Not currently tracked by CNDDDB but informal (media) sightings exist	–
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	–	SSC	–	Reported in Moorpark and Simi Valley (1992)	–
<i>Taxidea taxus</i> American badger	–	SSC	–	Reported in Moorpark (2016)	–
<p>Federal Designation (Federal Endangered Species Act, USFWS)</p> <p>END      Federally listed, endangered THR      Federally listed, threatened</p> <p>State Designation (California Endangered Species Act, CDFW)</p> <p>END      State listed Endangered THR      State listed Threatened CAN      Candidate for listing FP      Fully Protected SSC      Species of Special Concern</p> <p>Other Designations</p> <p>AFS      American Fisheries Service</p> <p>EN      Endangered TH      Threatened VU      Vulnerable</p>					

**Table 3. Special-Status Wildlife Species Known to Occur in the Plan Area**

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
LIS BCC	Ventura County, locally important species USFWS Birds of Conservation Concern				
<p>– Indicates information that is not applicable to the species.                      *State candidacy revoked in January 2022 but candidacy status may be reinstated based on June 2022 court decision.                      **Currently listed as State Candidate on State and Federally Listed Endangered and Threatened Animals of California (CNDDDB 2022b) but not the Special Animals List (CNDDDB 2022c).</p>					
<p><b>Sources:</b>                      California Natural Diversity Database (CNDDDB) RareFind 5. 2022a. <a href="https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data">https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data</a>, Commercial Version dated September 4, 2022.                      United States Fish and Wildlife Service (USFWS) 2022. Information Planning and Conservation (IPaC) System. Available at <a href="https://ecos.fws.gov/ipac/location/index">https://ecos.fws.gov/ipac/location/index</a>. Accessed on September 6, 2022.                      Ventura County Resource Management Agency Locally Important Animal List. 2014. <a href="https://www.vcrma.org/ventura-county-locally-important-species-list">https://www.vcrma.org/ventura-county-locally-important-species-list</a>. Accessed on September 6, 2022.</p>					

**Crotch bumble bee (*Bombus crotchii*)** was petitioned for listing in 2018, advanced to state candidacy status in June 2019 (CDFW 2019), challenged and ruled ineligible for listing under CESA (categorized as a fish) in November 2020, and then ruled (by the Third Appellate Court District in California) that "...a terrestrial invertebrate... may be listed as an endangered or threatened species under the [California Endangered Species Act]," under the definition of 'fish.' At the time of this report and pending ongoing litigation, this species does not have legal status under CESA and is not considered a State Candidate. This species is known to inhabit open grassland and scrub habitats. It occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (Williams et al. 2014). Because this species is easily overlooked, most of the CNDDDB records are based on museum specimens, none of which occur within the Moorpark or Simi quadrangle search, however, the Plan Area occurs within the current range for this species.

**Vernal pool shrimp (*Branchinecta lynchi*)** is a federally listed threatened species. Vernal pool fairy shrimp occurs in cool-water vernal pools or vernal pool-like habitats. Only one CNDDDB record is known to occur, approximately 37 miles north of the Plan Area in northern Ventura County.

**Monarch butterfly (*Danaus plexippus* pop. 1)** is a candidate for federal listing (California overwintering population only) whose listing is warranted, but precluded at this time by more critical species. A decision on the listing status is delayed until 2024. This species is dependent on its larval host plant (milkweed [*Asclepias* spp.]) for breeding habitat and nectars on a variety of flowering plants and annuals. Most of the monarch overwintering sites in California are located within approximately 1.5 miles of the coast and provide very specific microclimate conditions that include dappled sunlight, fresh water, high humidity, and absence of freezing temperatures (Pelton et.al., 2016). The CNDDDB does not track this species, but it likely migrates through the area on its way to and from coastal overwintering grounds.

**Riverside fairy shrimp (*Streptocephalus woottoni*)** is a federally listed endangered species. Riverside fairy shrimp are associated with coastal scrub and grassland habitats and are found in moderately deep vernal

pools or ephemeral ponds. Riverside fairy shrimp has been recorded in the Terra Rejada Vernal Pool Preserve in the southeastern portion of the Plan Area.

#### *Critical Habitat*

The USFWS designated Critical Habitat for Riverside fairy shrimp in 2001 (USFWS 2001) and revised the designation in 2012 (USFWS 2012). Subunit 1a (Tierra Rejada Preserve) of designated Critical Habitat is located within the southeastern portion of the Plan Area (Appendix A – Figure 7).

**Santa Ana sucker (*Catostomus santaanae*)** is a federally listed threatened species. Santa Ana sucker is endemic to California and is found in cool, clear streams with sand, rubble, and boulder bottoms and algae. Santa Ana sucker has been recorded in several locations north of the Plan Area; however, this species has not been documented within the Plan Area.

**Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*)** is a state- and federally listed endangered species and a CDFW fully protected species. Unarmored threespine stickleback are associated with weedy pools, backwaters, and southern California streams with emergent vegetation and prefer cool, clear water. Unarmored threespine stickleback has been recorded to the north of the Plan Area; however, this species has not been documented within the Plan Area.

**Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)** is a federally listed threatened and state-listed endangered species. Western yellow-billed cuckoo is associated with riparian woodlands and forests, along the broad, lower flood bottoms of larger river systems and nests in riparian areas with willows, cottonwoods, and a dense understory. Western yellow-billed cuckoo has been recorded to the northwest of the Plan Area; this species has not been documented within the Plan Area.

**Southwestern willow flycatcher (*Empidonax traillii extimus*)** is a state and federally listed endangered species that breeds in dense riparian vegetation along rivers and streams in the southwestern United States from May through September. This species is associated with riparian woodland and forests. They construct nests in dense thickets of willows, mulefat, and other trees and shrubs approximately four to seven meters in height. They virtually always nest near surface water or saturated soil. Southwestern willow flycatcher has been recorded to the northwest of the Plan Area; however, this species has not been documented within the Plan Area.

**California condor (*Gymnogyps californianus*)** is a state and federally listed endangered species and a CDFW fully protected species. This species requires large areas of remote country for foraging, roosting, and nesting and are known to fly 150 miles a day in search of food. Condors roost on large trees or snags, or on isolated rocky outcrops and cliffs. Foraging habitat includes open grasslands and oak savanna foothills that support populations of large mammals such as deer and cattle. This species was removed completely from the wild by 1987 and captive-bred condors have been gradually reintroduced to the wild beginning in 1992. The Sespe Condor Sanctuary is located in northern Ventura County and this species is known to nest at Hopper Mountain National Wildlife Refuge approximately 10 miles north of the Plan Area.

**Coastal California gnatcatcher (*Polioptila californica californica*)** is a federally listed threatened species and a CDFW SSC. Coastal California gnatcatcher is an obligate permanent resident of sage scrub habitat below 765 meters in southern California. This species is found in low, sage scrub in arid washes, on mesas,

and on slopes. Coastal California gnatcatcher has been documented in several locations throughout the Plan Area.

#### *Critical Habitat*

The USFWS designated Critical Habitat for coastal California gnatcatcher in 2000 and revised the designated Critical Habitat in 2007 (USFWS 2007). Unit 13 of designated critical habitat is located within the eastern portion of the Plan Area (Appendix A – Figure 7).

**Bank swallow (*Riparia riparia*)** is a state-listed threatened species. Bank swallow is a colonial nester and is associated with riparian and lowland habitats west of the desert. It requires vertical banks or cliffs with fine-textured, sandy soils near streams, rivers, lakes or ocean for nesting. Bank swallow has been documented east and northwest of the Plan Area; however, this species has not been documented within the Plan Area.

**Least Bell's vireo (*Vireo bellii pusillus*)** is a state- and federally listed endangered species. This species inhabits riparian woodland habitats consisting of cottonwoods, willows, and mulefat. Least Bell's vireos are found in areas with a dense shrub cover and a dense, stratified canopy. Nests occur in dense thickets of willow or mulefat, one or two meters from the ground. Least Bell's vireo has been documented in the southeastern portion of the Plan Area and in several locations immediately east of the Plan Area.

**Mountain lion (*Puma concolor*)** is a candidate for state listing (California Fish and Game Code 2020, CNDDDB 2022b). The petition to list is specific to the ESU of mountain lions in southern and central coastal California. Mountain lions require large areas of relatively undisturbed habitats with adequate connectivity to allow for dispersal and gene flow. They have large home ranges that include heterogeneous habitats. In the United States, these often consist of pine forests, riparian and oak woodlands, streams, chaparral, and grasslands, though they are also known to occur in desert habitats. Because this species has only recently been proposed for listing and is not a species typically reported to the CNDDDB, no CNDDDB records occur within the Plan Area; however, media articles for sightings exist.

#### **4.4.4 Nesting Bird Species**

The Plan Area supports a variety of habitats that provide suitable nesting habitat for native migratory and resident bird species, including owls and raptors. Ground nesting species are likely to nest in the grassland habitat and more open natural areas. Native trees and shrubs provide nesting habitat for numerous songbird species. Both native and landscaped trees can be utilized for nesting by migratory birds, and many species have adapted to urban environments. Bridges, buildings, and other artificial structures commonly support nesting passerines and raptors. Virtually all native nesting songbirds and raptors are protected by the MBTA (USFWS 1918).

#### **4.4.5 Roosting Bats**

The Plan Area supports a variety of habitats that provide suitable roosting habitat for native bat species. Bats can roost in a variety of habitats including cliffs, rock crevices, natural and landscaped trees (i.e. tree hollows, leaf foliage), forests, thickets, bridges, buildings, and other artificial structures.

## Federal & State Listed and Candidate Animal Species With Potential to Occur



©Stephanie McNight

*Bombus crotchii\**  
(Crotch bumble bee)



© Daniel Anderson and Peter J. Bryant

*Branchinecta lynchi*  
(vernal pool fairy shrimp)



© Chris Brown, USGS

*Streptocephalus woottoni*  
(Riverside fairy shrimp)



© Christine Tischer

*Danaus plexippus*  
(monarch butterfly)



© Alice Abela

*Gasterosteus aculeatus williamsoni*  
(unarmored threespine stickleback)



© Manna Warburton

*Catostomus santaanae*  
(Santa Ana sucker)



© Ashley Wapnberg

*Coccyzus americanus occidentalis*  
(western yellow-billed cuckoo)



Dave Menke, USFWS

*Empidonax traillii extimus*  
(southwestern willow flycatcher)



© 2010 Patrick Martin

*Gymnogyps californianus*  
(California condor)



© Robert Hamilton

*Polioptila californica californica*  
(coastal California gnatcatcher)



© Niall D. Perrins

*Riparia riparia*  
(bank swallow)



© 2015 Benjamin Smith

*Vireo bellii pusillus*  
(least Bell's vireo)



*Puma concolor*  
(mountain lion)

\*Pending ongoing litigation, not considered a State Candidate at time of report.



## 4.5 Habitat Conservation Plans and Natural Community Conservation Plans

No CDFW permitted Natural Community Conservation Plans or HCPs occur within the City of Moorpark or County of Ventura (Figure 8). As identified in Section 2.4, Municipal Code 17, the approved Moorpark Highlands - Specific Plan Two will permanently preserve 169 acres of land in an HCP, providing open space that enhances the habitat within 94 of those acres, and provides multi-use trails for access to these areas by the public. These areas shall remain ungraded and shall not be developed, with the exception of roadway and infrastructure improvements necessary for the construction of Spring Road. The natural open space zone areas impacted by grading for Spring Road shall be recontoured and revegetated to the standards as defined in the design guidelines, Section 8, of Specific Plan Two. Subsequent revegetation and/or maintenance activities within the natural open space areas shall be limited to those activities as prescribed in the HCP, Appendix J of the EIR.

## 4.6 Wildlife Movement Corridors and Linkages

Wildlife corridors are linear landscape elements that provide for wildlife species movement and dispersal between two or more habitats. Wildlife corridors contribute to population viability by assuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local displacement or ecological catastrophes (e.g., fires). Wildlife corridors could be bound by development or areas unsuitable for wildlife, but could contain enough food, cover, and/or water to facilitate wildlife movement between habitat patches and prevent isolation of populations. Travel routes are landscape features (i.e., ridgelines, drainages, canyons, or riparian areas) that are used by wildlife to gain access to essential resources. Areas adjoining two habitats are also often referred to as habitat linkages.

A statewide interagency workshop was conducted in 2000 to delineate habitat linkages critical for preserving the State's biodiversity. The Santa Monica – Sierra Madre Connection is a chain of linkages that connect the Santa Monica, Simi, Santa Susana, and Sierra Madre ranges, addressing two of the 15 landscape linkages identified as irreplaceable and imminently threatened (see Appendix A – Figure 9). This linkage serves to connect the Los Padres and Angeles national forests. It covers very diverse ecological settings and encompasses several major vegetation types. It is one of the few remaining coastal-to-inland connections in the South Coast Ecoregion. The final Linkage Design covers approximately 398,944 acres, of which 75 percent is already protected. It has several main strands, reflecting variation in habitat needs of different sets of target species. The northern strand is dominated by pinyon-juniper woodland, sagebrush, and desert scrub habitats and serves linkage needs of American badger (*Taxidea taxus*), mountain lion, and mule deer (*Odocoileus hemionus*). The central strands connect at generally higher elevations, including a series of hardwood, conifer, chaparral, and riparian habitats. They serve the needs of numerous focal species, including mountain lion, mule deer, Pacific kangaroo rat (*Dipodomys agilis*), California spotted owl (*Strix occidentalis*), acorn woodpecker (*Melanerpes formicivorus*), mountain kingsnake (*Lampropeltis zonata*), pond turtle (*Actinemys marmorata*), two-striped garter snake (*Thamnophis hammondi*), Monterey salamander (*Ensatina eschscholtzii*), and bear sphinx moth (*Proserpinus lucidus*). The southernmost strand of the Linkage Design follows the southern foothills and is dominated by coastal oak woodland, coastal sage scrub, valley foothill riparian, and grassland habitats. It provides the only fairly contiguous belt of coastal habitats in the

Linkage Design, and provides connectivity for mule deer, Pacific kangaroo rat, acorn woodpecker and Monterey salamander, as well as many other species (South Coast Wildlands 2008).

The Santa Monica – Sierra Madre Connection occurs within the eastern half of the City and branches around Moorpark College and residential developments that largely restrict wildlife movement through this area. The General Plan has designated the majority of the eastern portion of the linkage (north and south of State Highway 118) and the majority of the southern portion of the linkage (east of State Route 23) as Open Space. The western branch is fragmented by existing industrial and residential developments and includes the Moorpark Highlands Specific Plan Area. The area connecting the western branch through the Specific Plan Area could be further fragmented by the extension of State Route 23 and North Hills Parkway, a potential bypass route for State Highway 118.

#### **4.6.1 *Tierra Rejada Critical Wildlife Passage Area***

Critical Wildlife Passage Areas (CWPA) within the boundaries of the larger wildlife movement corridors and linkages. CWPA are areas identified as being particularly critical for facilitating wildlife movement based on one or more of the following factors: (1) the existence of intact native habitat or other habitat with important beneficial values for wildlife; (2) proximity to water bodies or ridgelines; (3) proximity of critical roadway crossings used by wildlife; (4) likelihood of encroachment by future development, and within which wildlife movement and plant dispersal could be easily disturbed by development; or (5) presence of non-urbanized or undeveloped lands within a geographic location that connects core habitats at a regional scale. Although not within the Plan Area, the Tierra Rejada Valley CWPA occurs immediately adjacent to the Plan Area's southeast border (see Appendix A Figure 9). The Tierra Rejada Valley has been identified as a critical link that facilitates animal movement between the Santa Monica Mountains and the Santa Susana Mountains to the north.

#### **4.7 Jurisdictional Aquatic Resources**

Aquatic resources that meet the definition of Waters of the United States fall under the jurisdiction of the USACE and subject to regulation under Section 404 of the CWA. Waters of the United States are also subject to regulation by the RWQCB under Section 401 of the CWA. Some aquatic resources that are excluded from the definition of Waters of the United States and not regulated under the CWA, such as isolated wetlands and manmade water features, may still be regulated at the state level by the RWQCB and/or the CDFW.

Discharge of waste to Waters of the State, defined as "any surface water or groundwater, including saline waters, within the boundaries of the state," is regulated by the RWQCB under the Porter-Cologne Water Quality Control Act.

Aquatic resources under the jurisdiction of the CDFW include the definable bed, bank, or channel, areas of rivers, streams, and lakes that support periodic or intermittent flows, perennial flows, subsurface flows, support fish or other aquatic life and areas that support riparian or hydrophytic vegetation in association with a streambed. This includes areas where waters flow as well as surrounding vegetation that is riparian in nature or tied hydrologically to the associated aquatic feature.

A formal study to delineate aquatic resources within the Plan Area was not conducted. However, aquatic features that are potentially under the jurisdiction of the USACE and the CDFW were identified within the Plan Area using information obtained from the USFWS NWI database (Figure 10) and USGS NHD (Figure 11).

## 4.8 Existing General Plan Land Use Element Policies

A number of policies in the Land Use element of the General Plan address biological resources. These policies are implemented to help reduce impacts to existing biological resources within the City. Each set of similar policies is followed by an implementation action that identifies the programs and procedures currently used to put General Plan goals and policies into action. For purposes of this document, the policies have been divided into three categories: 1) guidelines for new development, 2) preservation and enhancement of existing resources, and 3) wildlife connectivity.

### 4.8.1 Guidelines for New Development

Policies relevant to new development include:

- **Policy 5.3:** Landscaped and/or natural vegetation buffer areas shall be provided around and within residential projects to minimize land use conflicts and privacy impacts;
- **Policy 5.4:** Clustering of residential dwelling units may be allowed, if it can provide a public benefit such as the following: protects environmentally sensitive habitat or agricultural land; promotes land conservation as well as visual relief.
- **Policy 14.1:** New development shall be located and designed to minimize adverse visual and/or environmental impacts to the community;
- **Policy 14.2:** New development shall respect, integrate with, and complement the natural features of the land;
- **Policy 15.1:** Public & private projects shall be designed so that significant vegetation shall be maintained and protected, including riparian and oak woodland vegetation and mature trees (as defined in the City Code).
- **Policy 15.9:** New development projects shall be required to use xeriscape landscaping techniques which include drought-tolerant plant species, reduction of turf area, irrigation designed to meet plant needs, and grouping plants according to their watering needs.
  - **Implementation Action:** Consult with federal, state, and regional wildlife agencies with purview over natural resources and sensitive habitats. Require new development to incorporate native vegetation into project design and establish natural vegetation buffer areas.
  - **Implementation Action:** Consult with federal, state, and regional wildlife agencies with purview over natural resources and sensitive habitats. Require that development proposals incorporate the preservation of natural vegetation and propose measures to mitigate any impacts on local biological resources stemming from land disturbance or other site

development. Pursue actions that provide appropriate long-term protection of areas within the City that contain sensitive habitat, and which are considered of unique value in enhancing the quality of the local environment.

- **Policy 15.8:** Development in significant hazard areas, which cannot be mitigated without resulting in significant adverse environmental impacts, shall be prohibited.
  - **Implementation Action:** Consider the conversion of hazard areas to environmental uses (e.g. convert floodplain areas into wetland).

#### 4.8.2 Preservation and Enhancement of Existing Resources

Policies relevant to preservation and enhancement of existing resources include:

- **Policy 14.4:** The flood control easement area adjacent to the Arroyo Simi floodway shall be preserved and enhanced as an important natural and scenic feature of the community;
- **Policy 14.5:** Compatible open space/recreational uses of the Arroyo Simi floodway should be encouraged which are consistent with the provisions of the Federal Emergency Management Agency for floodway uses;
- **Policy 14.6:** Areas identified as significant aquifer recharge areas shall be protected and preserved;
- **Policy 15.2:** Ecologically sensitive habitats shall be protected and preserved or replaced with no net loss of habitat so long as there is substantial public benefit to any relocation program;
- **Policy 15.3:** Natural and cultural resources having significant educational, scientific, scenic, recreational or social value shall be protected and preserved.
  - **Implementation Action:** Pursue actions that provide appropriate long-term protection of areas within the City that contain sensitive habitat, including the Arroyo Simi floodway and associated recharge areas, which are considered of unique value in enhancing the quality of the local environment. Consider the creation of conservation easements to protect the biological integrity of this area, or the creation of a preserve for use as part of a mitigation landbank.

#### 4.8.3 Wildlife Connectivity

Policies relevant to wildlife connectivity include:

- **Policy 15.5:** The City shall require developers to maintain wildlife corridors to allow for the passage of animals between designated open space or recreation areas.
  - **Implementation Action:** Continue working with the County of Ventura, California Department of Fish and Game [now California Department of Fish and Wildlife], and U.S. Fish and Wildlife Service to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the Santa Monica Mountains – Sierra Madre Mountains Connection.

## 5.0 LITERATURE CITED

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## **LIST OF APPENDICES**

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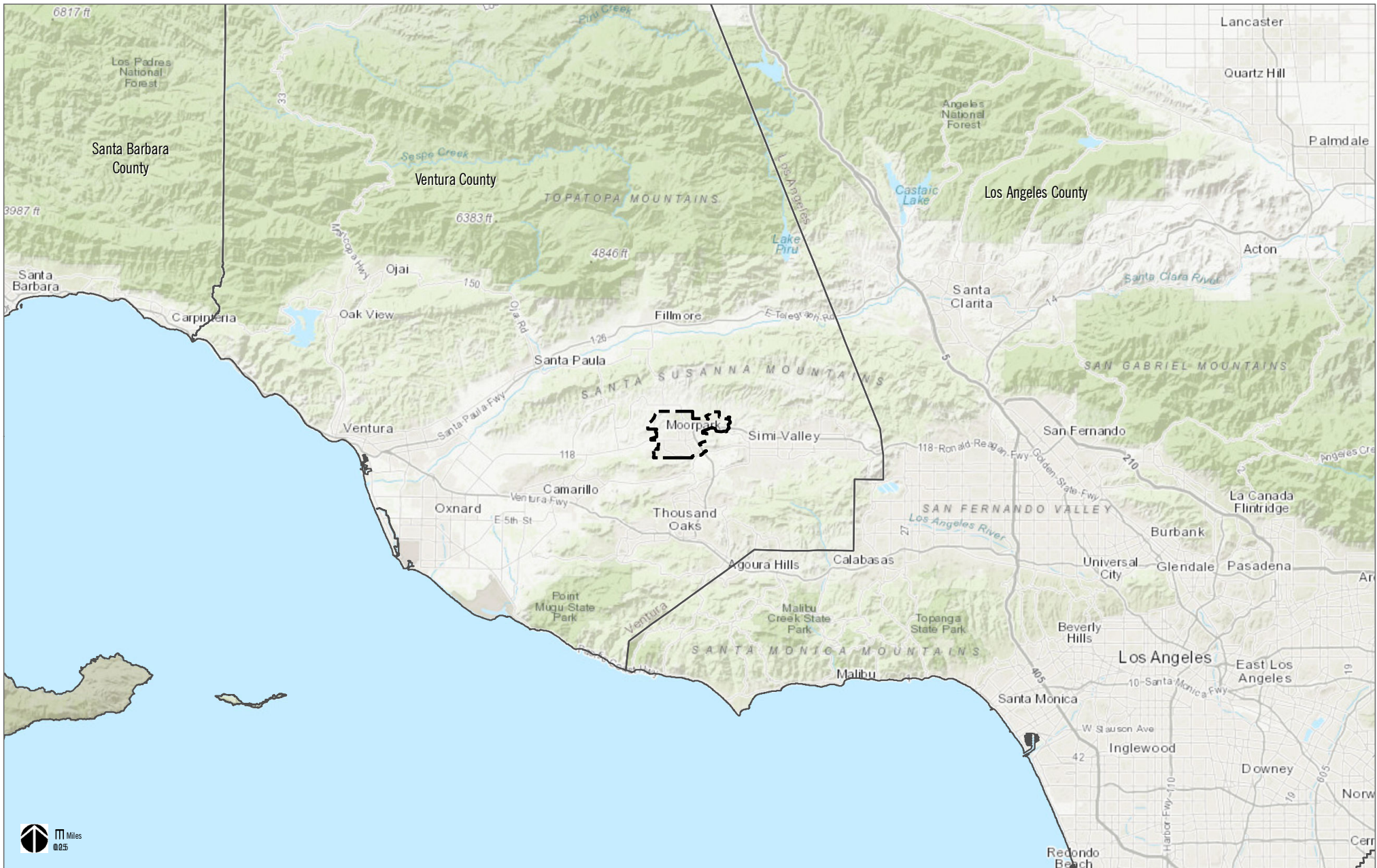
Appendix A – Figures

Appendix B – CNDDDB, CNPS, and IPaC Database Search Results

Appendix C – County of Ventura Locally Important Species Lists

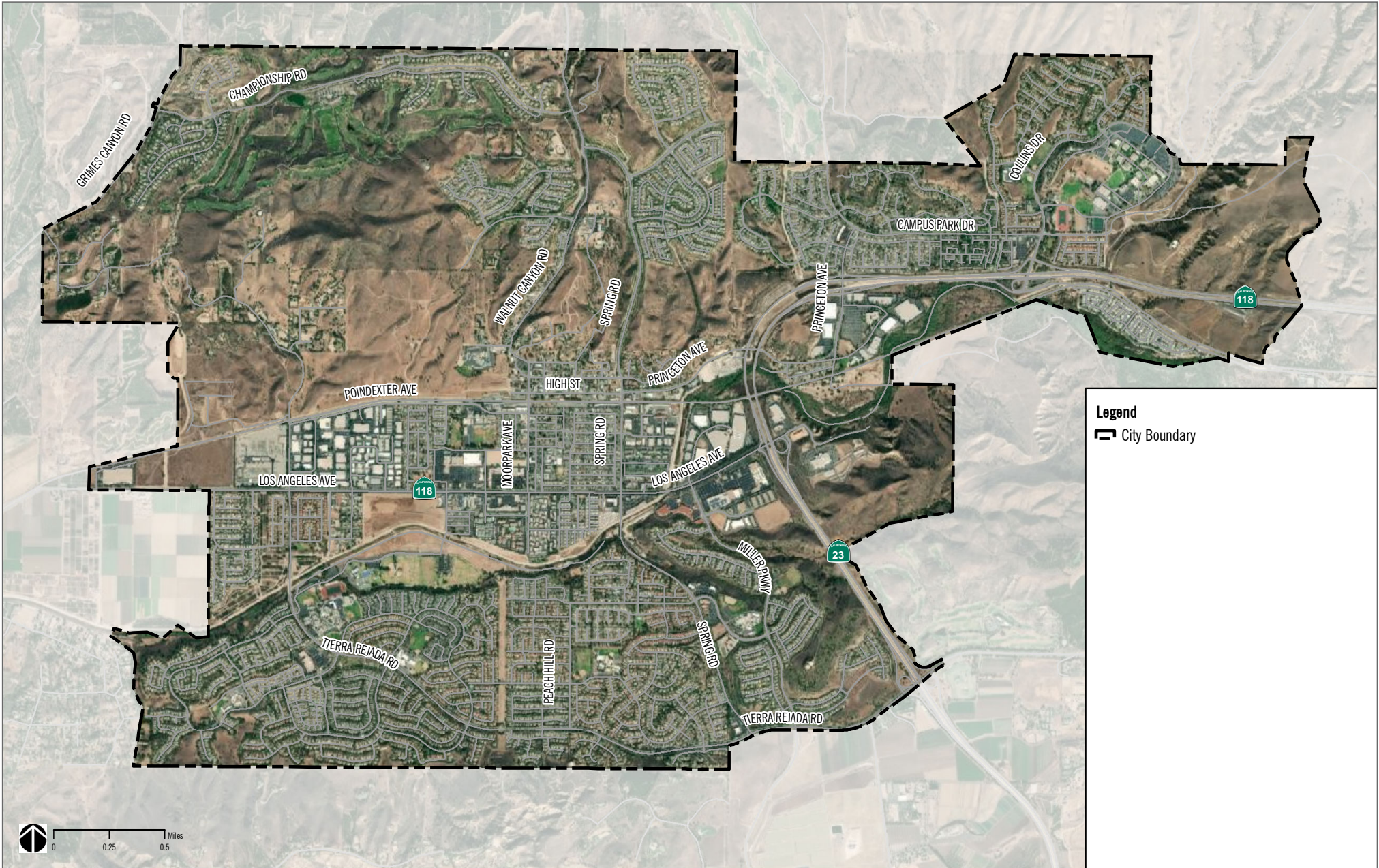






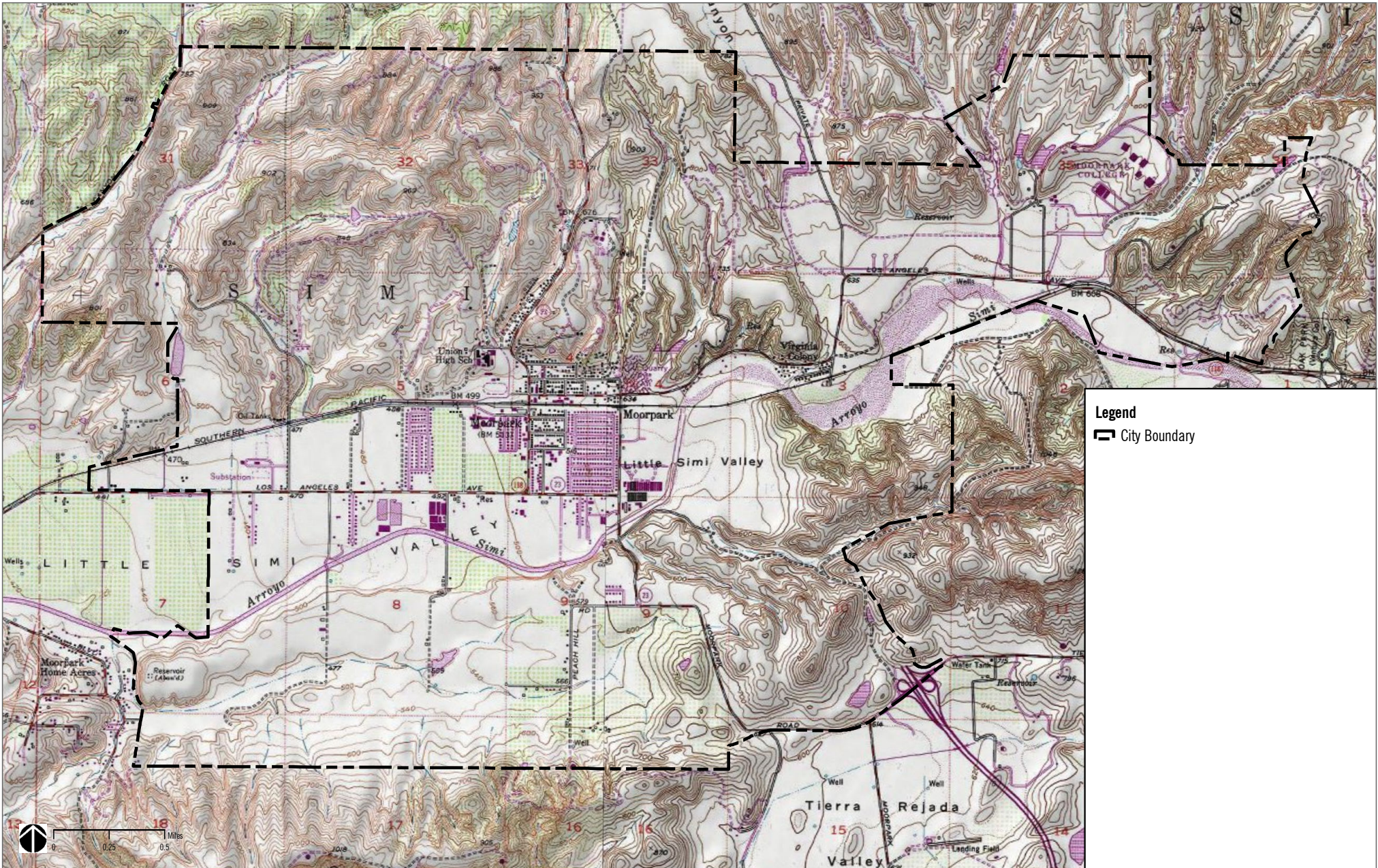
Source: Esri, City of Moorpark

**Figure 1. Regional Vicinity Map**



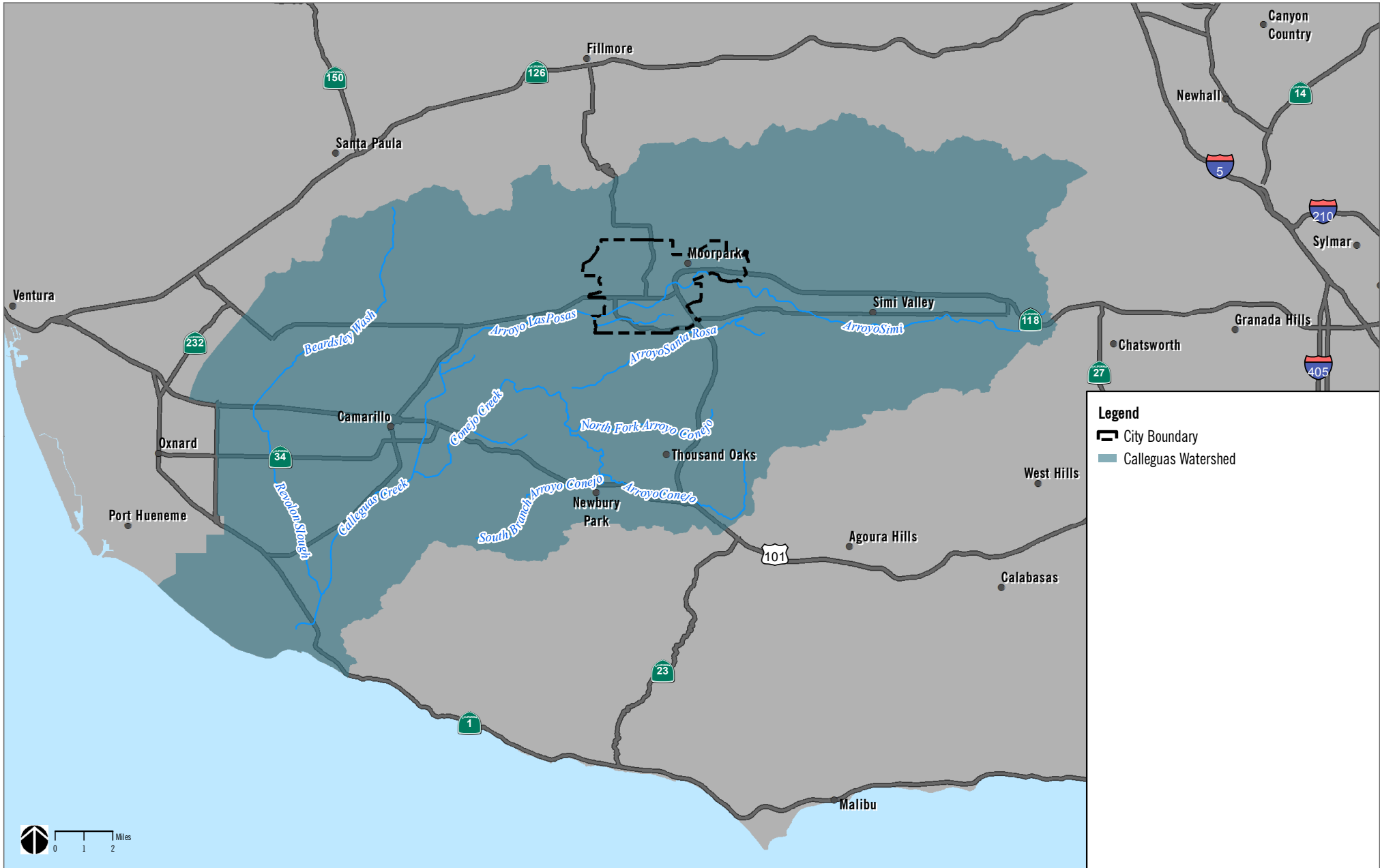
Source: Esri, City of Moorpark

**Figure 2. General Plan Map**



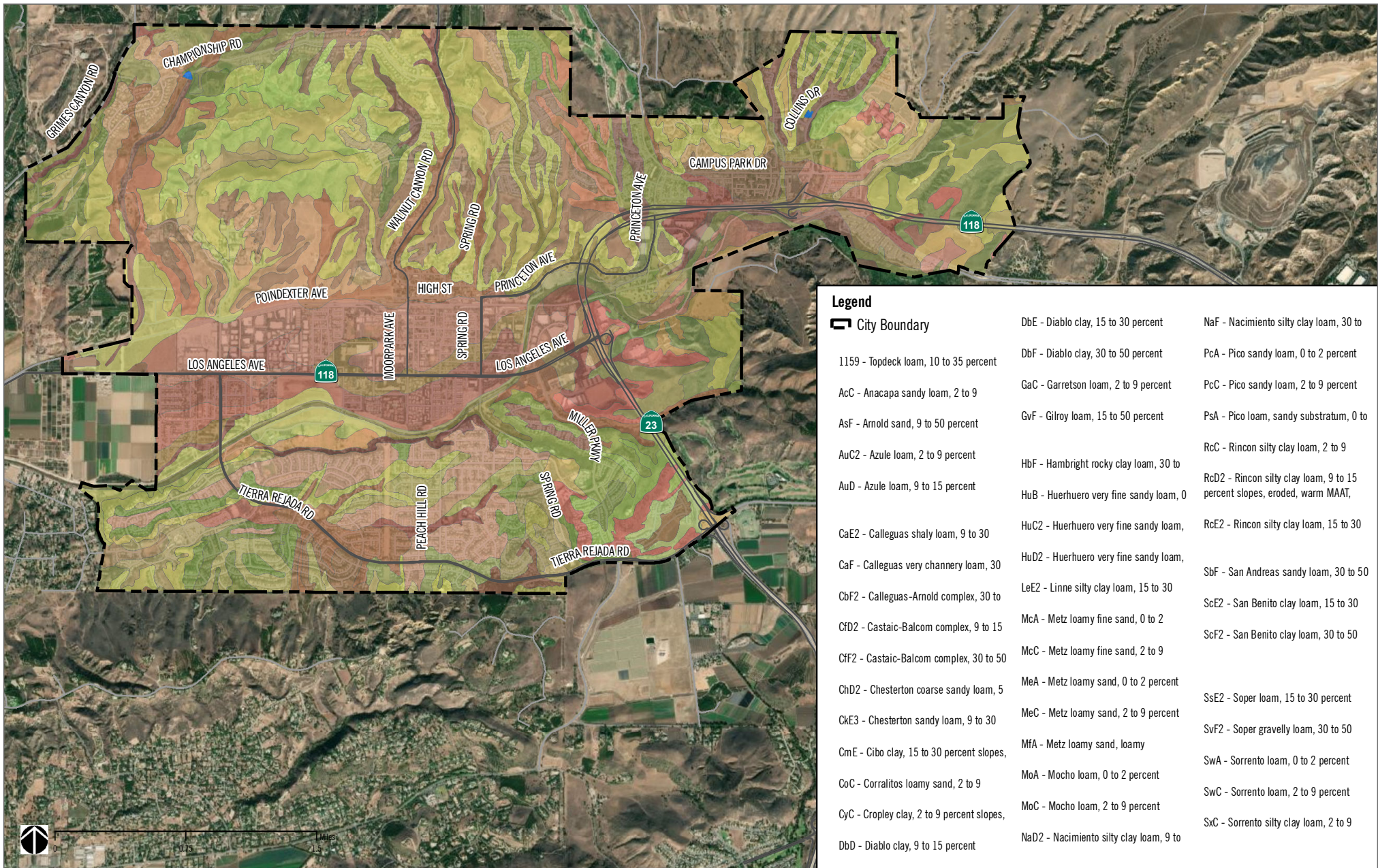
Source: USGS Topographic Quadrangles: Moorpark, Simi Valley West, City of Moorpark

**Figure 3. USGS Quadrangle Map**



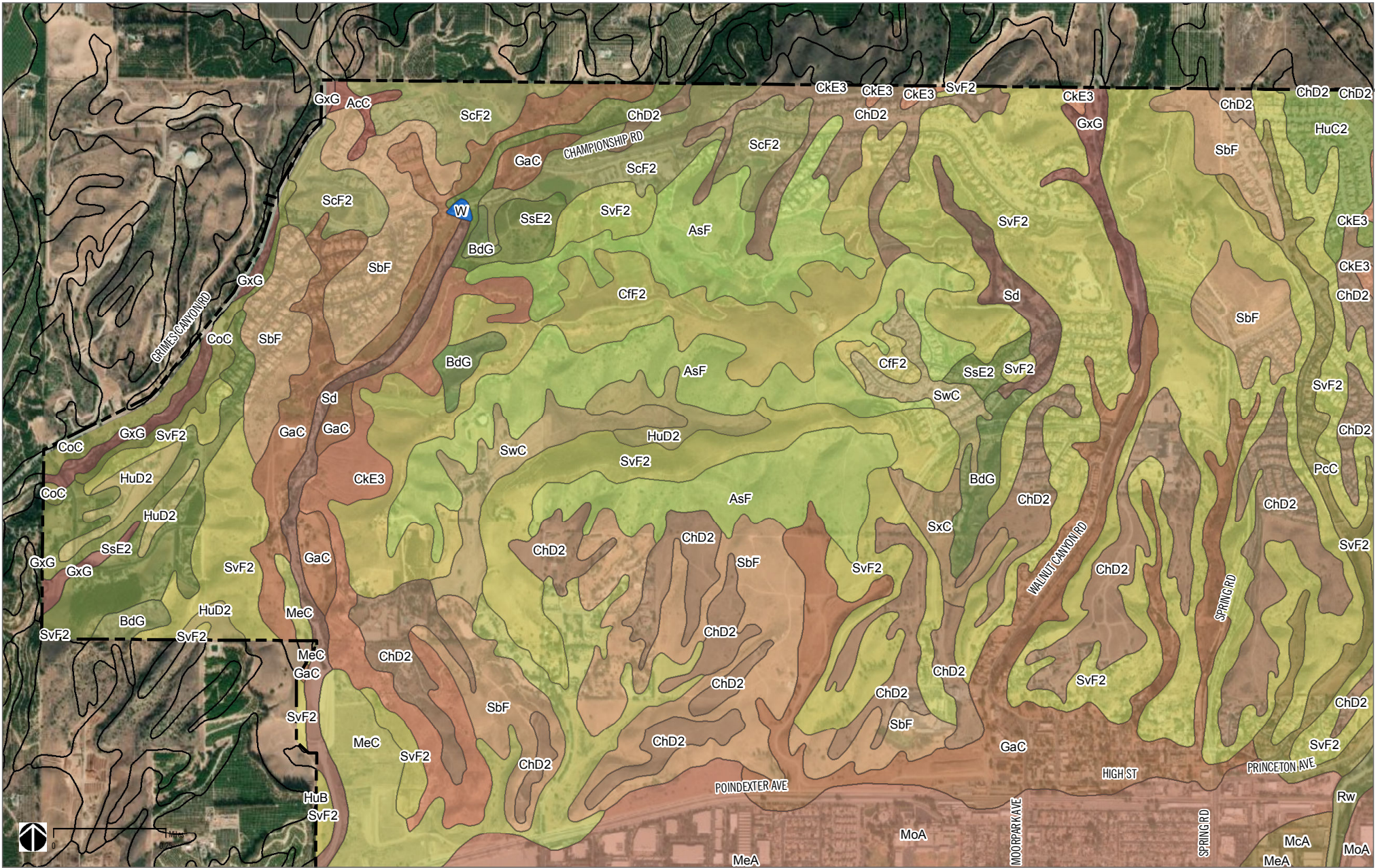
Source: California State Water Resources Control Board, USGS, City of Moorpark, Esri

**Figure 4. Calleguas Creek Watershed Map**



Source: US Fish and Wildlife Service, Esri, City of Moorpark

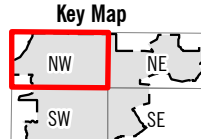
**Figure 5. NRCS Soils Overview Map**

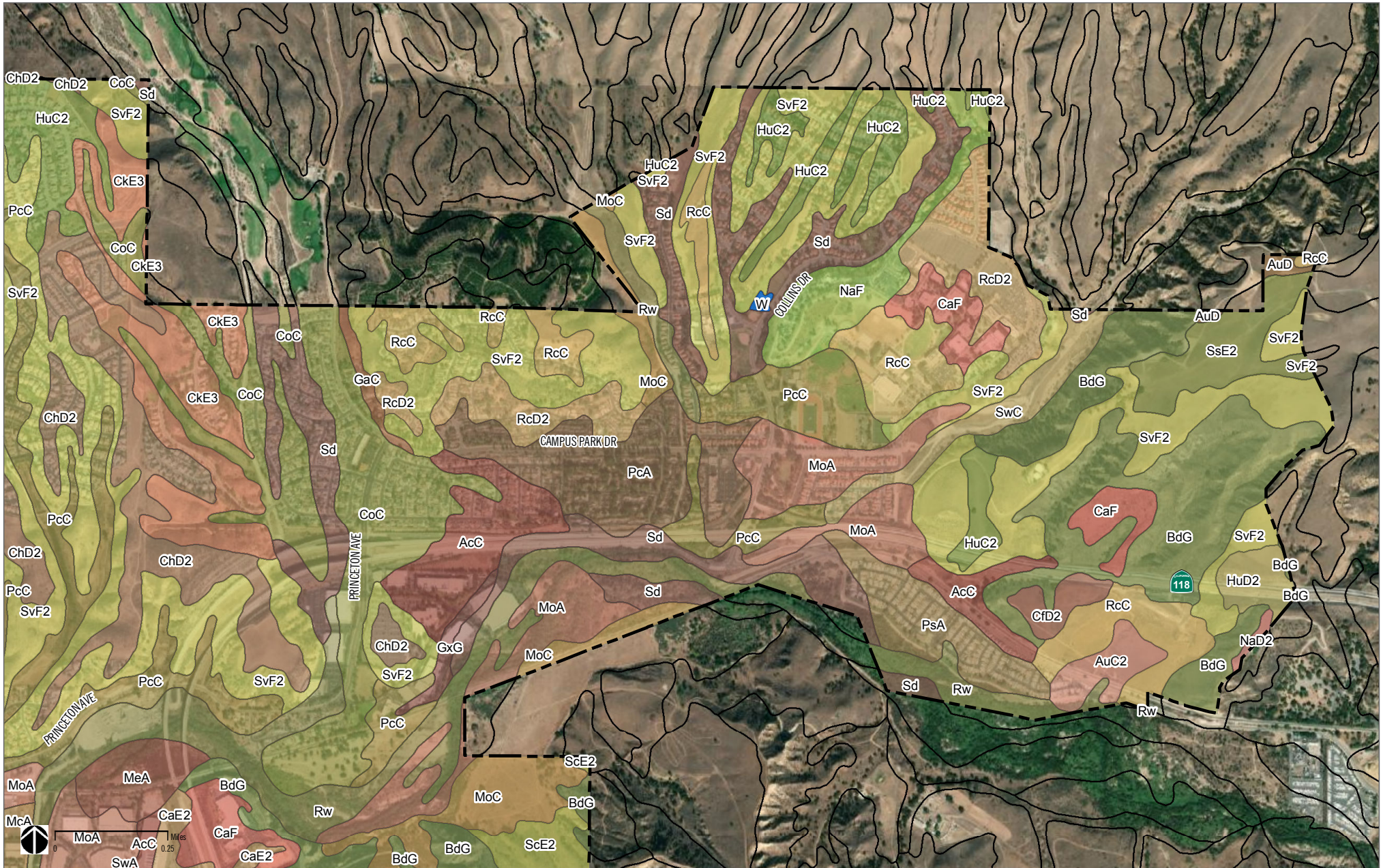


Source: NRCS gSURGO, Esri, City of Moorpark

**Figure 5a. NRCS Soils Map**

**Legend**  
 □ City Boundary  
 E-60



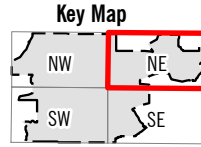


Source: NRCS gSSURGO, Esri, City of Moorpark

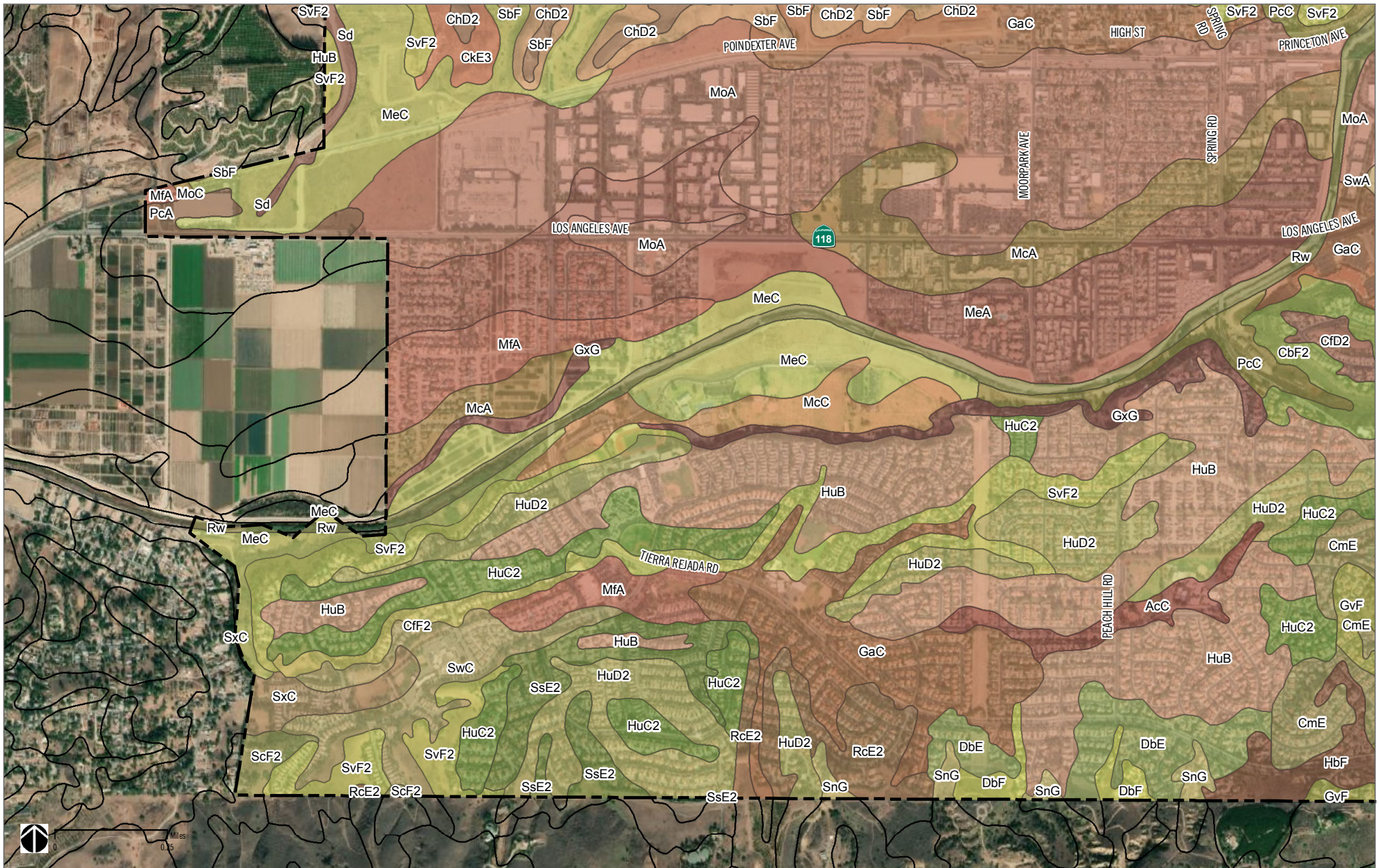
**Figure 5b. NRCS Soils Map**

**Legend**  
 □ City Boundary

E-61





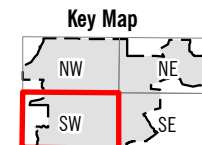


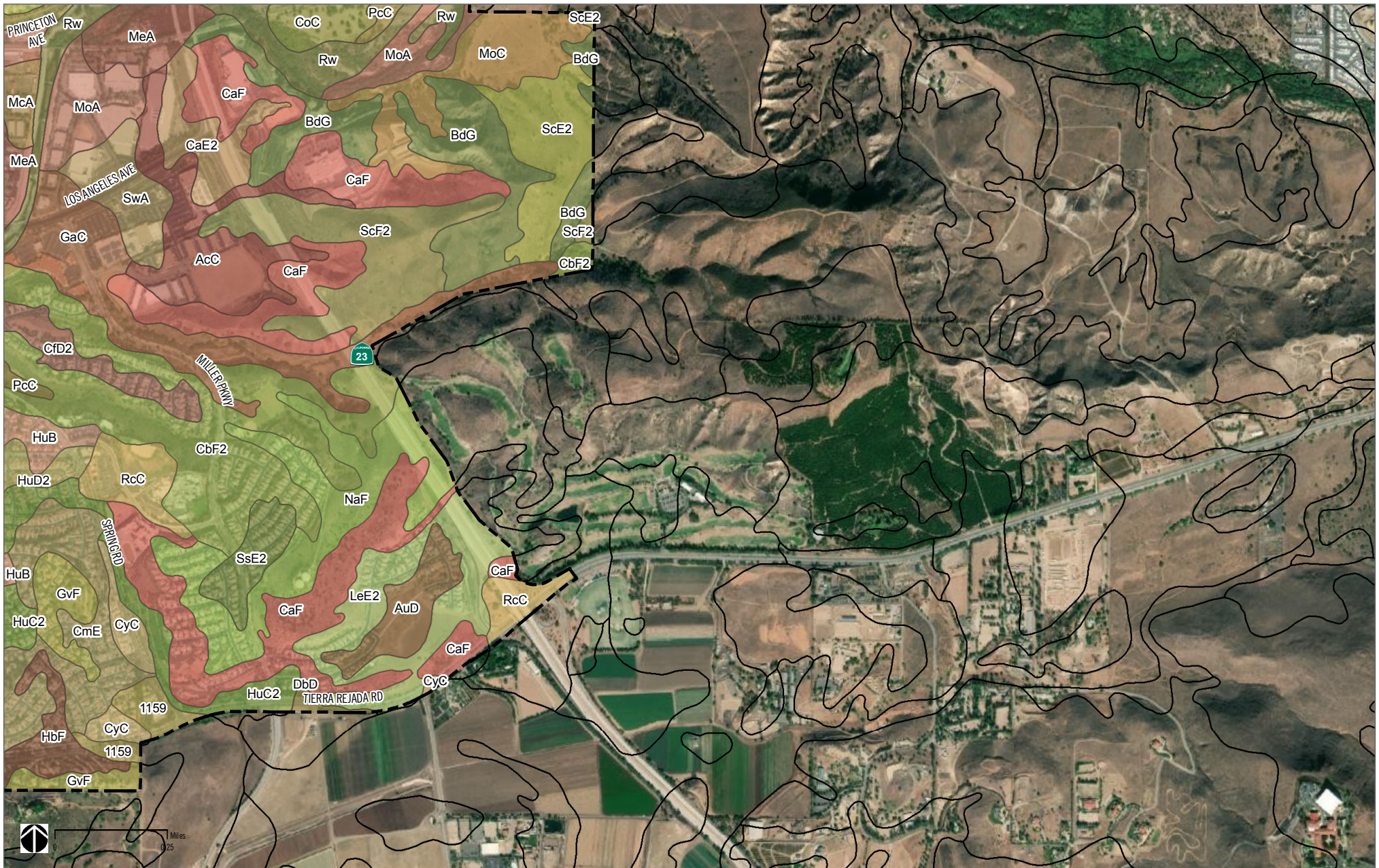
Source: NRCs gSSURGO, Esri, City of Moorpark

**Figure 5c. NRCs Soils Map**

**Legend**  
 - - - City Boundary

E-62





Source: NRCS gSSURGO, Esri, City of Moorpark

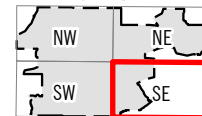
**Figure 5d. NRCS Soils Map**

**Legend**

City Boundary

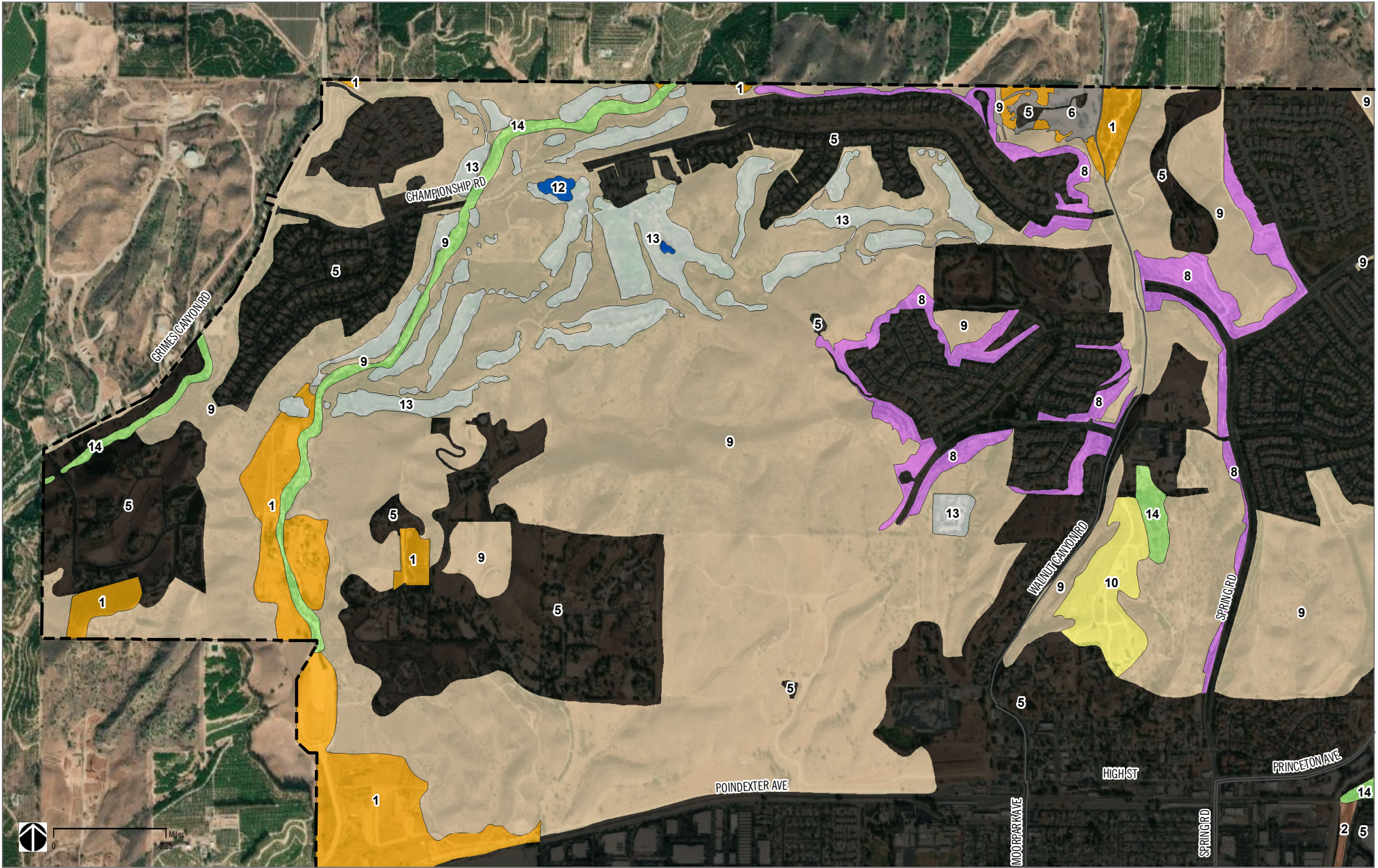
E-63

**Key Map**



City of Moorpark  
**General Plan Update**

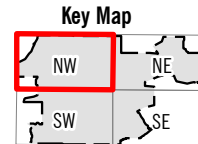




Source: Ventura County (2008), ECORP, Esri, City of Moorpark

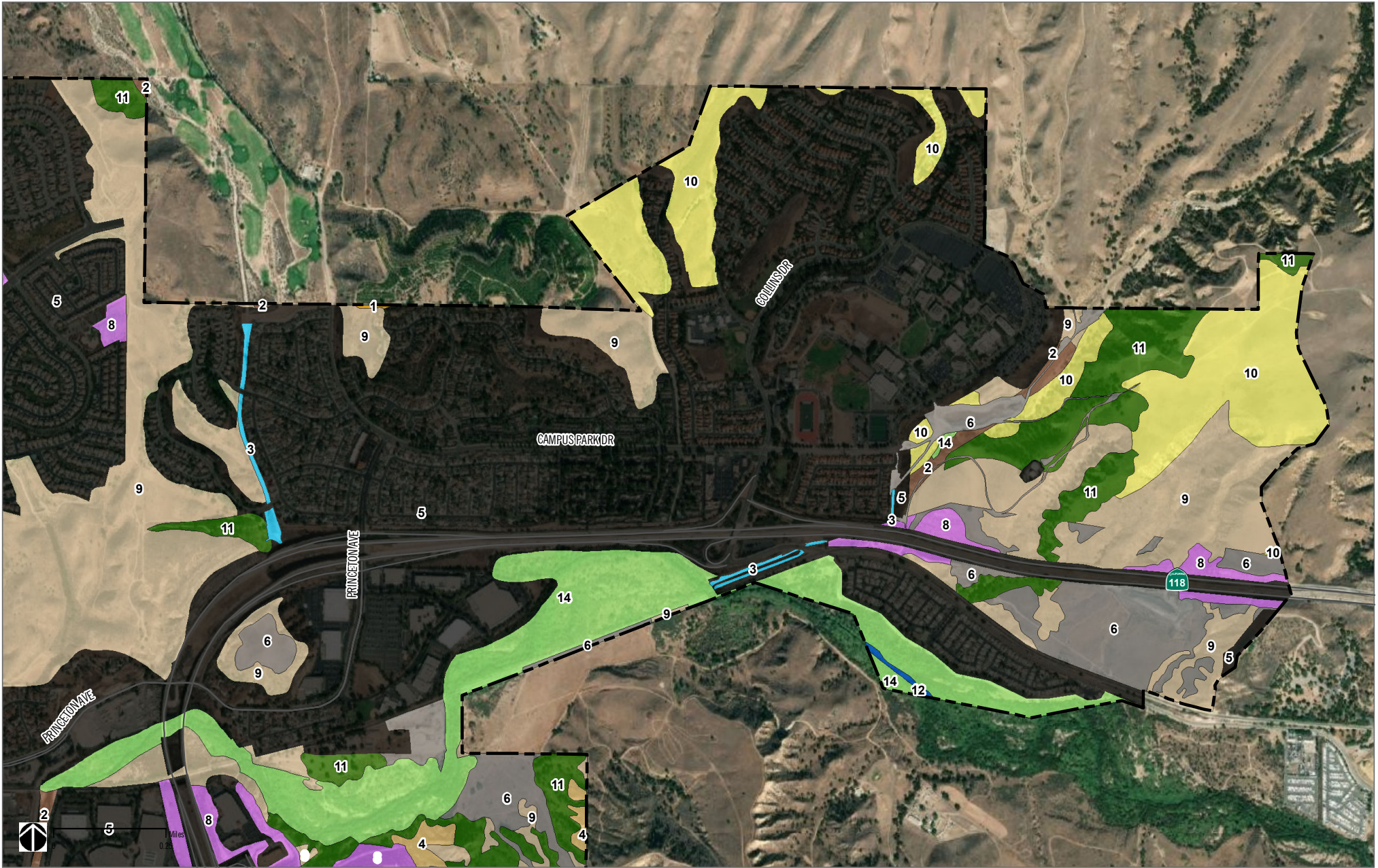
# Figure 6a. Vegetation Communities

- Legend**
- City Boundary
  - Vegetation Communities**
  - 1 - Agriculture
  - 2 - Alluvial Scrub
  - 5 - Developed
  - 6 - Disturbed
  - 8 - Landscaped
  - 9 - Mixed Scrub
  - 10 - Native Bunchgrass Grassland
  - 12 - Open Water
  - 13 - Ornamental
  - 14 - Riparian



City of Moorpark  
**General Plan Update**

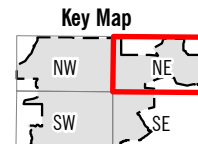




Source: Ventura County (2008), ECORP, Esri, City of Moorpark

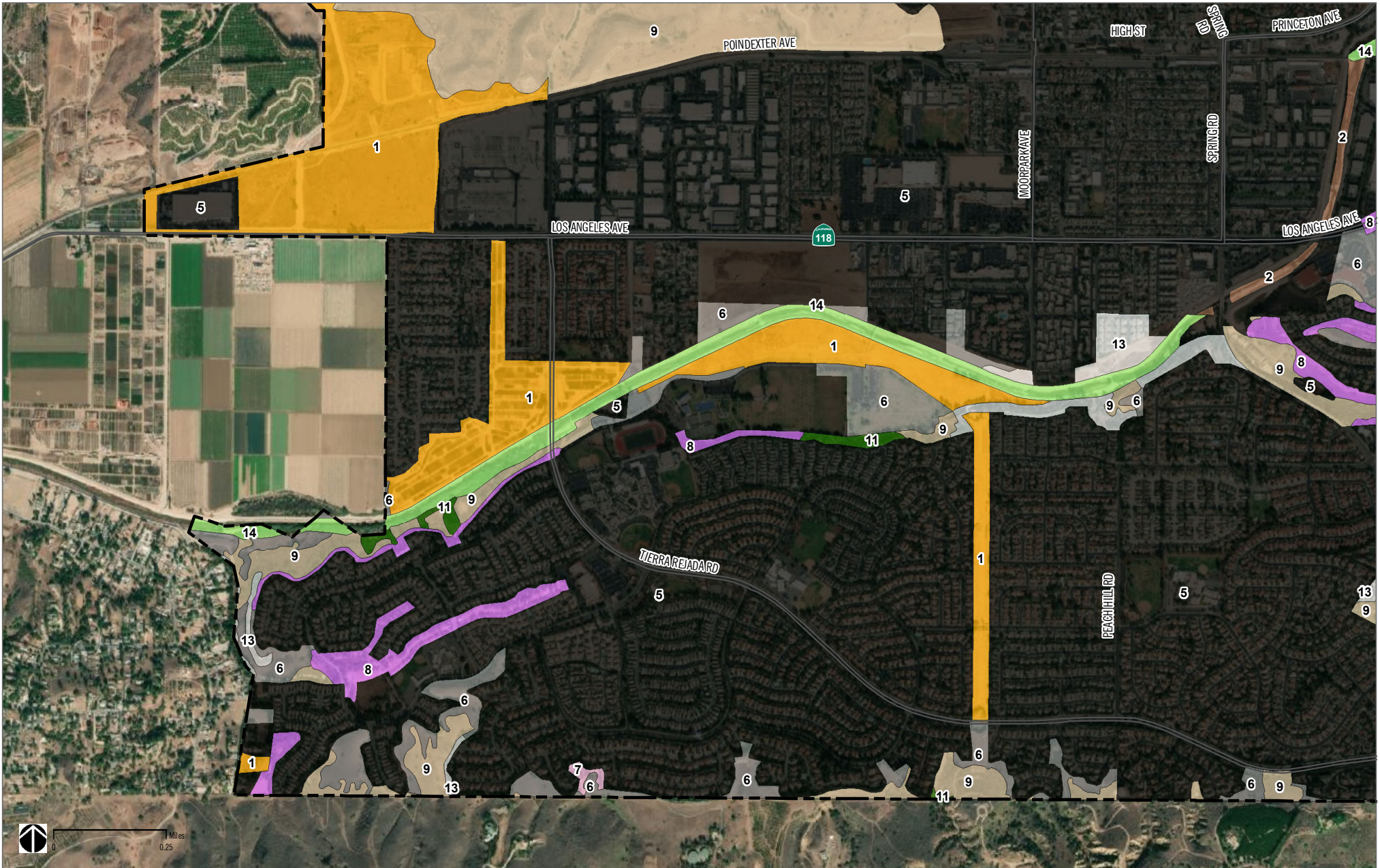
# Figure 6b. Vegetation Communities

- Legend**
- City Boundary
  - Vegetation Communities**
  - 1 - Agriculture
  - 2 - Alluvial Scrub
  - 3 - Channel
  - 4 - Chaparral
  - 5 - Developed
  - 6 - Disturbed
  - 8 - Landscaped
  - 9 - Mixed Scrub
  - 10 - Native Bunchgrass Grassland
  - 11 - Oak Woodland
  - 12 - Open Water
  - 14 - Riparian



City of Moorpark  
**General Plan Update**

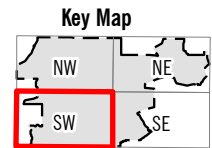




Source: Ventura County (2008), ECORP, Esri, City of Moorpark

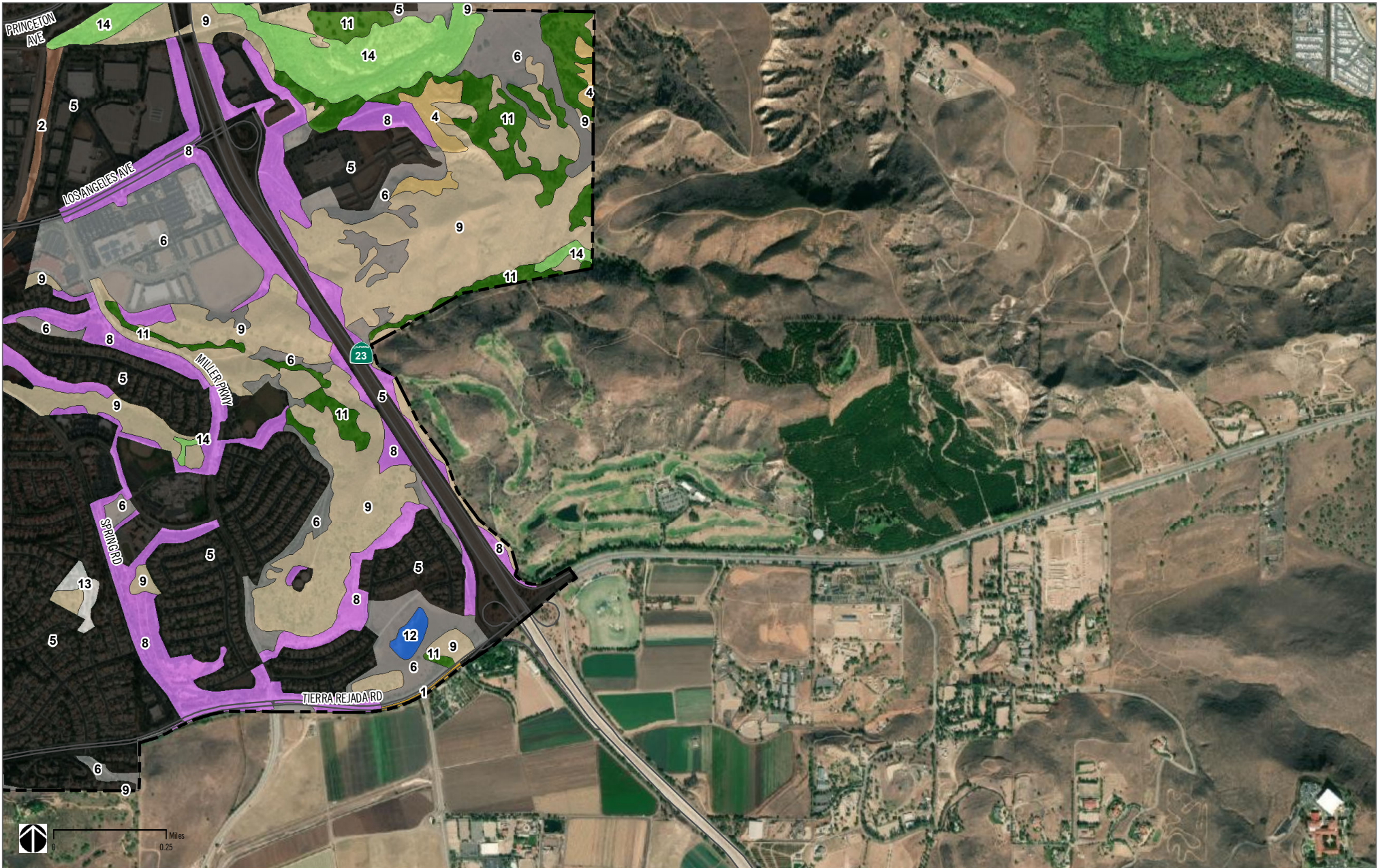
# Figure 6c. Vegetation Communities

- Legend**
- City Boundary
  - Vegetation Communities**
  - 1 - Agriculture
  - 2 - Alluvial Scrub
  - 5 - Developed
  - 6 - Disturbed
  - 7 - Eucalyptus Woodland
  - 8 - Landscaped
  - 9 - Mixed Scrub
  - 11 - Oak Woodland
  - 13 - Ornamental
  - 14 - Riparian



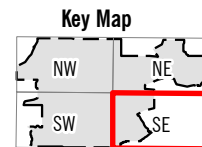
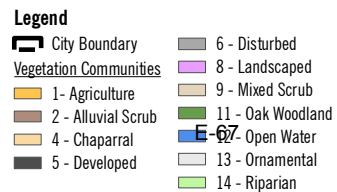
City of Moorpark  
**General Plan Update**

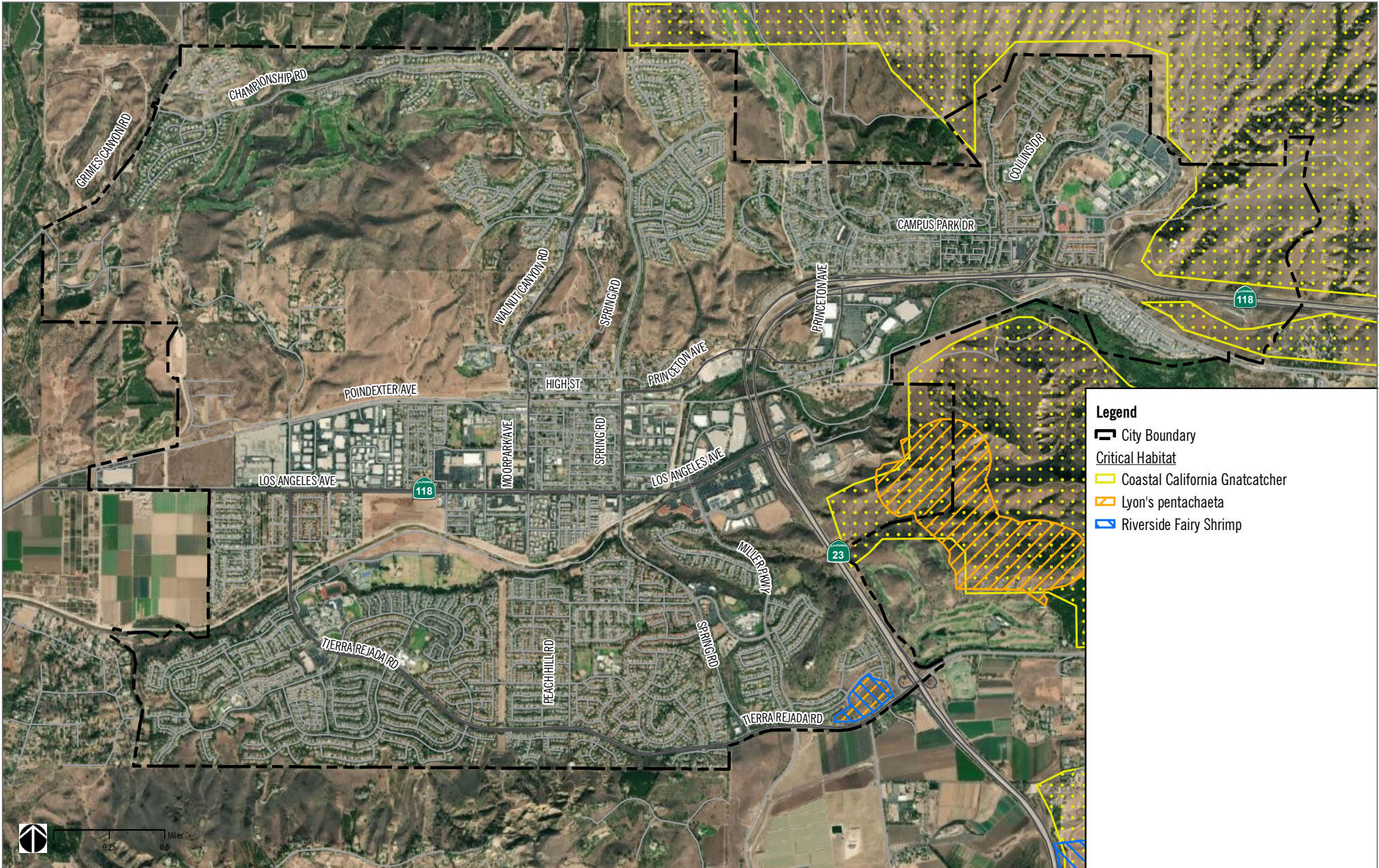




Source: Ventura County (2008), ECORP, Esri, City of Moorpark

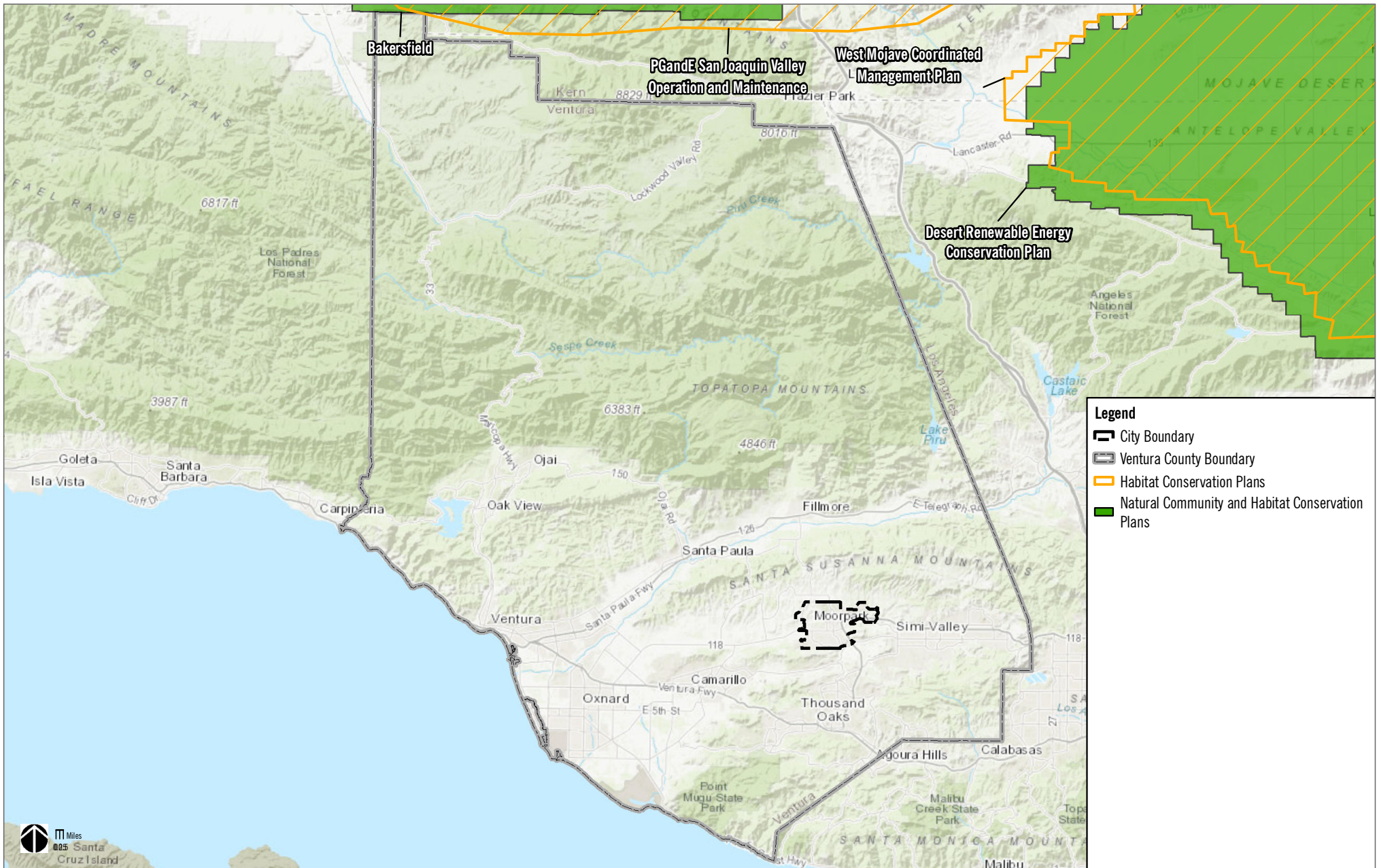
# Figure 6d. Vegetation Communities





Source: US Fish and Wildlife Service, Esri, City of Moorpark

**Figure 7. Critical Habitat**

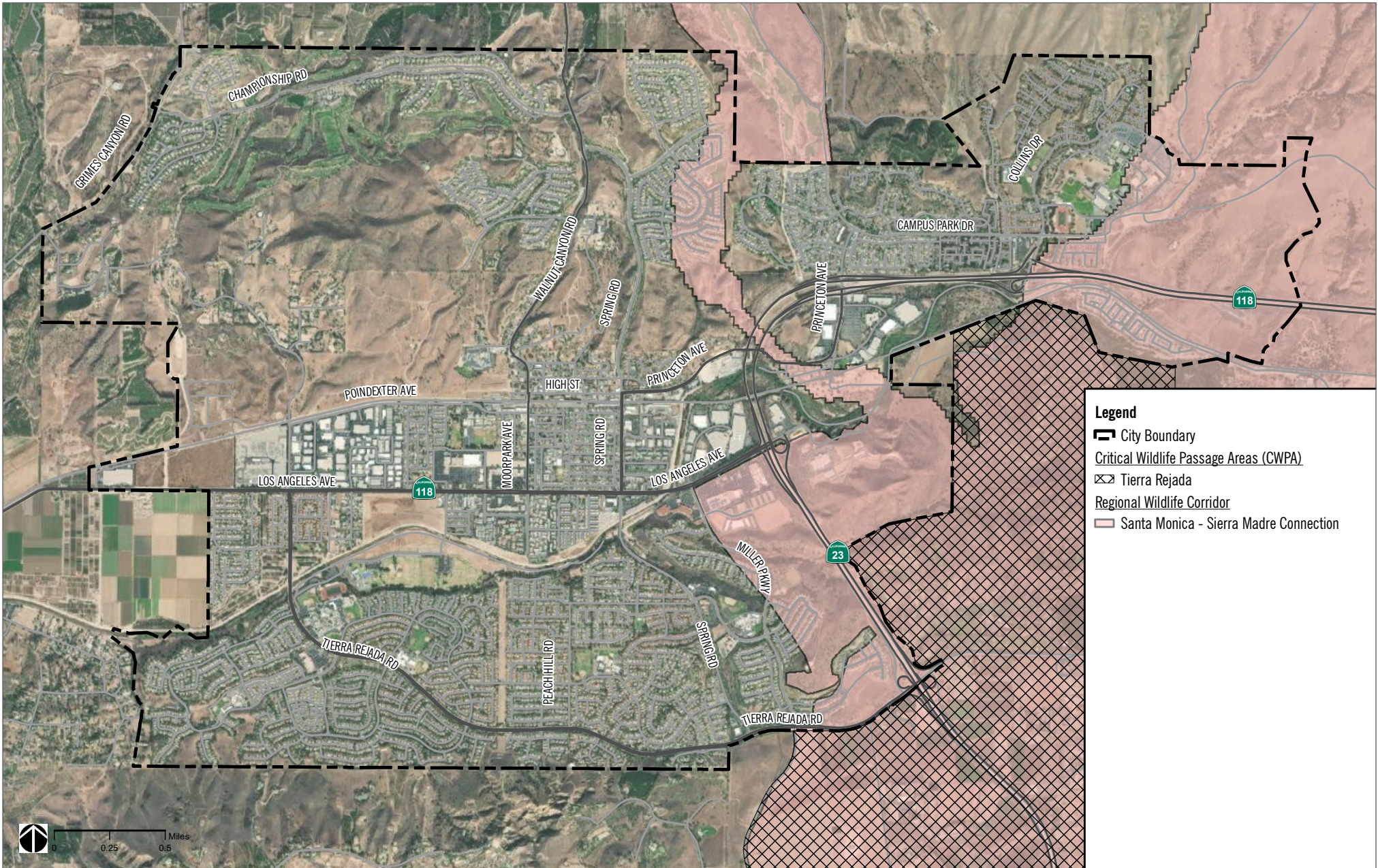


Source: CDFW, City of Moorpark

**Figure 8. NCCP and HCP Plan Areas**

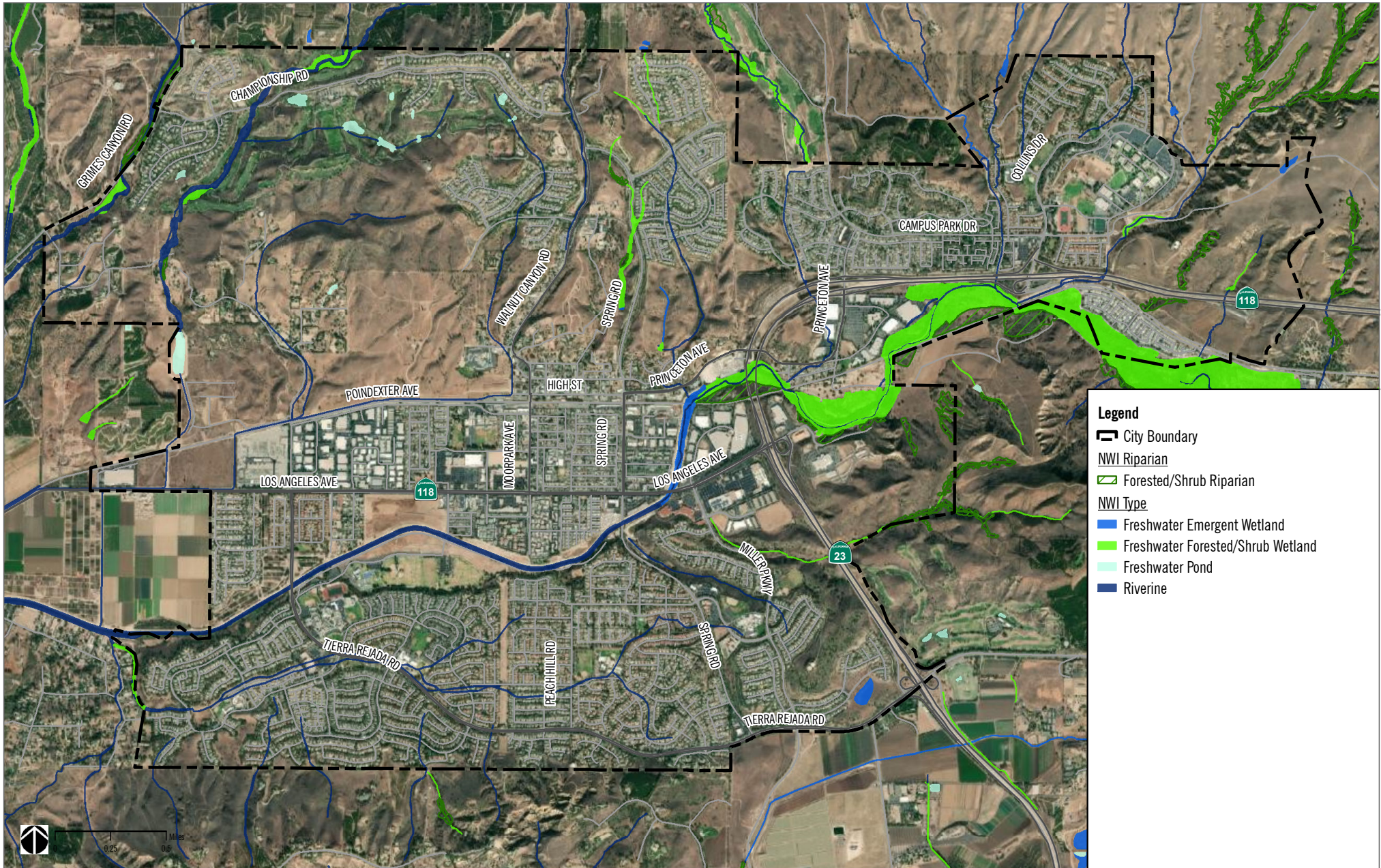






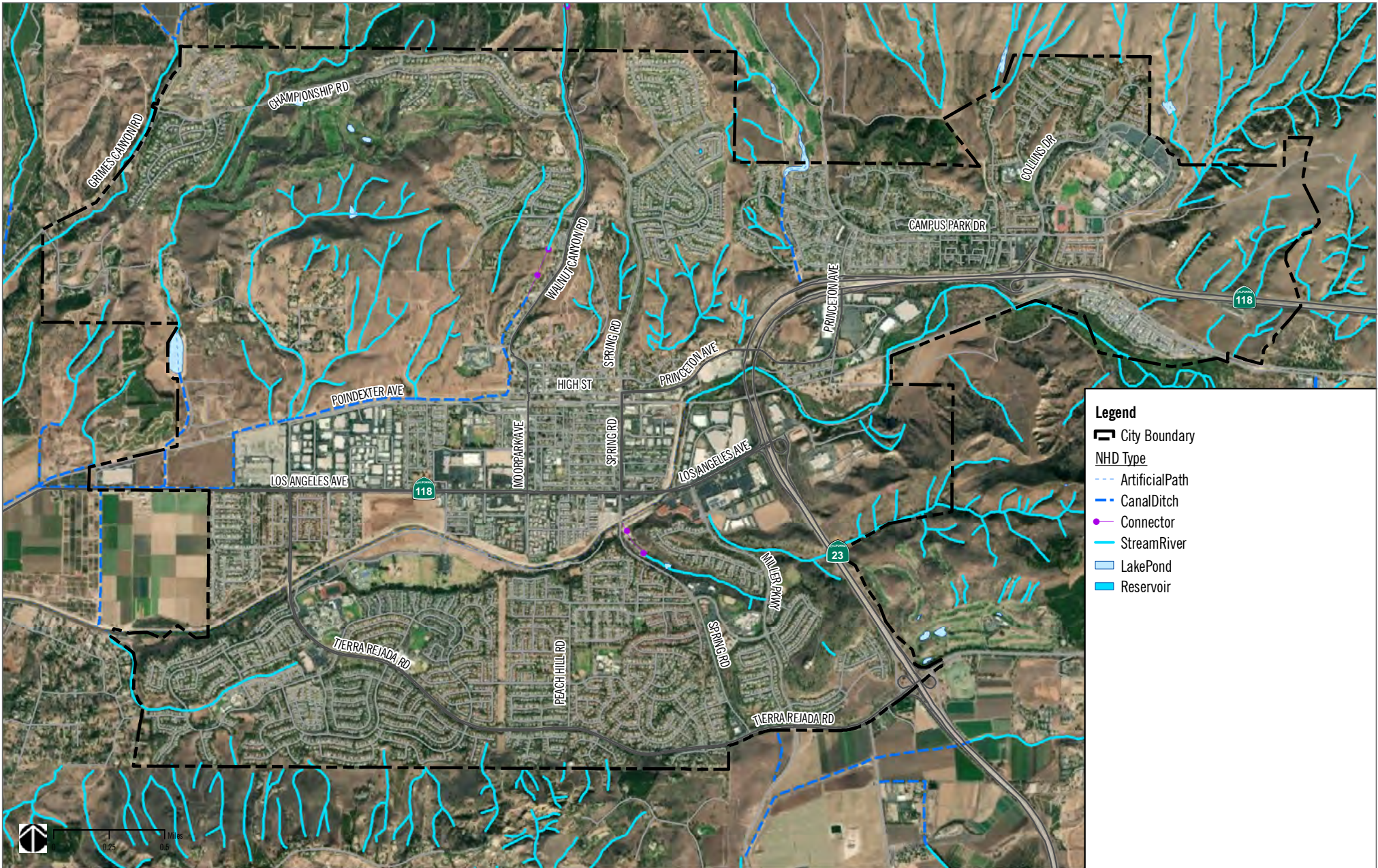
Source: Ventura County, Esri, City of Moorpark

**Figure 9. Regional Wildlife Corridors**



Source: US Fish and Wildlife Service (2019), Esri, City of Moorpark

**Figure 10. Potential Aquatic Features (NWI)**



Source: USGS NHD High Resolution (2017), Esri, City of Moorpark

**Figure 11. Potential Aquatic Features (NHD)**

CNDDB, CNPS, and IPaC Database Search Results



**Multiple Occurrences per Page**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



**Query Criteria:** Quad<span style='color:Red'> IS </span>(Moorpark (3411838)<span style='color:Red'> OR </span>Simi (3411837))<br /><span style='color:Red'> AND </span><span style='color:Red'> Taxonomic Group<span style='color:Red'> IS </span>(Dune<span style='color:Red'> OR </span><span style='color:Red'> Scrub<span style='color:Red'> OR </span><span style='color:Red'> Herbaceous<span style='color:Red'> OR </span><span style='color:Red'> Marsh<span style='color:Red'> OR </span><span style='color:Red'> Riparian<span style='color:Red'> OR </span><span style='color:Red'> Woodland<span style='color:Red'> OR </span><span style='color:Red'> Forest<span style='color:Red'> OR </span><span style='color:Red'> Alpine<span style='color:Red'> OR </span><span style='color:Red'> Inland Waters<span style='color:Red'> OR </span><span style='color:Red'> Marine<span style='color:Red'> OR </span><span style='color:Red'> Estuarine<span style='color:Red'> OR </span><span style='color:Red'> Riverine<span style='color:Red'> OR </span><span style='color:Red'> Palustrine<span style='color:Red'> OR </span><span style='color:Red'> Ferns<span style='color:Red'> OR </span><span style='color:Red'> Gymnosperms<span style='color:Red'> OR </span><span style='color:Red'> Monocots<span style='color:Red'> OR </span><span style='color:Red'> Dicots<span style='color:Red'> OR </span><span style='color:Red'> Lichens<span style='color:Red'> OR </span><span style='color:Red'> Bryophytes)

<b>Southern Coast Live Oak Riparian Forest</b>		<b>Element Code:</b> CTT61310CA	
Southern Coast Live Oak Riparian Forest			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G4
	<b>State:</b> None		<b>State:</b> S4
	<b>Other:</b>		
<b>Habitat:</b>	<b>General:</b> <input type="checkbox"/>		
	<b>Micro:</b> <input type="checkbox"/>		

<b>Occurrence No.</b>	12	<b>Map Index:</b>	00535	<b>EO Index:</b>	16020	<b>Element Last Seen:</b>	1987-01-XX
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	1987-01-XX	<b>Record Last Updated:</b>	1998-08-02
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown				

**Quad Summary:** Santa Susana (3411836), Simi (3411837)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.31644 / -118.77719	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3798673 E336481	<b>Elevation (ft):</b>	1140
<b>PLSS:</b>	T03N, R18W, Sec. 28, N (S)	<b>Acres:</b>	276.9

**Location:** ALAMOS CANYON, FROM ABOUT 1/2 AIR MILE EAST OF LANDING STRIP U/S ABOUT 3 MILES.  
**Detailed Location:** MAPPED PER INTERPRETATION OF 1987 AERIAL PHOTOS. FORMERLY EXTENDED D/S 1-2 MILES FURTHER.  
**Ecological:** MAPPED BY WIESLANDER SURVEY AS QUERCUS AGRIFOLIA WOODLAND W/SALVIA LEUCOPHYLLA & LOTUS SCOPARIUS IN UNDERSTORY IN U/S REACHES.  
**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.  
**Owner/Manager:** UNKNOWN

<b>Occurrence No.</b>	13	<b>Map Index:</b>	00416	<b>EO Index:</b>	16021	<b>Element Last Seen:</b>	1987-01-XX
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	1987-01-XX	<b>Record Last Updated:</b>	1998-08-02
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown				

**Quad Summary:** Simi (3411837)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.30199 / -118.81020	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3797124 E333415	<b>Elevation (ft):</b>	860
<b>PLSS:</b>	T03N, R18W, Sec. 31, W (S)	<b>Acres:</b>	64.1

**Location:** WEST FORK OF ALAMOS CANYON FROM NEAR WHERE IT FORKS FROM MAIN CANYON TO NEAR LANDING STRIP.  
**Detailed Location:** MAPPED PER INTERPRETATION OF 1987 AERIAL PHOTOS.  
**Ecological:** QUERCUS AGRIFOLIA W/ UNDERSTORY OF LOTUS SCOPARIUS ACCORDING TO WIESLANDER SURVEY.  
**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.  
**Owner/Manager:** UNKNOWN



**Multiple Occurrences per Page**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



<b>Occurrence No.</b>	14	<b>Map Index:</b> 00383	<b>EO Index:</b> 13417	<b>Element Last Seen:</b>	1987-01-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1987-01-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	1998-08-02
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.31553 / -118.81866		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3798639 E332664		<b>Elevation (ft):</b>	800	
<b>PLSS:</b>	T03N, R19W, Sec. 25, N (S)		<b>Acres:</b>	517.9	
<b>Location:</b>	CANYON & TRIBUTARIES EAST-NORTHEAST OF MOORPARK COLLEGE.				
<b>Detailed Location:</b>	MAPPED PER INTERPRETATION OF 1987 AERIAL PHOTOS.				
<b>Ecological:</b>	OPEN WOODLAND OF QUERCUS AGRIFOLIA OVER LOTUS SCOPARIUS, SALVIA LEUCOPHYLLA, ARTEMISIA CALIFORNICA ACCORDING TO WIESLANDER SURVEY.				
<b>General:</b>	SEE <a href="https://wildlife.ca.gov/Data/VegCamp/Natural-Communities">HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
<b>Owner/Manager:</b>	UNKNOWN				
<b>Occurrence No.</b>	15	<b>Map Index:</b> 00153	<b>EO Index:</b> 16018	<b>Element Last Seen:</b>	1987-01-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1987-01-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	1998-08-31
<b>Quad Summary:</b>	Moorpark (3411838)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.34141 / -118.92356		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3801688 E323064		<b>Elevation (ft):</b>	940	
<b>PLSS:</b>	T03N, R20W, Sec. 13, SW (S)		<b>Acres:</b>	67.8	
<b>Location:</b>	TRIBUTARY TO GRIMES CANYON, WEST OF HWY 23, ABOVE QUARRY.				
<b>Detailed Location:</b>	MAPPED PER INTERPRETATION OF 1987 AERIAL PHOTOS.				
<b>Ecological:</b>					
<b>General:</b>	SEE <a href="https://wildlife.ca.gov/Data/VegCamp/Natural-Communities">HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
<b>Owner/Manager:</b>	UNKNOWN				
<b>Occurrence No.</b>	46	<b>Map Index:</b> 00576	<b>EO Index:</b> 15992	<b>Element Last Seen:</b>	1976-06-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1976-06-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	1998-08-02
<b>Quad Summary:</b>	Santa Susana (3411836), Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.34253 / -118.74931		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3801522 E339096		<b>Elevation (ft):</b>	1800	
<b>PLSS:</b>	T03N, R18W, Sec. 15 (S)		<b>Acres:</b>	476.9	
<b>Location:</b>	TRIPAS CANYON & BRANCH (UNNAMED ON USGS MAP) TO SOUTH OF MAIN CANYON.				
<b>Detailed Location:</b>	EXTANT, 1976, ACCORDING TO NWI MAP BASED ON U2 IMAGERY.				
<b>Ecological:</b>	QUERCUS AGRIFOLIA WOODLAND FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY.				
<b>General:</b>	SEE <a href="https://wildlife.ca.gov/Data/VegCamp/Natural-Communities">HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
<b>Owner/Manager:</b>	UNKNOWN				



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<b>Occurrence No.</b>	47	<b>Map Index:</b>	00386	<b>EO Index:</b>	15990	<b>Element Last Seen:</b>	1934-XX-XX
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1934-XX-XX	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		1998-08-02	

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.36359 / -118.81788	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3803968 E332831	<b>Elevation (ft):</b>	1400
<b>PLSS:</b>	T03N, R19W, Sec. 12, NE (S)	<b>Acres:</b>	64.1

**Location:** STREAM TO EAST OF WILEY CANYON ON NORTH SLOPE OF OAK RIDGE.

**Detailed Location:**

**Ecological:** QUERCUS AGRIFOLIA WOODLAND FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY.

**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**Owner/Manager:** UNKNOWN

<b>Occurrence No.</b>	48	<b>Map Index:</b>	00448	<b>EO Index:</b>	15991	<b>Element Last Seen:</b>	1934-XX-XX
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1934-XX-XX	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		1998-08-02	

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.37150 / -118.80025	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3804816 E334468	<b>Elevation (ft):</b>	1650
<b>PLSS:</b>	T03N, R18W, Sec. 06, E (S)	<b>Acres:</b>	20.4

**Location:** STREAM TO WEST OF TORREY CANYON, NORTH SLOPE OF OAK RIDGE.

**Detailed Location:**

**Ecological:** QUERCUS AGRIFOLIA WOODLAND FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY.

**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**Owner/Manager:** UNKNOWN



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<b>Occurrence No.</b>	49	<b>Map Index:</b> 00371	<b>EO Index:</b> 15989	<b>Element Last Seen:</b> 1976-06-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1987-06-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 1998-08-02

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.34515 / -118.82398	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3801933 E332233	<b>Elevation (ft):</b>	1560
<b>PLSS:</b>	T03N, R19W, Sec. 13 (S)	<b>Acres:</b>	670.2

**Location:** HAPPY CAMP CANYON FROM NEAR HAPPY CAMP U/S FOR SEVERAL MILES.

**Detailed Location:**

**Ecological:** Q. AGRIFOLIA IN OPEN STAND OVER NICOTIANA GLAUCA, ARTEMISIA CALIFORNICA, ERICAMERIA PINIFOLIA, SALVIA APIANA ACCORDING TO WIESLANDER 1934 SURVEY. NATIONAL WETLAND INVENTORY MAPPED AS FORESTED & SCRUB PORTIONS BASED ON 1976 AERIAL PHOTO.

**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**Owner/Manager:** UNKNOWN

**Southern Riparian Scrub**

**Element Code:** CTT63300CA

Southern Riparian Scrub

<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G3
	<b>State:</b> None		<b>State:</b> S3.2
	<b>Other:</b>		
<b>Habitat:</b>	<b>General:</b> <input type="checkbox"/>		
	<b>Micro:</b> <input type="checkbox"/>		

<b>Occurrence No.</b>	18	<b>Map Index:</b> 00063	<b>EO Index:</b> 28814	<b>Element Last Seen:</b> 1987-01-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1987-01-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 1998-07-23

**Quad Summary:** Moorpark (3411838)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.26129 / -118.96723	<b>Accuracy:</b>	1/5 mile
<b>UTM:</b>	Zone-11 N3792879 E318875	<b>Elevation (ft):</b>	300
<b>PLSS:</b>	T02N, R20W, Sec. 15 (S)	<b>Acres:</b>	0.0

**Location:** ARROYO LAS POSAS, ABOUT 1.7 MILES EAST OF SOMIS.

**Detailed Location:** SMALL PATCH SCRUB AS INTERPRETED FROM 1987 AERIAL PHOTOGRAPHS.

**Ecological:** UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**Owner/Manager:** UNKNOWN





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<b>Occurrence No.</b>	19	<b>Map Index:</b> 00088	<b>EO Index:</b> 28812	<b>Element Last Seen:</b> 1987-01-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1987-01-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 1998-07-23

**Quad Summary:** Moorpark (3411838)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.26500 / -118.95732	<b>Accuracy:</b>	1/5 mile
<b>UTM:</b>	Zone-11 N3793272 E319795	<b>Elevation (ft):</b>	340
<b>PLSS:</b>	T02N, R20W, Sec. 10 (S)	<b>Acres:</b>	0.0

**Location:** ARROYO LAS POSAS, ABOUT 1.7 MILES WEST OF JUNCTION OF GRIMES CANYON ROAD & HWY 118.  
**Detailed Location:** SMALL PATCH OF SCRUB AS INTERPRETED FROM 1987 AERIAL PHOTOGRAPHS.  
**Ecological:** UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.  
**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.  
**Owner/Manager:** UNKNOWN

<b>Occurrence No.</b>	20	<b>Map Index:</b> 00224	<b>EO Index:</b> 13368	<b>Element Last Seen:</b> 1987-01-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1987-01-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 1998-07-23

**Quad Summary:** Moorpark (3411838)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.34926 / -118.89308	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3802505 E325885	<b>Elevation (ft):</b>	1300
<b>PLSS:</b>	T03N, R19W, Sec. 17, N (S)	<b>Acres:</b>	33.7

**Location:** GRIMES CANYON, U/S OF GRIMES CANYON ROAD ABOUT 0.6-1.0 MILE.  
**Detailed Location:** 1987 EXTENT MAPPED PER INTERPRETATION OF AERIAL PHOTOS; FORMERLY EXTENDED D/S ABOUT 1.5 MILES FARTHER.  
**Ecological:** OPEN QUERCUS AGRIFOLIA OVER ARTEMISIA CALIFORNICA & SALVIA LEUCOPHYLLA ACCORDING TO WIESLANDER SURVEY.  
**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.  
**Owner/Manager:** UNKNOWN



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<b>Occurrence No.</b>	21	<b>Map Index:</b> 00262	<b>EO Index:</b> 15322	<b>Element Last Seen:</b> 1987-XX-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1987-XX-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 1998-07-23
<b>Quad Summary:</b>	Simi (3411837)			
<b>County Summary:</b>	Ventura			
<b>Lat/Long:</b>	34.28847 / -118.79006		<b>Accuracy:</b> specific area	
<b>UTM:</b>	Zone-11 N3795592 E335242		<b>Elevation (ft):</b> 800	
<b>PLSS:</b>	T02N, R18W, Sec. 05, NW (S)		<b>Acres:</b> 52.6	
<b>Location:</b>	BREA CANYON, NORTH OF SOUTHERN PACIFIC RAILROAD TRACKS.			
<b>Detailed Location:</b>	1987 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS.			
<b>Ecological:</b>	MAPPED BY WIESLANDER SURVEY AS OPEN STAND OF QUERCUS AGRIFOLIA, LOTUS SCOPARIUS AND SALVIA LEUCOPHYLLA.			
<b>General:</b>	SEE <a href="https://wildlife.ca.gov/Data/VegCamp/Natural-Communities">HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.			
<b>Owner/Manager:</b>	UNKNOWN			

<b>Occurrence No.</b>	22	<b>Map Index:</b> 00263	<b>EO Index:</b> 13367	<b>Element Last Seen:</b> 1987-01-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1987-01-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 1998-07-23
<b>Quad Summary:</b>	Simi (3411837)			
<b>County Summary:</b>	Ventura			
<b>Lat/Long:</b>	34.32570 / -118.86753		<b>Accuracy:</b> specific area	
<b>UTM:</b>	Zone-11 N3799849 E328187		<b>Elevation (ft):</b> 1000	
<b>PLSS:</b>	T03N, R19W, Sec. 21 (S)		<b>Acres:</b> 286.2	
<b>Location:</b>	HAPPY CAMP CANYON FROM ABOUT 1 MILE NORTH OF VIRGINIA COLONY U/S TO VICINITY OF HAPPY CAMP.			
<b>Detailed Location:</b>	BELOW HAPPY CAMP, MAPPED FROM 1987 AERIALS, WEST FORK ABOVE NWI.			
<b>Ecological:</b>	MAPPED BY WIESLANDER SURVEY AS OPEN STAND OF QUERCUS AGRIFOLIA W/UNDERSTORY OF NICOTIANA GLAUCA, ERICAMERIA PINIFOLIA (LOWER PART) & INCLUDES ARTEMISIA CALIFORNICA, SALVIA APIANA (UPPER PART).			
<b>General:</b>	SEE <a href="https://wildlife.ca.gov/Data/VegCamp/Natural-Communities">HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.			
<b>Owner/Manager:</b>	UNKNOWN			



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<b>Occurrence No.</b>	23	<b>Map Index:</b>	00351	<b>EO Index:</b>	15321	<b>Element Last Seen:</b>	1934-XX-XX
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1934-XX-XX	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		1998-07-23	

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.36716 / -118.83084	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3804386 E331646	<b>Elevation (ft):</b>	1200
<b>PLSS:</b>	T03N, R19W, Sec. 01, SW (S)	<b>Acres:</b>	52.8

**Location:** STREAM TO WEST OF WILEY CANYON, NORTH SLOPE OF OAK RIDGE.

**Detailed Location:**

**Ecological:** MAPPED BY WIESLANDER SURVEY AS OPEN STAND OF QUERCUS AGRIFOLIA AND LOTUS SCOPARIUS.

**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**Owner/Manager:** UNKNOWN

<b>Occurrence No.</b>	24	<b>Map Index:</b>	00362	<b>EO Index:</b>	15320	<b>Element Last Seen:</b>	1934-XX-XX
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1976-XX-XX	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		1998-07-23	

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.36494 / -118.82328	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3804127 E332337	<b>Elevation (ft):</b>	1550
<b>PLSS:</b>	T03N, R19W, Sec. 01 (S)	<b>Acres:</b>	91.0

**Location:** WILEY CANYON ON NORTH SIDE OF OAK RIDGE, NORTH OF BIG MOUNTAIN.

**Detailed Location:** STILL EXTANT PER NATIONAL WETLANDS INVENTORY MAP, BASED ON 1976 U2 IMAGERY.

**Ecological:** MAPPED BY WIESLANDER SURVEY AS OPEN STAND OF QUERCUS AGRIFOLIA, LOTUS SCOPARIUS, SALVIA LEUCOPHYLLA, ARTEMISIA CALIFORNICA.

**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**Owner/Manager:** UNKNOWN



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<b>Occurrence No.</b>	25	<b>Map Index:</b>	00106	<b>EO Index:</b>	15318	<b>Element Last Seen:</b>	1986-12-10
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1986-12-10	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		1998-07-23	

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**Quad Summary:** Moorpark (3411838), Piru (3411847), Fillmore (3411848), Santa Paula (3411931), Saticoy (3411932)

**County Summary:** Ventura

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<b>Lat/Long:</b>	34.34567 / -119.05895	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3802404 E310618	<b>Elevation (ft):</b>	360
<b>PLSS:</b>	T03N, R21W, Sec. 14 (S)	<b>Acres:</b>	4299.3

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**Location:** SANTA CLARA RIVER BED FROM NEAR CONFLUENCE CALUMET CANYON D/S TO VICINITY OF SATICOY.

**Detailed Location:** SEEN IN 1986 AERIALS.

**Ecological:** MAPPED BY WIESLANDER SURVEY AS SCRUB W/DOMINANTS BACCHARIS VIMINEA, NICOTIANA GLAUCA, LEPIDOSPARTUM SQUAMATUM, ERIOGONUM FASCICULATUM, CORETHROGYNE FILAGINIFOLIA, GRASSES AND WILLOWS. DOMINANCE CHANGES ALONG STREAM COURSE.

**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**Owner/Manager:** UNKNOWN

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<b>Southern Willow Scrub</b>		<b>Element Code:</b> CTT63320CA	
Southern Willow Scrub			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G3
	<b>State:</b> None		<b>State:</b> S2.1
	<b>Other:</b>		
<b>Habitat:</b>	<b>General:</b> <input type="checkbox"/>		
	<b>Micro:</b> <input type="checkbox"/>		

<b>Occurrence No.</b>	16	<b>Map Index:</b>	00343	<b>EO Index:</b>	15279	<b>Element Last Seen:</b>	1987-01-XX
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	1987-01-XX		
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>	1998-07-21		
<b>Quad Summary:</b>	Simi (3411837)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.28659 / -118.82527		<b>Accuracy:</b>	specific area			
<b>UTM:</b>	Zone-11 N3795441 E331997		<b>Elevation (ft):</b>	600			
<b>PLSS:</b>	T02N, R19W, Sec. 01 (S)		<b>Acres:</b>	261.1			
<b>Location:</b>	ARROYO SIMI, FROM VIRGINIA COLONY U/S TO JUST BEYOND EASTERN BOUNDARY OF OAK PARK.						
<b>Detailed Location:</b>	INTERPRETED FROM 1987 AERIAL PHOTOS.						
<b>Ecological:</b>	WIESLANDER MAPPED AS SALIX, BACCHARIS VIMINEA, NICOTIANA GLAUCA, SAMBUCUS GLAUCA AND ATRIPLEX LENTIFORMIS.						
<b>General:</b>	SEE <a href="https://wildlife.ca.gov/Data/VegCamp/Natural-Communities">HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.						
<b>Owner/Manager:</b>	UNKNOWN						

<b>Occurrence No.</b>	17	<b>Map Index:</b>	00034	<b>EO Index:</b>	28808	<b>Element Last Seen:</b>	1987-01-XX
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	1987-01-XX		
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>	1998-07-21		
<b>Quad Summary:</b>	Moorpark (3411838)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.34416 / -118.97887		<b>Accuracy:</b>	non-specific area			
<b>UTM:</b>	Zone-11 N3802090 E317982		<b>Elevation (ft):</b>	425			
<b>PLSS:</b>	T03N, R20W, Sec. 16, NE (S)		<b>Acres:</b>	26.8			
<b>Location:</b>	BALCOM CANYON, ABOUT 0.6 MILE OF SOUTH MOUNTAIN ROAD.						
<b>Detailed Location:</b>	INTERPRETED FROM AERIAL PHOTOS.						
<b>Ecological:</b>	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.						
<b>General:</b>	SEE <a href="https://wildlife.ca.gov/Data/VegCamp/Natural-Communities">HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.						
<b>Owner/Manager:</b>	UNKNOWN						



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**Valley Oak Woodland**

Element Code: CTT71130CA

Valley Oak Woodland

**Listing Status:** **Federal:** None

**CNDDB Element Ranks:** **Global:** G3

**State:** None

**State:** S2.1

**Other:**

**Habitat:** **General:**

**Micro:**

**Occurrence No.:** 65      **Map Index:** 00586      **EO Index:** 15116      **Element Last Seen:** 1934-XX-XX

**Occ. Rank:** Unknown      **Presence:** Presumed Extant      **Site Last Seen:** 1934-XX-XX

**Occ. Type:** Natural/Native occurrence      **Trend:** Unknown      **Record Last Updated:** 1998-07-31

**Quad Summary:** Santa Susana (3411836), Simi (3411837), Val Verde (3411846), Piru (3411847)

**County Summary:** Ventura

**Lat/Long:** 34.37538 / -118.74088      **Accuracy:** specific area

**UTM:** Zone-11 N3805152 E339934      **Elevation (ft):** 2380

**PLSS:** T03N, R18W, Sec. 02 (S)      **Acres:** 766.9

**Location:** OAK RIDGE NEAR EUREKA CANYON, WEST OF TAPO CANYON. PARTS IN OAK RIDGE OIL FIELD.

**Detailed Location:**

**Ecological:** QUERCUS LOBATA AND Q. AGRIFOLIA IN OPEN WOODLAND OVER LOTUS SCOPARIUS, ARTEMISIA CALIFORNICA AND SALVIA LEUCOPHYLLA ACCORDING TO WIESLANDER SURVEY.

**General:** SEE [HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES](https://wildlife.ca.gov/Data/VegCamp/Natural-Communities) TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

**Owner/Manager:** UNKNOWN



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<b>California Walnut Woodland</b>		<b>Element Code:</b> CTT71210CA	
California Walnut Woodland			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G2
	<b>State:</b> None		<b>State:</b> S2.1
	<b>Other:</b>		
<b>Habitat:</b>	<b>General:</b> <input type="checkbox"/>		
	<b>Micro:</b> <input type="checkbox"/>		

<b>Occurrence No.</b>	31	<b>Map Index:</b>	00533	<b>EO Index:</b>	13488	<b>Element Last Seen:</b>	1934-XX-XX
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1934-XX-XX	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		1998-09-01	
<b>Quad Summary:</b>	Simi (3411837), Piru (3411847)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.37854 / -118.76451		<b>Accuracy:</b>	specific area			
<b>UTM:</b>	Zone-11 N3805539 E337768		<b>Elevation (ft):</b>	1200			
<b>PLSS:</b>	T03N, R18W, Sec. 04 (S)		<b>Acres:</b>	457.3			
<b>Location:</b>	NORTH & WEST OF OAK RIDGE & IN SMITH CANYON FROM GUIBERSON ROAD U/S FOR ABOUT 2 MILES.						
<b>Detailed Location:</b>	FOUR STANDS. MAPPED HERE W/ARTIFICIAL CONNECTIONS BETWEEN STANDS.						
<b>Ecological:</b>	MAPPED BY WIESLANDER SURVEY AS OPEN JUGLANS CALIFORNICA, QUERCUS AGRIFOLIA AND Q. LOBATA. UNDERSTORY INCLUDES LOTUS SCOPARIUS, SALVIA LEUCOPHYLLA, ARTEMISIA CALIFORNICA AND GRASS.						
<b>General:</b>	SEE <a href="https://wildlife.ca.gov/Data/VegCamp/Natural-Communities">HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES</a> TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.						
<b>Owner/Manager:</b>	UNKNOWN						

<b>Pentachaeta lyonii</b>		<b>Element Code:</b> PDAST6X060	
Lyon's pentachaeta			
<b>Listing Status:</b>	<b>Federal:</b> Endangered	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G1
	<b>State:</b> Endangered		<b>State:</b> S1
	<b>Other:</b> Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		
<b>Habitat:</b>	<b>General:</b> CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, COASTAL SCRUB.		
	<b>Micro:</b> EDGES OF CLEARINGS IN CHAPARRAL, USUALLY AT THE ECOTONE BETWEEN GRASSLAND AND CHAPARRAL OR EDGES OF FIREBREAKS. 30-670 M.		



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<b>Occurrence No.</b>	29	<b>Map Index:</b> 24356	<b>EO Index:</b> 26999	<b>Element Last Seen:</b> 1994-XX-XX
<b>Occ. Rank:</b>	Poor		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1994-XX-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Decreasing	<b>Record Last Updated:</b> 2016-11-21

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.25710 / -118.81698	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3792157 E332702	<b>Elevation (ft):</b>	1200
<b>PLSS:</b>	T02N, R19W, Sec. 13, E (S)	<b>Acres:</b>	8.0

**Location:** RONALD REAGAN PRESIDENTIAL LIBRARY SITE, ALONG PRESIDENTIAL DRIVE, WEST OF SIMI VALLEY.

**Detailed Location:** MAPPED BY CNDDDB ACCORDING TO A 1989 MCCLELLAND MAP. A 1998 FOTHERINGHAM REPORT MENTIONS THAT THERE ARE STILL POPULATIONS SOUTH OF THE LIBRARY THAT ARE IN YET-TO-BE-BUILT LOTS; NEED MAP DETAIL. INCLUDES 1988 BURGESS COLLECTION.

**Ecological:** SHALLOW VOLCANIC-DERIVED SOILS WITH DUDLEYA ABRAMSII PARVA (ALSO RARE).

**General:** IN 1994, THOMAS MENTIONS THERE WERE 2 SUBPOPS, ONE WAS DESTROYED BY THE RD & MITIGATION PLANTING HAS FAILED; THE OTHER SUBPOP LOCATED ADJACENT TO THE RD HAD 500 PLANTS IN 1994. UNSURE WHICH SUBPOPS THOMAS IS REFERENCING. NEEDS FIELDWORK.

**Owner/Manager:** PVT

<b>Occurrence No.</b>	30	<b>Map Index:</b> 25140	<b>EO Index:</b> 28650	<b>Element Last Seen:</b> 2011-06-21
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 2011-06-21
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Decreasing	<b>Record Last Updated:</b> 2016-11-21

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.26538 / -118.85495	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3793138 E329222	<b>Elevation (ft):</b>	675
<b>PLSS:</b>	T02N, R19W, Sec. 10, SE (S)	<b>Acres:</b>	8.0

**Location:** CARLSBERG DEVELOPMENT; IMMEDIATELY NW OF THE INTERSECTION OF THE HWY 23 FREEWAY AND TIERRA REJADA RD, CLOVERLEAF.

**Detailed Location:** BETWEEN VERNAL POOL AND TIERRA REJADA. MAPPED BY CNDDDB TO ENCOMPASS MULTIPLE YEARS WORTH OF SURVEY DATA FROM MOUNTAINS RECREATION AND CONSERVATION AUTHORITY (LAST SURVEY IN 2007).

**Ecological:** IN THIN ROCKY CONEJO VOLCANICS, ON NE SIDE OF A COASTAL SAGE SCRUB STAND. WITH SALVIA LEUCOPHYLLA, ENCELIA CALIFORNICA, BACCHARIS PILULARIS, LASTHENIA CALIFORNICA, PECTOCARYA LINEARIS. ADJACENT VERNAL POOL SUPPORTS ORCUTTIA CALIFORNICA.

**General:** 1000 PLANTS IN 1991. 230,000 PLANTS PRESENT IN 1997 PER FOTHERINGHAM (LARGEST KNOWN POPULATION). UNKNOWN NUMBER OF PLANTS SEEN IN 2004 AND 2005. <1000 INDIVIDUALS OBSERVED IN 2007. 4 PLANTS OBSERVED IN 2008. "UNCOMMON" IN 2011.

**Owner/Manager:** MTNS REC & CONS AUTHORITY





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<b>Occurrence No.</b>	31	<b>Map Index:</b> 25971	<b>EO Index:</b> 5250	<b>Element Last Seen:</b>	1991-05-XX
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1991-05-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	1998-06-02
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.27414 / -118.84160		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3794087 E330469		<b>Elevation (ft):</b>	1100	
<b>PLSS:</b>	T02N, R19W, Sec. 11, NW (S)		<b>Acres:</b>	12.2	
<b>Location:</b>	CLOVER CAST DEVELOPMENT; VICINITY OF SIMI VALLEY, EAST OF HWY 23, NORTH OF TIERRA REJADA ROAD.				
<b>Detailed Location:</b>	SUMMIT OF RIDGELINE IN SECTION 11; ONE IN A SADDLE AND ONE NEAR THE TOP OF THE SECOND HIGHEST KNOB.				
<b>Ecological:</b>	IN SPARSELY VEGETATED, GRASSY OPENINGS IN VOLCANIC CLAY SOILS WITHIN COASTAL SAGE SCRUB. CALOCHORTUS CATALINAE COMMON NEARBY AND ON NORTH-FACING SLOPES.				
<b>General:</b>	60 PLANTS IN 1991. TO BE INCLUDED IN "RARE PLANT PRESERVE" OF ABOUT 50 ACRES AS MITIGATED NEGATIVE DECLARATION FOR HOUSING DEVELOPMENT. MAY NEED ACTIVE MANAGEMENT PLAN SOON.				
<b>Owner/Manager:</b>	PVT				
<b>Occurrence No.</b>	37	<b>Map Index:</b> 38849	<b>EO Index:</b> 33856	<b>Element Last Seen:</b>	1995-05-22
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1995-05-22
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	1998-05-29
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.28090 / -118.84928		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3794849 E329776		<b>Elevation (ft):</b>	920	
<b>PLSS:</b>	T02N, R19W, Sec. 03, SE (S)		<b>Acres:</b>	2.4	
<b>Location:</b>	ABOUT 4000 FT ESE OF INTERSECTION OF HWY 23 AND NEW LOS ANGELES AVE, EAST OF MOORPARK, TIERRA REJADA HILLS.				
<b>Detailed Location:</b>	PLANTS FOUND WITHIN GRADED DIRT ROADWAY AND MARGINS.				
<b>Ecological:</b>	COASTAL SCRUB/GRASSLAND ECOTONE. IN SOME PLACES HIGHLY DISTURBED AND DOMINATED BY STUNTED GROWTH OF CENTAUREA MELITENSIS.				
<b>General:</b>	1200 PLANTS IN 1995.				
<b>Owner/Manager:</b>	PVT				



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<b>Dudleya parva</b>		<b>Element Code:</b> PDCRA04016	
Conejo dudleya			
<b>Listing Status:</b>	<b>Federal:</b> Threatened	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G1
	<b>State:</b> None		<b>State:</b> S1
	<b>Other:</b> Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		
<b>Habitat:</b>	<b>General:</b> COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.		
	<b>Micro:</b> IN CLAY OR VOLCANIC SOILS ON ROCKY SLOPES AND GRASSY HILLSIDES. 90-380 M.		

<b>Occurrence No.</b>	19	<b>Map Index:</b> 86802	<b>EO Index:</b> 87767	<b>Element Last Seen:</b>	1998-05-27
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1998-05-27
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2012-09-26
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.26204 / -118.83117		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3792728 E331404		<b>Elevation (ft):</b>	850	
<b>PLSS:</b>	T02N, R19W, Sec. 13, NW (S)		<b>Acres:</b>	3.0	
<b>Location:</b>	BETWEEN LAPEYRE ROAD AND ESPERANCE DRIVE, 0.5 MILE SOUTH OF TIERRA REJADA ROAD, MOORPARK.				
<b>Detailed Location:</b>	MAPPED BY CNDDB AAS 4 POLYGONS.				
<b>Ecological:</b>	NON-NATIVE GRASSLAND WITH SCATTERED ROCK OUTCROPS. ASSOC WITH AVENA, HAZARDIA SQUAROSSA, SALVIA LEUCOPHYLLA, ARTEMISIA CALIFORNICA, ERIOGONUM FASCICULATUM, BRASSICA, BROMUS, HORDEUM MURINUM, PHALARIS PARADOXA, XANTHIUM, TOCALOTE, ERODIUM.				
<b>General:</b>	OVER 250 PLANTS OBSERVED IN 1998.				
<b>Owner/Manager:</b>	PVT				

<b>Occurrence No.</b>	20	<b>Map Index:</b> 86803	<b>EO Index:</b> 87768	<b>Element Last Seen:</b>	1988-06-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1988-06-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2012-09-26
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.25690 / -118.81752		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3792136 E332651		<b>Elevation (ft):</b>	1240	
<b>PLSS:</b>	T02N, R19W, Sec. 13, E (S)		<b>Acres:</b>	3.0	
<b>Location:</b>	NEAR RONALD REAGAN PRESIDENTIAL LIBRARY AND MUSEUM, PRESIDENTIAL DRIVE, NEAR SIMI VALLEY.				
<b>Detailed Location:</b>	MAPPED BY CNDDB AS 3 POLYGONS.				
<b>Ecological:</b>	IN CRACKS ON NORTH-FACING CONJEO VOLCANIC ROCKS.				
<b>General:</b>	AN UNKNOWN NUMBER OF PLANTS WERE OBSERVED HERE IN 1988.				
<b>Owner/Manager:</b>	PVT				



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<b><i>Lupinus paynei</i></b>		<b>Element Code:</b> PDFAB2B580	
Payne's bush lupine			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G1Q
	<b>State:</b> None		<b>State:</b> S1
	<b>Other:</b> Rare Plant Rank - 1B.1		
<b>Habitat:</b>	<b>General:</b> COASTAL SCRUB, RIPARIAN SCRUB, VALLEY AND FOOTHILL GRASSLAND.		
	<b>Micro:</b> SANDY. 220-425 M.		

<b>Occurrence No.</b>	5	<b>Map Index:</b> A7903	<b>EO Index:</b> 109690	<b>Element Last Seen:</b>	2008-04-01
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2008-04-01
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2018-01-02

**Quad Summary:** Simi (3411837)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.29154 / -118.81646	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3795975 E332819	<b>Elevation (ft):</b>	910
<b>PLSS:</b>	T02N, R19W, Sec. 1, NE (S)	<b>Acres:</b>	5.0

**Location:** ALONG HIGHWAY 118, OAK PARK.  
**Detailed Location:** MAPPED BY CNDDDB ACCORDING TO 2008 HUANG COORDINATES; IN THE NE 1/4 OF THE NE 1/4 OF SECTION 1. THESE COORDINATES PLACE SITE JUST NE OF OAK PARK.  
**Ecological:** SOUTH-FACING. SAND.  
**General:** ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2008 HUANG COLLECTION.  
**Owner/Manager:** UNKNOWN

<b>Occurrence No.</b>	6	<b>Map Index:</b> A7904	<b>EO Index:</b> 109691	<b>Element Last Seen:</b>	2009-04-12
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2009-04-12
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2018-01-02

**Quad Summary:** Moorpark (3411838)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.34114 / -118.9049	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3801626 E324781	<b>Elevation (ft):</b>	1100
<b>PLSS:</b>	T03N, R19W, Sec. 18, SE (S)	<b>Acres:</b>	6.0

**Location:** GRIMES CANYON ROAD (HIGHWAY 23), WINDING SECTION.  
**Detailed Location:** MAPPED ACCORDING TO 2008 AND 2009 HUANG COORDINATES. IN THE NE 1/4 OF THE SE 1/4 OF SECTION 18.  
**Ecological:**  
**General:** UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008 OR 2009. "SMALL" POPULATIONS REPORTED IN THIS AREA.  
**Owner/Manager:** UNKNOWN



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<b><i>Monardella sinuata ssp. gerryi</i></b>		<b>Element Code:</b> PDLAM18163	
Gerry's curly-leaved monardella			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G3T1
	<b>State:</b> None		<b>State:</b> S1
	<b>Other:</b> Rare Plant Rank - 1B.1		
<b>Habitat:</b>	<b>General:</b> COASTAL SCRUB.		
	<b>Micro:</b> SANDY OPENINGS. 180-215 M.		

<b>Occurrence No.</b>	1	<b>Map Index:</b>	91620	<b>EO Index:</b>	99807	<b>Element Last Seen:</b>	1976-06-02
<b>Occ. Rank:</b>	None	<b>Presence:</b>	Possibly Extirpated	<b>Site Last Seen:</b>		1976-06-02	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2015-12-04	

**Quad Summary:** Newbury Park (3411828), Moorpark (3411838)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.24586 / -118.90465	<b>Accuracy:</b>	2/5 mile
<b>UTM:</b>	Zone-11 N3791058 E324605	<b>Elevation (ft):</b>	700
<b>PLSS:</b>	T02N, R19W, Sec. 19 (S)	<b>Acres:</b>	0.0

**Location:** ON LAS POSAS ROAD, 0.5 MILE NORTH OF SANTA ROSA VALLEY ROAD, SANTA ROSA VALLEY.  
**Detailed Location:** EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS A BEST GUESS TO ENCOMPASS THE AREA ABOUT 0.5 ROAD MILE NORTH OF SANTA ROSA VALLEY ROAD ON LAS POSAS ROAD AND AN ELEVATION OF 700 FEET BASED ON LOCATION DESCRIPTION AND ELEVATION ON LABEL.  
**Ecological:**  
**General:** ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1976 HOWE COLLECTION. SITE PRESUMED EXTIRPATED BY ELVIN; AREA HAS BEEN SURVEYED MULTIPLE TIMES WITH NO SUCCESS.  
**Owner/Manager:** UNKNOWN

<b>Occurrence No.</b>	3	<b>Map Index:</b>	98393	<b>EO Index:</b>	99813	<b>Element Last Seen:</b>	2015-06-28
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2015-06-28	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2015-12-09	

**Quad Summary:** Newbury Park (3411828), Moorpark (3411838)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.25164 / -118.93821	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3791757 E321527	<b>Elevation (ft):</b>	650
<b>PLSS:</b>	T02N, R20W, Sec. 14, SE (S)	<b>Acres:</b>	28.0

**Location:** ALONG UTILITY ROAD NNE OF THE NORTH END OF GERRY ROAD, ABOUT 5.4 AIR KM SW OF MOORPARK.  
**Detailed Location:** MAPPED ACCORDING TO 2015 ELVIN COORDINATES, NEAR COMMON CORNER OF SECTIONS 13, 14, 23, AND 24. POPULATION ASSUMED TO BE CONTINUOUS BETWEEN POINTS PROVIDED BUT DATA IS UNCLEAR. LANDOWNER IS AWARE OF PLANTS AND TRYING TO PROTECT THEM.  
**Ecological:** COASTAL SAGE SCRUB WITH SANDY SOILS DERIVED FROM SANDSTONE BEDROCK. ASSOCIATED WITH CROTON CALIFORNICUS, HORKELIA CUNEATA, ARTEMISIA CALIFORNICA, EUPHORBIA TERRACINA, ERIOGONUM CINEREUM, OPUNTIA ORICOLA, O. LITTORALIS, ETC.  
**General:** TYPE LOCALITY. ABOUT 50-100 INDIVIDUALS OBSERVED IN 2013. UNKNOWN NUMBER OBSERVED IN 2015, BUT FEWER THAN IN PREVIOUS YEARS DUE TO DROUGHT.  
**Owner/Manager:** PVT

<b><i>Horkelia cuneata var. puberula</i></b>		<b>Element Code:</b> PDROS0W045	
mesa horkelia			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G4T1
	<b>State:</b> None		<b>State:</b> S1



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<b>Habitat:</b>	<b>Other:</b> Rare Plant Rank - 1B.1, USFS_S-Sensitive
	<b>General:</b> CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB.
	<b>Micro:</b> SANDY OR GRAVELLY SITES. 15-1645 M.

<b>Occurrence No.</b>	75	<b>Map Index:</b>	98744	<b>EO Index:</b>	100217	<b>Element Last Seen:</b>	2011-05-09
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2011-05-09	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2016-01-08	

<b>Quad Summary:</b>	Simi (3411837)						
<b>County Summary:</b>	Ventura						

<b>Lat/Long:</b>	34.28388 / -118.85416	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3795189 E329333	<b>Elevation (ft):</b>	615
<b>PLSS:</b>	T02N, R19W, Sec. 3, SE (S)	<b>Acres:</b>	5.0

<b>Location:</b>	ARROYO SIMI; EAST OF STATE ROUTE 23, SOUTH OF THE METROLINK RAILROAD TRACKS AND SOUTH OF THE CREEK, SIMI VALLEY.						
<b>Detailed Location:</b>	MAPPED ACCORDING TO 2011 WOOD COORDINATES.						
<b>Ecological:</b>	NORTH-FACING SLOPE. AMONG NATIVE GRASSES AND OTHER ANNUALS AND PERENNIALS.						
<b>General:</b>	ROUGHLY 15 PLANTS OBSERVED IN 2011. NOT OBSERVED AT ANY OTHER LOCATIONS IN GENERAL VICINITY.						
<b>Owner/Manager:</b>	UNKNOWN						

<b>Occurrence No.</b>	76	<b>Map Index:</b>	98745	<b>EO Index:</b>	100218	<b>Element Last Seen:</b>	1995-07-27
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1995-07-27	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2016-01-20	

<b>Quad Summary:</b>	Simi (3411837)						
<b>County Summary:</b>	Ventura						

<b>Lat/Long:</b>	34.30417 / -118.87033	<b>Accuracy:</b>	non-specific area
<b>UTM:</b>	Zone-11 N3797466 E327886	<b>Elevation (ft):</b>	850
<b>PLSS:</b>	T03N, R19W, Sec. 33, NE (S)	<b>Acres:</b>	162.0

<b>Location:</b>	0.5 MILE WEST OF HAPPY CAMP CANYON, 1.9 MILES NORTH OF ARROYO SIMI CHANNEL, HILLS NORTH OF MOORPARK.						
<b>Detailed Location:</b>	MAPPED AS BEST GUESS ACCORDING TO TRS ON COLLECTION LABEL IN THE NE 1/4 OF SECTION 33.						
<b>Ecological:</b>	WEST-FACING SLOPE OF SMALL CANYON. ON SANDY SLOPE OF COASTAL SAGE SCRUB WITH ERICAMERIA PINIFOLIA, RHAMNUS CALIFORNICA, AND ERIASTRUM DENSIFOLIUM SSP. ELONGATUM.						
<b>General:</b>	450 INDIVIDUALS OBSERVED IN 1995.						
<b>Owner/Manager:</b>	UNKNOWN						



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<b>Occurrence No.</b>	77	<b>Map Index:</b>	98746	<b>EO Index:</b>	100219	<b>Element Last Seen:</b>	2002-03-29
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2002-03-29	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2016-01-08	
<b>Quad Summary:</b>	Simi (3411837)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.32664 / -118.8189			<b>Accuracy:</b>	non-specific area		
<b>UTM:</b>	Zone-11 N3799872 E332663			<b>Elevation (ft):</b>	1475		
<b>PLSS:</b>	T03N, R19W, Sec. 24, SE (S)			<b>Acres:</b>	40.0		
<b>Location:</b>	1 MILE SOUTH OF MIDDLE RANGE FIRE ROAD, 2 MILES WEST OF NO 2 CANYON FIRE ROAD, MOORPARK.						
<b>Detailed Location:</b>	MOSTLY ALONG A LONG-ABANDONED ROADWAY. MAPPED AS BEST GUESS ALONG THE ROAD WITHIN GIVEN TRS OF T3N R19W SEC 24 SE1/4.						
<b>Ecological:</b>	SANDY OPENINGS IN CHAPARRAL. ASSOCIATED WITH CAMISSONIA BISTORTA, C. CALIFORNICA, CHLOROGALUM, PECTOCARYA, ADENOSTOMA FASCICULATUM, CEANOTHUS MEGACARPUS, AND MALACOTHAMNUS FASCICULATUS.						
<b>General:</b>	OCCASIONAL AND PATCHY IN 2002. NEED MAP DETAIL FOR THIS SITE.						
<b>Owner/Manager:</b>	UNKNOWN						

<b><i>Calochortus plummerae</i></b>		<b>Element Code:</b> PMLI0D150	
Plummer's mariposa-lily			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G4
	<b>State:</b> None		<b>State:</b> S4
	<b>Other:</b> Rare Plant Rank - 4.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		
<b>Habitat:</b>	<b>General:</b> COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.		
	<b>Micro:</b> OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.		

<b>Occurrence No.</b>	73	<b>Map Index:</b>	47964	<b>EO Index:</b>	47964	<b>Element Last Seen:</b>	1998-06-25
<b>Occ. Rank:</b>	Fair	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1998-06-25	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2002-05-21	
<b>Quad Summary:</b>	Simi (3411837)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.29502 / -118.79664			<b>Accuracy:</b>	non-specific area		
<b>UTM:</b>	Zone-11 N3796329 E334650			<b>Elevation (ft):</b>			
<b>PLSS:</b>	T03N, R18W, Sec. 32, SW (S)			<b>Acres:</b>	205.2		
<b>Location:</b>	SIMI VALLEY LANDFILL, NORTH OF SIMI VALLEY, RIDGE BETWEEN BREA AND ALAMOS CANYONS.						
<b>Detailed Location:</b>	MAPPED WITHIN THE NW 1/4 OF THE NW 1/4 OF SECTION 5, THE NORTH HALF OF THE NE 1/4 OF SECTION 6, THE SOUTH HALF OF THE SE 1/4 OF SECTION 31 AND THE SW 1/4 OF SECTION 32.						
<b>Ecological:</b>	AREA MOSTLY DISTURBED, DOMINATED BY CENTAUREA MELITENSIS, BUT PLANTS ALSO SEEM TO GROW FROM UNDER CANOPY OF SCATTERED CHAMISE AND PURPLE SAGE SHRUBS.						
<b>General:</b>	8 PLANTS OBSERVED IN 1998.						
<b>Owner/Manager:</b>	PVT-SIMI VALLEY LANDFILL						



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<b>Occurrence No.</b>	107	<b>Map Index:</b> 61022	<b>EO Index:</b> 61058	<b>Element Last Seen:</b>	2004-05-24
<b>Occ. Rank:</b>	Poor		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2004-05-24
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2005-04-19

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.28883 / -118.82307	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3795685 E332204	<b>Elevation (ft):</b>	780
<b>PLSS:</b>	T02N, R19W, Sec. 01, NW (S)	<b>Acres:</b>	0.0

**Location:** 1 AIR MILE SE OF MOORPARK COLLEGE. JUST NORTH OF HIGHWAY 118 NEAR THE WESTERN EDGE OF OAK PARK.  
**Detailed Location:** IN THE SE 1/4 OF THE NW 1/4 OF SECTION 1. NEAR TRAIL.  
**Ecological:** LOW QUALITY COASTAL SAGE SCRUB, RECENTLY BURNED. ASSOCIATES INCLUDE MUSTARDS, BROMES, AND ENCELIA CALIFORNICA. EXPOSED RIDGELINE TRAIL WITH WHITE, CHALKY SOIL.  
**General:** 1 PLANT OBSERVED IN 2004.  
**Owner/Manager:** VEN COUNTY-PARKS & REC

<b>Occurrence No.</b>	187	<b>Map Index:</b> 77476	<b>EO Index:</b> 78415	<b>Element Last Seen:</b>	2007-06-29
<b>Occ. Rank:</b>	Poor		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2007-06-29
<b>Occ. Type:</b>	Transplant Outside of Native Hab./Range		<b>Trend:</b> Decreasing	<b>Record Last Updated:</b>	2009-12-14

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.25449 / -118.82642	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3791883 E331827	<b>Elevation (ft):</b>	1100
<b>PLSS:</b>	T02N, R19W, Sec. 13, SW (S)	<b>Acres:</b>	2.0

**Location:** 0.1 MILE WEST OF THE WEST END OF PRESIDENTIAL DR, NORTH OF E OLSEN RD, NEAR THE BORDER BETWEEN SIMI VALLEY AND MOORPARK.  
**Detailed Location:** MAPPED AS 3 POLYGONS.  
**Ecological:** ROCKY OUTCROPS IN CHAPARRAL. NORTH TO NE-FACING SLOPES.  
**General:** THE TWO SOUTHERN POLYGONS WERE LOCATIONS WHERE THREE BULBS WERE DUG UP IN 2007. ALL THREE BULBS WERE THEN TRANSPLANTED TO THE NORTHERN POLYGON TO AVOID DEVELOPMENT OCCURRING AT THE SOUTHERN POLYGONS.  
**Owner/Manager:** PVT



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<b>Orcuttia californica</b>		<b>Element Code:</b> PMPOA4G010	
California Orcutt grass			
<b>Listing Status:</b>	<b>Federal:</b> Endangered	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G1
	<b>State:</b> Endangered		<b>State:</b> S1
<b>Other:</b>	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank		
<b>Habitat:</b>	<b>General:</b> VERNAL POOLS.		
	<b>Micro:</b> 10-660 M.		

<b>Occurrence No.</b>	28	<b>Map Index:</b> 25604	<b>EO Index:</b> 8445	<b>Element Last Seen:</b> 2011-06-21
<b>Occ. Rank:</b>	Poor		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 2011-06-21
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 2021-08-20

<b>Quad Summary:</b>	Simi (3411837)
<b>County Summary:</b>	Ventura

<b>Lat/Long:</b>	34.26602 / -118.85550	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3793210 E329173	<b>Elevation (ft):</b>	655
<b>PLSS:</b>	T02N, R19W, Sec. 10, SE (S)	<b>Acres:</b>	6.0

**Location:** IMMEDIATELY NW OF THE HWY 23 FREEWAY AND TIERRA REJADA RD, CLOVERLEAF.

**Detailed Location:** MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO A MAP IN A 2008 REPORT. THIS IS REPORTEDLY PART OF THE TIERRA REJADA VERNAL POOL PRESERVE (OWNED BY THE SERENATA HOMEOWNERS ASSOCIATION AND MANAGED BY THE MRCA).

**Ecological:** DEEP 3 ACRE VERNAL POOL REPORTED TO FILL ONLY IN ABOVE AVERAGE RAINFALL YEARS. IN RUDERAL GRASSLAND LIKELY CONVERTED FROM COASTAL SAGE SCRUB. HEAVY CLAY SOIL. WITH VERBENA BRACTEATA, MALVA PARVIFLORA, CRYPISIS NILIACA, JUNCUS BUFONIUS, ETC.

**General:** 10,000+ PLANTS EST IN 1992. NO PLANTS IN 2000; SITE VERY DRY & UPLAND SPECIES INVADING. NO PLANTS IN 2003 & 2004. 26,125 SEEN IN 2005. NO PLANTS IN 2006, 2007, & 2010 (LIKELY DUE TO LACK OF RAINFALL). OCCASIONAL ON OUTER MARGINS IN 2011.

**Owner/Manager:** PVT

<b>Occurrence No.</b>	35	<b>Map Index:</b> 55259	<b>EO Index:</b> 55259	<b>Element Last Seen:</b> 2011-04-24
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 2011-04-24
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 2021-08-18

<b>Quad Summary:</b>	Simi (3411837)
<b>County Summary:</b>	Ventura

<b>Lat/Long:</b>	34.25539 / -118.83831	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3792003 E330734	<b>Elevation (ft):</b>	680
<b>PLSS:</b>	T02N, R19W, Sec. 14, SE (S)	<b>Acres:</b>	1.8

**Location:** EAST OF TIERRA REJADA VALLEY, APPROXIMATELY 0.5 AIR MILE EAST OF LANDING FIELD.

**Detailed Location:** ONE SMALL COLONY LOCATED IN THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 14.

**Ecological:** SOUTHERLY LOBE OF VERNAL POOL/MARSH SYSTEM FED BY INTERMITTENT STREAM. DOMINANT PLANTS INCLUDE ECHINODORUS BERTEROI, CRYPISIS VAGINIFLORA, GNAPHALIUM PALUSTRE. ASSOC: ELEOCHARIS MACROSTACHYA, XANTHIUM STRUMARIUM & MALVELLA LEPROSA.

**General:** 24+ INDIVIDUALS OBSERVED IN 2003. A 2011 GIBSON COLLECTION FROM "DAY CANYON NEAR SIMI VALLEY AND REAGAN LIBRARY" IS ALSO ATTRIBUTED TO THIS OCCURRENCE.

**Owner/Manager:** PVT



### Search Results

15 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3411838:3411837]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
<a href="#"><u><i>Calochortus catalinae</i></u></a>	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	(Feb)Mar-Jun	None	None	G3G4	S3S4	4.2	No Photo Available
<a href="#"><u><i>Calochortus clavatus</i> var. <i>clavatus</i></u></a>	club-haired mariposa lily	Liliaceae	perennial bulbiferous herb	(Mar)May-Jun	None	None	G4T3	S3	4.3	No Photo Available
<a href="#"><u><i>Calochortus clavatus</i> var. <i>gracilis</i></u></a>	slender mariposa-lily	Liliaceae	perennial bulbiferous herb	Mar-Jun(Nov)	None	None	G4T2T3	S2S3	1B.2	No Photo Available
<a href="#"><u><i>Calochortus plummerae</i></u></a>	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	No Photo Available
<a href="#"><u><i>Convolvulus simulans</i></u></a>	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2	No Photo Available
<a href="#"><u><i>Dudleya parva</i></u></a>	Conejo dudleya	Crassulaceae	perennial herb	May-Jun	FT	None	G1	S1	1B.2	No Photo Available
<a href="#"><u><i>Horkelia cuneata</i> var. <i>puberula</i></u></a>	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	None	None	G4T1	S1	1B.1	 © 2008 Tony Morosco
<a href="#"><u><i>Juglans californica</i></u></a>	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	 © 2020 Zoya Akulova
<a href="#"><u><i>Juncus acutus</i> ssp. <i>leopoldii</i></u></a>	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2	 © 2019 Belinda Lo
<a href="#"><u><i>Lupinus paynei</i></u></a>	Payne's bush lupine	Fabaceae	perennial shrub	Mar-Apr(May-Jul)	None	None	G1Q	S1	1B.1	No Photo Available
<a href="#"><u><i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i></u></a>	white-veined monardella	Lamiaceae	perennial herb	(Apr)May-Aug(Sep-Dec)	None	None	G4T3	S3	1B.3	No Photo Available
<a href="#"><u><i>Monardella</i></u></a>	Gerry's curly-	Lamiaceae	annual herb	Apr-Jun	None	None	G3T1	S1	1B.1	

<u><i>sinuata</i> ssp. <i>gerryi</i></u>	leaved monardella										No Photo Available
<u><i>Orcuttia californica</i></u>	California Orcutt grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1		No Photo Available
<u><i>Pentachaeta lyonii</i></u>	Lyon's pentachaeta	Asteraceae	annual herb	(Feb)Mar- Aug	FE	CE	G1	S1	1B.1		No Photo Available
<u><i>Suaeda taxifolia</i></u>	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S4	4.2		No Photo Available

Showing 1 to 15 of 15 entries

**Suggested Citation:**

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website <https://www.rareplants.cnps.org> [accessed 6 September 2022].



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**Query Criteria:** Quad<span style='color:Red'> IS </span>(Moorpark (3411838)<span style='color:Red'> OR </span>Simi (3411837))<br /><span style='color:Red'> AND </span>Taxonomic Group<span style='color:Red'> IS </span>(Fish<span style='color:Red'> OR </span>Amphibians<span style='color:Red'> OR </span>Reptiles<span style='color:Red'> OR </span>Birds<span style='color:Red'> OR </span>Mammals<span style='color:Red'> OR </span>Mollusks<span style='color:Red'> OR </span>Arachnids<span style='color:Red'> OR </span>Crustaceans<span style='color:Red'> OR </span>Insects)

<b>Spea hammondii</b>		<b>Element Code:</b> AAABF02020	
western spadefoot			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G2G3
	<b>State:</b> None		<b>State:</b> S3
	<b>Other:</b> BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened		
<b>Habitat:</b>	<b>General:</b> OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY-FOOTHILL HARDWOOD WOODLANDS.		
	<b>Micro:</b> VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING.		

<b>Occurrence No.</b>	290	<b>Map Index:</b> 55430	<b>EO Index:</b> 55430	<b>Element Last Seen:</b> 2004-04-29
<b>Occ. Rank:</b>	Excellent	<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 2004-04-29	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 2004-05-11	
<b>Quad Summary:</b>	Moorpark (3411838)			
<b>County Summary:</b>	Ventura			
<b>Lat/Long:</b>	34.33618 / -118.87951	<b>Accuracy:</b> 80 meters		
<b>UTM:</b>	Zone-11 N3801032 E327106	<b>Elevation (ft):</b> 1500		
<b>PLSS:</b>	T03N, R19W, Sec. 16, NW (S)	<b>Acres:</b> 0.0		
<b>Location:</b>	ALONG ROSELAND AVENUE, WEST OF HAPPY CAMP CANYON REGIONAL PARK, NORTH OF MOORPARK.			
<b>Detailed Location:</b>				
<b>Ecological:</b>	HABITAT CONSISTS OF A MAN-MADE BASIN WHICH CREATED A POND WITH A HEAVY SILT/CLAY STRUCTURE. DRYING SEDIMENT CREATES LARGE CRACKS WHERE JUVENILE TOADS CAN BE FOUND.			
<b>General:</b>	HUNDREDS OF TADPOLES OBSERVED ON 29 APR 2004.			
<b>Owner/Manager:</b>	PVT			

<b>Occurrence No.</b>	332	<b>Map Index:</b> 63622	<b>EO Index:</b> 63717	<b>Element Last Seen:</b> 2000-03-XX
<b>Occ. Rank:</b>	Good	<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 2000-03-XX	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 2019-10-08	
<b>Quad Summary:</b>	Simi (3411837)			
<b>County Summary:</b>	Ventura			
<b>Lat/Long:</b>	34.30408 / -118.77622	<b>Accuracy:</b> specific area		
<b>UTM:</b>	Zone-11 N3797301 E336546	<b>Elevation (ft):</b> 1055		
<b>PLSS:</b>	T03N, R18W, Sec. 33, NW (S)	<b>Acres:</b> 3.1		
<b>Location:</b>	0.9 MILES NW OF THE INTERSECTION OF LOST CANYONS DRIVE AND ERRINGER ROAD, SIMI VALLEY.			
<b>Detailed Location:</b>				
<b>Ecological:</b>	HABITAT CONSISTS OF A CATTLE POND WITHIN A GRAZED AREA DOMINATED BY ANNUAL GRASSLAND TUCKED AGAINST BASE OF FOOTHILLS DOMINATED BY COASTAL SAGE SCRUB.			
<b>General:</b>	HUNDREDS OF TADPOLES FOUND IN MAR 2000.			
<b>Owner/Manager:</b>	PVT-UNOCAL			



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<b>Occurrence No.</b>	334	<b>Map Index:</b> 63638	<b>EO Index:</b> 63733	<b>Element Last Seen:</b>	2003-04-22
<b>Occ. Rank:</b>	Excellent		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2003-04-22
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2019-10-08

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.30090 / -118.82267	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3797024 E332265	<b>Elevation (ft):</b>	935
<b>PLSS:</b>	T03N, R19W, Sec. 36, SW (S)	<b>Acres:</b>	2.3

**Location:** 1.1 AIR MILES NE OF THE INTERSECTION OF CAMPUS PARK DRIVE AND COLLINS DRIVE, EAST OF MOORPARK COLLEGE, MOORPARK.

**Detailed Location:**

**Ecological:** HABITAT CONSISTS OF A VERNAL POOL SURROUNDED BY OPEN, NATIVE AND ANNUAL GRASSLAND ON A GENTLY SLOPING, BROAD RIDGE.

**General:** HUNDREDS OF POST-METAMORPHIC JUVENILES FOUND ON 22 APR 2003.

**Owner/Manager:** PVT-UNOCAL

<b>Occurrence No.</b>	477	<b>Map Index:</b> A6811	<b>EO Index:</b> 108581	<b>Element Last Seen:</b>	2017-04-09
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2017-04-09
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2017-10-12

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.28665 / -118.77316	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3795362 E336795	<b>Elevation (ft):</b>	993
<b>PLSS:</b>	T02N, R18W, Sec. 4, NW (S)	<b>Acres:</b>	5.0

**Location:** ABOUT 0.4 MILES NE OF FIRST STREET AT HWY 118 & 0.6 MILES SW OF ERRINGER RD AT FALCON ST, SIMI VALLEY.

**Detailed Location:** MAPPED TO PROVIDED COORDINATES.

**Ecological:** FENCED, SEASONAL POOL ABOUT 75'X35' SURROUNDED BY ANNUAL GRASSLAND & PATCHES OF SAGE SCRUB, W/MULEFAT & A COTTONWOOD ALONG WESTERN MARGIN OF POOL. CLOSE TO URBAN DEVELOPMENT. LAND USED FOR GRAZING, PRIOR GRADING & UNPAVED ROADS IN VICINITY.

**General:** ABOUT 300 TADPOLES OBSERVED ON 20 MAR; 10S OF METAMORPHED JUVENILES OBSERVED ON 9 APR 2017.

**Owner/Manager:** PVT



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<b>Occurrence No.</b>	1087	<b>Map Index:</b> B4033	<b>EO Index:</b> 116952	<b>Element Last Seen:</b>	2019-02-03
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2019-02-03
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2019-09-24

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.32069 / -118.86575	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3799290 E328341	<b>Elevation (ft):</b>	944
<b>PLSS:</b>	T03N, R19W, Sec. 27, NW (S)	<b>Acres:</b>	5.0

**Location:** ALONG HAPPY CAMP CANYON TRAIL, NEAR THE NORTH END OF GOLF COURSE, HAPPY CAMP CANYON REGIONAL PARK, NORTH OF MOORPARK.

**Detailed Location:** MAPPED TO COORDINATES PROVIDED.

**Ecological:** EPHEMERAL POOL LOCATED WITHIN WELL USED TRAIL. NARROW STRIP OF NATIVE SCRUB BOUNDED BY GOLF COURSE TO THE WEST AND ORCHARDS/RURAL DEVELOPMENT TO THE EAST.

**General:** 5 ADULTS FOUND BETWEEN 2 AND 3 FEB 2019.

**Owner/Manager:** VEN COUNTY

<b>Occurrence No.</b>	1088	<b>Map Index:</b> B4044	<b>EO Index:</b> 116962	<b>Element Last Seen:</b>	2013-04-23
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2013-04-23
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2019-09-25

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.2787 / -118.80401	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3794531 E333940	<b>Elevation (ft):</b>	707
<b>PLSS:</b>	T02N, R18W, Sec. 6, NE (S)	<b>Acres:</b>	5.0

**Location:** ARROYO SIMI, 0.4 AIR MILE WEST OF N MADERA RD AND EASY ST INTERSECTION, TIERRA REJADA PARK, SIMI VALLEY.

**Detailed Location:** MAPPED TO COORDINATES PROVIDED.

**Ecological:** DISTURBED GRASSLAND COMMUNITY ADJACENT TO RIPARIAN AREA AND UPLAND COASTAL SAGE SCRUB COMMUNITY.

**General:** 1 ADULT HEARD CALLING ON 23 APR 2013.

**Owner/Manager:** RANCHO SIMI RPD

<b>Occurrence No.</b>	1361	<b>Map Index:</b> B5204	<b>EO Index:</b> 118151	<b>Element Last Seen:</b>	2017-06-14
<b>Occ. Rank:</b>	Poor		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2017-06-14
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-02-28

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.29643 / -118.79585	<b>Accuracy:</b>	1 mile
<b>UTM:</b>	Zone-11 N3796484 E334726	<b>Elevation (ft):</b>	981
<b>PLSS:</b>	T03N, R18W, Sec. 32 (S)	<b>Acres:</b>	1987.0

**Location:** SIMI VALLEY LANDFILL AND RECYCLING CENTER, NORTH OF SIMI VALLEY.

**Detailed Location:** MAPPED TO GENERAL VICINITY OF LANDFILL.

**Ecological:**

**General:** LARVAE OBSERVED INCIDENTALLY IN A POND BETWEEN 20 MAR AND 14 JUN 2017 DURING GNATCATCHER SURVEYS.

**Owner/Manager:** PVT-WASTE MANAGEMENT



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<b><i>Elanus leucurus</i></b>		<b>Element Code:</b> ABNKC06010	
white-tailed kite			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G5
	<b>State:</b> None		<b>State:</b> S3S4
	<b>Other:</b> BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern		
<b>Habitat:</b>	<b>General:</b> ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS AND RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.		
	<b>Micro:</b> OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.		

<b>Occurrence No.</b>	161	<b>Map Index:</b>	89896	<b>EO Index:</b>	90915	<b>Element Last Seen:</b>	2011-04-01
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2011-04-01	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2013-08-06	
<b>Quad Summary:</b>	Simi (3411837)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.29057 / -118.84193		<b>Accuracy:</b>	80 meters			
<b>UTM:</b>	Zone-11 N3795910 E330471		<b>Elevation (ft):</b>	600			
<b>PLSS:</b>	T02N, R19W, Sec. 02, N (S)		<b>Acres:</b>	0.0			
<b>Location:</b>	ALONG ARROYO SIMI JUST SOUTH OF COLLINS DR AT HWY 118, ABOUT 2 MILES ENE OF THE CITY OF MOORPARK.						
<b>Detailed Location:</b>	MAPPED TO PROVIDED COORDINATES.						
<b>Ecological:</b>							
<b>General:</b>	A PAIR OF WHITE-TAILED KITES WERE OBSERVED NESTING NEAR ARROYO SIMI IN SUMMER 2011; LAST DATE OBSERVED AND NEST FATE UNKNOWN. IT APPEARS THAT THIS OBSERVATION WAS REPORTED TO J. HUMBLE (CDFW) BY C. HUNTLEY (ASPEN BIOLOGY).						
<b>Owner/Manager:</b>	UNKNOWN						



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***Coccyzus americanus occidentalis***

**Element Code:** ABNRB02022

western yellow-billed cuckoo

<b>Listing Status:</b>	<b>Federal:</b> Threatened	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G5T2T3
	<b>State:</b> Endangered		<b>State:</b> S1
	<b>Other:</b> BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive		
<b>Habitat:</b>	<b>General:</b> RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS.		
	<b>Micro:</b> NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, WITH LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.		

<b>Occurrence No.</b>	217	<b>Map Index:</b>	B2357	<b>EO Index:</b>	114282	<b>Element Last Seen:</b>	2018-08-XX
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>			2018-08-XX
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>			2019-02-28

**Quad Summary:** Moorpark (3411838), Santa Paula (3411931)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.36161 / -119.00019	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3804064 E316060	<b>Elevation (ft):</b>	306
<b>PLSS:</b>	T03N, R20W, Sec. 8, NW (S)	<b>Acres:</b>	5.0

**Location:** S SIDE OF THE SANTA CLARA RIVER, ABOUT 0.8 MI NW OF S MOUNTAIN RD AT GLANVILLE RD & 1.0 MI SSE OF CA-126 AT EDWARDS RD.

**Detailed Location:** MAPPED TO PROVIDED COORDINATES. IN HEDRICK RANCH NATURE AREA, MANAGED BY FRIENDS OF THE SANTA CLARA RIVER.

**Ecological:** HIGH-QUALITY, DENSE RED WILLOW-DOMINATED WOODLAND HABITAT ON FLOODPLAIN, SURROUNDED BY AGRICULTURE. AREA SURVEYED IN 2018 BASED ON A HABITAT SUITABILITY MODEL THAT IDENTIFIED THIS AREA AS HIGH-QUALITY YELLOW-BILLED CUCKOO HABITAT.

**General:** 1 HEARD IN RESPONSE TO PLAYBACK ON 23 JUL; HEARD AGAIN DURING PASSIVE LISTENING, 31 JUL 2018. LIKELY AN ADULT FEMALE BASED ON "COO" CALLS; PRESENT DURING BREEDING SEASON IN SUITABLE HABITAT BUT NO NEST OR MATE FOUND IN FOLLOWUP VISITS.

**Owner/Manager:** PVT



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<b><i>Athene cucularia</i></b>		<b>Element Code:</b> ABNSB10010	
burrowing owl			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G4
	<b>State:</b> None		<b>State:</b> S3
<b>Other:</b>	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern		
<b>Habitat:</b>	<b>General:</b>	OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.	
	<b>Micro:</b>	SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.	

<b>Occurrence No.</b>	85	<b>Map Index:</b>	17045	<b>EO Index:</b>	9848	<b>Element Last Seen:</b>	1990-03-27
<b>Occ. Rank:</b>	Fair	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	1990-03-27	<b>Record Last Updated:</b>	1992-01-28
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Stable				

<b>Quad Summary:</b>	Santa Susana (3411836), Simi (3411837)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.31262 / -118.73681		<b>Accuracy:</b>	non-specific area			
<b>UTM:</b>	Zone-11 N3798185 E340190		<b>Elevation (ft):</b>	1300			
<b>PLSS:</b>	T03N, R18W, Sec. 26, SW (S)		<b>Acres:</b>	512.6			
<b>Location:</b>	UPPER DRY CANYON, APPROX 2 MI N OF SIMI VALLEY, S OF BIG MOUNTAIN.						
<b>Detailed Location:</b>							
<b>Ecological:</b>	ANNUAL GRASSLAND WITH SPARSE COASTAL SAGE SCRUB; DIVERSE TOPOGRAPHY. ABUNDANT GROUND SQUIRREL BURROWS AVAILABLE.						
<b>General:</b>	OBSERVED IN LOW SLOPES AT THE BASE OF BIG MOUNTAIN. AREA IS VERY SCENIC; USED AS A MOVIE SET AND AS A BACKDROP.						
<b>Owner/Manager:</b>	PVT-MARUFUJI AMERICA						

<b>Occurrence No.</b>	796	<b>Map Index:</b>	64646	<b>EO Index:</b>	64725	<b>Element Last Seen:</b>	2006-03-05
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	2006-03-05	<b>Record Last Updated:</b>	2006-05-09
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown				

<b>Quad Summary:</b>	Simi (3411837)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.36153 / -118.79832		<b>Accuracy:</b>	80 meters			
<b>UTM:</b>	Zone-11 N3803708 E334625		<b>Elevation (ft):</b>	2410			
<b>PLSS:</b>	T03N, R18W, Sec. 07 (S)		<b>Acres:</b>	0.0			
<b>Location:</b>	OAK RIDGE, ABOUT 6 MILES NORTH OF SIMI VALLEY.						
<b>Detailed Location:</b>							
<b>Ecological:</b>	HABITAT CONSISTS OF COASTAL SAGE SCRUB, DOMINATED BY ARTEMISIA CALIFORNICA, SALVIA LEUCOPHYLLA, SALVIA MELLIFERA, ERIOGONUM FASCICULATUM, YUCCA WHIPPLEI, AND ADENOSTOMA FASCICULATUM.						
<b>General:</b>	1 ADULT OBSERVED USING A ROAD CULVERT AS A BURROW SITE ON 5 MAR 2006.						
<b>Owner/Manager:</b>	PVT						





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<b><i>Empidonax traillii extimus</i></b>		<b>Element Code:</b> ABPAE33043	
southwestern willow flycatcher			
<b>Listing Status:</b>	<b>Federal:</b> Endangered	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G5T2
	<b>State:</b> Endangered		<b>State:</b> S1
	<b>Other:</b> NABCI_RWL-Red Watch List		
<b>Habitat:</b>	<b>General:</b> RIPARIAN WOODLANDS IN SOUTHERN CALIFORNIA.		
	<b>Micro:</b> <input type="checkbox"/>		

<b>Occurrence No.</b>	57	<b>Map Index:</b>	75755	<b>EO Index:</b>	76769	<b>Element Last Seen:</b>	2009-05-16
<b>Occ. Rank:</b>	Excellent	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2009-05-16	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2009-07-06	

**Quad Summary:** Moorpark (3411838)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.36224 / -118.99802	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3804130 E316259	<b>Elevation (ft):</b>	305
<b>PLSS:</b>	T03N, R20W, Sec. 08 (S)	<b>Acres:</b>	0.0

**Location:** SANTA CLARA RIVER, SOUTH OF THE END OF GLANVILLE RD, ABOUT 3.0 MI EAST OF SANTA PAULA.  
**Detailed Location:**  
**Ecological:** RIPARIAN WOODLAND. NATURE PRESERVE BORDERED BY SANTA CLARA RIVER AND AGRICULTURAL LAND.  
**General:** 1 MALE OBSERVED AND HEARD SINGING IN WILLOW FOREST ON 16 MAY 2009.  
**Owner/Manager:** FRIENDS OF THE SANTA CLARA RIV



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<b>Riparia riparia</b>		<b>Element Code:</b> ABPAU08010	
bank swallow			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G5
	<b>State:</b> Threatened		<b>State:</b> S2
	<b>Other:</b> BLM_S-Sensitive, IUCN_LC-Least Concern		
<b>Habitat:</b>	<b>General:</b> COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT.		
	<b>Micro:</b> REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE.		

<b>Occurrence No.</b>	112	<b>Map Index:</b> 84175	<b>EO Index:</b> 85196	<b>Element Last Seen:</b>	1926-05-13
<b>Occ. Rank:</b>	None		<b>Presence:</b> Extirpated	<b>Site Last Seen:</b>	1926-05-13
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2013-07-12

<b>Quad Summary:</b>	Moorpark (3411838), Fillmore (3411848)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.38728 / -118.94483	<b>Accuracy:</b>	1 mile		
<b>UTM:</b>	Zone-11 N3806812 E321205	<b>Elevation (ft):</b>	380		
<b>PLSS:</b>	T04N, R20W, Sec. 35 (S)	<b>Acres:</b>	0.0		

**Location:** SANTA CLARA RIVER NEAR SESPE.

**Detailed Location:** WFVZ COLLECTIONS: "EAST OF SANTA PAULA" AND "SESPE; HOLES IN THE BANK OF THE SANTA CLARA RIVER NEAR STATION." FMNH COLLECTIONS: "SESPE." EXACT LOCATION UNKNOWN. MAPPED TO THE SANTA CLARA RIVER NEAR SESPE VILLAGE AND SW OF FILLMORE.

**Ecological:** REPORTED TO BE "A LARGE COLONY NESTING" DURING 1926. ONE NEST DESCRIBED AS "MADE OF BARLEY STRAW AND WEEDS LINED WITH FEATHERS." SOME NESTS ABOUT 20 FEET ABOVE RIVER.

**General:** EGGS COLLECTED 5 MAY 1904. H.C. BURT COLL 2 EGG SETS (5 EGGS EACH) 8 MAY 1910. S. PEYTON COLL 1 EGG SET (5 EGGS) 20 MAY 1910. E.T. BADGER COLL 2 EGG SETS (4 EGGS EACH) 13 MAY 1926. CONSIDERED EXTIRPATED AS A BREEDER IN S CALIFORNIA (SCH92).

**Owner/Manager:** UNKNOWN

<b>Occurrence No.</b>	116	<b>Map Index:</b> 84328	<b>EO Index:</b> 85359	<b>Element Last Seen:</b>	1897-05-15
<b>Occ. Rank:</b>	None		<b>Presence:</b> Extirpated	<b>Site Last Seen:</b>	1897-05-15
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2012-08-14

<b>Quad Summary:</b>	Santa Susana (3411836), Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.26620 / -118.74488	<b>Accuracy:</b>	1 mile		
<b>UTM:</b>	Zone-11 N3793050 E339358	<b>Elevation (ft):</b>	870		
<b>PLSS:</b>	T02N, R18W, Sec. 11 (S)	<b>Acres:</b>	0.0		

**Location:** SIMI.

**Detailed Location:** LOCATION STATED AS "SIMI CAL." EXACT LOCATION UNKNOWN. MAPPED TO ARROYO SIMI WITHIN THE CITY OF SIMI VALLEY.

**Ecological:** FRESH EGGS COLLECTED FROM NEST IN HOLE ABOUT 2.5 FEET DEEP IN CREEK BANK ABOUT 4 FEET HIGH FROM BOTTOM AND ABOUT 8 FEET HIGH FROM TOP OF BANK; NEST MADE OF A FEW STICKS AND WEEDS.

**General:** SIX EGGS COLLECTED BY APPLETON ON "15 MAY 97" (PRESUMABLY 1897). CONSIDERED EXTIRPATED AS A BREEDER IN SOUTHERN CALIFORNIA (SCH92).

**Owner/Manager:** UNKNOWN

<b>Polioptila californica californica</b>		<b>Element Code:</b> ABPB08081	
coastal California gnatcatcher			
<b>Listing Status:</b>	<b>Federal:</b> Threatened	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G4G5T3Q
	<b>State:</b> None		<b>State:</b> S2



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<b>Habitat:</b>	<b>Other:</b> CDFW_SSC-Species of Special Concern, NABCI_YWL-Yellow Watch List
	<b>General:</b> OBLIGATE, PERMANENT RESIDENT OF COASTAL SAGE SCRUB BELOW 2500 FT IN SOUTHERN CALIFORNIA.
	<b>Micro:</b> LOW, COASTAL SAGE SCRUB IN ARID WASHES, ON MESAS AND SLOPES. NOT ALL AREAS CLASSIFIED AS COASTAL SAGE SCRUB ARE OCCUPIED.

<b>Occurrence No.</b>	482	<b>Map Index:</b>	33296	<b>EO Index:</b>	2092	<b>Element Last Seen:</b>	1995-07-27
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	1995-07-27		
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>	1995-09-28		

**Quad Summary:** Simi (3411837)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.29056 / -118.87402	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3795963 E327518	<b>Elevation (ft):</b>	650
<b>PLSS:</b>	T02N, R19W, Sec. 04, NW (S)	<b>Acres:</b>	4.0

**Location:** 0.5 MILE NORTH OF MOORPARK AND LITTLE SIMI VALLEY.  
**Detailed Location:**  
**Ecological:** HABITAT CONSISTS OF VENTURAN COASTAL SAGE SCRUB & SOUTHERN CACTUS SCRUB, DOMINATED BY CALIFORNIA SAGEBRUSH, WITH COYOTE BUSH, PURPLE SAGE, & COASTAL PRICKLY PEAR PRESENT. SURROUNDING AREA IS DEVELOPED TO THE SOUTH & EAST.  
**General:** ONE JUVENILE/FEMALE OBSERVED ON 14, 18, 20, AND 27 JUNE AND 27 JULY 1995.  
**Owner/Manager:** PVT

<b>Occurrence No.</b>	865	<b>Map Index:</b>	71244	<b>EO Index:</b>	72148	<b>Element Last Seen:</b>	2012-10-19
<b>Occ. Rank:</b>	Fair	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	2012-10-19		
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>	2013-04-11		

**Quad Summary:** Simi (3411837)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.26918 / -118.85844	<b>Accuracy:</b>	non-specific area
<b>UTM:</b>	Zone-11 N3793566 E328908	<b>Elevation (ft):</b>	600
<b>PLSS:</b>	T02N, R19W, Sec. 10, W (S)	<b>Acres:</b>	374.0

**Location:** LITTLE SIMI VALLEY, NORTHWEST OF STATE HWY 23 AND TIERRA REJADA RD, MOORPARK.  
**Detailed Location:** MAPPED TO 1997/1998 SURVEY AREA AND DETECTIONS. 2008 RECORD FROM 0.44 MI NW OF HWY 23 & TIERRA REJADA RD IN REMNANT COASTAL SAGE SCRUB/CACTUS SCRUB AT END OF SHAWNEE ST. SITE KNOWN AS THE CARLSBERG RANCH PROJECT.  
**Ecological:** 1997-98 WAS DOMINATED BY COASTAL PRICKLY PEAR, CA SAGEBRUSH, COYOTE BRUSH, PURPLE SAGE, CA ENCELIA, & BLACK SAGE. 2008 WAS HIGHLY FRAGMENTED REMNANT COASTAL SAGE/CACTUS SCRUB MANAGED BY THE MOUNTAINS RECREATION AND CONSERVATION AUTHORITY.  
**General:** 1 DETECTED ON 22 OCT, 20 NOV, 3 DEC, & 17 DEC 1997, & 13 JAN 1998 BY GLENN LUKOS ASSOCIATES; PRESUMED TO BE SAME INDIVIDUAL. 2 ADULTS & 3 JUVENILES OBSERVED 25 JUN 2008. UNKNOWN NUMBER, LIKELY ONLY 1, OBSERVED BETWEEN 1 MAY-19 OCT 2012.  
**Owner/Manager:** MTNS REC & CONS AUTHORITY, PVT



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<b>Occurrence No.</b>	924	<b>Map Index:</b> 88743	<b>EO Index:</b> 89756	<b>Element Last Seen:</b>	2012-09-19
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2012-09-19
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-24
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.26932 / -118.81807		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3793514 E332625		<b>Elevation (ft):</b>	908	
<b>PLSS:</b>	T02N, R19W, Sec. 12, SE (S)		<b>Acres:</b>	42.0	
<b>Location:</b>	ABOUT 1.7 MILES NW OF SINALOA LAKE, BETWEEN MADERA RD, TIERRA REJADA RD AND HWY 23/118, JUST W OF SIMI VALLEY.				
<b>Detailed Location:</b>	MAPPED TO PROVIDED MAPS AND COORDINATES. PAIR W/ 4 JUVENILES ATTEMPTED TO RE-NEST; NEST WAS INACTIVE AS OF 28 MAY 2010. 2010 OBS CONSISTED OF 2 INDEPENDENT NEST SITES AND 1 LONE MALE, DETECTIONS WERE MADE DURING FOCUSED PROTOCOL SURVEYS.				
<b>Ecological:</b>	COASTAL SAGE SCRUB WITH PRICKLY PEAR CACTUS DOMINATED BY PURPLE SAGE, CALIFORNIA SAGEGRASS, CALIFORNIA BUCKWHEAT, DEERWEED, AND NATIVE AND NON-NATIVE GRASSES. CACTUS WRENS, GRASSHOPPER SPARROW, & COOPE'RS HAWK ALSO OBSERVED AT THIS SITE.				
<b>General:</b>	PAIR & 4 JUVS OBS 20 APR, DISPERSAL ASSUMED 14 MAY 2010. 2ND NEST DETECTED 28 APR, ABANDONED & RE-NESTED 6 MAY, INCUBATION OBS 14 MAY, PRESUMED NESTLINGS 28 MAY, 2 FLEDGLINGS CONFIRMED 8 JUN 2010. 1 M OBS 28 APR 2010. 1 OBS ON 19 SEP 2012.				
<b>Owner/Manager:</b>	UNKNOWN				
<b>Occurrence No.</b>	925	<b>Map Index:</b> 88748	<b>EO Index:</b> 89762	<b>Element Last Seen:</b>	2012-05-30
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2012-05-30
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-27
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.26398 / -118.822		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3792928 E332254		<b>Elevation (ft):</b>	855	
<b>PLSS:</b>	T02N, R19W, Sec. 13, NE (S)		<b>Acres:</b>	50.0	
<b>Location:</b>	ARROYO SANTA ROSA, 1.7 MILES WNW OF SINALOA LAKE, BETWEEN MADERA RD, TIERRA REJADA RD AND HWY 23/118, W OF SIMI VALLEY.				
<b>Detailed Location:</b>	MAPPED TO PROVIDED COORDINATES. SURVEY AREA LOCATED JUST N OF RONALD REAGAN PRESIDENTIAL LIBRARY AND MUSEUM.				
<b>Ecological:</b>	HABITAT CONSISTED OF EAST AND WEST SIDE GENTLE SLOPES ALONG AN S-SHAPED DRAINAGE, VEGETATED WITH CHAMISE, COASTAL SAGE SCRUB MIXED SAGE SCRUB AND GRASSLAND. SOUTHERN CALIFORNIA RUFIOUS-CROWNED SPARROW NESTS OBSERVED IN THE AREA.				
<b>General:</b>	2 PAIRS WITH NESTS, 1 POSSIBLE PAIR, AND 1 MALE OBSERVED BETWEEN 11 APR AND 20 MAY 2011 (4 TERRITORIES IDENTIFIED). 2 PAIRS, 2 NESTS, AND 5 MALES OBSERVED BETWEEN 13 APR AND 30 MAY 2012 (7 POSSIBLE TERRITORIES IDENTIFIED).				
<b>Owner/Manager:</b>	PVT				



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<b>Occurrence No.</b>	945	<b>Map Index:</b> A2002	<b>EO Index:</b> 103595	<b>Element Last Seen:</b>	2015-05-27
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2015-05-27
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-24
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.28666 / -118.7686		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3795356 E337215		<b>Elevation (ft):</b>	979	
<b>PLSS:</b>	T02N, R18W, Sec. 4, NE (S)		<b>Acres:</b>	25.0	
<b>Location:</b>	ABOUT 0.5 MILES NE OF FIRST STREET AT HWY 118 & 0.5 MILES SW OF ERRINGER RD AT FALCON ST, SIMI VALLEY.				
<b>Detailed Location:</b>	MAPPED TO PROVIDED COORDINATES.				
<b>Ecological:</b>	FAIRLY LUSH COASTAL SAGE SCRUB, DOMINATED BY SAGEBRUSH WITH SCATTERED ELDERBERRY. URBAN DEVELOPMENT TO SOUTH, OPEN SPACE/RANGELAND TO NORTH.				
<b>General:</b>	CALLING MALE OBSERVED FOR OVER A MONTH DURING PROTOCOL SURVEYS, 19 APR - 27 MAY 2015; A SECOND BIRD, EITHER A FEMALE OR JUVENILE, OBSERVED ON 27 MAY.				
<b>Owner/Manager:</b>	PVT				

<b>Occurrence No.</b>	961	<b>Map Index:</b> B2024	<b>EO Index:</b> 113948	<b>Element Last Seen:</b>	2019-08-13
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2019-08-13
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-21
<b>Quad Summary:</b>	Moorpark (3411838)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.28561 / -118.90298		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3795463 E324842		<b>Elevation (ft):</b>	499	
<b>PLSS:</b>	T02N, R19W, Sec. 6, NE (S)		<b>Acres:</b>	13.0	
<b>Location:</b>	ABOUT 0.4 MILES NW OF POINDEXTER AVE AT GABBERT RD & 1.5 MILES NE OF CA-118 AT HITCH BLVD, MOORPARK.				
<b>Detailed Location:</b>	MAPPED TO PROVIDED COORDINATES.				
<b>Ecological:</b>	COASTAL SAGE SCRUB DOMINATED BY CALIFORNIA SAGEBRUSH IN FORMER RESIDENTIAL DEVELOPMENT SITE WITH HOMESITE PADS, ROADS, AND OTHER STRUCTURES. SURROUNDING LAND USES INCLUDED UNDEVELOPED LAND, RURAL RESIDENTIAL, AND RANCHES.				
<b>General:</b>	TWO PAIRS AND UP TO FOUR JUVENILES OBSERVED ON 13 MAY 2015. 2 JUVENILES OBSERVED AND OTHERS HEARD CALLING ON 13 AUG 2019.				
<b>Owner/Manager:</b>	PVT				



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<b>Occurrence No.</b>	975	<b>Map Index:</b> B6069	<b>EO Index:</b> 119103	<b>Element Last Seen:</b>	2019-09-30
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2019-09-30
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-21
<b>Quad Summary:</b>	Moorpark (3411838)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.33887 / -118.88299		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3801336 E326792		<b>Elevation (ft):</b>	1556	
<b>PLSS:</b>	T03N, R19W, Sec. 16, SW (S)		<b>Acres:</b>	8.0	
<b>Location:</b>	1 MILE EAST OF GRIMES CANYON RD AND WAYNES WAY INTERSECTION, 4 MILES NORTH OF MOORPARK.				
<b>Detailed Location:</b>	MAPPED TO COORDINATES PROVIDED.				
<b>Ecological:</b>	SITE USED FOR TRANSMISSION LINES. COASTAL SAGE SCRUB HABITAT ADJACENT TO SAND/GRAVEL MINE AND AGRICULTURAL FIELDS.				
<b>General:</b>	2 JUVENILES OBSERVED FORAGING ON 13 AUG; ADULT PAIR FORAGING ON 28 AUG AND 16 SEP; AND 1 MALE FORAGING ON 30 SEP 2019.				
<b>Owner/Manager:</b>	UNKNOWN				

<b>Occurrence No.</b>	976	<b>Map Index:</b> B6079	<b>EO Index:</b> 119113	<b>Element Last Seen:</b>	2019-08-28
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2019-08-28
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-21
<b>Quad Summary:</b>	Moorpark (3411838)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.3038 / -118.90208		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-11 N3797479 E324963		<b>Elevation (ft):</b>	781	
<b>PLSS:</b>	T03N, R19W, Sec. 32, NW (S)		<b>Acres:</b>	5.0	
<b>Location:</b>	CHAMPIONSHIP DR, 0.5 MILE EAST OF GRIMES CANYON RD INTERSECTION, MOORPARK COUNTRY CLUB, MOORPARK.				
<b>Detailed Location:</b>	MAPPED TO COORDINATES PROVIDED.				
<b>Ecological:</b>	SITE LOCATED IN GOLF COURSE WITH PATCHES OF SCRUB. AERIAL IMAGERY SHOWS GOLF COURSE AND ADJACENT RESIDENTIAL AREAS WERE DEVELOPED IN EARLY 2000S. OPEN SPACE OCCURS SOUTH OF GOLF COURSE.				
<b>General:</b>	1 DETECTED ON 28 AUG 2019.				
<b>Owner/Manager:</b>	UNKNOWN				



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<b>Occurrence No.</b>	977	<b>Map Index:</b> B6082	<b>EO Index:</b> 119116	<b>Element Last Seen:</b>	2019-08-28
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2019-08-28
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-21

**Quad Summary:** Moorpark (3411838)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.30014 / -118.90213	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3797074 E324951	<b>Elevation (ft):</b>	866
<b>PLSS:</b>	T03N, R19W, Sec. 32, NW (S)	<b>Acres:</b>	5.0

**Location:** 0.6 MILE SOUTHEAST OF GRIMES CANYON RD AND CHAMPIONSHIP DR INTERSECTION, MOORPARK COUNTRY CLUB, MOORPARK.

**Detailed Location:** MAPPED TO COORDINATES PROVIDED.

**Ecological:** SITE LOCATED IN GOLF COURSE WITH PATCHES OF SCRUB. AERIAL IMAGERY SHOWS GOLF COURSE AND ADJACENT RESIDENTIAL AREAS WERE DEVELOPED IN EARLY 2000S. OPEN SPACE OCCURS SOUTH OF GOLF COURSE.

**General:** 1 RESPONDED TO CALL PLAYBACK ON 28 AUG 2019.

**Owner/Manager:** UNKNOWN

<b>Occurrence No.</b>	978	<b>Map Index:</b> B6087	<b>EO Index:</b> 119121	<b>Element Last Seen:</b>	2011-12-15
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2011-12-15
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-21

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.28712 / -118.84734	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3795536 E329967	<b>Elevation (ft):</b>	633
<b>PLSS:</b>	T02N, R19W, Sec. 2, NW (S)	<b>Acres:</b>	27.0

**Location:** SOUTH OF ARROYO SIMI, 0.5 MILES SOUTHWEST OF COLLINS DR AT HWY 118, 2 MILES EAST OF MOORPARK.

**Detailed Location:** MAPPED ACCORDING TO MAP PROVIDED.

**Ecological:** SCRUB HABITAT DOMINATED BY CALIFORNIA SAGEBRUSH (ARTEMISIA CALIFORNICA). OBSERVER NOTED THAT THAT AREA MAY NOT SUPPORT A RESIDENT POPULATION OF CALIFORNIA GNATCATCHER.

**General:** UP TO 5 INDIVIDUALS DETECTED ON 25 JUL AND 1 ON 15 DEC 2011.

**Owner/Manager:** PVT



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<b>Occurrence No.</b>	979	<b>Map Index:</b> B6089	<b>EO Index:</b> 119123	<b>Element Last Seen:</b>	2018-04-04
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2018-04-04
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-28

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.30278 / -118.78526	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3797171 E335712	<b>Elevation (ft):</b>	1089
<b>PLSS:</b>	T03N, R18W, Sec. 32, NE (S)	<b>Acres:</b>	5.0

**Location:** 1.4 MILES NORTH OF HWY 118 AT N MADERA RD, SIMI VALLEY LANDFILL, NORTH OF SIMI VALLEY

**Detailed Location:** MAPPED TO COORDINATES PROVIDED.

**Ecological:** SITE DISTURBED BY LANDFILL ACTIVITIES AND NEARBY GRAZING. COASTAL SAGE SCRUB HABITAT CONSISTING PRIMARILY OF BLACK SAGE (SALVIA MELLIFERA) AND PURPLE SAGE (SALVIA LEUCOPHYLLA).

**General:** NONE DETECTED IN 2016 NAD 2017. 2 ADULTS OBSERVED INCUBATING EGGS ON 4 APR 2018; PAIR WAS OBSERVED FORAGING WITH AT LEAST ONE FLEDGLING DURING A SUBSEQUENT SURVEY.

**Owner/Manager:** PVT-WASTE MANAGEMENT

<b>Occurrence No.</b>	986	<b>Map Index:</b> B6100	<b>EO Index:</b> 119135	<b>Element Last Seen:</b>	2012-06-27
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2012-06-27
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2020-08-26

**Quad Summary:** Thousand Oaks (3411827), Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.25006 / -118.83745	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3791410 E330804	<b>Elevation (ft):</b>	769
<b>PLSS:</b>	T02N, R19W, Sec. 23, NE (S)	<b>Acres:</b>	5.0

**Location:** ON EAST SIDE OF HWY 23, 0.5 MILE NORTH OF E OLSEN RD, SUNSET HILLS-OLSEN ROAD OPEN SPACE, SOUTHWEST OF SIMI VALLEY.

**Detailed Location:** MAPPED TO COORDINATES PROVIDED.

**Ecological:** PURPLE SAGE SCRUB WITH MINOR INCLUSIONS OF CALIFORNIA SAGEBRUSH AND ADJACENT TO LARGE PATCH OF SAGEBRUSH SCRUB. SURROUNDING LAND USE INCLUDES ORCHARD AND OPEN SPACE. SITE DISTURBED BY DIRT ROADS AND UTILITY POLE EASEMENT.

**General:** 1 PAIR OF ADULTS AND 1 JUVENILE OBSERVED ON 27 JUN 2012.

**Owner/Manager:** PVT-SCE





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<b>Occurrence No.</b>	989	<b>Map Index:</b> 84328	<b>EO Index:</b> 119144	<b>Element Last Seen:</b> 1904-06-05
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1904-06-05
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 2020-08-28

**Quad Summary:** Santa Susana (3411836), Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.26620 / -118.74488	<b>Accuracy:</b>	1 mile
<b>UTM:</b>	Zone-11 N3793050 E339358	<b>Elevation (ft):</b>	870
<b>PLSS:</b>	T02N, R18W, Sec. 11 (S)	<b>Acres:</b>	0.0

**Location:** VICINITY OF SIMI VALLEY

**Detailed Location:** LOCATIONS STATED AS "SIMI, VENTURA CO." EXACT LOCATION UNKNOWN. COLLECTED BY JOHN SPARHAWK APPLETON (1867-1959) WHO MOVED TO SIMI VALLEY AROUND 1887 AND WAS A PHOTOGRAPHER AND MEMBER OF COOPER ORNITHOLOGICAL CLUB.

**Ecological:** NESTS FOUND IN BUSH: "2 FEET UP IN SAGE BUSH; BIRD ON NEST," AND "4 FT UP IN CHAPARRAL BRUSH; BIRD WOULD NOT LEAVE UNTIL NEARLY TOUCHED."

**General:** EGGS COLLECTED ON 12 JUN 1902 AND ON 5 JUN 1904.

**Owner/Manager:** UNKNOWN

<b><i>Vireo bellii pusillus</i></b>		<b>Element Code:</b> ABPBW01114
least Bell's vireo		
<b>Listing Status:</b>	<b>Federal:</b> Endangered	<b>CNDDB Element Ranks:</b> <b>Global:</b> G5T2
	<b>State:</b> Endangered	<b>State:</b> S2
	<b>Other:</b> NABCI_YWL-Yellow Watch List	
<b>Habitat:</b>	<b>General:</b> SUMMER RESIDENT OF SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.	
	<b>Micro:</b> NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.	

<b>Occurrence No.</b>	123	<b>Map Index:</b> 15934	<b>EO Index:</b> 14263	<b>Element Last Seen:</b> 2015-05-28
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 2015-05-28
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Increasing	<b>Record Last Updated:</b> 2016-02-09

**Quad Summary:** Moorpark (3411838), Santa Paula (3411931)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.36261 / -119.00893	<b>Accuracy:</b>	non-specific area
<b>UTM:</b>	Zone-11 N3804191 E315257	<b>Elevation (ft):</b>	300
<b>PLSS:</b>	T03N, R20W, Sec. 07 (S)	<b>Acres:</b>	517.0

**Location:** SANTA CLARA RIVER FROM ABOUT 0.5 MI SE-3.2 MI NE OF HWY 126 AT S HALLOCK DR & 2.8-4.4 MI NW OF BAYMUIR RANCH (SITE).

**Detailed Location:** SPECIMEN LOCALITY "3 MILES E OF SANTA PAULA." MAPPED TO PROVIDED MAPS, 2011 SURVEY SITE & 2015 DETECTION LOCATIONS. 2015 SURVEY SITES INCLUDED HEDRICK RANCH NATURE AREA & TNC PROPERTIES TAYLOR RANCH & PETO-MCCONICA.

**Ecological:** WILLOW-MULEFAT RIPARIAN WOODLAND W/SOME COTTONWOOD, ON PRESERVES BORDERED BY RIVER & AG LAND. 5 PAIRS & 1 TERRITORIAL MALE DETECTED ON UNK DATE IN 1900S (LIKELY LATE 1990S). 2011: POINT COUNT SURVEY, BIRDS MAY HAVE BEEN DOUBLE-COUNTED.

**General:** EGGS COLLECTED 1925. 1 PAIR & 1 TERRITORIAL MALE(TM) OBSERVED '90. 3 PAIRS & 3 TM OBS '91. 0 OBS '92. 1 TM HEARD & OBS 16 MAY 2009. 4 TERRITORIES DETECTED, '10. UP TO 24 ADULTS DET, '11. OVER 21 TERRITORIES, 65 ADULTS, 24 FLEDGLINGS, '15.

**Owner/Manager:** FRIENDS OF THE SANTA CLARA RIV



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<b>Occurrence No.</b>	130	<b>Map Index:</b> 00303	<b>EO Index:</b> 24960	<b>Element Last Seen:</b>	1985-07-XX
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1985-07-XX
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Increasing	<b>Record Last Updated:</b>	2016-07-19
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.2887 / -118.8499		<b>Accuracy:</b>	2/5 mile	
<b>UTM:</b>	Zone-11 N3795716 E329735		<b>Elevation (ft):</b>	590	
<b>PLSS:</b>	T02N, R19W, Sec. 2, N (S)		<b>Acres:</b>	280.0	
<b>Location:</b>	ARROYO SIMI, BETWEEN COLLEGE VIEW AVE AND ROORPARK RD.				
<b>Detailed Location:</b>	MAPPED ACCORDING TO PROVIDED TRS OF T2N, R19W, NW 1/4 SEC 2 AND E 1/2 SEC 3. LOCATION DESCRIBED AS MOORPARK, CALIFORNIA IN ARROYO SIMI BETWEEN COLLEGE VIEW AVENUE AND MOORPARK ROAD.				
<b>Ecological:</b>	HABITAT IS DENSE RIPARIAN DOMINATED BY WILLOWS. SOME AREA IS DESIGNATED AS OPEN SPACE; REMAINDER IS SLATED FOR FREEWAY CONSTRUCTION BY CALTRANS. COWBIRDS ABUNDANT.				
<b>General:</b>	ONE BIRD RESPONDED TO A TAPED CALL IN 1983. 5 SINGING MALES SEEN OR HEARD RESPONDING TO TAPED CALLS THE SECOND WEEK OF JUN AND AGAIN THE FIRST WEEK OF JUL 1985; 2 VIREOS OBSERVED, RESPONSES FROM UP TO 4 BIRDS.				
<b>Owner/Manager:</b>	CALTRANS, VEN COUNTY, PVT				
<b>Occurrence No.</b>	540	<b>Map Index:</b> 91908	<b>EO Index:</b> 92984	<b>Element Last Seen:</b>	2007-08-02
<b>Occ. Rank:</b>	Unknown		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2007-08-02
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2014-03-20
<b>Quad Summary:</b>	Moorpark (3411838)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.26817 / -118.93423		<b>Accuracy:</b>	non-specific area	
<b>UTM:</b>	Zone-11 N3793583 E321927		<b>Elevation (ft):</b>	370	
<b>PLSS:</b>	T02N, R20W, Sec. 12, SW (S)		<b>Acres:</b>	52.0	
<b>Location:</b>	ARROYO LAS POSAS (CREEK), VICINITY OF HISTORICAL TERNEZ, 0.6 MILE SW OF LOS ANGELES AVE & HITCH BLVD INTERSECTION.				
<b>Detailed Location:</b>	PROVIDED COORDINATES WERE FOR CENTER OF MOORPARK WASTEWATER TREATMENT PLANT. MAPPED TO PROVIDED LOCATION DESCRIPTION OF "MOORPARK, ARROYO LAS POSAS, MOORPARK WASTEWATER TREATMENT PLANT."				
<b>Ecological:</b>	CREEK IS ON SOUTH SIDE OF TREATMENT PLANT. AGRICULTURAL LAND IN THE SURROUNDING AREA (BASED ON 2003-2012 AERIAL PHOTOS).				
<b>General:</b>	1 EGG/NEST COLLECTION MADE ON 2 AUG 2007 BY J.M. GREAVES (WVZ #177742).				
<b>Owner/Manager:</b>	UNKNOWN, PVT				



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<b>Occurrence No.</b>	541	<b>Map Index:</b>	91909	<b>EO Index:</b>	92985	<b>Element Last Seen:</b>	2009-06-22
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2009-06-22	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2014-04-22	

**Quad Summary:** Moorpark (3411838)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.25906 / -118.98851	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3792670 E316910	<b>Elevation (ft):</b>	275
<b>PLSS:</b>	T02N, R20W, Sec. 16, NW (S)	<b>Acres:</b>	8.0

**Location:** NEAR CONFLUENCE OF COYOTE CANYON CREEK & ARROYO LAS POSAS, ABOUT 0.5 MILE SE OF LOS ANGELES AVE AT SOMIS RD.

**Detailed Location:** MAPPED TO PROVIDED COORDINATES. DETECTION LOCATION WAS JUST EAST OF SOMIS ON NORTHERN SIDE OF SOUTHERN PACIFIC RAILROAD TRACKS.

**Ecological:** RIPARIAN CORRIDOR PRIMARILY COMPOSED OF DENSE WILLOWS WITH AN OVERSTORY OF EUCALYPTUS TREES.

**General:** TERRITORIAL AND MATING CALLS HEARD FROM 2 MALES ON 22 JUN 2009; CALLS WERE HEARD FOR OVER 2 HOURS.

**Owner/Manager:** UNKNOWN

<b>Occurrence No.</b>	544	<b>Map Index:</b>	91930	<b>EO Index:</b>	93003	<b>Element Last Seen:</b>	1940-05-21
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1940-05-21	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2014-04-18	

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.26950 / -118.78130	<b>Accuracy:</b>	1 mile
<b>UTM:</b>	Zone-11 N3793474 E336011	<b>Elevation (ft):</b>	800
<b>PLSS:</b>	T02N, R18W, Sec. 08 (S)	<b>Acres:</b>	0.0

**Location:** CITY OF SIMI VALLEY, NE OF THOUSAND OAKS.

**Detailed Location:** MAPPED GENERALLY PROVIDED LOCATION OF "SIMI VALLEY." USED 1951 HISTORIC USGS TOPO FOR SIMI QUAD AND MAPPED TO HISTORIC CITY OF SIMI/SIMI VALLEY. WFVZ #115566, 112360, 62506, 115568, 115571, 115569, 115572, 115567, 115570, 115331.

**Ecological:** AREAS HAS BEEN HEAVILY DEVELOPED (AERIAL PHOTOS 1994-2013). SOME POTENTIALLY SUITABLE HABITAT REMAINS IN THE VICINITY.

**General:** EGG SETS COLLECTED ON 14 JUN 1889, 15 MAY 1892, 13 MAY 1906 (4 EGGS), 17 MAY 1913, 24 MAY 1913, 6 JUN 1915 (2 SETS), 21 MAY 1916 (2 SETS), AND 21 MAY 1940. ALL COLLECTIONS MADE BY J.S. APPLETON; UNKNOWN NUMBER OF EGGS COLLECTED.

**Owner/Manager:** UNKNOWN



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<b>Occurrence No.</b>	545	<b>Map Index:</b>	91931	<b>EO Index:</b>	93004	<b>Element Last Seen:</b>	2017-05-10
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2017-05-10	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2018-02-08	

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.28099 / -118.81314	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3794800 E333104	<b>Elevation (ft):</b>	652
<b>PLSS:</b>	T02N, R18W, Sec. 6, SW (S)	<b>Acres:</b>	22.0

**Location:** ALONG ARROYO SIMI, 1.1 MILES WEST OF HWY 128 AT MADERA RD, NW EDGE OF CITY OF SIMI VALLEY.

**Detailed Location:** MAPPED TO PROVIDED 2008 COORDINATES, ALONG ARROYO SIMI. COULD NOT LOCATE 1913 LOCALITY "SIMI VALLEY, SIMI CREEK (GARDNER'S PLACE);" ATTRIBUTED HERE. SITE MANAGED BY RANCHO SIMI RECREATION & PARK DIST & SIMI VALLEY COUNTY SANITATION DIST.

**Ecological:** RIPARIAN HABITAT DOMINATED BY YOUNG ARROYO & RED WILLOWS W/SOME COTTONWOOD & ARUNDO. WITHIN CALLEGUAS CREEK WATERSHED. NEXT TO WATER QUALITY TREATMENT PLANT. 2017: SITE IS PART OF ONGOING RESTORATION EFFORTS INCLUDING ARUNDO REMOVAL.

**General:** 1 EGG SET COLLECTED ON 24 MAY 1913. 1 HEARD SINGING FOR "SEVERAL MINUTES IN LATE MORNING" ON 5 JUN 2008; BIRD CONSIDERED BREEDING BY REPORTER. 1 TERRITORIAL PAIR OBS 6 MAY 2015. 3 NESTING PAIRS OBSERVED MAR-MAY 2017.

**Owner/Manager:** RANCHO SIMI RPD

<b>Occurrence No.</b>	595	<b>Map Index:</b>	A8394	<b>EO Index:</b>	110177	<b>Element Last Seen:</b>	2017-07-28
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2017-07-28	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2018-04-12	

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.28401 / -118.82176	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3795149 E332316	<b>Elevation (ft):</b>	632
<b>PLSS:</b>	T02N, R19W, Sec. 1, SE (S)	<b>Acres:</b>	5.0

**Location:** ALONG ARROYO SIMI, ABOUT 0.2 MILES SW OF W LOS ANGELES AVE AT QUIMISA DR, W OF SIMI VALLEY.

**Detailed Location:** MAPPED TO PROVIDED COORDINATES. LAND MANAGER IS SIMI VALLEY COUNTY SANITATION DISTRICT.

**Ecological:** DETECTED IN ISLAND OF WILLOWS SURROUNDED BY GIANT REED NEAR ARROYO SIMI CREEK. SURROUNDING LAND USES INCLUDED OPEN SPACE & MOBILE HOME/RV LOT.

**General:** 1 HEARD SINGING ON 28 JUL 2017, PRESUMED TO BE A BREEDING BIRD.

**Owner/Manager:** SIMI VALLEY CSD



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<b>Occurrence No.</b>	606	<b>Map Index:</b> B1154	<b>EO Index:</b> 113048	<b>Element Last Seen:</b>	2017-06-23
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2017-06-23
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2018-10-18
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.27893 / -118.8036		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-11 N3794556 E333978		<b>Elevation (ft):</b>	685	
<b>PLSS:</b>	T02N, R18W, Sec. 6, SE (S)		<b>Acres:</b>	5.0	
<b>Location:</b>	ARROYO SIMI AT TIERRA RAJADA PARK, ABOUT 0.1 MI NNW OF RIDGE VIEW DR AT TERRACE DR & 0.7 MI SW OF HWY 118 AT MADERA RD.				
<b>Detailed Location:</b>	MAPPED TO PROVIDED COORDINATES.				
<b>Ecological:</b>	WILLOW RIPARIAN CORRIDOR ALONG ARROYO SIMI CREEK. PUBLIC LAND/OPEN SPACE ADJACENT TO MOBILE HOMES/RESIDENTIAL.				
<b>General:</b>	1 ADULT MALE DETECTED SINGING FROM SEVERAL PERCHES ON 23 JUN 2017. SURVEYOR CONCLUDED THAT THE BIRD WAS ON TERRITORY AND LIKELY NESTING.				
<b>Owner/Manager:</b>	RANCHO SIMI RPD				
<b>Occurrence No.</b>	615	<b>Map Index:</b> B3414	<b>EO Index:</b> 115329	<b>Element Last Seen:</b>	2018-07-11
<b>Occ. Rank:</b>	Excellent		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2018-07-11
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2019-07-09
<b>Quad Summary:</b>	Thousand Oaks (3411827), Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.25184 / -118.80164		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3791549 E334105		<b>Elevation (ft):</b>	788	
<b>PLSS:</b>	T02N, R18W, Sec. 18, SE (S)		<b>Acres:</b>	44.0	
<b>Location:</b>	FROM ABOUT 0.2 TO 0.3 MI SE OF MADERA RD AT COUNTRY CLUB DR & 0.3 MI SW OF SINALOA LAKE, SYCAMORE CANYON.				
<b>Detailed Location:</b>	MAPPED TO PROVIDED MAP & COORDINATES. PROPERTY OWNED BY WOOD RANCH GOLF COURSE.				
<b>Ecological:</b>	FLOODED ARROYO WILLOW RIPARIAN FOREST ABOVE SYCAMORE CANYON DAM, WITH PERENNIAL FLOW FROM GOLF COURSE UPSTREAM. IN FLOOD BASIN SURROUNDED BY RESIDENTIAL DEVELOPMENT.				
<b>General:</b>	2 COUNTERSINGING MALES OBSERVED IN 2017 WITH POSSIBLE JUVENILES HEARD, 1 SINGING MALE OBSERVED IN 2018. NESTING NOT CONFIRMED, SURVEYS TOO LATE IN SEASON.				
<b>Owner/Manager:</b>	PVT				



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<b><i>Aimophila ruficeps canescens</i></b>		<b>Element Code:</b> ABPBX91091	
southern California rufous-crowned sparrow			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G5T3
	<b>State:</b> None		<b>State:</b> S3
	<b>Other:</b> CDFW_WL-Watch List		
<b>Habitat:</b>	<b>General:</b> RESIDENT IN SOUTHERN CALIFORNIA COASTAL SAGE SCRUB AND SPARSE MIXED CHAPARRAL.		
	<b>Micro:</b> FREQUENTS RELATIVELY STEEP, OFTEN ROCKY HILLSIDES WITH GRASS AND FORB PATCHES.		

<b>Occurrence No.</b>	233	<b>Map Index:</b> B3437	<b>EO Index:</b> 115353	<b>Element Last Seen:</b>	2017-11-29
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2017-11-29
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2019-07-15

**Quad Summary:** Simi (3411837)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.27551 / -118.85666	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3794265 E329086	<b>Elevation (ft):</b>	677
<b>PLSS:</b>	T02N, R19W, Sec. 10, NE (S)	<b>Acres:</b>	5.0

**Location:** E SIDE OF CA-23, ABOUT 0.6 MI SE OF THE CA-118 INTERCHANGE AND 0.7 MI NW OF THE TIERRA REJADA RD INTXN, W OF MOORPARK.  
**Detailed Location:** MAPPED TO PROVIDED COORDINATES. ON BUTLER RANCH PROPERTY.  
**Ecological:** COASTAL SAGE SCRUB WITH NARROW BAND OF RIPARIAN OAK WOODLAND TO N, ANNUAL GRASSLAND IN DISTURBED AREAS. HWY 23 TO W WITH RESIDENTIAL DEVELOPMENT BEYOND, OPEN SPACE TO N, S, & E. DISTURBANCE FROM ROAD CUTS, EQUESTRIAN USE, ANNUAL GRASSES.  
**General:** 3 ADULTS HEARD AND SEEN FORAGING ON 29 NOV 2017.  
**Owner/Manager:** PVT



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<b>Artemisospiza belli belli</b>		<b>Element Code:</b> ABPBX97021		
Bell's sage sparrow				
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G5T2T3	
	<b>State:</b> None		<b>State:</b> S3	
	<b>Other:</b> CDFW_WL-Watch List			
<b>Habitat:</b>	<b>General:</b> NESTS IN CHAPARRAL DOMINATED BY FAIRLY DENSE STANDS OF CHAMISE. FOUND IN COASTAL SAGE SCRUB IN SOUTH OF RANGE.			
	<b>Micro:</b> NEST LOCATED ON THE GROUND BENEATH A SHRUB OR IN A SHRUB 6-18 INCHES ABOVE GROUND. TERRITORIES ABOUT 50 YDS APART.			
<b>Occurrence No.</b>	61	<b>Map Index:</b> A0719	<b>EO Index:</b> 102286	<b>Element Last Seen:</b> 2015-04-19
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 2015-04-19
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 2016-06-30
<b>Quad Summary:</b>	Simi (3411837)			
<b>County Summary:</b>	Ventura			
<b>Lat/Long:</b>	34.28741 / -118.77762		<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3795454 E336386		<b>Elevation (ft):</b>	1089
<b>PLSS:</b>	T02N, R18W, Sec. 4, NW (S)		<b>Acres:</b>	5.0
<b>Location:</b>	ABOUT 0.6 MILES NNE OF SR-118 AT FIRST ST AND 0.9 MILES SW OF ERRINGER RD AT FALCON ST, SIMI VALLEY.			
<b>Detailed Location:</b>	MAPPED TO PROVIDED COORDINATES.			
<b>Ecological:</b>	FAIRLY DENSE COASTAL SAGE SCRUB WITH ARTEMISIA CALIFORNICA AND ERIOGONUM FASCICULATUM ON MESA-LIKE RIDGE. OPEN SPACE/RANGELAND TO NORTH, URBAN/COMMERCIAL TO SOUTH. SITE PROPOSED FOR DEVELOPMENT.			
<b>General:</b>	DESCRIBED AS A COMMON BREEDER IN SIMI VALLEY IN 1933. 2 ADULTS OBSERVED FEEDING YOUNG ON 19 APR 2015.			
<b>Owner/Manager:</b>	PVT			



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<b><i>Gila orcuttii</i></b>		<b>Element Code:</b> AFCJB13120	
arroyo chub			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G2
	<b>State:</b> None		<b>State:</b> S2
	<b>Other:</b> AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive		
<b>Habitat:</b>	<b>General:</b> 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.		
	<b>Micro:</b> SLOW WATER STREAM SECTIONS WITH MUD OR SAND BOTTOMS. FEEDS HEAVILY ON AQUATIC VEGETATION AND ASSOCIATED INVERTEBRATES.		

<b>Occurrence No.</b>	36	<b>Map Index:</b> 47976	<b>EO Index:</b> 47976	<b>Element Last Seen:</b>	2000-04-20
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2000-04-20
<b>Occ. Type:</b>	Transplant Outside of Native Hab./Range		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2017-05-17
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.29175 / -118.84497		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3796046 E330194		<b>Elevation (ft):</b>	580	
<b>PLSS:</b>	T02N, R19W, Sec. 02 (S)		<b>Acres:</b>	164.1	
<b>Location:</b>	ARROYO SIMI, S OF LOS ANGELES AVE, FROM VIRGINIA COLONY TO 2.5 MI UPSTREAM, ABOUT 4 MI WNW OF SIMI.				
<b>Detailed Location:</b>	UCLA 2000 STUDY SITES 134 AND 146. THESE ARE 2 OF THE 16 SITES SAMPLED THROUGHOUT THE CALLEGUAS CREEK WATERSHED. A TOTAL OF 1091 INDIVIDUALS CAUGHT/TRAPPED WITHIN THIS WATERSHED. MAPPED TO PROVIDED MAP.				
<b>Ecological:</b>	ARROYO CHUBS WERE FOUND TO BE COMMON IN CALLEGUAS WATERSHED, ESPECIALLY IN VICINITY OF WATERCRESS OR OTHER SURFACE VEGETATION. OUTSIDE NATIVE RANGE OF SPECIES; CONSIDERED PART OF A TRANSLOCATED POPULATION.				
<b>General:</b>	UNKNOWN NUMBER CAUGHT BY TRAP OR ELECTROFISHING ON 19-20 APR 2000; NUMBERS CAUGHT NOT GIVEN BY SITE, BUT RANGED FROM 1-292 FISH PER 150-300 M REACH.				
<b>Owner/Manager:</b>	UNKNOWN				





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***Catostomus santaanae***

**Element Code:** AFCJC02190

Santa Ana sucker

**Listing Status: Federal:** Threatened

**CNDDDB Element Ranks: Global:** G1

**State:** None

**State:** S1

**Other:** AFS\_TH-Threatened, IUCN\_EN-Endangered

**Habitat: General:** ENDEMIC TO LOS ANGELES BASIN SOUTH COASTAL STREAMS.

**Micro:** HABITAT GENERALISTS, BUT PREFER SAND-RUBBLE-BOULDER BOTTOMS, COOL, CLEAR WATER, AND ALGAE.

**Occurrence No.** 9                      **Map Index:** 00497                      **EO Index:** 13484                      **Element Last Seen:** 2007-10-09

**Occ. Rank:** Good                      **Presence:** Presumed Extant                      **Site Last Seen:** 2007-10-09

**Occ. Type:** Natural/Native occurrence                      **Trend:** Unknown                      **Record Last Updated:** 2010-05-03

**Quad Summary:** Moorpark (3411838), Newhall (3411845), Val Verde (3411846), Piru (3411847), Fillmore (3411848), Santa Paula (3411931)

**County Summary:** Los Angeles, Ventura

**Lat/Long:** 34.39926 / -118.78686                      **Accuracy:** non-specific area

**UTM:** Zone-11 N3807874 E335753                      **Elevation (ft):** 650

**PLSS:** T04N, R18W, Sec. 29 (S)                      **Acres:** 3770.0

**Location:** SANTA CLARA RVR FROM SANTA PAULA TO VALENCIA, 9 MI OF SESPEE CRK, PIRU CRK S OF LAKE & CASTAIC CRK FROM 126 TO COMMERCE.

**Detailed Location:** FAW: "SESPE CRK AT RR CROSSING." WEL STATIONS WITH OBS: #4-5, 7-12, 28-29 & 31. LACM: "SANTA CLARA RIVER AT FILLMORE" & "SANTA CLARA RIVER BETWEEN HWY23 & SESPE CRK." COU05F0005: "CASTAIC CRK U/S OF HWY 126 & D/S OF COMMERCE CENTER BRIDGE."

**Ecological:** HYBRIDIZES W/OWENS SUCKER IN LOWER PARTS OF DRAINAGE (S OF FILMORE).

**General:** 18 OBS AT STATION #8 & 14 AT #4 IN JUL '75 (WEL/CSU). 4 OBS IN '92. 2 OBS IN '96, 22 IN '97, 455 IN '98, 1 IN '99. 51 IN 2000. 60 PIT IN DEC '00. 80 COLL IN '03; DEP AT LACM. 1 OBS IN '04 & 111 IN '05. COMMON OBS IN '07. 39 DEAD OBS OCT '07.

**Owner/Manager:** PVT



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<b><i>Gasterosteus aculeatus williamsoni</i></b>		<b>Element Code:</b> AFCPA03011
unarmored threespine stickleback		
<b>Listing Status:</b>	<b>Federal:</b> Endangered	<b>CNDDDB Element Ranks: Global:</b> G5T1
	<b>State:</b> Endangered	<b>State:</b> S1
	<b>Other:</b> AFS_EN-Endangered, CDFW_FP-Fully Protected	
<b>Habitat:</b>	<b>General:</b> WEEDY POOLS, BACKWATERS, AND AMONG EMERGENT VEGETATION AT THE STREAM EDGE IN SMALL SOUTHERN CALIFORNIA STREAMS.	
	<b>Micro:</b> COOL (<24 C), CLEAR WATER WITH ABUNDANT VEGETATION.	

<b>Occurrence No.</b>	3	<b>Map Index:</b> 78887	<b>EO Index:</b> 1204	<b>Element Last Seen:</b> 2007-10-17
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 2007-10-17	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b> Fluctuating	<b>Record Last Updated:</b> 2010-08-11	

**Quad Summary:** Moorpark (3411838), Newhall (3411845), Val Verde (3411846), Piru (3411847), Fillmore (3411848), Santa Paula (3411931), Saticoy (3411932)

**County Summary:** Los Angeles, Ventura

<b>Lat/Long:</b>	34.38793 / -118.89418	<b>Accuracy:</b>	non-specific area
<b>UTM:</b>	Zone-11 N3806796 E325863	<b>Elevation (ft):</b>	950
<b>PLSS:</b>	T04N, R19W, Sec. 32 (S)	<b>Acres:</b>	2610.0

**Location:** SANTA CLARA RIVER FROM JUST WEST OF HWY 118, EAST TO MOUTH OF SAN FRANCISQUITO CREEK, E OF I-5. LA & VENTURA COUNTIES.

**Detailed Location:** INCLUDES REFUGE AREA DESIGNATED IN 1991 JUST NORTH OF MAGIC MOUNTAIN PARKING LOT ALONG BLUFF. HIGHER NUMBERS OF FISH BETWEEN 2003 & 2007 HAVE BEEN IN THE EASTERN PART OF THE FEATURE IN THE VICINITY OF I-5.

**Ecological:** MANY SURVEYS IN DIFFERENT PARTS OF THE RIVER OVER THE YEARS.

**General:** 20 JUL & 2 AUG 1994:195 OBS. '95: 9 COLL. '97: 200 OBS. 2 SEP '98: 5 OBS. 9 MAY & 13 OCT 2000: 66 OBS. SEPT '03: 522 RELOCATED. NOV 8 '04: 8 DIPNETTED FROM LONG CYN TO HWY 126. 2 FEB '05: 1 OBS. '06: COMMON IN REFUGE. '07: 630 RELOCATED.

**Owner/Manager:** PVT, OTHER

<b><i>Neotoma lepida intermedia</i></b>		<b>Element Code:</b> AMAFF08041
San Diego desert woodrat		
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks: Global:</b> G5T3T4
	<b>State:</b> None	<b>State:</b> S3S4
	<b>Other:</b> CDFW_SSC-Species of Special Concern	
<b>Habitat:</b>	<b>General:</b> COASTAL SCRUB OF SOUTHERN CALIFORNIA FROM SAN DIEGO COUNTY TO SAN LUIS OBISPO COUNTY.	
	<b>Micro:</b> MODERATE TO DENSE CANOPIES PREFERRED. THEY ARE PARTICULARLY ABUNDANT IN ROCK OUTCROPS, ROCKY CLIFFS, AND SLOPES.	



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<b>Occurrence No.</b>	17	<b>Map Index:</b> 33553	<b>EO Index:</b> 29703	<b>Element Last Seen:</b>	1992-07-16
<b>Occ. Rank:</b>	Excellent		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1992-07-16
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	1996-11-06
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.29241 / -118.83499		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-11 N3796102 E331114		<b>Elevation (ft):</b>	680	
<b>PLSS:</b>	T03N, R19W, Sec. 35, NE (S)		<b>Acres:</b>	0.0	
<b>Location:</b>	NEAR RAILROAD RIGHT-OF-WAY, 0.7 MILE WEST OF OAK PARK AND SOUTH OF MOORPARK COLLEGE, SIMI VALLEY.				
<b>Detailed Location:</b>	LOCATED ALONG NORTH AND SOUTH SIDES OF RAILROAD.				
<b>Ecological:</b>	HABITAT CONSISTS OF DENSE COASTAL SAGE SCRUB, COMPOSED OF OPUNTIA SP, ARTEMISIA SP, ENCELIA SP, SALVIA SP, ERIOGONUM SP, ELDERBERRY, YUCCA, AND GRANT RYE GRASS, ON A MODERATELY STEEP, ROCKY, SOUTH-FACING SLOPE.				
<b>General:</b>	2 ADULT MALES, 2 ADULT FEMALES, 2 SUBADULT FEMALES, 3 SUBADULT MALES, AND 1 MALE JUVENILE CAPTURED ON 16 JULY 1992.				
<b>Owner/Manager:</b>	PVT-SPRR				
<b>Occurrence No.</b>	18	<b>Map Index:</b> 33554	<b>EO Index:</b> 29704	<b>Element Last Seen:</b>	1992-07-16
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1992-07-16
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	1996-11-06
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.28131 / -118.79485		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-11 N3794805 E334787		<b>Elevation (ft):</b>	800	
<b>PLSS:</b>	T02N, R18W, Sec. 05, SW (S)		<b>Acres:</b>	0.0	
<b>Location:</b>	NORTH SIDE OF RAILROAD RIGHT-OF-WAY, 0.1 EAST OF MADERA ROAD, SIMI VALLEY.				
<b>Detailed Location:</b>					
<b>Ecological:</b>	HABITAT CONSISTS OF COASTAL SAGE SCRUB, DOMINATED BY OPUNTIA SP AND BACCHARIS PILULARIS.				
<b>General:</b>	5 ADULT MALES CAPTURED ON 16 JULY 1992.				
<b>Owner/Manager:</b>	PVT-SPRR				
<b>Occurrence No.</b>	19	<b>Map Index:</b> 33555	<b>EO Index:</b> 29702	<b>Element Last Seen:</b>	1992-07-16
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1992-07-16
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	1996-11-06
<b>Quad Summary:</b>	Moorpark (3411838)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.28057 / -118.91394		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-11 N3794923 E323822		<b>Elevation (ft):</b>	450	
<b>PLSS:</b>	T02N, R19W, Sec. 06, SW (S)		<b>Acres:</b>	0.0	
<b>Location:</b>	0.6 MILE WEST OF THE INTERSECTION OF GABBERT ROAD AND RAILROAD RIGHT-OF-WAY, SIMI VALLEY.				
<b>Detailed Location:</b>					
<b>Ecological:</b>	HABITAT CONSISTS OF COASTAL SAGE SCRUB, COMPOSED OF SCATTERED EPHYDRA SP, BACCHARIS PILULARIS, AND OPUNTIA SP, IN SANDY SOIL.				
<b>General:</b>	3 ADULT MALES, 1 ADULT FEMALE, 1 SUBADULT, AND 1 IMMATURE MALE CAPTURED ON 16 JULY 1992.				
<b>Owner/Manager:</b>	PVT-SPRR				



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<b>Taxidea taxus</b>		<b>Element Code:</b> AMAJF04010	
American badger			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G5
	<b>State:</b> None		<b>State:</b> S3
	<b>Other:</b> CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern		
<b>Habitat:</b>	<b>General:</b> MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.		
	<b>Micro:</b> NEEDS SUFFICIENT FOOD, FRIABLE SOILS AND OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.		
<b>Occurrence No.</b>	496	<b>Map Index:</b> A0722	<b>EO Index:</b> 102291
<b>Occ. Rank:</b>	Fair	<b>Presence:</b> Presumed Extant	<b>Element Last Seen:</b> 2016-03-31
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b> Unknown	<b>Site Last Seen:</b> 2016-03-31
			<b>Record Last Updated:</b> 2016-06-22
<b>Quad Summary:</b>	Moorpark (3411838)		
<b>County Summary:</b>	Ventura		
<b>Lat/Long:</b>	34.2921 / -118.8913	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3796163 E325931	<b>Elevation (ft):</b>	646
<b>PLSS:</b>	T03N, R19W, Sec. 32, SE (S)	<b>Acres:</b>	5.0
<b>Location:</b>	ABOUT 0.5 MILES NW OF CASEY RD AT WALNUT CANYON RD & 0.5 MILES NNE OF POINDEXTER AVE AT SIERRA AVE, MOORPARK.		
<b>Detailed Location:</b>	MAPPED TO COORDINATES PROVIDED FOR BURROW LOCATION.		
<b>Ecological:</b>	OPEN SPACE WITH NETWORK OF DIRT ROADS USED FOR RECREATION. RESIDENTIAL AND RAILROAD TO SOUTH, RURAL RESIDENTIAL EAST & WEST, AND UNDEVELOPED TO THE NORTH.		
<b>General:</b>	1 ADULT OBSERVED RUNNING DOWN DIRT ROAD WITH FRESHLY KILLED GROUND SQUIRREL ON 31 MAR 2016; SURVEYOR FOLLOWED THE BADGER TO ITS BURROW.		
<b>Owner/Manager:</b>	PVT		



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<b><i>Emys marmorata</i></b>		<b>Element Code:</b> ARAAD02030	
western pond turtle			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G3G4
	<b>State:</b> None		<b>State:</b> S3
	<b>Other:</b> BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive		
<b>Habitat:</b>	<b>General:</b> A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS AND IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.		
	<b>Micro:</b> NEEDS BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.		

<b>Occurrence No.</b>	1218	<b>Map Index:</b>	78677	<b>EO Index:</b>	79643	<b>Element Last Seen:</b>	2010-04-22
<b>Occ. Rank:</b>	Poor	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2010-04-22	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2010-04-27	

**Quad Summary:** Simi (3411837)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.27778 / -118.79833	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3794420 E334460	<b>Elevation (ft):</b>	710
<b>PLSS:</b>	T02N, R18W, Sec. 07, NW (S)	<b>Acres:</b>	0.0

**Location:** 0.1 MILE WEST OF THE N MADERA RD BRIDGE (HWY 118) OVER ARROYO SIMI, IN ARROYO SIMI, SIMI VALLEY.  
**Detailed Location:** MAPPED TO COORDINATES GIVEN.  
**Ecological:** CONCRETE RIPRAP BANKS & NARROW CHANNEL; OCCASIONAL CHECK DAMS W/ SMALL POOLS & SOME BASKING AREAS. SOME EMERGENT VEGETATION (CATTAILS, ETC); NO LARGE VEGETATION. CHANNEL SURROUNDED BY WALKING TRAIL & DEVELOPMENT. BETTER HABITAT DOWNSTREAM.  
**General:** 1 LARGE ADULT WAS OBSERVED BASKING ON A ROCK IN THE MIDDLE OF THE CHANNEL ON 22 APR 2010. SITE LIKELY USED FOR REARING, FEEDING, & BASKING, BUT NOT APPROPRIATE FOR BREEDING/NESTING. BETTER HABITAT ABOUT 1/4 MI DOWNSTREAM FOR REPRODUCTION.  
**Owner/Manager:** CITY OF SIMI VALLEY

<b><i>Anniella spp.</i></b>		<b>Element Code:</b> ARACC01070	
California legless lizard			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G3G4
	<b>State:</b> None		<b>State:</b> S3S4
	<b>Other:</b> CDFW_SSC-Species of Special Concern		
<b>Habitat:</b>	<b>General:</b> CONTRA COSTA COUNTY SOUTH TO SAN DIEGO, WITHIN A VARIETY OF OPEN HABITATS. THIS ELEMENT REPRESENTS CALIFORNIA RECORDS OF ANNIELLA NOT YET ASSIGNED TO NEW SPECIES WITHIN THE ANNIELLA PULCHRA COMPLEX.		
	<b>Micro:</b> VARIETY OF HABITATS; GENERALLY IN MOIST, LOOSE SOIL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.		



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<b>Occurrence No.</b>	45	<b>Map Index:</b> A9203	<b>EO Index:</b> 111044	<b>Element Last Seen:</b>	2014-07-07
<b>Occ. Rank:</b>	Excellent		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2014-07-07
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2018-04-30
<b>Quad Summary:</b>	Newbury Park (3411828), Moorpark (3411838)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.25032 / -118.92011		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-11 N3791579 E323192		<b>Elevation (ft):</b>	720	
<b>PLSS:</b>	T02N, R19W, Sec. 19, NW (S)		<b>Acres:</b>	5.0	
<b>Location:</b>	SOUTH SIDE OF PRESILLA RD AT CHESNUT LN, SOUTH SLOPE LAS POSAS HILLS, CAMARILLO.				
<b>Detailed Location:</b>	MAPPED TO PROVIDED COORDINATES.				
<b>Ecological:</b>	FOUND IN LEAF LITTER OF AVOCADO ORCHARD AND ADJACENT SOUTH-FACING SANDY SLOPE DOMINATED BY COASTAL SAGE SCRUB. PROBABLY OCCURS THROUGHOUT THE SANDY AREAS ON THE SOUTH-FACING SLOPE OF THE LAS POSAS HILLS.				
<b>General:</b>	25 ADULTS AND 5 JUVENILES FOUND ON 7 JUL 2014; PHOTOGRAPH PROVIDED. IT IS CURRENTLY UNKNOWN WHICH NEWLY (2013) DESCRIBED SPECIES OF ANNIELLA OCCURS HERE; ALL ANNIELLA IN CALIFORNIA ARE AN SSC.				
<b>Owner/Manager:</b>	PVT				
<b>Occurrence No.</b>	46	<b>Map Index:</b> A9204	<b>EO Index:</b> 111045	<b>Element Last Seen:</b>	1983-02-20
<b>Occ. Rank:</b>	Fair		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	1983-02-20
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2018-05-25
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.29215 / -118.84931		<b>Accuracy:</b>	1/5 mile	
<b>UTM:</b>	Zone-11 N3796098 E329796		<b>Elevation (ft):</b>	582	
<b>PLSS:</b>	T03N, R19W, Sec. 35, SW (S)		<b>Acres:</b>	70.0	
<b>Location:</b>	ALONG ARROYO SIMI ABOUT 0.6 MILE NE OF VIRGINIA COLONY, MOORPARK.				
<b>Detailed Location:</b>	COLLECTED ALONG NORTH SIDE OF ARROYO SIMI BEFORE THE CONSTRUCTION OF HWY 118.				
<b>Ecological:</b>	SINCE THE TIME OF COLLECTION, HWY 118 WAS CONSTRUCTED THROUGH THIS AREA. THERE APPEARS TO BE RESIDUAL HABITAT IN THE VICINITY OF ARROYO SIMI SOUTH TO THE RAILROAD TRACKS.				
<b>General:</b>	ONE WAS COLLECTED IN THIS AREA ON 27 NOV 1982, AND TWO WERE COLLECTED ON 20 FEB 1983 (THE LATTER, SSS 26192-26293). IT IS CURRENTLY UNKNOWN WHICH NEWLY (2013) DESCRIBED SPECIES OF ANNIELLA OCCURS HERE; ALL ANNIELLA IN CALIFORNIA ARE AN SSC.				
<b>Owner/Manager:</b>	UNKNOWN				



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<b>Occurrence No.</b>	47	<b>Map Index:</b>	A9205	<b>EO Index:</b>	111046	<b>Element Last Seen:</b>	1993-03-07
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	1993-03-07	<b>Record Last Updated:</b>	2018-04-30
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b>	Unknown			
<b>Quad Summary:</b>	Simi (3411837), Moorpark (3411838)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.33653 / -118.8685		<b>Accuracy:</b>	1 mile			
<b>UTM:</b>	Zone-11 N3801052 E328120		<b>Elevation (ft):</b>	1115			
<b>PLSS:</b>	T03N, R19W, Sec. 16 (S)		<b>Acres:</b>	1987.0			
<b>Location:</b>	HAPPY CAMP CANYON ABOUT 4 MILES NNE OF MOORPARK, WEST END OF BIG MOUNTAIN.						
<b>Detailed Location:</b>	MAPPED TO SPECIMEN LOCALITIES; DISTANCES GENERALLY GIVEN AS 2.8 MILES NNE, 3.7 MILES NNE, AND 4 MILES NNE OF MOORPARK IN HAPPY CAMP CANYON.						
<b>Ecological:</b>	LIKELY COLLECTED FROM THE CANYON FLOOR THAT APPEARS TO BE WASH-LIKE HABITAT.						
<b>General:</b>	THREE COLLECTED ON 23 MAR 1990, AND ONE COLLECTED ON 7 MAR 1993. IT IS CURRENTLY UNKNOWN WHICH NEWLY (2013) DESCRIBED SPECIES OF ANNIELLA OCCURS HERE; ALL ANNIELLA IN CALIFORNIA ARE AN SSC.						
<b>Owner/Manager:</b>	UNKNOWN						

<b>Occurrence No.</b>	85	<b>Map Index:</b>	A9566	<b>EO Index:</b>	111420	<b>Element Last Seen:</b>	1983-02-20
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>	1983-02-20	<b>Record Last Updated:</b>	2018-05-25
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b>	Unknown			
<b>Quad Summary:</b>	Simi (3411837)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.27959 / -118.80907		<b>Accuracy:</b>	1/5 mile			
<b>UTM:</b>	Zone-11 N3794638 E333475		<b>Elevation (ft):</b>	820			
<b>PLSS:</b>	T02N, R18W, Sec. 6, SW (S)		<b>Acres:</b>	70.0			
<b>Location:</b>	VICINITY OF TIERRA REJADA PARK, ABOUT 0.75 MILES WEST OF N MADERA RD AT ARROYO SIMI, CITY OF SIMI VALLEY.						
<b>Detailed Location:</b>	LOCATION STATED AS "DUMP N SIDE ARROYO SIMI AT NW EDGE SIMI VALLEY, 1/4 MI W JCT ARROYO SIMI & MADERA AVE." 1970 & 1980 AERIAL IMAGES INDICATE WHAT IS NOW TIERRA REJADA PARK WAS LIKELY A LANDFILL. MAPPED TO THE GENERAL AREA OF THE PARK.						
<b>Ecological:</b>							
<b>General:</b>	ONE WAS COLLECTED BY S. SWEET ON 20 FEB 1983 (SSS #26198). IT IS CURRENTLY UNKNOWN WHICH NEWLY (2013) DESCRIBED SPECIES OF ANNIELLA OCCURS HERE; ALL ANNIELLA IN CALIFORNIA ARE AN SSC.						
<b>Owner/Manager:</b>	CITY OF MOORPARK						

<b><i>Phrynosoma blainvillii</i></b>			<b>Element Code:</b> ARACF12100	
coast horned lizard				
<b>Listing Status:</b>	<b>Federal:</b>	None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G3G4
	<b>State:</b>	None		<b>State:</b> S3S4
	<b>Other:</b>	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern		
<b>Habitat:</b>	<b>General:</b>	FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.		
	<b>Micro:</b>	OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.		



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<b>Occurrence No.</b>	494	<b>Map Index:</b> 52852	<b>EO Index:</b> 52852	<b>Element Last Seen:</b>	2002-05-28
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2002-05-28
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2003-10-08
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.33752 / -118.85580		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-11 N3801140 E329290		<b>Elevation (ft):</b>	1700	
<b>PLSS:</b>	T03N, R19W, Sec. 15, SE (S)		<b>Acres:</b>	0.0	
<b>Location:</b>	BIG MOUNTAIN AREA, 4 MILES NNE OF MOORPARK.				
<b>Detailed Location:</b>					
<b>Ecological:</b>	HABITAT CONSISTS OF COASTAL SAGE SCRUB, BISECTED BY FIRE/UTILITY ACCESS ROADS.				
<b>General:</b>	2 ADULTS OBSERVED ON 28 MAY 2002.				
<b>Owner/Manager:</b>	UNKNOWN				
<b>Occurrence No.</b>	495	<b>Map Index:</b> 52853	<b>EO Index:</b> 52853	<b>Element Last Seen:</b>	2002-05-28
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2002-05-28
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2003-10-08
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.34738 / -118.85045		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3802225 E329802		<b>Elevation (ft):</b>	1400	
<b>PLSS:</b>	T03N, R19W, Sec. 15, NE (S)		<b>Acres:</b>	15.3	
<b>Location:</b>	BIG MOUNTAIN AREA, 4.5 MILES NNE OF MOORPARK.				
<b>Detailed Location:</b>					
<b>Ecological:</b>	HABITAT CONSISTS OF COASTAL SAGE SCRUB, BISECTED BY FIRE/UTILITY ACCESS ROADS.				
<b>General:</b>	2 ADULTS OBSERVED ON 28 MAY 2002.				
<b>Owner/Manager:</b>	UNKNOWN				
<b>Occurrence No.</b>	496	<b>Map Index:</b> 52854	<b>EO Index:</b> 52854	<b>Element Last Seen:</b>	2002-05-28
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2002-05-28
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2003-10-08
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.35005 / -118.83945		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-11 N3802503 E330820		<b>Elevation (ft):</b>	1600	
<b>PLSS:</b>	T03N, R19W, Sec. 14, NW (S)		<b>Acres:</b>	0.0	
<b>Location:</b>	BIG MOUNTAIN AREA, 5 MILES NNE OF MOORPARK.				
<b>Detailed Location:</b>					
<b>Ecological:</b>	HABITAT CONSISTS OF COASTAL SAGE SCRUB, BISECTED BY FIRE/UTILITY ACCESS ROADS.				
<b>General:</b>	1 ADULT OBSERVED ON 28 MAY 2002.				
<b>Owner/Manager:</b>	UNKNOWN				





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<b>Occurrence No.</b>	497	<b>Map Index:</b> 52864	<b>EO Index:</b> 52864	<b>Element Last Seen:</b>	2003-10-10
<b>Occ. Rank:</b>	Good		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2003-10-10
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2003-11-06
<b>Quad Summary:</b>	Moorpark (3411838), Fillmore (3411848)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.37641 / -118.96915		<b>Accuracy:</b>	specific area	
<b>UTM:</b>	Zone-11 N3805650 E318945		<b>Elevation (ft):</b>	400	
<b>PLSS:</b>	T03N, R20W, Sec. 03, NW (S)		<b>Acres:</b>	28.0	
<b>Location:</b>	BETWEEN TELEGRAPH ROAD (HIGHWAY 126) AND THE SANTA CLARA RIVER, 3 MILES SW OF FILLMORE.				
<b>Detailed Location:</b>	LIZARDS FOUND IN THE VICINITY OF A DRY STREAMBED AND WITHIN A COMMERCIAL NURSERY.				
<b>Ecological:</b>	HABITAT CONSISTS OF A SANDY STREAMBED WITH NEARBY SOUTHERN RIPARIAN SCRUB AND COASTAL SAGE SCRUB.				
<b>General:</b>	2 JUVENILES OBSERVED ON 30 SEP 2003; 1 JUVENILE OBSERVED ON 7 OCT 2003; 1 JUVENILE OBSERVED ON 10 OCT 2003.				
<b>Owner/Manager:</b>	PVT-VALLEY CREST TREE CO				
<b>Occurrence No.</b>	670	<b>Map Index:</b> 71371	<b>EO Index:</b> 72270	<b>Element Last Seen:</b>	2008-04-16
<b>Occ. Rank:</b>	Excellent		<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b>	2008-04-16
<b>Occ. Type:</b>	Natural/Native occurrence		<b>Trend:</b> Unknown	<b>Record Last Updated:</b>	2008-05-27
<b>Quad Summary:</b>	Simi (3411837)				
<b>County Summary:</b>	Ventura				
<b>Lat/Long:</b>	34.29222 / -118.81000		<b>Accuracy:</b>	80 meters	
<b>UTM:</b>	Zone-11 N3796041 E333414		<b>Elevation (ft):</b>	780	
<b>PLSS:</b>	T03N, R18W, Sec. 31, NW (S)		<b>Acres:</b>	0.0	
<b>Location:</b>	ALAMOS CANYON, 150 METERS NORTH OF STATE ROUTE 118, NORTHWEST OF SIMI VALLEY.				
<b>Detailed Location:</b>	JUST EAST OF ALAMOS CANYON ROAD.				
<b>Ecological:</b>	HABITAT CONSISTS OF AN UPLAND AREA. THE OVERALL AREA IS COMPRISED OF OPEN AND A RIPARIAN ZONE. NUMEROUS NON-ARGENTINE ANT COLONIES WERE PRESENT IN THE IMMEDIATE AREA.				
<b>General:</b>	1 ADULT OBSERVED UNDER A SMALL WEEDY BUSH AT 11 AM ON 16 APR 2008. ESTIMATED TEMPERATURE: 75 DEGREES F.				
<b>Owner/Manager:</b>	PVT-WASTE MANAGEMENT				



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<b><i>Aspidoscelis tigris stejnegeri</i></b>		<b>Element Code:</b> ARACJ02143	
coastal whiptail			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G5T5
	<b>State:</b> None		<b>State:</b> S3
	<b>Other:</b> CDFW_SSC-Species of Special Concern		
<b>Habitat:</b>	<b>General:</b> FOUND IN DESERTS AND SEMI-ARID AREAS WITH SPARSE VEGETATION AND OPEN AREAS. ALSO FOUND IN WOODLAND AND RIPARIAN AREAS.		
	<b>Micro:</b> GROUND MAY BE FIRM SOIL, SANDY, OR ROCKY.		

<b>Occurrence No.</b>	11	<b>Map Index:</b> 33615	<b>EO Index:</b> 30049	<b>Element Last Seen:</b> 1996-05-22
<b>Occ. Rank:</b>	Fair	<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1996-05-22	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 1997-01-06	

**Quad Summary:** Simi (3411837)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.29051 / -118.81185	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3795853 E333240	<b>Elevation (ft):</b>	750
<b>PLSS:</b>	T02N, R18W, Sec. 06, NW (S)	<b>Acres:</b>	0.0

**Location:** ALAMOS CANYON ROAD, NORTH OF HWY 118, 1.5 MILES EAST OF MOORPARK COLLEGE, SIMI VALLEY.  
**Detailed Location:**  
**Ecological:** HABITAT CONSISTS OF BUCKBRUSH CHAPARRAL TO THE EAST OF ROAD & VENTURAN COASTAL SAGE SCRUB TO THE WEST OF ROAD.  
**General:** ONE ADULT OBSERVED ON 22 MAY 1996.  
**Owner/Manager:** PVT

<b>Occurrence No.</b>	12	<b>Map Index:</b> 33616	<b>EO Index:</b> 30050	<b>Element Last Seen:</b> 1996-05-22
<b>Occ. Rank:</b>	Fair	<b>Presence:</b> Presumed Extant	<b>Site Last Seen:</b> 1996-05-22	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b> Unknown	<b>Record Last Updated:</b> 1997-01-06	

**Quad Summary:** Simi (3411837)  
**County Summary:** Ventura

<b>Lat/Long:</b>	34.28618 / -118.80485	<b>Accuracy:</b>	80 meters
<b>UTM:</b>	Zone-11 N3795361 E333877	<b>Elevation (ft):</b>	710
<b>PLSS:</b>	T02N, R18W, Sec. 06, SE (S)	<b>Acres:</b>	0.0

**Location:** UNNAMED CANYON, BETWEEN ALAMOS CANYON AND BREA CANYON, NORTH SIDE OF HWY 118, NW OF SIMI.  
**Detailed Location:** SITE IS LOCATED NEAR THE WESTERN TERMINOUS OF COCHRAN ROAD.  
**Ecological:**  
**General:** 1 ADULT OBSERVED ON 22 MAY 1996.  
**Owner/Manager:** PVT



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<b>Arizona elegans occidentalis</b>		<b>Element Code:</b> ARADB01017	
California glossy snake			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G5T2
	<b>State:</b> None		<b>State:</b> S2
	<b>Other:</b> CDFW_SSC-Species of Special Concern		
<b>Habitat:</b>	<b>General:</b> 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.		
	<b>Micro:</b> GENERALIST REPORTED FROM A RANGE OF SCRUB AND GRASSLAND HABITATS, OFTEN WITH LOOSE OR SANDY SOILS.		
<b>Occurrence No.</b>	77	<b>Map Index:</b> A3343	<b>EO Index:</b> 104976
<b>Occ. Rank:</b>	Unknown	<b>Presence:</b> Presumed Extant	<b>Element Last Seen:</b> 1995-03-26
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b> Unknown	<b>Site Last Seen:</b> 1995-03-26
			<b>Record Last Updated:</b> 2017-01-11
<b>Quad Summary:</b>	Simi (3411837), Moorpark (3411838)		
<b>County Summary:</b>	Ventura		
<b>Lat/Long:</b>	34.31733 / -118.87169	<b>Accuracy:</b>	non-specific area
<b>UTM:</b>	Zone-11 N3798928 E327787	<b>Elevation (ft):</b>	901
<b>PLSS:</b>	T03N, R19W, Sec. 28, NE (S)	<b>Acres:</b>	138.0
<b>Location:</b>	EAST OF HAPPY CAMP RD AND WEST OF HAPPY CAMP CANYON FIRE RD, HAPPY CAMP CANYON PARK, N OF MOORPARK (LITTLE SIMI VALLEY).		
<b>Detailed Location:</b>	COLLECTED AT 0.25 MI N AND 0.25 MI E OF PARK ENTRANCE AT BROADWAY AVE.		
<b>Ecological:</b>			
<b>General:</b>	2 COLLECTED IN MAR 1995.		
<b>Owner/Manager:</b>	VEN COUNTY		



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<b><i>Diadophis punctatus modestus</i></b>		<b>Element Code:</b> ARADB10015	
San Bernardino ringneck snake			
<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDDB Element Ranks:</b>	<b>Global:</b> G5T2T3
	<b>State:</b> None		<b>State:</b> S2?
	<b>Other:</b> USFS_S-Sensitive		
<b>Habitat:</b>	<b>General:</b> MOST COMMON IN OPEN, RELATIVELY ROCKY AREAS. OFTEN IN SOMEWHAT MOIST MICROHABITATS NEAR INTERMITTENT STREAMS.		
	<b>Micro:</b> AVOIDS MOVING THROUGH OPEN OR BARREN AREAS BY RESTRICTING MOVEMENTS TO AREAS OF SURFACE LITTER OR HERBACEOUS VEG.		

<b>Occurrence No.</b>	13	<b>Map Index:</b>	A0740	<b>EO Index:</b>	102307	<b>Element Last Seen:</b>	2015-07-07
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2015-07-07	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2016-06-22	
<b>Quad Summary:</b>	Newbury Park (3411828), Moorpark (3411838)						
<b>County Summary:</b>	Ventura						
<b>Lat/Long:</b>	34.25028 / -118.92028		<b>Accuracy:</b>	1/10 mile			
<b>UTM:</b>	Zone-11 N3791575 E323176		<b>Elevation (ft):</b>	711			
<b>PLSS:</b>	T02N, R19W, Sec. 19, NW (S)		<b>Acres:</b>	18.0			
<b>Location:</b>	ABOUT 0.1 MILES SE OF PRESILLA RD AT CHESTNUT LN & 0.6 MILES NW OF E LAS POSAS RD AT ESCOLLERA AVE, POSAS HILLS.						
<b>Detailed Location:</b>	MAPPED TO PROVIDED COORDINATES.						
<b>Ecological:</b>	FOUND IN AVOCADO ORCHARD AND ADJACENT COASTAL SAGE SCRUB.						
<b>General:</b>	4 ADULTS OBSERVED ON 7 JUL 2015.						
<b>Owner/Manager:</b>	UNKNOWN						



**Multiple Occurrences per Page**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



***Thamnophis hammondi***

**Element Code:** ARADB36160

two-striped gartersnake

<b>Listing Status:</b>	<b>Federal:</b> None	<b>CNDDB Element Ranks:</b>	<b>Global:</b> G4
	<b>State:</b> None		<b>State:</b> S3S4
	<b>Other:</b> BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive		
<b>Habitat:</b>	<b>General:</b> COASTAL CALIFORNIA FROM VICINITY OF SALINAS TO NORTHWEST BAJA CALIFORNIA. FROM SEA TO ABOUT 7,000 FT ELEVATION.		
	<b>Micro:</b> HIGHLY AQUATIC, FOUND IN OR NEAR PERMANENT FRESH WATER. OFTEN ALONG STREAMS WITH ROCKY BEDS AND RIPARIAN GROWTH.		

<b>Occurrence No.</b>	4	<b>Map Index:</b>	23952	<b>EO Index:</b>	13496	<b>Element Last Seen:</b>	1993-05-27
<b>Occ. Rank:</b>	Poor	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		1993-05-27	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		1994-04-08	

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.28073 / -118.80508	<b>Accuracy:</b>	1/5 mile
<b>UTM:</b>	Zone-11 N3794758 E333845	<b>Elevation (ft):</b>	640
<b>PLSS:</b>	T02N, R18W, Sec. 06, S (S)	<b>Acres:</b>	0.0

**Location:** ARROYO SIMI, 0.7 MILE NW OF THE JUNCTION OF LOS ANGELES AVENUE AND MADERA ROAD, SIMI VALLEY.

**Detailed Location:**

**Ecological:** HABITAT CONSISTS OF RIPARIAN SCRUB HABITAT, LOCATED ON THE TERRACES ELEVATED ABOVE THE FLOW OF THE ARROYO SIMI.

**General:** TWO JUVENILE SNAKES FOUND WITHIN THE ARROYO SIMI.

**Owner/Manager:** CITY OF SIMI VALLEY



**Multiple Occurrences per Page**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



***Streptocephalus woottoni***

**Element Code:** ICBRA07010

Riverside fairy shrimp

**Listing Status: Federal:** Endangered

**CNDDB Element Ranks: Global:** G1G2

**State:** None

**State:** S1S2

**Other:** IUCN\_EN-Endangered

**Habitat: General:** ENDEMIC TO WESTERN RIVERSIDE, ORANGE, AND SAN DIEGO COUNTIES IN AREAS OF TECTONIC SWALES/EARTH SLUMP BASINS IN GRASSLAND AND COASTAL SAGE SCRUB.

**Micro:** INHABIT SEASONALLY ASTATIC POOLS FILLED BY WINTER/SPRING RAINS. HATCH IN WARM WATER LATER IN THE SEASON.

<b>Occurrence No.</b>	9	<b>Map Index:</b>	39360	<b>EO Index:</b>	34362	<b>Element Last Seen:</b>	2011-04-07
<b>Occ. Rank:</b>	Good	<b>Presence:</b>	Presumed Extant	<b>Site Last Seen:</b>		2011-04-07	
<b>Occ. Type:</b>	Natural/Native occurrence	<b>Trend:</b>	Unknown	<b>Record Last Updated:</b>		2014-04-14	

**Quad Summary:** Simi (3411837)

**County Summary:** Ventura

<b>Lat/Long:</b>	34.26606 / -118.85556	<b>Accuracy:</b>	specific area
<b>UTM:</b>	Zone-11 N3793214 E329168	<b>Elevation (ft):</b>	650
<b>PLSS:</b>	T02N, R19W, Sec. 10, SE (S)	<b>Acres:</b>	4.6

**Location:** TIERRA REJADA VERNAL POOL PRESERVE, 0.1 MILE NORTH OF SUNSET VALLEY ROAD AT TIERRA REJADA ROAD, MOORPARK.

**Detailed Location:**

**Ecological:** HABITAT A SAGPOND/VERNAL POOL. BRANCHINECTA LINDAHLI ALSO PRESENT. B. LINDAHLI, BUT NO S. WOOTTONI, FOUND IN 2006. INSUFFICIENT PONDING FOR FAIRY SHRIMP IN 2002, 2007 & 2010. PONDED TO ABOUT 2.77 ACRES & 14" DEEP IN 2011.

**General:** ESTIMATED ABUNDANCE 5,000-10,000 ON 1 MAR 1998; 20 VOUCHERS SENT TO LACM. REPORTEDLY DETECTED IN 2001. WET-SEASON SURVEYS 2002-2006 FOUND 0 ADULTS. ESTIMATED ABUNDANCE 1000S OF S. WOOTTONI & 1 B. LINDAHLI FOUND ON 7 APR 2011.

**Owner/Manager:** MRCA-TIERRA REJADA PRESERVE

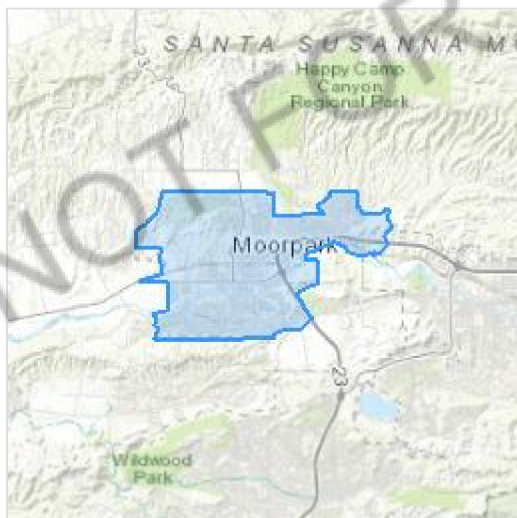
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Ventura County, California



## Local office

Ventura Fish And Wildlife Office

☎ (805) 644-1766

📠 (805) 644-3958

✉ [FW8VenturaSection7@FWS.Gov](mailto:FW8VenturaSection7@FWS.Gov)

2493 Portola Road, Suite B  
Ventura, CA 93003-7726

NOT FOR CONSULTATION



# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

NAME	STATUS
<p>California Condor <i>Gymnogyps californianus</i></p> <p>There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.</p> <p><a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a></p>	Endangered
<p>Coastal California Gnatcatcher <i>Polioptila californica californica</i></p> <p>Wherever found</p> <p>There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/8178">https://ecos.fws.gov/ecp/species/8178</a></p>	Threatened
<p>Least Bell's Vireo <i>Vireo bellii pusillus</i></p> <p>Wherever found</p> <p>There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.</p> <p><a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a></p>	Endangered
<p>Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i></p> <p>Wherever found</p> <p>There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.</p> <p><a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a></p>	Endangered
<p>Yellow-billed Cuckoo <i>Coccyzus americanus</i></p> <p>There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.</p> <p><a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a></p>	Threatened

## Insects

NAME	STATUS
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## Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

## Crustaceans

NAME

STATUS

### Riverside Fairy Shrimp *Streptocephalus woottoni*

Endangered

Wherever found

There is **final** critical habitat for this species. Your location overlaps the critical habitat.

<https://ecos.fws.gov/ecp/species/8148>

### Vernal Pool Fairy Shrimp *Branchinecta lynchi*

Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/498>

## Flowering Plants

NAME

STATUS

### California Orcutt Grass *Orcuttia californica*

Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4923>

### Conejo Dudleya *Dudleya abramsii* ssp. *parva*

Threatened

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4871>

### Gambel's Watercress *Rorippa gambellii*

Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4201>

**Lyon's Pentachaeta** *Pentachaeta lyonii* Endangered  
 Wherever found  
 There is **final** critical habitat for this species. Your location overlaps the critical habitat.  
<https://ecos.fws.gov/ecp/species/4699>

**Marsh Sandwort** *Arenaria paludicola* Endangered  
 Wherever found  
 No critical habitat has been designated for this species.  
<https://ecos.fws.gov/ecp/species/2229>

**Spreading Navarretia** *Navarretia fossalis* Threatened  
 Wherever found  
 There is **final** critical habitat for this species. The location of the critical habitat is not available.  
<https://ecos.fws.gov/ecp/species/1334>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Coastal California Gnatcatcher <i>Polioptila californica californica</i> <a href="https://ecos.fws.gov/ecp/species/8178#crithab">https://ecos.fws.gov/ecp/species/8178#crithab</a>	Final
Lyon's Pentachaeta <i>Pentachaeta lyonii</i> <a href="https://ecos.fws.gov/ecp/species/4699#crithab">https://ecos.fws.gov/ecp/species/4699#crithab</a>	Final
Riverside Fairy Shrimp <i>Streptocephalus woottoni</i> <a href="https://ecos.fws.gov/ecp/species/8148#crithab">https://ecos.fws.gov/ecp/species/8148#crithab</a>	Final

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>Allen's Hummingbird <i>Selasphorus sasin</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9637">https://ecos.fws.gov/ecp/species/9637</a></p>	Breeds Feb 1 to Jul 15

<p><b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i>  This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a></p>	Breeds Jan 1 to Aug 31
<p><b>Belding's Savannah Sparrow</b> <i>Passerculus sandwichensis beldingi</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/8">https://ecos.fws.gov/ecp/species/8</a></p>	Breeds Apr 1 to Aug 15
<p><b>Bullock's Oriole</b> <i>Icterus bullockii</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds Mar 21 to Jul 25
<p><b>California Thrasher</b> <i>Toxostoma redivivum</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jan 1 to Jul 31
<p><b>Clark's Grebe</b> <i>Aechmophorus clarkii</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jun 1 to Aug 31
<p><b>Common Yellowthroat</b> <i>Geothlypis trichas sinuosa</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/2084">https://ecos.fws.gov/ecp/species/2084</a></p>	Breeds May 20 to Jul 31
<p><b>Golden Eagle</b> <i>Aquila chrysaetos</i>  This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a></p>	Breeds Jan 1 to Aug 31
<p><b>Lawrence's Goldfinch</b> <i>Carduelis lawrencei</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9464">https://ecos.fws.gov/ecp/species/9464</a></p>	Breeds Mar 20 to Sep 20

**Marbled Godwit** *Limosa fedoa*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

Breeds elsewhere

**Nuttall's Woodpecker** *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

**Oak Titmouse** *Baeolophus inornatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

Breeds Mar 15 to Jul 15

**Olive-sided Flycatcher** *Contopus cooperi*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

Breeds May 20 to Aug 31

**Short-billed Dowitcher** *Limnodromus griseus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

Breeds elsewhere

**Tricolored Blackbird** *Agelaius tricolor*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

Breeds Mar 15 to Aug 10

**Western Grebe** *Aechmophorus occidentalis*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/6743>

Breeds Jun 1 to Aug 31

**Wrentit** *Chamaea fasciata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 10

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

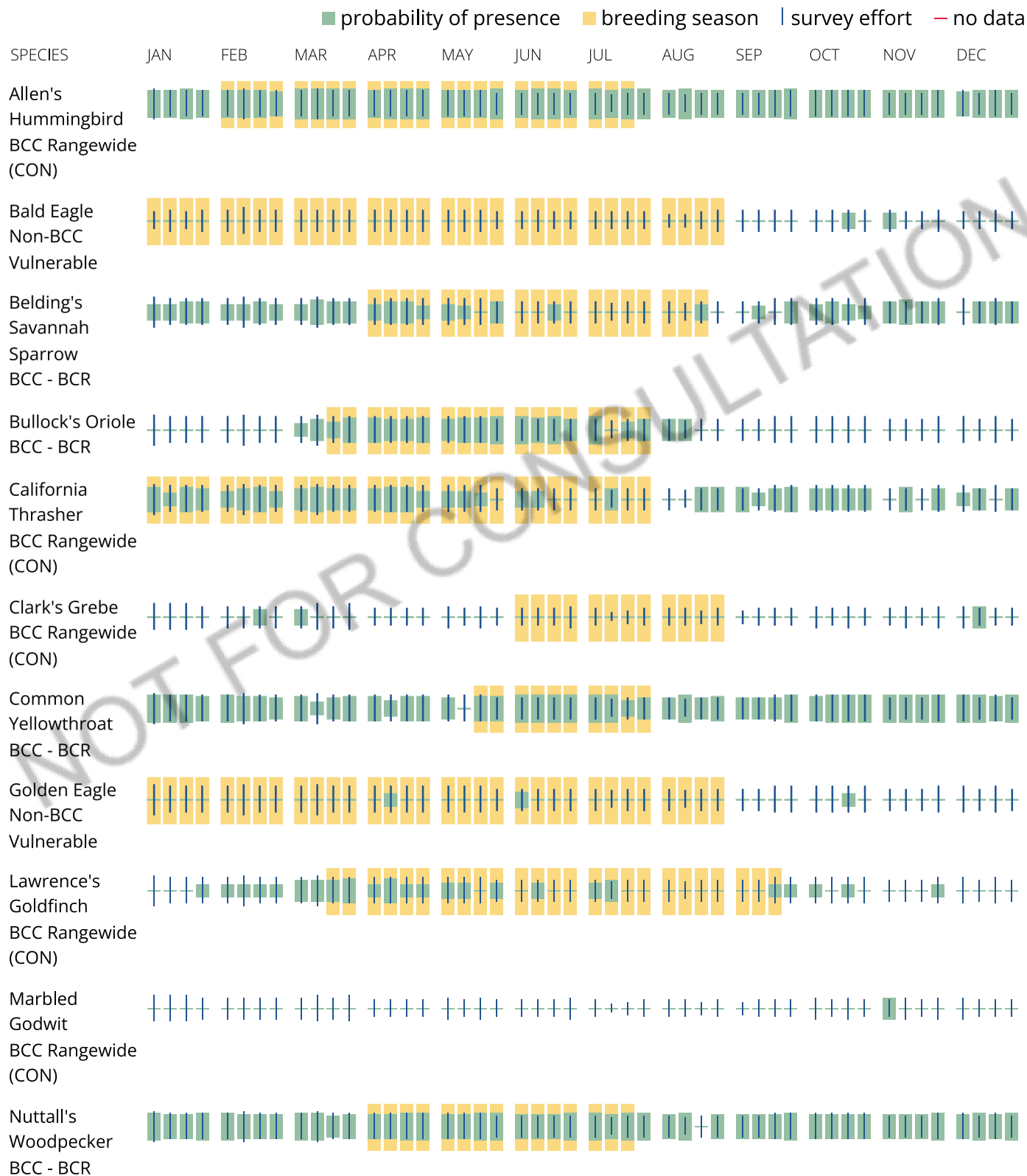
### No Data (—)

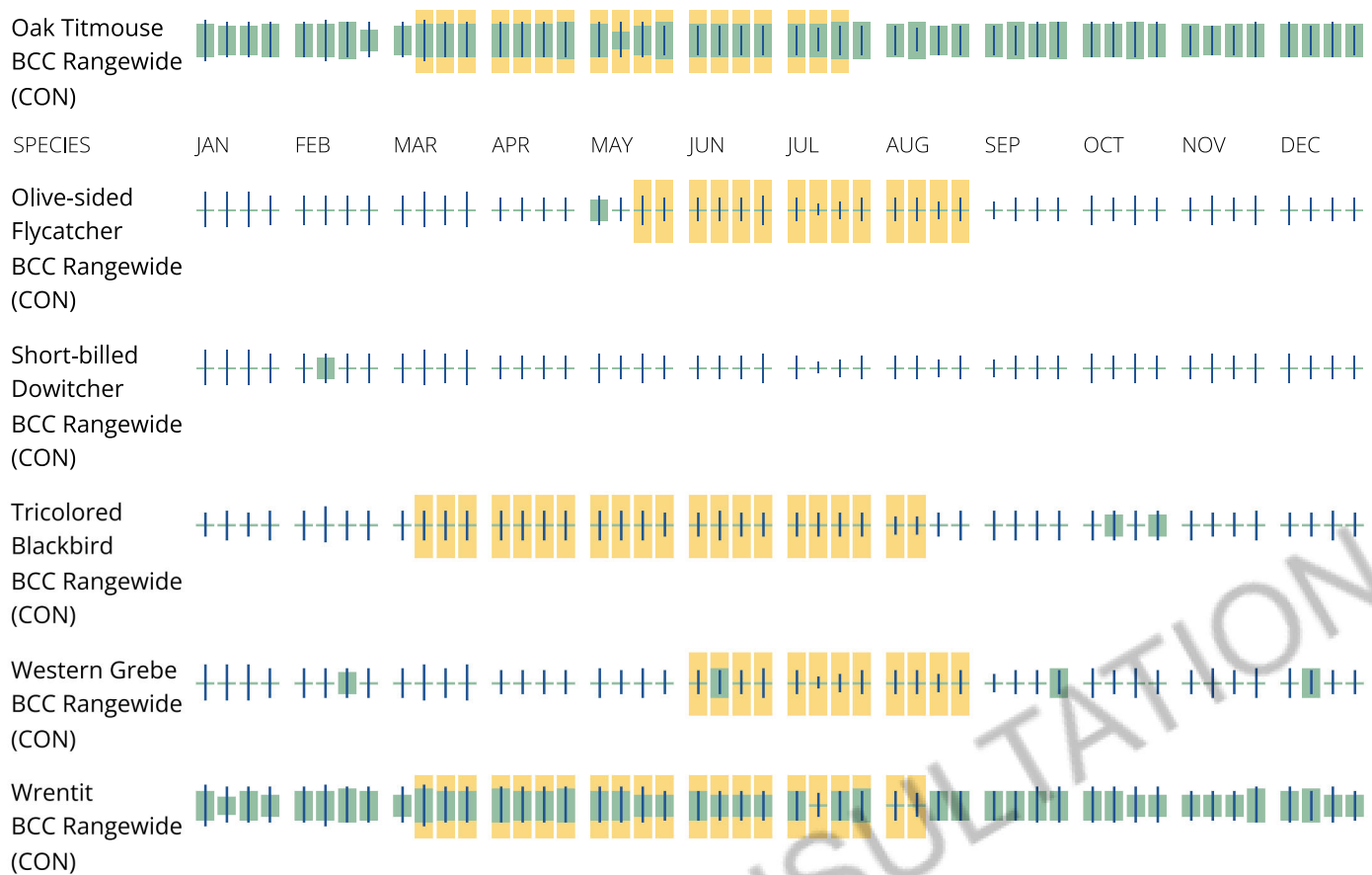


A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to

you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

### Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

### Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact [CBRA@fws.gov](mailto:CBRA@fws.gov).

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

## Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

County of Ventura Locally Important Species Lists



## Ventura County Locally Important Species

County of Ventura • Resources Management Agency • Planning Division  
800 S. Victoria Ave., Ventura, CA 93009 • 805/654-2045 • [www.ventura.org/rma/planning](http://www.ventura.org/rma/planning)

### Definition:

The following definition for *Locally Important Species* is excerpted from the Ventura County Initial Study Assessment Guidelines.

The Ventura County General Plan defines a *Locally Important Species* as a plant or animal species that is not an endangered, threatened, or rare species, but is considered by qualified biologists to be a quality example or unique species within the County and region. The following criteria further define what local qualified biologists have determined to be *Locally Important Species*:

#### *Locally Important Plants*

- Taxa that are declining throughout the extent of their range AND have five (5) or fewer *element occurrences* in Ventura County.

#### *Locally Important Animals*

Taxa for which habitat in Ventura County is crucial for their existence either globally or in Ventura County. This includes:

- Taxa for which the population(s) in Ventura County represents 10 percent or more of the known extant global distribution; or
- Taxa for which there are five or fewer *element occurrences*, or less than 1,000 individuals, or less than 2,000 acres of habitat that sustains populations in Ventura County; or,
- Native taxa that are generally declining throughout their range or are in danger of extirpation in Ventura County.

### Lists:

Lists of species known to meet the criteria for Locally Important Plants and Locally Important Animals are found on the Planning Division's website. These lists will be updated annually. The Planning Division will solicit recommendations for additions to and removals from the lists from biologists with expertise regarding the biological resources of Ventura County (e.g., State and federal agencies, universities, qualified consulting biologists) and will compile the proposed changes to the lists and review supporting evidence provided with the recommendations against the criteria for Locally Important Species. The Planning Division will circulate the proposed changes to the Locally Important Species Lists among the biologists with expertise regarding the biological resources of Ventura County and the public for review and comment. If evidence supports the changes to the lists, the lists will be updated each January.





# Ventura County Planning Division

## 2018 Locally Important Plant List

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Abronia turbinata</i> Torr. ex S. Watson	Turbinate Sand-verbena	A/PH	Nyctaginaceae		2	Consortium of California Herbaria
<i>Acanthoscyphus parishii</i> var. <i>abramsii</i> (E.A. McGregor) Reveal [synonym: <i>Oxytheca parishii</i> var. <i>abramsii</i> ]	Abrams' Oxytheca	AH	Polygonaceae	CRPR 1B.2	4-5	Consortium of California Herbaria
<i>Acanthoscyphus parishii</i> (Parry) Small var. <i>parishii</i>	Parish Oxytheca	AH	Polygonaceae	CRPR 4.2	1	Consortium of California Herbaria
<i>Acmispon glaber</i> var. <i>brevialatus</i> (Ottley) Brouillet	Short Deerweed	PH	Fabaceae		1	Consortium of California Herbaria
<i>Acmispon heermannii</i> (Durand & Hilg.) Brouillet var. <i>heermannii</i>	Heermann Lotus or Hosackia	PH	Fabaceae		4	Consortium of California Herbaria
<i>Acmispon heermannii</i> var. <i>orbicularis</i> (A. Gray) Brouillet	Roundleaf Heermann Lotus or Hosackia	PH	Fabaceae		1	Consortium of California Herbaria
<i>Acmispon junceus</i> (Bentham) Brouillet var. <i>junceus</i>	Rush Hosackia	AH	Fabaceae		2	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Acmispon micranthus</i> (Torrey & A. Gray) Brouillet	Grab Hosackia or Lotus	AH	Fabaceae		3	Consortium of California Herbaria
<i>Acmispon parviflorus</i> (Bentham) D.D. Sokoloff	Tiny Lotus	AH	Fabaceae		2	Consortium of California Herbaria
<i>Agrostis hallii</i> Vasey	Hall's Bentgrass	PG	Poaceae		1	Consortium of California Herbaria
<i>Alisma plantago-aquaticum</i> L.	Common or Broadleaf Water-plantain	PH	Alismataceae		4	Consortium of California Herbaria
<i>Allium amplexans</i> Torrey	Narrowleaf Onion	PG	Alliaceae		1	Consortium of California Herbaria
<i>Allium denticulatum</i> (Traub) D. McNeal	Dentate Fringed Onion	PG	Alliaceae		1	Consortium of California Herbaria
<i>Allium lacunosum</i> S. Watson var. <i>lacunosum</i>	Pitted Onion	PG	Alliaceae		1	Consortium of California Herbaria
<i>Allium lacunosum</i> var. <i>davisiae</i> (M.E. Jones) D. McNeal	Davis Onion	PG	Alliaceae		1	Consortium of California Herbaria
<i>Allium monticola</i> Davidson	Mountain Onion	PG	Alliaceae		4	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Allium parryi</i> S. Watson	Parry Fringed Onion	PG	Alliaceae		3	Consortium of California Herbaria
<i>Allium praecox</i> Brandegee	Early Onion	PG	Alliaceae		4	Consortium of California Herbaria
<i>Allophyllum divaricatum</i> (Nuttall) A.D. Grant & V. Grant	Divaricate Allophyllum	AH	Polemoniaceae		4	Consortium of California Herbaria
<i>Allophyllum gilioides</i> (Benth) A.D. Grant & V. Grant subsp. <i>gilioides</i>	Stragglng Gilia	AH	Polemoniaceae		5	Consortium of California Herbaria
<i>Allophyllum integrifolium</i> (Brand) A.D. Grant & V. Grant	Sticky Allophyllum	AH	Polemoniaceae		1	Consortium of California Herbaria
<i>Alopecurus carolinianus</i> Walter	Tufted Foxtail	AG	Poaceae		1	Consortium of California Herbaria
<i>Alopecurus saccatus</i> Vasey	Pacific Foxtail	AG	Poaceae		2	Consortium of California Herbaria
<i>Amaranthus californicus</i> (Moq.) S. Watson	California Amaranth	AH	Amaranthaceae		3	Consortium of California Herbaria
<i>Amaranthus powellii</i> ssp. <i>bouchonii</i> (Thell.) Costea & Carretero	Powell Amaranth	AH	Amaranthaceae		1	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Ambrosia confertiflora</i> DC.	Weak-leaved Burweed or Bursage	PH	Asteraceae		2	Consortium of California Herbaria
<i>Ambrosia salsola</i> (T. & G. ex G.) Strother & B.G. Baldwin var. <i>salsola</i>	Burrobrush	S	Asteraceae		3	Consortium of California Herbaria
<i>Ammannia coccinea</i> Rottb.	Long-leaved or Purple Ammannia	AH	Lythraceae		3	Consortium of California Herbaria
<i>Ammannia robusta</i> Heer & Regel	Grand Redstem	AH	Lythraceae		2	Consortium of California Herbaria
<i>Amsinckia eastwoodae</i> J.F. Macbr.	Elegant Fiddleneck	AH	Boraginaceae		1	Consortium of California Herbaria
<i>Amsinckia spectabilis</i> Fisch. & C. A. Mey. var. <i>spectabilis</i>	Showy Fiddleneck	AH	Boraginaceae		1	Consortium of California Herbaria, Rancho Santa Ana Botanical Garden
<i>Amsinckia vernicosa</i> Hook. & Arn.	Vernal Fiddleneck	AH	Boraginaceae		1	Consortium of California Herbaria
<i>Andropogon glomeratus</i> var. <i>pumilus</i> Vasey ex Dewey	Bushy Bluestem	PG	Poaceae		1	Consortium of California Herbaria
<i>Androsace elongata</i> subsp. <i>acuta</i> (Greene) G. Robb.	Rock-jasmine	AH	Primulaceae		2	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Antennaria dimorpha</i> (Nuttall) Torrey & A. Gray	Low Everlasting	PH	Asteraceae		2	Consortium of California Herbaria
<i>Anthoxanthum occidentale</i> (Buckley) Veldkamp	California Sweet Grass	PG	Poaceae		1	Consortium of California Herbaria
<i>Antirrhinum nuttallianum</i> subsp. <i>subsessile</i> (A. Gray) D. Thompson	Nuttall Snapdragon	AH	Plantaginaceae		5	Consortium of California Herbaria
<i>Antirrhinum ovatum</i> Eastwood	Oval-leaved Snapdragon	AH	Plantaginaceae	CRPR 4.2	2	Consortium of California Herbaria
<i>Aphanes occidentalis</i> (Nuttall) Rydb.	Dew-cup, Lady's Mantle	AH	Rosaceae		3	Consortium of California Herbaria
<i>Aphanisma blitoides</i> Moq.	Aphanisma	S	Chenopodiaceae	CRPR 1B.2	1	Consortium of California Herbaria
<i>Aralia californica</i> S. Watson	Elk Clover, Spikenard	S	Araliaceae		3	Consortium of California Herbaria
<i>Arbutus menziesii</i> Pursh	Pacific Madrone	T	Ericaceae		5	Consortium of California Herbaria
<i>Arctostaphylos patula</i> Greene	Greenleaf Manzanita	S	Ericaceae		3	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Aristida purpurea</i> Nuttall var. <i>purpurea</i>	Purple Three-awn Grass	PG	Poaceae		1	Consortium of California Herbaria
<i>Aristida ternipes</i> var. <i>gentilis</i> (Henrard) J.S. Trent	Hook Three-awn Grass	PG	Poaceae		1	Consortium of California Herbaria
<i>Arnica discoidea</i> Benth.	Rayless or Discoid Arnica	PH	Asteraceae		1	Consortium of California Herbaria
<i>Artemisia ludoviciana</i> subsp. <i>incompta</i> (Nuttall) Keck	White Sagebrush	PH	Asteraceae		1	Consortium of California Herbaria
<i>Artemisia tridentata</i> subsp. <i>parishii</i> (Gray) H.M. Hall & Clements	Parish Great Basin Sagebrush	S	Asteraceae		3	Consortium of California Herbaria
<i>Asplenium vespertinum</i> Maxon	Western Spleenwort	PF	Aspleniaceae	CRPR 4.2	1	Consortium of California Herbaria
<i>Astragalus curtipes</i> A. Gray	Morro Milkvetch	PH	Fabaceae		2	Consortium of California Herbaria
<i>Astragalus oxyphysus</i> Gray	Robust Milkvetch	PH	Fabaceae		3	Consortium of California Herbaria
<i>Astragalus pomonensis</i> M.E. Jones	Pomona Locoweed	PH	Fabaceae		3	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i> (Rydb.) Munz	Ventura Marsh Milkvetch	PH	Fabaceae	FE, SE, CRPR 1B.1	1	Consortium of California Herbaria, Mary Carroll, Arcadis; Mary Meyer, CDFW
<i>Astragalus whitneyi</i> A. Gray var. <i>whitneyi</i>	Whitney Locoweed	PH	Fabaceae		3	Consortium of California Herbaria
<i>Atriplex argentea</i> var. <i>expansa</i> (S. Watson) S.L. Welsh & Reveal	Mojave Silverscale	PH	Chenopodiaceae		5	Consortium of California Herbaria
<i>Atriplex canescens</i> var. <i>laciniata</i> Parish in W.L. Jepson	Caleb Saltbush	S	Chenopodiaceae		1	Consortium of California Herbaria
<i>Atriplex coulteri</i> (Moq.) D. Dietr.	Coulter Saltbush	PH	Chenopodiaceae	CRPR 1B.2	3	Consortium of California Herbaria
<i>Atriplex dioica</i> Raf.	Thickleaf Orach	AH	Chenopodiaceae		4	Consortium of California Herbaria
<i>Atriplex watsonii</i> Nelson ex Abrams	Matscale	PH	Chenopodiaceae		1	Consortium of California Herbaria
<i>Baccharis malibuensis</i> Beauchamp & Henrickson	Malibu Baccharis	S	Asteraceae	CRPR 1B.1	4	Mary Meyer, CDFW, Rick Burgess, Mark Elvin, USFWS
<i>Baccharis salicina</i> Torrey & A. Gray	Emory Baccharis	S	Asteraceae		1	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Batis maritima</i> L.	Saltwort, Beachwort	S	Bataceae		3	Consortium of California Herbaria
<i>Berberis aquifolium</i> var. <i>dictyota</i> Jeps.	Dull-leaf or Jepson Holly-leaved Barberry	S	Berberidiaceae		3	Consortium of California Herbaria
<i>Berberis pinnata</i> Lagasca subsp. <i>pinnata</i>	Pinnate-leaved Barberry	S	Berberidiaceae		2	Consortium of California Herbaria
<i>Bidens frondosa</i> L.	Sticktight	AH	Asteraceae		2	Consortium of California Herbaria
<i>Boechera breweri</i> (S. Watson) Al-Shehbaz var. <i>breweri</i>	Brewer Rock Cress	PH	Brassicaceae		2	Consortium of California Herbaria
<i>Boechera californica</i> (Rollins) Windham & Al-Shehbaz	California Rockcress	PH	Brassicaceae		1	Consortium of California Herbaria
<i>Boechera retrofracta</i> (Graham) A. Löve & D. Löve	Holboell Rock Cress	PH	Brassicaceae		1	Consortium of California Herbaria
<i>Boechera xylopoda</i> Windam & Al-Shehbaz	Desert Rock Cress	PH	Brassicaceae		4	Consortium of California Herbaria
<i>Bolboschoenus</i> [ <i>Scirpus</i> ] <i>robustus</i> (Pursh) Soják, Čas. Nár.	Seashore Bulrush	PG	Cyperaceae		3	Consortium of California Herbaria



Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Botrychium simplex</i> E. Hitchc. <i>var. simplex</i>	Least Moonwort, Little Grapefern	PF	Ophioglossaceae		1	Consortium of California Herbaria
<i>Boykinia occidentalis</i> T. & G.	Santa Lucia Brookfoam	PH	Saxifragaceae		4	Consortium of California Herbaria
<i>Boykinia rotundifolia</i> C. Parry	Roundleaved Boykinia	PH	Saxifragaceae		4	Consortium of California Herbaria; Tarja Sagar, NPS
<i>Bromus orcuttianus</i> (Shear) A. Hitchc.	Orcutt Brome	PG	Poaceae		3	Consortium of California Herbaria
<i>Bromus porteri</i> (J.M. Coult.) Nash	Nodding Brome	PG	Poaceae		1	Consortium of California Herbaria
<i>California macrophylla</i> (H. & A.) Aldas., C. Navarro, P. Vargas, Ll. Saez & Aedo	Largeleaf Filaree	AH	Geraniaceae	CRPR 1B.1	2	Consortium of California Herbaria
<i>Callitriche marginata</i> Torrey	California Water-starwort, Wallow Starwort	PH	Plantaginaceae		3	Consortium of California Herbaria; Tarja Sagar, NPS
<i>Calochortus clavatus</i> subsp. <i>gracilis</i> Ownby	Slender Club-haired Mariposa Lily	PG	Liliaceae	CRPR 1B.2	4	Consortium of California Herbaria
<i>Calochortus fimbriatus</i> H.P. McDonald	Weed's Mariposa Lily	PG	Liliaceae	CRPR 1B.2	5	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Calochortus palmeri</i> S. Watson <i>var. palmeri</i>	Palmer Mariposa Lily	PG	Liliaceae	CRPR 1B.2	5	Consortium of California Herbaria
<i>Calochortus plummerae</i> Greene	Plummer Mariposa Lily	PG	Liliaceae	CRPR 1B.2	4	Consortium of California Herbaria
<i>Calystegia malacophylla</i> (E. Greene) Munz <i>subsp. malacophylla</i>	Sierra Morning-glory	PV	Convolvulaceae		1	Consortium of California Herbaria
<i>Calystegia occidentalis subsp. fulrata</i> (Gray) Brummitt	Western Morning-glory	PV	Convolvulaceae		1	Consortium of California Herbaria
<i>Calystegia peirsonii</i> (Abrams) Brummitt	Peirson's Morning-glory	PV	Convolvulaceae	CRPR 4.2	1	Consortium of California Herbaria
<i>Camissonia contorta</i> (Douglas) P.H. Raven	Contorted Primrose	AH	Onagraceae		2	Consortium of California Herbaria
<i>Camissoniopsis pallida</i> (Abrams) W.L. Wagner & Hoch <i>subsp. pallida</i>	Pale Primrose	AH	Onagraceae		4	Consortium of California Herbaria
<i>Cardamine pachystigma</i> (S. Watson) Rollins <i>var. pachystigma</i>	Toothwort	PH	Brassicaceae		4	Consortium of California Herbaria
<i>Cardionema ramosissimum</i> (Weinm.) A. Mels. & J.F. Macbr.	Sand Mat	PH	Caryophyllaceae		4	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Carex athrostachya</i> Olney	Slender-beaked Sedge	PG	Cyperaceae		2	Consortium of California Herbaria
<i>Carex aurea</i> Nuttall	Golden-fruited Sedge	PG	Cyperaceae		2	Consortium of California Herbaria
<i>Carex barbarae</i> Dewey	Santa Barbara Sedge	PG	Cyperaceae		5	Consortium of California Herbaria
<i>Carex brainerdii</i> Mack.	Brainard Sedge	PG	Cyperaceae		1	UC Berkeley Herbarium
<i>Carex densa</i> L. Bailey	Dense Sedge	PG	Cyperaceae		3	Consortium of California Herbaria
<i>Carex fracta</i> Mackenzie	Fragile-sheathed Sedge	PG	Cyperaceae		2	Consortium of California Herbaria, David Magney
<i>Carex globosa</i> Boott	Round-fruited Sedge	PG	Cyperaceae		3-4	Consortium of California Herbaria
<i>Carex hassei</i> L. Bailey	Hasse Sedge	PG	Cyperaceae		2	Consortium of California Herbaria
<i>Carex multicaulis</i> L. Bailey	Many-stemmed Sedge	PG	Cyperaceae		1	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Carex nebrascensis</i> Dewey	Nebraska Sedge	PG	Cyperaceae		1	Consortium of California Herbaria
<i>Carex pansa</i> L. Bailey	Sand Dune Sedge	PG	Cyperaceae		2	Consortium of California Herbaria
<i>Carex pellita</i> Muhl. ex Willd.	Woolly Sedge	PG	Cyperaceae		2	Consortium of California Herbaria
<i>Carex rossii</i> Boott	Ross Sedge	PG	Cyperaceae		3	Consortium of California Herbaria
<i>Carex schottii</i> Dewey	Schott Sedge	PG	Cyperaceae		1	Consortium of California Herbaria
<i>Carex spissa</i> L. Bailey	San Diego Sedge	PG	Cyperaceae		1	Consortium of California Herbaria
<i>Castilleja attenuata</i> (Gray) Chuang & Heckard	Valley Tassels	AH	Orobanchaceae		2	Consortium of California Herbaria
<i>Castilleja plagiotoma</i> A. Gray	Mojave Indian Paintbrush	PH	Orobanchaceae	CRPR 4.3	2	Consortium of California Herbaria
<i>Castilleja tenuis</i> (A.A. Heller) Chuang & Heckard	Bristle Owl's Clover	AH	Orobanchaceae		1	Consortium of California Herbaria, Rick Burgess

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Caulanthus californicus</i> (S. Watson) Payson	California Jewelflower	AH	Brassicaceae	FE, SE	1	Consortium of California Herbaria
<i>Caulanthus heterophyllus</i> (Nutt.) Payson	Different-leaved Jewelflower	AH	Brassicaceae		4	Consortium of California Herbaria
<i>Caulanthus inflatus</i> S. Watson	Desert Candle	AH	Brassicaceae		3	Consortium of California Herbaria
<i>Caulanthus lemmonii</i> S. Watson	Lemmon Jewelflower	AH	Brassicaceae	CRPR 1B.2	3	Consortium of California Herbaria
<i>Ceanothus cuneatus</i> var. <i>ramulosus</i> Greene	Coast Ceanothus	S	Rhamnaceae		1	Consortium of California Herbaria
<i>Centromadia parryi</i> subsp. <i>australis</i> (Keck) B.G. Baldwin	Southern Tarplant	AH	Asteraceae	CRPR 1B.1	3	Consortium of California Herbaria
<i>Chaenactis fremontii</i> A. Gray	Desert Pincushion	AH	Asteraceae		2	Consortium of California Herbaria
<i>Chaenactis glabriuscula</i> var. <i>heterocarpha</i> (A. Gray) H.M. Hall	Different-seeded Yellow Pincushion	AH	Asteraceae		2	Consortium of California Herbaria
<i>Chaenactis glabriuscula</i> var. <i>megacephala</i> A. Gray	Big-flowered Yellow Pincushion	AH	Asteraceae		4	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Chamaesyce melanadenia</i> (Torrey) Milsp.	Squaw Spurge	PH	Euphorbiaceae		3	Consortium of California Herbaria
<i>Chamaesyce micromera</i> (Engelm.) Wootton & Standl.	Sonoran Spurge	AH	Euphorbiaceae		1	Consortium of California Herbaria
<i>Chamaesyce ocellate</i> (Durand & Hilg.) Millsp. <i>subsp. ocellata</i>	Littleeye Spurge	AH	Euphorbiaceae		2	Consortium of California Herbaria
<i>Cheilanthes clevelandii</i> D.C. Eaton.	Cleveland Lip-fern	PF	Pteridaceae		3	Consortium of California Herbaria
<i>Cheilanthes cooperae</i> D.C. Eaton	Mrs. Cooper Lip-fern	PF	Pteridaceae		2	Consortium of California Herbaria
<i>Cheilanthes newberryi</i> (D.C. Eaton) Domin	Cotton Fern	PF	Pteridaceae		4	Consortium of California Herbaria
<i>Chenopodium berlandieri</i> Moq. <i>var. zschackei</i> (Murr) Graebn.	Pitseed Goosefoot	AH	Chenopodiaceae		5	Consortium of California Herbaria
<i>Chenopodium desiccatum</i> A. Nelson	Aridland Goosefoot	AH	Chenopodiaceae		2	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Chloropyron maritimum</i> (Nutt. ex Benth.) <i>subsp. maritimum</i>	Saltmarsh Birds-beak	AH	Orobanchaceae	CRPR 1B.1, FE, SE	1	Consortium of California Herbaria
<i>Chorizanthe brevicornu</i> Torr. <i>var. brevicornu</i>	Brittle Spineflower	AH	Polygonaceae		1	Consortium of California Herbaria
<i>Chorizanthe clevelandii</i> C. Parry	Cleveland Spineflower	AH	Polygonaceae		4	Consortium of California Herbaria
<i>Chorizanthe membranacea</i> Benth.	Pink Spineflower	AH	Polygonaceae		1	Consortium of California Herbaria
<i>Chorizanthe parryi</i> <i>var. fernandina</i> (S. Watson) Jeps.	San Fernando Valley Spineflower	AH	Polygonaceae	SE, CRPR 1B.1	1	Consortium of California Herbaria
<i>Chorizanthe uniaristata</i> T. & G.	One-awned Spineflower	AH	Polygonaceae		4	Consortium of California Herbaria
<i>Chrysothamnus viscidiflorus</i> (Hook.) Nutt. <i>subsp. viscidiflorus</i>	Yellow Rabbitbrush	S	Asteraceae		2	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Cicuta douglasii</i> (DC.) Coulter & Rose	Western Water-hemlock	PH	Apiaceae		3	Consortium of California Herbaria
<i>Cirsium scariosum</i> Nutt. var. <i>citrinum</i> (Petr.) D.J. Keil	Southern Meadow Thistle	BH	Asteraceae		3	Consortium of California Herbaria
<i>Cistanthe maritima</i> (Nutt.) Hershk.	Seaside Redmaids	AH	Montiaceae	CRPR 4.2	2	Consortium of California Herbaria
<i>Clarkia affinis</i> Lewis & Lewis	Hairy Clarkia	AH	Onagraceae		4	Consortium of California Herbaria
<i>Clarkia dudleyana</i> (Abrams) J.F. Macbr.	Dudley Godetia	AH	Onagraceae		5	Consortium of California Herbaria
<i>Clarkia modesta</i> Jeps.	Modest Clarkia	AH	Onagraceae		2	Consortium of California Herbaria
<i>Clarkia purpurea</i> subsp. <i>viminea</i> (Douglas) Lewis & Lewis	Large Purple Clarkia	AH	Onagraceae		1	Consortium of California Herbaria
<i>Clarkia xantiana</i> Gray subsp. <i>xantiana</i>	Xantus Clarkia	AH	Onagraceae		1	H.M. Hall, Rick Burgess
<i>Clinopodium douglasii</i> (Benth.) Kuntze	Yerba Buena	PH	Lamiaceae		4-5	Consortium of California Herbaria



Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Clinopodium mimuloides</i> Kuntze	Monkeyflower Yerba Buena	PH/S	Lamiaceae	CRPR 4.2	1	Consortium of California Herbaria
<i>Collinsia parviflora</i> Lindley	Blue-eyed Mary, Blue Lips	AH	Plantaginaceae		2	Consortium of California Herbaria
<i>Collomia tinctoria</i> Kellogg	Yellow-staining Collomia	AH	Polemoniaceae		3	Consortium of California Herbaria
<i>Comarostaphylis diversifolia</i> subsp. <i>planifolia</i> (Jeps.) G.D. Wallace	Simpleleaf Summer Holly	S	Ericaceae		2	Consortium of California Herbaria
<i>Cornus sericea</i> L. subsp. <i>sericea</i>	American or Creek Dogwood	S	Cornaceae		3	Consortium of California Herbaria
<i>Crassula aquatica</i> (L.) Schönl.	Water Pigmy-Weed	AH	Crassulaceae		1	Consortium of California Herbaria
<i>Crepis acuminata</i> Nuttall	Long-leaved Hawksbeard	PH	Asteraceae		4	Consortium of California Herbaria
<i>Cryptantha affinis</i> (A. Gray) Greene	Side-grooved Forget-Me-Not	AH	Boraginaceae		2	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Cryptantha flaccida</i> (Lehm.) Greene	Flaccid Forget-Me-Not	AH	Boraginaceae		4	Consortium of California Herbaria
<i>Cryptantha leiocarpa</i> (Fisch. & C. Meyer) Greene	Coast Forget-Me-Not	AH	Boraginaceae		4	Consortium of California Herbaria
<i>Cryptantha pterocarya</i> (Torr.) Greene var. <i>pterocarya</i>	Wing-nut Forget-Me-Not	AH	Boraginaceae		1	Consortium of California Herbaria
<i>Cryptantha sparsiflora</i> (Greene) Greene	Few-flowered Forget-Me-Not	AH	Boraginaceae		4	Consortium of California Herbaria
<i>Cucurbita palmata</i> S. Watson	Coyote Melon	PV	Cucurbitaceae		1	Consortium of California Herbaria
<i>Cycladenia humilis</i> var. <i>venusta</i> (Eastwood) Munz	Elegant Cycladenia	PH	Apocynaceae		1	Consortium of California Herbaria
<i>Cylindropuntia californica</i> (Torr. & A. Gray) F.M. Knuth var. <i>parkeri</i> (J.M. Coult.) Pinkava	Cane Cholla	S	Cactaceae		2	Consortium of California Herbaria
<i>Cyperus acuminatus</i> Torrey & Hooker	Short-pointed Umbrella-sedge	AG	Cyperaceae		2	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Cyperus erythrorhizos</i> Muhlenb.	Red-root Flatsedge	AG	Cyperaceae		1	Consortium of California Herbaria
<i>Cyperus laevigatus</i> L.	Smooth Flatsedge	PG	Cyperaceae		2	Consortium of California Herbaria, David Magney, Carl Wishner
<i>Cyperus odoratus</i> L.	Flatsedge	AG	Cyperaceae		2	Consortium of California Herbaria, Tarja Sagar
<i>Cyperus squarrosus</i> L.	Awned Flatsedge	PG	Cyperaceae		1	Consortium of California Herbaria
<i>Danthonia unispicata</i> (Thurb.) Vasey	One-spike Oat Grass	PG	Poaceae		1	Consortium of California Herbaria
<i>Deinandra paniculata</i> (A. Gray) Davidson & Moxley	Paniculate Tarplant	AH	Asteraceae		1	Consortium of California Herbaria
<i>Delphinium gracilentum</i> Greene	Coast Larkspur	PH	Ranunculaceae		5	Consortium of California Herbaria
<i>Delphinium hesperium</i> A. Gray subsp. <i>hesperium</i>	Western Larkspur	PH	Ranunculaceae		2	Consortium of California Herbaria
<i>Delphinium gypsophilum</i> Ewan subsp. <i>gypsophilum</i>	Gypsum Larkspur	PH	Ranunculaceae	CRPR 4.2	5	Consortium of California Herbaria

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<i>Delphinium inopinum</i> (Jeps.) H.F. Lewis & Epling	Unexpected Larkspur	PH	Ranunculaceae	CRPR 4.3	4	Consortium of California Herbaria
<i>Delphinium umbracolorum</i> H.F. Lewis & Epling	Umbrella Larkspur	PH	Ranunculaceae	CRPR 1B.3	3	Consortium of California Herbaria
<i>Deschampsia cespitosa</i> (L.) Beauv. <i>subsp. cespitosa</i>	Tufted Hairgrass	PG	Poaceae		3	Consortium of California Herbaria
<i>Descurainia californica</i> (A. Gray) O.E. Schulz	California Tansy Mustard	AH	Brassicaceae		2	Consortium of California Herbaria
<i>Dicentra pauciflora</i> S. Watson	Few-flowered Bleeding Heart	PH	Fumariaceae		1	Consortium of California Herbaria
<i>Dichondra occidentalis</i> House	Western Dichondra	PH	Convolvulaceae	CRPR 4.2	4	Consortium of California Herbaria; Rick Burgess; Tarja Sagar, NPS
<i>Diplacus rutilus</i> [A. Grant] McMinn	Red Sticky Bush Monkeyflower	S	Phrymaceae		1	Consortium of California Herbaria, Rick Burgess
<i>Distichlis littoralis</i> (Engelm.) H.L. Bell & Columbus	Shoregrass	PG	Poaceae		1	Consortium of California Herbaria
<i>Dodecatheon alpinum</i> (A. Gray) Greene	Alpine Shooting Star	PH	Primulaceae		2	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Dodecatheon clevelandii</i> subsp. <i>patulum</i> (Greene) H.J. Thompson	Lowland Padre Shooting Star	PH	Primulaceae		1	Consortium of California Herbaria
<i>Downingia bella</i> Hoover	Hoover Downingia	AH	Lobeliaceae		1	Consortium of California Herbaria
<i>Dudleya caespitosa</i> (Haw.) Britton & Rose	Sea Lettuce	PH	Crassulaceae		4	Consortium of California Herbaria
<i>Dudleya cymosa</i> subsp. <i>agourensis</i> K.M. Nakai	Agoura Hills Live-forever	PH	Crassulaceae	FT, CRPR 1B.2	1	Tarja Sagar, NPS; Stephen McCabe, UCSB Arboretum; Rick Burgess, David Magney
<i>Dudleya cymosa</i> (Lem.) Britton & Rose subsp. <i>cymosa</i>	Canyon Live-forever	PH	Crassulaceae		1	Tarja Sagar, NPS; Stephen McCabe, UCSB Arboretum; David Magney
<i>Dudleya cymosa</i> subsp. <i>marcescens</i> Moran	Marcescent Live-forever	PH	Crassulaceae	FT, SR, CRPR 1B.2	5	Consortium of California Herbaria; Tarja Sagar, NPS
<i>Dudleya parva</i> Rose & Davidson	Conejo Live-forever	PH	Crassulaceae	FT, CRPR 1B.2	1	Consortium of California Herbaria; Tarja Sagar, NPS; Stephen McCabe, UCSB Arboretum
<i>Dudleya verityi</i> K.M. Nakai	Verity Live-forever	PH	Crassulaceae	FT, CRPR 1B.2	1	Consortium of California Herbaria; Tarja Sagar, NPS; Stephen McCabe, UCSB Arboretum

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<i>Eastwoodia elegans</i> Brandegee	Yellow Mock Aster	S	Asteraceae		2	Consortium of California Herbaria
<i>Elatine brachysperma</i> Gray	Slender Waterwort	AH	Elatinaceae		1	Consortium of California Herbaria
<i>Elatine californica</i> Gray	California Waterwort	AH	Elatinaceae		1	Consortium of California Herbaria
<i>Eleocharis acicularis</i> var. <i>gracilescens</i> Svenson	Graceful Spikerush	PG	Cyperaceae		1	Consortium of California Herbaria
<i>Eleocharis bella</i> (Piper) Svenson	Bella Spikerush	PG	Cyperaceae		1	Consortium of California Herbaria
<i>Eleocharis bernardina</i> Munz & Johnston	Few-flowered Clubrush	PG	Cyperaceae		3	Consortium of California Herbaria
<i>Eleocharis quinqueflora</i> (Hartmann) O. Schwarz	Few-flowered Spikerush	PG	Cyperaceae		1	Consortium of California Herbaria, Rick Burgess, David Magney
<i>Eleocharis rostellata</i> (Torrey) Torrey	Beaked Spikerush	PG	Cyperaceae		4	Consortium of California Herbaria
<i>Eleocharis suksdorfiana</i> Beauv.	Suksdorf's Spikerush	PG	Cyperaceae		2	Consortium of California Herbaria, David Magney
<i>Elodea canadensis</i> Rich.	Common Waterweed	PG	Hydrocharitaceae		1	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Elymus cinereus</i> Scribn. & Merr.	Great Basin Wildrye	PG	Poaceae		1	Consortium of California Herbaria, Rick Burgess
<i>Elymus glaucus</i> subsp. <i>jepsonii</i> (Burt Davy) Gould	Jepson Blue or Woodland Wildrye	PG	Poaceae		4	Consortium of California Herbaria
<i>Elymus stebbinsii</i> (Scribner & J.G. Smith) Gould	Wheatgrass	PG	Poaceae		5	Consortium of California Herbaria
<i>Emmenanthe penduliflora</i> var. <i>rosea</i> Brand	Rose Whispering Bells	AH	Boraginaceae		1	Consortium of California Herbaria
<i>Ephedra californica</i> S. Watson	California Desert Tea, Cañatillo	S	Ephedraceae		3	Consortium of California Herbaria
<i>Epilobium ciliatum</i> subsp. <i>glandulosum</i> (Lehm.) P. Hoch & Raven	Sticky Northern Willow-herb	AH	Onagraceae		4	Consortium of California Herbaria
<i>Epilobium densiflorum</i> (Lindley) P. Hoch & Raven	Dense-flowered Spike-primrose	AH	Onagraceae		3	Consortium of California Herbaria
<i>Epilobium foliosum</i> (Torrey & A. Gray) Suksd.	Leafy Spike-primrose	AH	Onagraceae		2	Consortium of California Herbaria
<i>Epilobium glaberrimum</i> Barbey subsp. <i>glaberrimum</i>	Waxy Willow-herb	AH	Onagraceae		4	Consortium of California Herbaria, Rick Burgess

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<i>Epilobium halleanum</i> Hausskn.	Gland Willow-herb	PH	Onagraceae		2	Consortium of California Herbaria
<i>Epilobium minutum</i> Lindley ex Lehm.	Chaparral Willowherb	AH	Onagraceae		1	Consortium of California Herbaria
<i>Eragrostis pectinacea</i> var. <i>miserrima</i> (Fourn.) Reeder	Spreading Tufted Lovegrass	AG	Poaceae		1	Consortium of California Herbaria
<i>Eriastrum hooveri</i> (Jepson) H. Mason	Hoover Woolly Star	AH	Polemoniaceae		1 on County Boundary	Consortium of California Herbaria
<i>Ericameria cooperi</i> (Gray) H.M. Hall var. <i>cooperi</i>	Cooper Goldenbush	S	Asteraceae		2	Consortium of California Herbaria
<i>Ericameria parryi</i> var. <i>aspera</i> (Greene) G.L. Nesom & G.I. Baird	Parry Rabbitbrush	S	Asteraceae		3	Consortium of California Herbaria
<i>Eriogonum crocatum</i> Davidson	Conejo or Saffron Buckwheat	S	Polygonaceae	SR, CRPR 1B.2	3	Consortium of California Herbaria
<i>Eriogonum kennedyi</i> var. <i>alpigenum</i> (Munz & Johnston) Munz & Johnston	Alpine Kennedy Buckwheat	PH	Polygonaceae	CRPR 1B.3	1	Consortium of California Herbaria



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<i>Eriogonum thurberi</i> Torrey	Thurber's Wild Buckwheat	AH	Polygonaceae		1	Consortium of California Herbaria
<i>Eriogonum wrightii</i> var. <i>membranaceum</i> Jeps.	Sheathed Wright Buckwheat	S	Polygonaceae		1	Consortium of California Herbaria, Rick Burgess
<i>Eryngium vaseyi</i> J. Coulter & Rose	Coyote Thistle	PH	Apiaceae		1	Consortium of California Herbaria
<i>Erysimum insulare</i> Greene	Island Wallflower	AH/BH	Brassicaceae		2	Consortium of California Herbaria
<i>Euphorbia polycarpa</i> var. <i>hirtella</i> Benth.	Hairy Golondrina	PH	Euphorbiaceae		1	Consortium of California Herbaria
<i>Galium californicum</i> Hooker & Arnott <i>subsp. californicum</i>	California Bedstraw	PH	Rubiaceae			UCSB Herbarium, David Magney
<i>Galium californicum</i> <i>ssp. flaccidum</i> (E. Greene) Dempster & Stebb.	California Bedstraw	PH	Rubiaceae		2	Consortium of California Herbaria
<i>Galium cliftonsmithii</i> (Dempster) Dempster & Stebb.	Santa Barbara Bedstraw	PH	Rubiaceae	CRPR 4.3	1	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Galium triflorum</i> Michaux	Sweet-scented Bedstraw	PH	Rubiaceae		2	Consortium of California Herbaria
<i>Gamochaeta ustulata</i> (Nutt.) Holub	Gamochaeta	BH	Asteraceae		1	Consortium of California Herbaria
<i>Garrya elliptica</i> Lindley	Silk-tassel Bush	S	Garryaceae		2-3	Consortium of California Herbaria
<i>Geranium californicum</i> G Jones & F. Jones	California Geranium	PH	Geraniaceae		1	Consortium of California Herbaria
<i>Gilia latiflora</i> subsp. <i>Davyi</i> (Milliken) A. & V. Grant	Davy Broad-flowered Gilia	AH	Polemoniaceae		3	Consortium of California Herbaria
<i>Hesperevax acaulis</i> var. <i>robustior</i> Morefield	Robust Dwarf Evax	AH	Asteraceae		2	Consortium of California Herbaria
<i>Hesperochiron californicus</i> (Benth.) S. Watson	California Hesperochiron	PH	Boraginaceae		5	Consortium of California Herbaria
<i>Heterotheca subaxillaris</i> ssp. <i>latifolia</i> (Buckley) Semple	False Goldenaster	AH/BH	Asteraceae		1	Consortium of California Herbaria
<i>Heuchera caespitosa</i> Eastw.	Urn-flowered Alumroot	PH	Saxifragaceae	CRPR 4.3	1	Consortium of California Herbaria

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<i>Hieracium albiflorum</i> Hooker	White-flowered Hawkweed	PH	Asteraceae		2	Consortium of California Herbaria, Rick Burgess
<i>Hordeum brachyantherum</i> subsp <i>brachyantherum</i> Nevski	Meadow Barley	AG	Poaceae		2	Consortium of California Herbaria
<i>Hornungia procumbens</i> (L.) Hayek	Prostate Hutchinsia	AH	Brassicaceae		1	Consortium of California Herbaria
<i>Hulsea vestita</i> subsp. <i>gabrielensis</i> Wilken	San Gabriel Hulsea	PH	Asteraceae	CRPR 4.3	2	Consortium of California Herbaria
<i>Hydrocotyle verticillata</i> Thunb.	Marsh Pennywort	PH	Araliaceae		4	Consortium of California Herbaria
<i>Imperata brevifolia</i> Vasey	Satintail	PG	Poaceae	CRPR 2.1	2	Consortium of California Herbaria
<i>Isoetes howellii</i> Engelm.	Howell Quillwort	PF	Isoetaceae		1	Consortium of California Herbaria
<i>Juncus macrandrus</i> Cov.	Long-anthered Rush	PG	Juncaceae		2	Consortium of California Herbaria
<i>Juncus patens</i> E. Meyer	Spreading Rush	PG	Juncaceae		5	Consortium of California Herbaria
<i>Kopsiopsis strobilacea</i> Gray	California Ground Cone	PH	Orobanchaceae		5	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Lasthenia ferrisiae</i> Ornduff	Ferris Goldfields	AH	Asteraceae	CRPR 4.2	2	Consortium of California Herbaria
<i>Lasthenia glabrata</i> subsp. <i>coulteri</i> (Gray) Ornduff	Coulter's Goldfields	AH	Asteraceae	CRPR 1B.1	3	Consortium of California Herbaria
<i>Lemna aequinoctialis</i> Welw	Lesser Duckweed	AG	Araceae		1	Consortium of California Herbaria
<i>Lemna minor</i> L.	Duckweed	AG	Araceae		2	Consortium of California Herbaria
<i>Lemna turionifera</i> Landolt	Duckweed	AG	Araceae		4	Consortium of California Herbaria
<i>Lepidium dictyotum</i> A. Gray	Alkali Pepperwort	AH	Brassicaceae		1	Consortium of California Herbaria
<i>Lessingia glandulifera</i> var. <i>peirsonii</i> (J.T. Howell) Markos	Peirson Lessingia	AH	Asteraceae		1	Consortium of California Herbaria
<i>Limosella aquatica</i> L.	Mudwort	AH	Plantaginaceae		1	Consortium of California Herbaria
<i>Logfia depressa</i> (A.Gray) Holub	Low Berbia Impia	AH	Asteraceae		1	UCSB Herbarium, David Magney and Rick Burgess

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<i>Lomatium caruifolium</i> (H. & A.) J.M. Coult. & Rose var. <i>caruifolium</i>	Alkali Desert parsley	PH	Apiaceae		2	UC Riverside Herbarium
<i>Lycium andersonii</i> Gray	Anderson Desert-thorn	S	Solanaceae		1	Consortium of California Herbaria
<i>Madia sativa</i> Molina	Coast Tarplant	AH	Asteraceae		4	Consortium of California Herbaria
<i>Malacothrix glabrata</i> A. Gray	Desert Dandelion	AH	Asteraceae		2	Consortium of California Herbaria
<i>Malacothrix incana</i> (Nuttall) Torrey & A. Gray	Dunedelion	PH	Asteraceae	CRPR 4.3	0 (historical occurrences in County)	Consortium of California Herbaria
<i>Marsilea vestita</i> Hooker & Greville subsp. <i>vestita</i>	Hairy Pepperwort, Clover Fern	PF	Marsiliaceae		3	Consortium of California Herbaria
<i>Meconella denticulata</i> Greene	Tiny Poppy	AH	Papaveraceae		5	Consortium of California Herbaria
<i>Microseris douglasii</i> (DC.) Schultz-Bip. ssp. <i>douglasii</i>	Douglas Microseris	AH	Asteraceae		3	Consortium of California Herbaria
<i>Microseris douglasii</i> ssp. <i>tenella</i> (A. Gray) Chambers	Slender Douglas Microseris	AH	Asteraceae		1	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Mirabilis multiflora</i> var. <i>pubescens</i> S. Watson	Froebel Four O'Clock	PH	Nyctaginaceae		2	Consortium of California Herbaria
<i>Monardella sinuata</i> subsp. <i>sinuata</i> Elvin & A.C. Sanders	Curly-leaved Horsemint	PH	Lamiaceae		2	Consortium of California Herbaria; Mark Elvin, USFWS
<i>Morella californica</i> (Cham. & Schltld.) Wilbur [synonym: <i>Myrica californica</i> ]	California Wax-Myrtle, Pacific Bayberry	S	Myricaceae		1	Consortium of California Herbaria
<i>Mucronea californica</i> Benth.	California Spineflower	AH	Polygonaceae	CRPR 4.2	2	Consortium of California Herbaria
<i>Myosurus minimus</i> L.	Common Mousetails	AH	Ranunculaceae		1	Consortium of California Herbaria
<i>Navarretia peninsularis</i> Greene	Southern California Navarretia	AH	Polemoniaceae		3	Consortium of California Herbaria
<i>Nemacladus capillaris</i> Greene	Common Nemacladus	AH	Campanulaceae		1	Consortium of California Herbaria
<i>Opuntia basilaris</i> Engelm. & J. Bigelow var. <i>basilaris</i>	Beavertail Cactus	S	Cactaceae		1	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Orcuttia californica</i> Vasey	California Orcutt Grass	AG	Poaceae	FE, SE, CRPR 1B.2	1	Consortium of California Herbaria
<i>Orobanche valida</i> Jeps. <i>subsp. valida</i>	Rock Creek Broom-rape	PH	Orobanchaceae	CRPR 1B.2	1	Consortium of California Herbaria
<i>Papaver californicum</i> Gray	Wind or Fire Poppy	AH	Papaveraceae		5	Consortium of California Herbaria
<i>Pentachaeta fragilis</i> Brandegee	Fragile Pygmy Daisy	AH	Asteraceae	CRPR 4.3	4	Consortium of California Herbaria
<i>Perityle emoryi</i> Torrey	Emory's Rock Daisy	AH	Asteraceae		1	Consortium of California Herbaria
<i>Phacelia exilis</i> (Gray) G.J. Lee	Transverse Range Phacelia	AH	Boraginaceae	CRPR 4.3	5	Consortium of California Herbaria
<i>Phacelia grisea</i> Gray	White-flowered Phacelia	AH	Boraginaceae		1	Consortium of California Herbaria
<i>Phyla lanceolata</i> (Michx.) Greene	Narrowleaf Frog-fruit	PH	Verbenaceae		1	Consortium of California Herbaria
<i>Pilularia americana</i> A. Braun	American Pillwort	PF	Marsiliaceae		2	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Pinus flexilis</i> E. James	Limber Pine	T	Pinaceae		1	Consortium of California Herbaria
<i>Pinus sabiniana</i> D. Don	Foothill or Gray Pine	T	Pinaceae		1	Consortium of California Herbaria
<i>Plagiobothrys undulates</i> (Piper) I.M. Johnston	Undulate Popcornflower	AH	Boraginaceae		1	Consortium of California Herbaria
<i>Platanthera sparsiflora</i> (S. Watson) Schltr.	Few-flowered Rein Orchid	PG	Orchidaceae		1-2	Consortium of California Herbaria
<i>Polygonum polygaloides</i> subsp. <i>kelloggii</i> (Greene) J. Hickman	Kellogg Knotweed	AH	Polygonaceae		1	Consortium of California Herbaria
<i>Polystichum imbricans</i> (D.C. Eaton) D.H. Wagner subsp. <i>imbricans</i>	Imbricate Sword Fern	PF	Dryopteridaceae		1	Consortium of California Herbaria
<i>Pseudostellaria jamesiana</i> (Torrey) W.A. Weber & R.I. Hartman	False Chickweed	PH	Caryophyllaceae		1	Consortium of California Herbaria
<i>Pyrola picta</i> Smith	White-veined Wintergreen	PH	Ericaceae		2	Consortium of California Herbaria



Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Quercus palmeri</i> Engelm.	Palmer Oak	T	Fagaceae		1	Consortium of California Herbaria
<i>Ribes amarum</i> McClatchie	Bitter Gooseberry	S	Grossulariaceae		1	Consortium of California Herbaria
<i>Ribes aureum</i> var. <i>gracillimum</i> (Cov. & Britton) Jeps.	Slender Golden Currant	S	Grossulariaceae		4	Consortium of California Herbaria
<i>Rorippa curvisiliqua</i> (Hooker) Bessey ex Britton	Curved-pod Watercress	AH	Brassicaceae		4	Consortium of California Herbaria
<i>Sagittaria sanfordii</i> Greene	Sanford Arrow-head	PH	Alismataceae	CRPR 1B.2	1	Consortium of California Herbaria
<i>Salicornia bigelovii</i> Torrey	Bigelow Pickleweed	AH	Chenopodiaceae		1	Consortium of California Herbaria
<i>Salicornia depressa</i> Standley	Pickleweed	AH	Chenopodiaceae		2	Consortium of California Herbaria
<i>Salvia carduacea</i> Benth.	Thistle Sage	PH	Lamiaceae		1	Consortium of California Herbaria
<i>Salvia dorrii</i> var. <i>pilosa</i> (Gray) Strachan & Reveal	Pilose Desert Sage	S	Lamiaceae		2	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Samolus parviflorus</i> Raf.	Seaside Brookweed	PH	Theophrastaceae		2	David Magney
<i>Schoenoplectus saximontanus</i> (Fern.) J. Raynal	Rocky Mountain Bulrush	AG	Cyperaceae		1	Consortium of California Herbaria
<i>Schoenoplectus tabernaemontani</i> (C. Gmelin) Palla	Soft-stem Bulrush	PG	Cyperaceae		3	Consortium of California Herbaria, David Magney, and Rick Burgess
<i>Senecio aphanactis</i> Greene	California Groundsel, Rayless Ragwort	AH	Asteraceae	CRPR 2.2	2	Consortium of California Herbaria
<i>Sidalcea neomexicana</i> Gray	Salt Spring Checkermallow	PH	Malvaceae	CRPR 2.2	3-4	Consortium of California Herbaria
<i>Sidotheca caryophylloides</i> Parry [synonym: <i>Oxytheca caryophylloides</i> ]	Chickweed Oxytheca	AH	Polygonaceae	CRPR 4.3	4-5	Consortium of California Herbaria
<i>Sidotheca trilobata</i> (A. Gray) Reveal [synonym: <i>Oxytheca trilobata</i> ]	Three-lobed Oxytheca	AH	Polygonaceae		1	Consortium of California Herbaria
<i>Streptanthus campestris</i> S. Watson	Southern Jewelflower	B/PH	Brassicaceae	CRPR 1B.3	1	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Suaeda esteroa</i> Ferren & Whitmore	Estuary Seablite	S	Chenopodiaceae	CRPR 1B.2	1	Consortium of California Herbaria
<i>Symphoricarpos albus</i> var. <i>laevigatus</i> (Fern.) S.F. Blake	Common Snowberry	S	Caprifoliaceae		2	Consortium of California Herbaria
<i>Symphyotrichum lanceolatum</i> var. <i>hesperium</i> (A.Gray) G.L. Nesom	Siskiyou Aster	PH	Asteraceae		2	Consortium of California Herbaria
<i>Symphyotrichum spathulatum</i> (Lindl.) G.L. Nesom var. <i>spathulatum</i>	Western Mountain Aster	PH	Asteraceae		1	Consortium of California Herbaria
<i>Syntrichopappus lemmonii</i> (A. Gray) A. Gray	Lemmon's Xerasid	AH	Asteraceae	CRPR 4.3	1	Consortium of California Herbaria
<i>Trichostema micranthum</i> Gray	Bluecurls	AH	Lamiaceae		1-2	Consortium of California Herbaria
<i>Trichostema ovatum</i> Curran	Ovate Bluecurls	AH	Lamiaceae		1	Consortium of California Herbaria
<i>Trifolium bifidum</i> var. <i>decepiens</i> E. Greene	Pinole Clover	AH	Fabaceae		1	Consortium of California Herbaria
<i>Veratrum californicum</i> Durand var. <i>californicum</i>	California False Hellebore	PG	Melanthiaceae		1	Consortium of California Herbaria

Scientific Name	Common Name	Habit	Family	Federal/State Status	Number of Occurrences in Ventura County	Source
<i>Verbena bracteata</i> Lagasca & J.D. Rodriguez	Prostrate Verbena	AH/BH	Verbenaceae		2-3	Consortium of California Herbaria
<i>Veronica serpyllifolia</i> ssp. <i>humifusa</i> (Dickson) Syme	Tyme-leaved Speedwell	AH	Plantaginaceae		2	UCSB Herbaria and Santa Barbara Botanical Garden Herbaria
<i>Yucca brevifolia</i> Engelm.	Herbert's Joshua Tree	T	Agavaceae		1 on County Boundary	Consortium of California Herbaria

Notes: Scientific nomenclature follows the Flora of North America (1993-2011). The most current taxonomy is followed when changes have occurred since publication of the above listed references, as indicated on the Jepson Herbarium's online eFlora pages (<http://ucjeps.berkeley.edu/JM.html>). Common names follow Abrams and Ferris (1960), Neihaus and Ripper (1976), and DeGarmo (1980).

Habit definitions:

AF = annual fern or fern ally  
AG = annual grass or graminoid  
AH = annual herb  
BH = biennial herb  
PF = perennial fern or fern ally  
PG = perennial grass or graminoid  
PH = perennial herb  
PV = perennial vine  
S = shrub  
T = tree

Fed/State Status definitions:

FE = Federally listed Endangered  
FT = Federally listed Threatened  
SE = California listed Endangered  
ST = California listed Threatened  
SR = California listed Rare  
CRPR = California Rare Plant Rank



# Ventura County Planning Division

## 2014 Locally Important Animal List

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Scientific Name	Common Name	Federal/State Status	Criteria Met
<b>Invertebrates</b>			
<i>Haplotrema caelatum</i>	slotted lancetooth snail		<ul style="list-style-type: none"> <li>✓ 5 or fewer element occurrences in Ventura County.</li> </ul>
<i>Helminthoglypta phlyctaena</i>	zaca shoulderband snail		<ul style="list-style-type: none"> <li>✓ 5 or fewer element occurrences within Ventura County; and</li> <li>✓ Ventura County represents 10% or more of the known range for this species.</li> </ul>
<i>Helminthoglypta salviae</i>	sage shoulderband snail		<ul style="list-style-type: none"> <li>✓ 5 or fewer element occurrences within Ventura County; and</li> <li>✓ Ventura County represents 10% or more of the entire known range.</li> </ul>
<i>Helminthoglypta venturensis</i>	ventura shoulderband snail		<ul style="list-style-type: none"> <li>✓ 5 or fewer element occurrences in Ventura County; and</li> <li>✓ Ventura County represents 10% or more of the entire known range.</li> </ul>

Scientific Name	Common Name	Federal/State Status	Criteria Met
<i>Helminthoglypta willeti</i>	Matilija shoulderband snail		<ul style="list-style-type: none"> <li>✓ Ventura County represents 10% or more of the entire known range.</li> </ul>
<i>Timema monikensis</i>	walking stick		<ul style="list-style-type: none"> <li>✓ Ventura County represents 10% or more of the entire known range;</li> <li>✓ 5 or fewer element occurrences in Ventura County; and</li> <li>✓ In danger of extirpation in Ventura County.</li> </ul>
<b>Fish</b>			
<i>Cottus asper</i>	prickly sculpin		<ul style="list-style-type: none"> <li>✓ In danger of extirpation in Ventura County; and</li> <li>✓ 5 or fewer element occurrences within Ventura County.</li> </ul>
<i>Gasterosteus aculeatus microcephalus</i>	threespine stickleback	US Forest Service: Sensitive	<ul style="list-style-type: none"> <li>✓ In danger of extirpation in Ventura County; and</li> <li>✓ 5 or fewer element occurrences in Ventura County.</li> </ul>
<i>Lampetra tridentata</i>	Pacific lamprey	American Fisheries Service: Vulnerable	<ul style="list-style-type: none"> <li>✓ Generally declining throughout its range;</li> <li>✓ In danger of extirpation in Ventura County; and</li> <li>✓ 5 or fewer element occurrences within Ventura County.</li> </ul>

Scientific Name	Common Name	Federal/State Status	Criteria Met
<b>Amphibians</b>			
<i>Aneides lugubris</i>	arboreal salamander		<ul style="list-style-type: none"> <li>✓ 5 or fewer element occurrences within Ventura County;</li> <li>✓ Generally declining throughout its range; and</li> <li>✓ In danger of extirpation within Ventura County.</li> </ul>
<b>Reptiles</b>			
<i>Arizona elegans occidentalis</i>	California glossy snake		<ul style="list-style-type: none"> <li>✓ 5 or fewer element occurrences within Ventura County; and</li> <li>✓ In danger of extirpation in Ventura County.</li> </ul>
<i>Lampropeltis zonata pulchra</i>	San Diego mountain kingsnake	California Species of Special Concern	<ul style="list-style-type: none"> <li>✓ 5 or fewer element occurrences in Ventura County; and</li> <li>✓ Generally declining throughout its range.</li> </ul>
<b>Mammals</b>			
<i>Neotamias speciosus callipeplus</i>	Mt. Pinos lodgepole chipmunk	US Forest Service: Sensitive	<ul style="list-style-type: none"> <li>✓ Ventura County represents 10% or more of the entire known range.</li> </ul>

## **Appendix F1 Cultural Resources Report**



## Appendices

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# Cultural Resources Technical Report

Existing Conditions – Draft Report

September 2020



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# 1.0 INTRODUCTION

Historic-era buildings, archaeological sites, and tribal resources (collectively, cultural resources) are scattered throughout the City of Moorpark. The opportunity for additional cultural resources to be subsequently identified in the City exists, as buildings reach the 50-year or older mark or as development under the General Plan proceeds. To better guide development in the City, the Moorpark General Plan update strategy is to identify existing and future cultural resources in the City and ensure compliance with applicable laws before they can be altered or impacted.

## 1.1 Project Location

The City of Moorpark is located in the southeastern part of Ventura County, approximately 25 miles east of the City of Ventura, approximately 10 miles north of Thousand Oaks, approximately 20 miles south of Los Padres National Forest, and adjacent to the western boundary of the City of Simi Valley. The land area within the City's boundaries is 12.47 square miles (Appendix A, Figure 1). The General Plan Area (Study Area) is located within all or portions of Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 16, 17, 18 of Township 02 North and Range 19 West; and Sections 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 of Township 03 North and Range 19 West of the United States Geological Survey (USGS) Moorpark and Simi 7.5-minute topographic quadrangles (Appendix A, Figures 1 and 2).

## 1.2 General Plan Area

The City of Moorpark General Plan Area is located in the southeastern portion of Ventura County in southern California, an approximate one-hour drive from Los Angeles to the south and Santa Barbara to the north. The City comprises just under 13 square miles of land, and encompasses approximately 7,990 acres primarily designated for residential, commercial, and industrial use. The City stretches from east of the Ronald Reagan Freeway (State Route 23) and the community of Simi Valley, west to the community of Somis, and south to the City of Thousand Oaks.

## 1.3 Project Description and Background

The City of Moorpark's General Plan was originally adopted in 1986. Although the Land Use and Circulation Elements were updated significantly in 1992, the General Plan has not been comprehensively updated since its original adoption. A majority of elements comprising the General Plan are more than 20 years old. As a result, the General Plan neither maintains an internally consistent baseline of existing conditions nor reliable projections for growth and development of the City. The City intends for the development of a comprehensive General Plan and associated Environmental Impact Report (EIR) to allow for the tiering of environmental review for future projects involving discretionary actions by the City, pursuant to Sections 15152 and 15168 of the California Environmental Quality Act (CEQA). Streamlining CEQA analysis in this manner will allow for an expedited, consistent, and predictable process for the review of the potential impacts associated with new development and major programs, as outlined by Section 21093 of the State Public Resources Code (PRC). This report summarizes the existing cultural resources that will serve as the basis for development of the comprehensive General Plan Update and associated Programmatic EIR.

## 2.0 REGULATORY REQUIREMENTS

There are many federal, state, and local regulations designed to protect cultural resources within the City, some of which have been enacted since the last General Plan update. The most commonly invoked laws and regulations are summarized below. Most of these regulations are independent of the process under CEQA. This means that the regulations apply to a cultural resource even if there is no discretionary permit that would require an environmental analysis for the overall project.

### 2.1 Federal Regulations

#### 2.1.1 *National Historic Preservation Act of 1966*

Cultural resources are considered during federal undertakings under Section 106 of National Historic Preservation Act (NHPA) of 1966 (as amended) through one of its implementing regulations (36 Code of Federal Regulations [CFR] 800, Protection of Historic Properties). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of the NHPA.

Section 106 of the NHPA (54 United States Code [USC] 300101 et seq.) requires federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of any adversely affected cultural resource is assessed and mitigation measures are proposed to reduce the impacts to a less than significant level. Significant cultural resources are those listed or are eligible for listing in the NRHP in accordance with the criteria stated in 36 CFR 60.4, which are listed below:

“The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

In addition, the resource must be at least 50 years old, except in exceptional circumstances (36 CFR 60.4)”.

Effects to NRHP-eligible resources, deemed “Historic Properties” under Section 106, are adverse if the project may alter, directly or indirectly, any of the characteristics of an historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.

## 2.2 State Regulations

### 2.2.1 California Register of Historical Resources

CEQA requires a lead agency to determine whether a project would have a significant effect on one or more historical resources. An "Historical Resource" is defined as a resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (California PRC §5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et seq.) (14 CCR 15064.5[a][1]); *"a resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code"* (14 CCR, Section 15064.5[a][2]); or *"any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record"* (14 CCR 15064.5[a][3]).

PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The Commission oversees the administration of the California Register of Historical Resources (CRHR) and is responsible for designating State Historical Landmarks and Historical Points of Interest.

Section 5024.1 of 14 CCR 15064.5 of the CEQA Guidelines requires evaluation of historical resources to determine their eligibility for listing on the CRHR. The purposes of the CRHR are to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP (per the criteria listed at 36 CFR 60.4). The criteria listed below are used to determine whether a cultural resource is considered historically significant and eligible for listing in the CRHR. "Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 4852) including the following:

- A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. Is associated with the lives of persons important in our past;
- C. Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;  
or
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

According to Section 15064.5(a)(3)(A-D) of the CEQA Guidelines (14 CCR), a resource is considered historically significant if it meets the criteria for listing in the NRHP (per the criteria listed at 36 CFR 60.4 previously discussed). Impacts that affect those characteristics of the resource that qualify it for the NRHP

or that would adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered to have a significant effect on the environment.

PRC Sections 5079 to 5079.65 define the functions and duties of the Office of Historic Preservation (OHP), which administers federal- and state-mandated historic preservation programs in California as well as the California Heritage Fund.

### **2.2.2 Tribal Cultural Resources**

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to mandate consultation with California Native American tribes during the CEQA process to determine whether or not the proposed project may have a significant impact on a Tribal Cultural Resource, and that this consideration be made separately from cultural and paleontological resources.

Section 21073 of the PRC defines California Native American tribes as *"a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004."* This includes both federally and non-federally recognized tribes.

Section 21074(a) of the PRC defines Tribal Cultural Resources for the purpose of CEQA as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
- b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
- c. 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria A and B also meet the definition of an Historical Resource under CEQA, a Tribal Cultural Resource may also require additional consideration as an Historical Resource. Tribal Cultural Resources may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies carry out consultation with tribes at the commencement of the CEQA process to identify Tribal Cultural Resources. Furthermore, because a significant effect on a Tribal Cultural Resource is considered a significant impact on the environment under CEQA, consultation is required to develop appropriate avoidance, impact minimization, and mitigation measures. Consultation is concluded when either the lead agency and tribes agree to appropriate mitigation measures to mitigate or avoid a significant effect, if a significant effect exists, or when a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (21080.3.2[b]), whereby the lead agency uses



its best judgement in requiring mitigation measures that avoid or minimize impact to the greatest extent feasible.

### **2.2.3 Mills Act**

In 1972, California State Senator James Mills introduced a bill known as the Mills Act to grant property tax relief to owners of qualified historic properties. The Mills Act is a preservation tool created by the California legislature to encourage the preservation and restoration of historic properties. The Act enables cities to enter into historical property agreements with owners of qualifying properties; these agreements will result in reductions to the owner's property taxes. The agreements provide a benefit to cities in that they ensure preservation and guarantee authentic rehabilitations and a high level of maintenance of cultural resources important to communities.

## **2.3 Local Policies and Regulations**

### **2.3.1 City of Moorpark Municipal Code**

The purposes of Chapter 15.36, Historic Preservation, of the City of Moorpark Municipal Code, are to provide for the identification, protection, enhancement, perpetuation, and use of historic landmarks within the city that reflect special elements of the city's historical heritage and to promote the general welfare by;

- A. encouraging public knowledge, understanding, and appreciation of the city's past;
- B. fostering civic pride in the beauty and personality of the city and in the accomplishments of the city's past;
- C. safeguarding the heritage of the city by protecting landmarks, which reflects the City's history;
- D. protecting and enhancing property values within the city and increasing economic and financial benefits to the City and its inhabitants;
- E. identifying as early as possible and resolving conflicts between the preservation of historical landmarks and alternative land uses;
- F. preserving historic building materials through maintenance and restoration of existing historical landmarks;
- G. taking whatever steps are reasonable and necessary to safeguard the property rights of the others whose building or structure is declared to be a landmark;
- H. promoting the use of landmarks for the education and enjoyment of the people of the City; and
- I. promoting awareness of the economic benefits of historic preservation (ORD 194 Sec 2(part), 1994).

The Moorpark Municipal Code includes the following sections pertaining to Historic Preservation:

- 15.36.020. Provides definitions for terms used in the Historic Preservation code
- 15.36.030. Establishes an Historical Preservation Commission

- 15.36.040. Defines the powers and duties of the Historical Preservation Commission
- 15.36.050. Establishes guidelines for public hearings
- 15.36.060. Outlines procedures for the designation of historic landmarks
- 15.36.070. Outlines the requirements and procedures for obtaining a Certificate of Appropriateness for work affecting landmarks.
- 15.36.080. Provides for work on landmarks in the event of dangerous conditions
- 15.36.090. Stipulates that landmarks shall be kept in good repair.

### **2.3.2 Existing General Plan Land Use Element Goals and Policies**

The following existing goals and policies are aimed at providing guidance and policy direction regarding historic resources in the City. The goals and policies allow for the continued protection, preservation, maintenance, recognition, and documentation of historic resources so that future residents can enjoy what many residents value today.

*Goal 15: Maintain a high quality environment that contributes to and enhances the quality of life and protects public health, safety and welfare.*

**Policy 15.3:** Natural and cultural resources having significant educational, scientific, scenic, recreational or social value shall be protected and preserved.

*Goal 17: Enhance the physical and visual image of the community.*

**Policy 17.11:** The City shall cooperate with the County of Ventura Cultural Heritage Board to identify and inventory, and preserve Moorpark’s historical resources.

*Goal 18: Provide for and promote the revitalization of visually degraded landscaping, building facades and deteriorated buildings in the community.*

**Policy 18.1:** All downtown area revitalization efforts shall preserve, as appropriate, a historic theme reflective of the community’s origins.

**Policy 18.3:** The creation of both residential and commercial historic districts, and the upgrading of historic structures should be encouraged.

**Policy 18.4:** Development in the downtown area should incorporate the careful use of compatible or similar construction materials and architectural style, so as to not detract from the integrity of historical features.

Under Section 7.0 of the General Land Use Element, Implementation Measure 1 states that the City will *“Use the Land Use Element to promote a balanced City growth pattern and land use compatibility, maintain the City’s suburban/rural character, revitalize the downtown area, preserve important natural features and*

*biological and cultural resources, and require that overall intensity and density of land use decreases away from the valley floor.”* Additionally, Appendix A. Section C.3 states that the City Council shall consider “*Historic/cultural areas (including those of archaeological/paleontological importance)*” prior to the completion of any draft specific plan.

### **3.0 CULTURAL RESOURCES**

According to the background research conducted for the existing General Plan and more recent research for the General Plan Update, the City of Moorpark contains three locally significant resources, nine Points of Historic Interest, and one built environment resource listed in the CRHR. No resources within the City of Moorpark have been listed on the NRHP. Locally significant resources, Points of Historic Interest, and additional historic-period resources are listed below. In addition, there are numerous archaeological sites representing the pre-contact (prehistoric Native American) and historic-period occupation and history of the City that are withheld from public disclosure due to confidentiality.

The *National Register Information System* (NPS 2020) failed to reveal any listed properties within the City of Moorpark.

#### **3.1.1.1 Existing General Plan**

The original General Plan Environmental Impact Report for the City of Moorpark lists three locally significant resources (PBR 1992). These consist of the:

- Taylor House;
- 1890 circa Moorpark First Southern Baptist Church at 702 Walnut Street; and
- 1900s High Street Pepper Trees located on High Street planted by Poindexter.

The Moorpark First Southern Baptist Church at 702 Walnut Street and High Street Pepper Trees are also listed as Historical Landmarks of Ventura County by the Ventura County Genealogical Society.

#### **3.1.1.2 Points of Historical Interest**

The Moorpark Historical Society lists nine Points of Interest within Moorpark:

- Original Moorpark Southern Pacific Depot site
- Theater on High Street
- William’s Service Station
- Moorpark Mercantile Location
- Tanner’s Corner
- Whitaker Block
- Moorpark Women’s Fortnightly Clubhouse

- Munger/Cornett Home
- Wesley Chapel

Resources listed as *California Historical Landmarks* (OHP 1996) and by the OHP (OHP 2020) were reviewed on June 17, 2020, and there are no listed properties are located within the City of Moorpark.

### **3.1.1.3 Built Environment Resources Directory (BERD)**

The BERD lists 13 historic-period resources within the City of Moorpark. These include five bridges along SR-23 and eight buildings/structures including the Tanner Corner, the Saugus Santa Susana Moorpark Torrey Trans Tower, the National Ready Mix Concrete Company, and the Fence Factory. Of these, the five bridges are listed as not having been evaluated for the NRHP or CRHR. Seven of the eight buildings/structures are listed as having been determined ineligible for NRHP by consensus through the Section 106 process but have not been evaluated for cultural resources or Local Listing. Only the Tanner Corner is listed in the CRHR as an individual property.

## **4.0 GENERAL PLAN UPDATE**

The City of Moorpark General Plan was last updated in 2009. Since that time, additional buildings in the City would have reached 50 years in age, thereby increasing the number of potentially eligible historic resources in the City. Individual structures and focused areas of the city, such as specific neighborhoods, may also have historic characteristics that could be affected by future development. The General Plan Land Use Element, adopted in 1992 and last updated in 2009, specifically mentions consideration of cultural resources. In light of the ever-evolving nature of cultural resources management and the involvement of California Native American tribes in consultation processes regarding archaeological sites and tribal cultural resources, there exists an opportunity to re-evaluate and refine the General Plan goals and policies. Such updates may take the following forms.

*Goal 15: Maintain a high quality environment that contributes to and enhances the quality of life and protects public health, safety and welfare.*

**Policy 15.11:** Make efforts to further recognize the importance of the pre-contact history of the City, as evidenced through archaeology, with the intention of public education, resource preservation, and contribution to scientific knowledge.

**Policy 15.12:** Seek opportunities, through meaningful tribal consultation with Native American communities, to develop educational programs for residents regarding the local history of the area prior to European contact.

## 5.0 LITERATURE CITED

- NPS. 2020. National Register of Historic Places, Digital Archive on NP Gallery  
<https://npgallery.nps.gov/NRHP/BasicSearch/>. Accessed June 17, 2020.
- OHP. 2019. *Office of Historic Preservation California Historical Landmarks Website*.  
[http://ohp.parks.ca.gov/?page\\_id=21387](http://ohp.parks.ca.gov/?page_id=21387), Accessed June 17, 2020.
- \_\_\_\_\_. 1996. California Historical Landmarks. California Department of Parks and Recreation, Sacramento, California.
- PBR. 1992. Final Environmental Impact Report for the Moorpark General Plan. Prepared for the City of Moorpark, Moorpark California

## **Appendix F2 Cultural Resources Sensitivity Model**

## Appendices

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October 15, 2020

Mr. Jonathan Nettler  
PlaceWorks, Inc.  
700 South Flower Street, Suite 600  
Los Angeles, California 90015

**RE: *Cultural Resources Sensitivity Model for the Moorpark General Plan Update, City of Moorpark, Ventura County***

Dear Mr. Nettler:

In May 2020, ECORP Consulting, Inc. was retained by PlaceWorks, Inc. to generate a cultural resources sensitivity model in support of the 2020 Moorpark General Plan Update. The purpose of this sensitivity model is to serve as a planning tool for future projects in the City of Moorpark. This sensitivity model was developed by professional archaeologists using information obtained through a records search and literature review at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) located at California State University, Fullerton. All previously completed site records and technical reports pertinent to the City's General Plan boundaries (the Study Area) were provided by SCCIC staff to ECORP. ECORP personnel used the information found in the CHRIS records search results along with other sources to identify areas sensitive for archaeological resources and/or architectural history (built environment) resources. These Sensitivity Areas were then classified as High, Assumed High, and Low based on a classification protocol detailed in this report.

ECORP has provided recommendations in this report on utilizing the cultural sensitivity model, as well as the minimum cultural resources effort for future projects within the various sensitivity area classifications. This sensitivity model will be used by the City to identify areas of High Sensitivity, Assumed High Sensitivity, and Low Sensitivity for cultural resources that could be affected by future development within the General Plan Area, including archaeological sites and historic buildings, structures, and objects.

## **STUDY AREA**

The Study Area is defined by the boundaries of the City of Moorpark General Plan Area. Moorpark is located in the southeastern portion of Ventura County, approximately 25 miles east of the City of Ventura (City of San Buenaventura), approximately 10 miles north of Thousand Oaks, approximately 20 miles south of Los Padres National Forest, and adjacent to the western boundary of the City of Simi Valley. The Study Area encompasses 12.47 square miles of generally flat terrain at an elevation of approximately 700 to 1100 feet above mean sea level.

Individual projects and project components conducted by the City or private project proponents, and for which this sensitivity analysis will provide guidance, will have their own Project Areas delineated within the Study Area as part of the planning process. As a technical term, a Project Area consists of the horizontal and vertical limits of a project and includes the area within which significant impacts or adverse effects to



Historical Resources as defined under the California Environmental Quality Act (CEQA) or Historic Properties as defined under Section 106 of the National Historic Preservation Act (NHPA) could occur as a result of the project. The Project Area is defined for projects subject to CEQA. For projects subject to regulations implementing Section 106 (federal law and regulations), the term Area of Potential Effects (APE) is used rather than Project Area. For the purpose of this document, the term Study Area refers to the area reviewed for the current General Plan Update. The terms Project, Project Area, and APE are used to refer to future public and private projects and upgrades that will be subject to individual CEQA and Section 106-compliant studies.

## **REGULATORY CONTEXT**

This study serves as a large-scale planning document that is anticipated to assist in guiding future work within the City, which may be subject to discretionary approvals under CEQA. Some of these undertakings may also have a federal nexus, most commonly with the NHPA. The goal of NHPA and CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where feasible. CEQA pertains to all proposed projects that require state or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of development project maps. The NHPA pertains to projects that entail some degree of federal funding or permit approval.

The NHPA and CEQA (Title 14, California Code of Regulations [CCR], Article 5, § 15064.5) apply to cultural resources of the historical and pre-contact (prehistoric) periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant effect on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the California Register of Historical Resources (CRHR; Public Resources Code [PRC] § 5024.1, Title 14 CCR, § 4852) or the National Register of Historic Places (NRHP; 36 Code of Federal Regulations [CFR] 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under CFR 36 Part 800 and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources under CEQA.

Tribal Cultural Resources are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are 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 Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of Tribal Cultural Resources and impacts thereto. Because ECORP does not meet the definition of a California Native American tribe, this report only addresses information for which ECORP is qualified to identify and

evaluate, and that which is needed to inform the cultural resources section of CEQA documents. This report, therefore, does not identify or evaluate Tribal Cultural Resources. Should California Native American tribes ascribe additional importance to or interpretation of archaeological resources described herein, or provide information about non-archeological Tribal Cultural Resources, that information is documented separately in the AB 52 tribal consultation record between the tribe(s) and lead agency, and summarized in the Tribal Cultural Resources section of the CEQA document, if applicable.

Sections 6253, 6254, and 6254.10 of the California Code authorize State agencies to exclude archaeological site information from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code § 6250 et seq.) and California's open meeting laws (The Brown Act, Government Code § 54950 et seq.) protect the confidentiality of Native American cultural place information. Under Exemption 3 of the federal Freedom of Information Act (5 U.S. Code [USC] 5), because the disclosure of cultural resources location information is prohibited by the Archaeological Resources Protection Act of 1979 (16 USC 470hh) and Section 307103 of the NHPA, it is also exempted from disclosure under the Freedom of Information Act. Likewise, the Information Centers of the CHRIS maintained by the Office of Historic Preservation (OHP) prohibit public dissemination of records search information. In compliance with these requirements, the specific locations of archaeological sites are not disclosed with specificity in either this letter or the sensitivity model.

## **GEOLOGY AND SOILS**

According to the U.S. Department of Agriculture's (USDA's) Web Soil Survey website (USDA 2020), 53 soil types are located within the General Plan Area. The major soil types located within the General Plan Area include Arnold sand, Badland, Chesterton coarse sandy loam, Garretson loam, Huerhuero very fine sandy loam, Metz loamy sand, Mocho loam, and Soper gravelly loam. These soil types account for 46.6 percent of soil within the Study Area.

According to geologic maps of the area (Dibblee and Ehrenspeck 1992), the General Plan Area contains Holocene alluvium-containing sand and clay along the valley floor and floodplain areas. Holocene/Pleistocene landslide debris from Monterey Shale is found in the northern areas. Late Pliocene and Early Pleistocene non-marine fluvial flood plain and alluvial fan sediments of the Saugus Formation include pebble conglomerate of mostly granitic rocks are found at the base of Moorpark area. Prominent geological features of the area consist of Moorpark Anticline and Big Mountain to the north, and the Tierra Rejada Valley and the Las Posas Hills to the south. Moorpark is located in Little Simi Valley. Arroyo Simi runs from the southwest to the northeast of the City and Arroyo Las Posas runs through the southern portion of the City. The Simi Fault lies south and southeast of the study area.

Due to the presence of Holocene alluvium (approximately 90 percent) and Pleistocene sediments (approximately five percent) throughout the City of Moorpark, and given the likelihood of pre-contact archaeological sites located along perennial waterways, the presence of fault lines, hills, canyons, and mountains surrounding the City, there exists the potential for buried pre-contact archaeological sites throughout the Study Area.

## PRE-CONTACT HISTORY AND ETHNOGRAPHY

The first inhabitants of southern California were big game hunters and gatherers exploiting extinct species of Pleistocene megafauna (e.g., mammoth and other Rancholabrean fauna). Local "fluted point" assemblages comprised of large spear points or knives are stylistically and technologically similar to the Clovis Paleo-Indian cultural tradition dated to this period elsewhere in North America (Moratto 1984). Archaeological evidence for this period in southern California is limited to a few small temporary camps with fluted points found around late Pleistocene lake margins in the Mojave Desert and around Tulare Lake in the southern San Joaquin Valley. Single points are reported from Ocotillo Wells and Cuyamaca Pass in eastern San Diego County and from the Yuha Desert in Imperial County (Rondeau et al. 2007).

The study area is in the region occupied by the Chumash before and at the time of European contact. King (1981) has divided the prehistory of the Chumash region into three periods: Early (8,000 to 3,350 years before present [BP]), Middle (3,350 to 800 years BP), and Late (800 to 150 years BP or approximately AD 1150 to 1800). The Early Period has been divided into three phases: X, Y, and Z. The X Phase is characterized by large flake and core tools, millings, and handstones. Based on limited archaeological data, it appears that Phase X sites along the Santa Barbara Channel were located on crests of hills away from the ocean, but some Phase Y sites were located on knolls adjacent to sloughs. During Phase Z, sites were located on higher ground (King 1981).

During the Middle Period (3,350 to 800 years BP), increasing sedentism and increasing emphasis on marine subsistence along the Santa Barbara Channel is reflected by the appearance of coastal villages occupied during a large part of the year. The plank canoe, which made ocean fishing and travel to the Channel Islands safer and more efficient, came into use about 1,500 years BP. Use of the plank canoe also promoted trade and exchange between the mainland and the Channel Islands (Arnold 1987).

The full development of the Chumash occurred during the Late Period (800 to 150 years BP or approximately AD 1150 to 1800) (Arnold 1987). At the time, there was a series of permanent and semi-permanent villages with populations of 200 to 600 or more individuals along the Santa Barbara Channel and on the Channel Islands. The principal economic pursuits of the people of these villages were marine fishing and trading (Grant 1978).

At the time of Spanish contact, the Chumash occupied what is now Ventura County; the northwestern corner of Los Angeles County; the southern part of San Luis Obispo County; and the Santa Monica Mountains area of Los Angeles County, Santa Barbara County, the northern Channel Islands. The Chumash spoke several languages belonging to the Chumashan language family, which is not part of, or related to, any other North American language family. Artifactual and skeletal evidence indicate that the Chumash have continuously occupied the Ventura and Santa Barbara County areas from prior to 10,000 years BP to historic times. Linguistic evidence suggests that the Chumash expanded during the first millennium AD into territory previously occupied by Hokan speakers (Salinan) in southern San Luis Obispo County and on to the northern Channel Islands, where an unknown, now extinct, language was spoken (Golla 2007:80).

The Chumash were one of the most socially and economically complex hunting and gathering groups in North America (Arnold 1987:4). Chumash Channel-area villages contained circular houses made of willow

poles and thatch. A hearth was located in the center of each house. In addition to houses, each village contained a sweat house, a sacred council chamber, a dance floor, and a cemetery (Rogers 1929).

Status differentiation had developed to the point where village chiefs inherited their rank and probably controlled trade and redistribution. Only certain higher-ranking lineages built and operated plank canoes for trade with the islands. Trade and redistribution of products from different environmental zones was facilitated by the use of shell beads as a form of currency, made almost exclusively on the northern Channel Islands. Making microdrills (used to make beads) from island chert sources was a specialized industry (Arnold 1987:247).

When the Spanish arrived in 1769, the Chumash occupied the coast from Malibu Canyon to San Luis Obispo and inland as far as the western edge of the San Joaquin Valley. By 1804, most villages were abandoned as the Chumash were forced to move to the missions. Exposure to diseases introduced by Europeans soon began to decimate their population (Grant 1978). A typical example is the census kept for La Purisima Mission, where the Chumash declined in number from approximately 1,520 in 1804 to 400 in 1832 (Greenwood 1978).

When Spanish authority was removed in 1821, many Chumash left the coastal area and settled in the interior. Those who remained were usually mistreated by Mexican, and later Anglo settlers. European-borne diseases continued to reduce the Chumash population. That, as well as intermarriage with the Spanish, Mexicans, and Anglos, resulted in near extinction of the full-blooded Chumash by 1900 (Grant 1978). In 1855, a reservation of 120 acres was given to the Chumash near Santa Ynez Mission. This small parcel was eventually reduced to 75 acres, the smallest Native American reservation in California. By the 1970s, only about 40 Chumash of mixed blood remained there. Other Chumash with no formal tribal affiliation live outside the reservation (Grant 1978).

## **HISTORY**

The first significant European settlement of California began during the Spanish Period (1769 to 1821) when 21 missions and four presidios were established between San Diego and Sonoma. Although located primarily along the coast, the missions dominated the majority of the California region during this period. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. This included the forced conversion of the native population to Spanish colonial society and Catholicism, which often consisted of subjugating Indians into a life of servitude to Spanish citizens (Castillo 1978; Cleland 1941). During this time, the region fell largely under the control of the Mission San Buenaventura located within the present-day City of Ventura.

The Mexican Period (1821 to 1848) began with the success of the Mexican Revolution in 1821, but changes to the mission system were slow to follow. When secularization of the missions occurred in the 1830s, the vast land holdings of the missions in California were divided into large land grants called ranchos. The Mexican government granted ranchos throughout California to Spanish and Hispanic soldiers and settlers (Castillo 1978). The region encompassing the study area fell within the Rancho Simi (also known as Rancho San José de Nuestra Señora de Altigracia y Simi), which was the first land grant within Ventura County. The 113,009-acre land grant was awarded by the Mexican government to Santiago

Pico in 1795. The property included land from the Santa Susana Mountains to west of Moorpark. Pico died in 1815 and his sons were regranted the rancho in 1821. The name "Simi" was based on the Chumash village of Shimiji. The land grant encompasses today's Simi Valley and Moorpark. The Pico brothers built a two-room adobe in 1810 in Simi Valley and later sold the property in the 1830s (Winters 2016). In 1889, Robert P. and Mary Strathearn purchased a portion of the Rancho Simi. The two-room adobe was later incorporated into the Strathearn family home. The Rancho Simi Adobe has been recognized as California State Landmark No. 979, and is located at the Strathearn Historical Park and Museum, approximately 4.5 miles southwest of Moorpark in the Simi Valley.

In 1848, the Treaty of Guadalupe Hidalgo ended the Mexican-American War and marked the beginning of the American Period (1848 to present). The discovery of gold the same year initiated the 1849 California Gold Rush, bringing thousands of miners and settlers to California, most of who settled in the north. For those settlers who chose to come to southern California, much of their economic prosperity was fueled by cattle ranching rather than by gold. This prosperity, however, came to a halt in the 1860s as a result of severe floods and droughts, which put many ranchers into bankruptcy (Castillo 1978; Cleland 1941).

## **Moorpark History**

The City of Moorpark is located in Ventura County. Ventura County was organized in 1873 and the City of Ventura has always been the County seat. The City of Moorpark was named and founded in 1900 for the well-known English variety of apricot known as the Moorpark apricot (Gudde 1969). A post office was first listed in 1904.

Today's Moorpark historically was land within with the 113,000-acre Rancho Simi land grant. The land grant property was purchased by the Philadelphia and California Petroleum Company in hopes of discovering oil (Winters 2016). The Company discovered that the land did contain large quantities of oil and later sold portions of the land in 1887 to the Simi Land and Water Company, a land development group. Robert W. Poindexter, an investment banker from Los Angeles and the Secretary of the Simi Land and Water Company, obtained the title for what would become the City of Moorpark in 1887. Poindexter and his wife Madeline developed a small farming community west of today's Moorpark and it was known as Fremontville or Fremont. Historically the townsite of Fremontville was located north of today's Los Angeles Avenue and south of Poindexter Avenue, at the Moorpark Estates. The townsite became non-active and the streets were abandoned in 1900 by the County Board of Supervisors (Winters 2016).

After the Southern Pacific Railway announced that it intended to relocate its Coastline through Ventura County in the 1890s, Poindexter and his wife Madeline laid out the town site of Moorpark around the railroad in 1900 (Moorpark Historical Society 2020). A railroad depot was built by March 1900, helping to ensure that their application for a post office would be approved that year. Buildings from Fremontville were moved to High Street after the depot was constructed (Winters 2016).

In 1904, the City's position was strengthened by the completion of tunnels through the Santa Susana Mountains. The train depot burned down in 1909, but a similar depot was rebuilt in its place the next year. In 1904, the Munger family moved to Moorpark, and operated the Moorpark Hotel. In 1909, they sold their modest home on Charles Street to Frank and Mary Cornet. A grocery store was built on the corner of

High and Walnut streets, changing hands in 1911 and 1918. In 1905, the Moorpark Women's Fortnightly Club was founded.

Moorpark was home to a community of Methodists. Epworth, an earlier community located north of Moorpark near Broadway Road, built a Wesley Chapel in 1894. When Epworth hit hard times, Methodists in Moorpark moved the Wesley Chapel to the northeastern corner of Charles and Walnut streets. Epworth is located 0.5 mile north of the northern City limits of Moorpark. In 1919, the Methodists doubled the size of their chapel by moving and attaching another church building to it, this time the M.E. Fowler church from Somis. When the Methodists outgrew this church, it was used by Southern Baptists.

Early on, Moorpark developed agriculture as its main industry, first with dry land farming of hay, lima beans, black-eyed peas, and especially apricots within the valley floor surrounding the Arroyo Simi. Moorpark was dubbed the "apricot capital of the world," and by 1920, they were hosting an annual apricot festival. With increased irrigation, the town was able to grow walnuts and citrus, which gave farmers a higher return. In 1927, a theater was built on High Street, which served as the only talking movie theater for many years (Moorpark Historical Society 2020).

After World War II, agriculture in Moorpark was supplemented with animal husbandry, especially turkey, chicken, and egg ranchers. The theater on High Street closed in the 1950s, as did the original Southern Pacific Rail Depot (Moorpark Historical Society 2020).

On November 12, 1957, the City of Moorpark, then populated by 1,100 people, was the first in the nation to use atomic energy, provided by the Southern Reactor Experiment from a small nuclear reactor in the nearby Simi Hills, built by Atomics International. Two weeks later, Edward R. Murrow's "See it now" television program aired a program about the nuclear plant. While they continued to receive nuclear power for about three years, the main purpose of the Southern Reactor experiment was to demonstrate the feasibility of producing electricity through nuclear power plants and was a major milestone in President Dwight D. Eisenhower's Atoms for Peace program. In 1959, Atomics International was using their Simi reactor for experimental purposes and went through a partial meltdown (Los Angeles Times 1993).

The Southern Pacific rail depot in Moorpark was closed in the late 1950s and by 1964 it was torn down. A Richfield Gas Station was constructed on the property and later demolished to make way for a bank, which is now the home of the Moorpark Chamber of Commerce. By the 1970s, agricultural land within Moorpark began to give way to housing. Moorpark was incorporated as a city in 1983, providing a boost to industry and housing in the area (Moorpark Historical Society 2020).

## **PERSONNEL QUALIFICATIONS**

Registered Professional Archaeologist (RPA) Wendy Blumel, who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeologist, conducted or supervised all phases of the creation of this cultural sensitivity model. Wendy Blumel, Staff Archaeologist Megan Webb, and John O'Connor, Ph.D., RPA, prepared the technical report. Lisa Westwood, RPA, provided technical report review and quality assurance.

Ms. Blumel has 12 years of experience in cultural resources and is experienced in the organization and execution of field projects in compliance with Section 106 of the NHPA and CEQA. She has contributed to and authored numerous cultural resources technical reports, research designs, and cultural resource management plans, and has contributed to a variety of environmental compliance documents.

Megan Webb is a Staff Archaeologist for ECORP and has more than five years of experience in cultural resources management, primarily in California. She holds a B.A. degree in Anthropology and has participated in all aspects of archaeological fieldwork, including survey, test excavation, and data recovery, in addition to months of archaeological lab experience.

Dr. O'Connor has over 11 years of archaeological experience in North America and the Pacific Islands, experience that includes cultural resources management, academic research, museum collections management, and university teaching. Dr. O'Connor meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. He is well versed in the evaluation of impacts to cultural resources for CEQA and NHPA projects, and he has written or otherwise contributed to numerous environmental compliance documents. Dr. O'Connor serves as the Southern California Cultural Resources Manager for ECORP.

Lisa Westwood is an RPA who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology with 26 years of experience. She holds a B.A. in Anthropology and an M.A. in Anthropology (Archaeology). She is the Director of Cultural Resources for ECORP.

## **RECORDS SEARCH**

A cultural resources records search for the Study Area was completed by SCCIC staff of the CHRIS at California State University, Fullerton on June 15, 2020. The records search area covered the Moorpark General Plan Area, which is approximately 7,990 acres. The purpose of the records search was to determine the extent of previous surveys and to identify areas within the Study Area containing previously recorded resources. The identification and classification of individual resources was beyond the scope this study. This was a high-level effort that entailed the identification of the location and distribution of previously recorded resources that would indicate areas highly sensitive for cultural resources. The records search was also conducted to determine the previous survey coverage for the General Plan Area. For built environment features, ECORP relied on records on file at the SCCIC to inform the locations of previously recorded built environment resources. This study only differentiates between archaeological resources and historic-period built-environment (architectural) resources.

In addition to the official maps for archaeological sites and surveys on file at the SCCIC for Ventura County, ECORP also contacted the Moorpark Historical Society to gather relevant information on the City. ECORP archaeologists also reviewed historic U.S. Geological Survey (USGS) topographic maps and historic aerial photographs of the Study Area. ECORP gathered this information in order to inform a cultural resources sensitivity model for the Study Area. Historic maps reviewed include:

- The 1900 USGS Piru, California topographic quadrangle map (1:62,500 scale);
- The 1903 USGS Camulos, California topographic quadrangle map (1:125,000 scale);

- The 1941 USGS Piru, California topographic quadrangle map (1:62,500 scale);
- The 1951 USGS Moorpark, California topographic quadrangle map (7.5-minute);
- The 1951 USGS Simi, California topographic quadrangle map (7.5-minute); and
- The 1951 photorevised 1978 Moorpark, California topographic quadrangle map (7.5-minute).

Historic aerial photos taken in 1947, 1969, and 1978 to present were also reviewed for any indications of property usage and built environment.

## Literature Review Results

Results of the records search indicated that 135 previous cultural resources studies have been conducted within the Study Area between 1967 and 2017. These reports include a mix of archaeological field studies, literature searches, testing and data recovery reports, management plans, monitoring reports, and architectural history evaluations. A review of these reports indicates that approximately 77 percent of the Study Area has been covered by previous cultural resources studies.

Fifty-two previously recorded cultural resources have been identified within the Study Area. Twenty of those resources consist of pre-contact archaeological and/or ethnographic sites including habitation sites, lithic scatters, hearths/pits, and bedrock milling features. Thirty-one previously recorded resources consist of historic-period archaeological sites and/or historic-period built environment resources. Historic-period archaeological resources consist of foundations, landscaping features, water conveyance systems, refuse deposits, walls/fences, structures, and roads/trails/railroads. Built environment resources include educational buildings, single family properties, one- to three-story commercial buildings, engineering structures, multiple family structures, industrial buildings, ancillary buildings, and a dam. One resource consists of a multicomponent site including both a historical archaeological and pre-contact archaeological deposits.

The Moorpark Historical Society lists nine Points of Interest within Moorpark: The Original Moorpark Southern Pacific Depot site, the Theater on High Street, the William's Service Station, the Moorpark Mercantile Location, Tanner's Corner, the Whitaker Block, the Moorpark Women's Fortnightly Clubhouse, the Munger/Cornett Home, and the Wesley Chapel.

The National Register Information System (NPS 2020) failed to reveal any listed properties within the City of Moorpark.

Resources listed as *California Historical Landmarks* (OHP 1996) and by the OHP (OHP 2020) were reviewed on June 17, 2020, and there are no listed properties are located within the City of Moorpark.

A review of the Historical Landmarks of Ventura County by the Ventura County Genealogical Society listed two properties in Moorpark. The 1890 circa Moorpark First Southern Baptist Church at 705 Walnut Street and the 1900s High Street Pepper Trees located on High Street planted by Poindexter.



## Map and Aerial Photograph Review Results

The review of historical aerial photographs and maps provided information on the past land uses of the Study Area. Based on this information, the town of Moorpark first appeared on maps dating to 1900. Following is a summary of the review of historical maps and photographs.

- The 1900 USGS Piru, CA (1:62,500) map shows the Southern Pacific Railroad traveling through Little Simi Valley. The 1900 map depicts the town of Moorpark within Section 4 of T2N R19W.
- The 1903 USGS Camulos, CA (1:125,00) map shows the Southern Pacific Railroad traveling through Little Simi Valley. The 1903 map depicts the Arroyo Simi, Moorpark, and Fremontville within today's Moorpark City limits.
- The 1941 USGS Piru, CA (1:62,500) map depicts the town of Moorpark within Little Simi Valley. Majority of the area is comprised of agricultural land. The development within the town of Moorpark remains mostly confined to land surrounding the railroad.
- A review of aerial photographs from 1947 shows the Southern Pacific Railroad, the Arroyo Simi waterway, agricultural land (mostly orchards) within the valley floor, the route of Los Angeles Avenue, and Moorpark town development is centered around the railroad and High Street.
- The 1951 USGS Moorpark and Simi, CA (7.5-minute) maps reveal that land south of the railroad is mostly agricultural property and undeveloped land. Highway 118, Union High School, and the Virginia Colony are present of the 1951 maps.
- Aerial photographs from 1969 show that residential development has been built on the agricultural land once located south of the railroad and north of Arroyo Simi. The 1969 aerial reveals that the Arroyo Simi waterway has been rechanneled through the town of Moorpark. The Moorpark College and Union High School campuses are also present on the 1969 aerial.
- The 1951 photorevised 1978 Moorpark, CA (7.5-minute) map shows additional development throughout Moorpark.
- The aerial photographs from 1978 shows the construction of the Moorpark/Ronald Regan Freeway within the eastern portion of town. From the 1978 and 1994 aerials, the land located south of the Arroyo Simi has been developed. By 1994, the freeway had been completed. By the early 2000s, the land within the northern portion of town has been developed.

## SACRED LANDS FILE COORDINATION

ECORP contacted the California Native American Heritage Commission (NAHC) on June 17, 2020 to request a search of the Sacred Lands File for the Study Area. This search helps to determine whether or not Sacred Lands have been recorded by California Native American tribes within the Study Area, because the Sacred Lands File is populated by members of the Native American community who have knowledge about the locations of tribal resources. In requesting a search of the Sacred Lands File, ECORP solicited information from the Native American community regarding tribal cultural resources, but the responsibility to formally consult with the Native American community lies exclusively with the federal and

local agencies under applicable state and federal law. ECORP was not delegated authority by the Lead Agencies to conduct tribal consultation.

The results of the Sacred Lands File search by the NAHC were received on June 18, 2020. The search of the Sacred Lands File was negative and failed to indicate the presence of Native American Sacred Lands or tribal cultural resources in the Study Area.

## **SENSITIVITY MODELS**

Cultural resources come in a variety of forms, and range from historic, existing architecture to deeply buried archaeological and tribal cultural resources. The very nature of the latter makes identification and avoidance difficult, as some archaeological and tribal cultural resource sites do not manifest on the surface, such that they would be detectable by typical surface or near-surface methods alone. The ability to predict the presence of cultural resources is not always possible; however, the use of modeling to produce sensitivity and compliance status maps can be very helpful in long-range planning efforts. There are a number of benefits and uses for a sensitivity model for the City, including:

- serving as a screening tool for planners to determine if cultural resources surveys and evaluations have already been completed for a specific project area, thereby reducing the effort necessary to inventory for cultural resources;
- serving as a planning tool to identify to planners particularly sensitive areas that have a high potential for cultural resources, which may result in larger areas set aside for avoidance and preservation of cultural resources;
- identifying areas that may require additional or more specialized studies, such as geo-archaeological investigations;
- identifying areas that may require focused consultation with Native American tribes;
- identifying areas that may require consultation with specific special interest groups, like, historical societies, or other ethnic groups;
- serving as a model for predicting the types of cultural resources that may be expected in a specific project area; and
- allowing for the development of research themes and questions, guidelines for treatment, and an overall compliance framework that can be applied in a consistent manner over time.

However, confidential information in the possession of the City cannot be disclosed to the public. Those who may have access to information about specific site locations and descriptions consist of only professionally qualified individuals meeting the qualifications required by the CHRIS. As a result, the sensitivity model does not include specific locations of archaeological sites but considers broader zones of sensitivity.

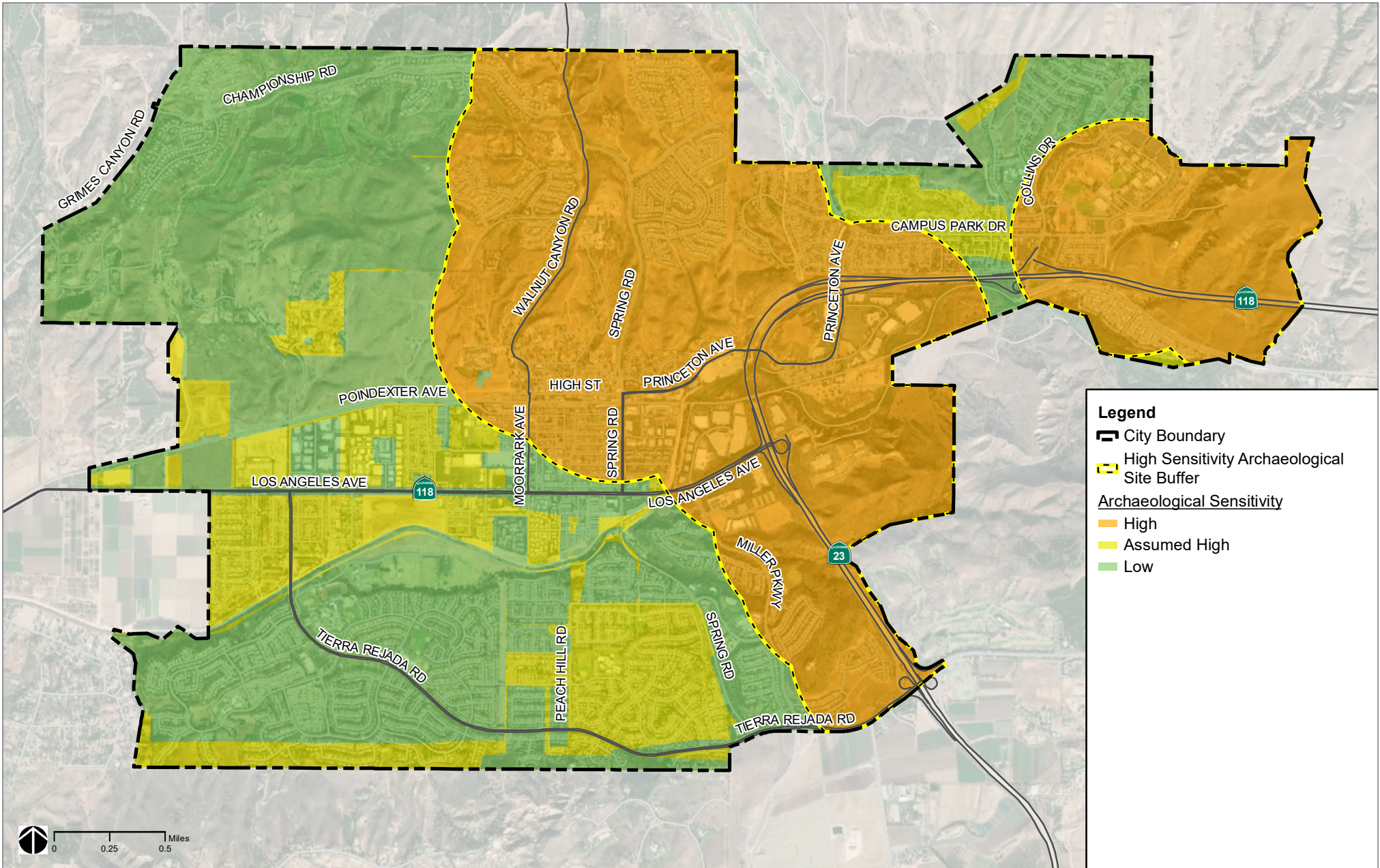
More important than the purpose of this sensitivity model is acknowledgement of what this model is not—it does not provide a predictive map of where resources are located and must not be used as a substitute for appropriate level of study under applicable state and federal law.

This sensitivity model for the City was developed by professional archaeologists through a records search and literature review of the Study Area via CHRIS through the SCCIC. The previously recorded sites within the Study Area were incorporated into a GIS model, upon which broad zones of sensitivity were developed. Site locations obtained from the SCCIC are as they have been submitted to the Information Center and have not been field-verified or revisited during the development of this model. As such, subsequent cultural resources management studies performed for specific projects may result in updates to these boundaries, or a determination that the resources are no longer present. In these circumstances, this model provides insight into the potential for discovering similar types of resources in the immediate vicinity, and therefore, use of this model should include a review of adjacent properties as well as the Assessor's Parcel Number in question.

The categories presented below are expected to shift over time; thus, they are not definitive and should be considered only for screening. For example, where a property is currently situated in an area of Assumed High Sensitivity, and such property is subject to protocols for identification, evaluation, and treatment of cultural resources, it will eventually be surveyed. If the survey concludes, with agency concurrence, that there are no cultural resources located within its boundaries, the model would be updated by the City to reflect a lower sensitivity, regardless if the development were to proceed; the classification would need to change from Assumed High Sensitivity to Low Sensitivity. If development of that property is delayed, the classification of low sensitivity would alert the City to perhaps require a field visit to confirm ground conditions, but not necessarily a full resurvey. Also, with the passage of time, built environment resources age and new context statements emerge, so these resources may achieve higher sensitivity levels. Over time, and as subsequent cultural resources investigations are completed within the City, the sensitivity model could more accurately reflect the actual inventory of cultural resources. As such, the more detailed, confidential version of this model will not be available in its entirety to the public but will be utilized by City staff. The model included in this report has been modified for public release. However, a potential applicant for a project within the City can request information from the confidential model about whether the project is located in a High, Assumed High, or Low sensitivity area at any time. Knowledge of the relative sensitivity of the project location may help make a determination about whether development, adaptive reuse or strict preservation is the appropriate land use. Please note that due to the nature of the cultural resources under analysis, sensitivity classifications differ between the Archaeological Sensitivity Model and the Architectural History Sensitivity Model.

## **Archaeological Sensitivity Model**

The three categories depicted in the sensitivity model for archaeological sites are those of High Sensitivity, Assumed High Sensitivity, and Low Sensitivity (Figure 1). A description of each follows.



Source: ECORP, Esri, City of Moorpark

**Figure 1. Archaeological Sensitivity**



### ***High Sensitivity***

This category represents the broad zones that have previously yielded archaeological sites that have been recorded by professionals on California Department of Parks and Recreation (DPR) 523 series forms and submitted to the Information Center, usually as a result of cultural resources management studies for previous projects subject to state or federal law. This model does not differentiate between previously recorded sites that have since been removed or impacted and those that remain intact; however, projects that will occur in a known High Sensitivity area should expect a higher likelihood of encountering archaeological sites. For projects in known High Sensitivity areas that are seeking discretionary approval from the City, a field visit by a qualified professional archaeologist to verify integrity should be performed.

### ***Assumed High Sensitivity***

This category represents those areas that can be classified as neither High nor Low, because they have not been surveyed for archaeological sites by professionals. This would include property such as private parcels that have never sought entitlements or approval from the City for projects subject to discretionary approval. Until these areas have been surveyed by professionals, they are assumed to be highly sensitive for archaeological sites. Should a future survey result in a negative finding for archaeological sites, the subject property may be converted to either High or Low Sensitivity by City planning staff, in consultation with qualified professionals.

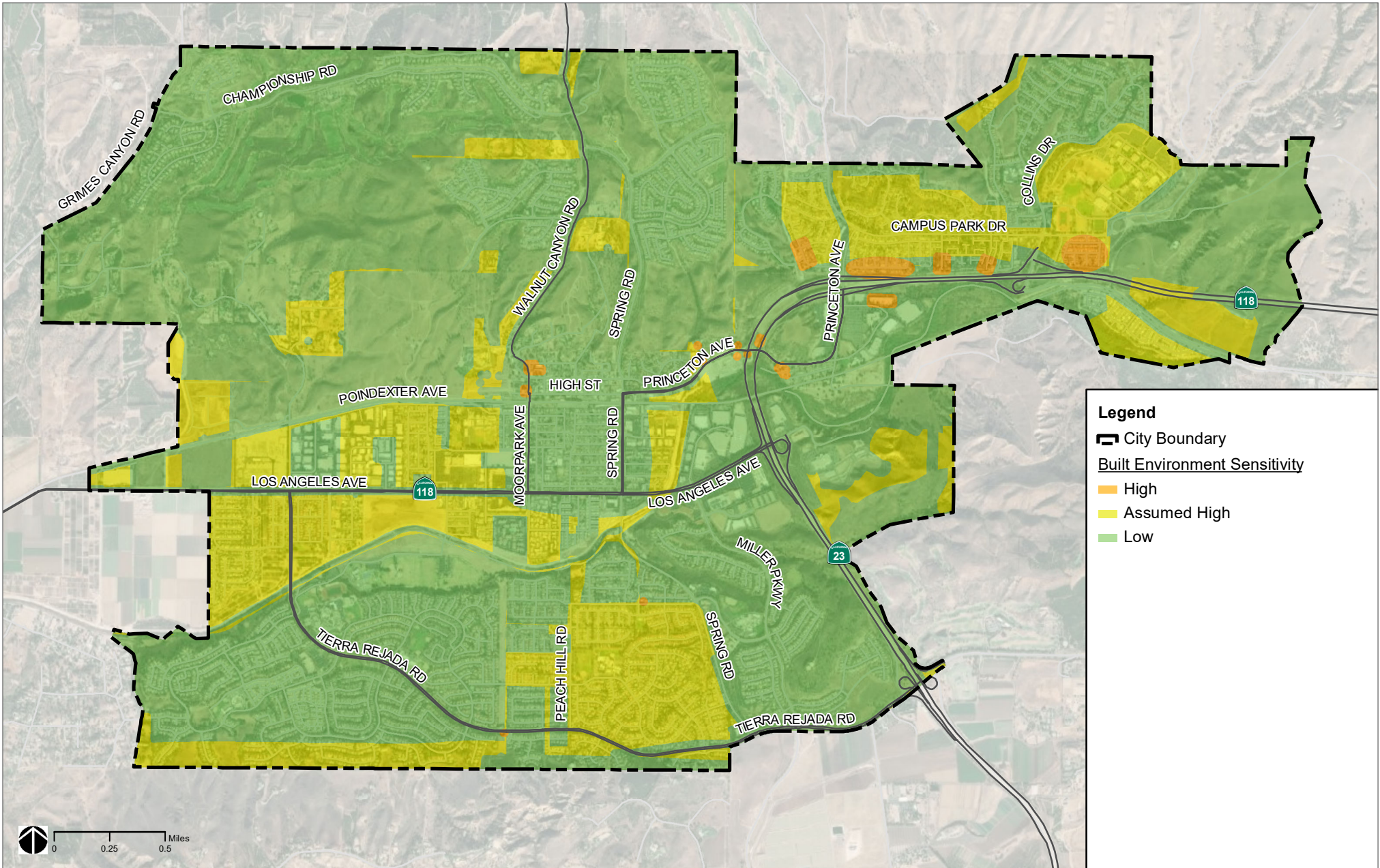
### ***Low Sensitivity***

This category represents areas that are reflected in the files at the Information Center as having been previously surveyed by qualified professionals, for which no archaeological sites were observed or recorded. Property within this category is not expected to be constrained by cultural resources; however, archaeological sites are not always visible from the surface. Standard conditions and mitigation measures for unanticipated discovery should be utilized as appropriate, given the nature of the project.

A potential applicant for a project within the City can request information about whether the project is located in a known High, Assumed High, or Low Sensitivity area at any time. While the City cannot release confidential information to the requesting party, knowledge of the relative sensitivity of the project location may help make a determination about whether development or conservation is the appropriate land use. The sensitivity model is also useful in suggesting the types of cultural resources that may be encountered, which, in turn, can be used to pre-define research themes and topics. It can also be used to develop standard treatment methods when avoidance or mitigation of significant cultural resources is necessary.

## **Architectural History Sensitivity Model**

The three categories depicted in the sensitivity model for architectural history (built environment resources) are those of High Sensitivity, Assumed High Sensitivity, and Low Sensitivity (Figure 2). A description of each follows.



Source: ECORP, Esri, City of Moorpark

**Figure 2. Built Environment Sensitivity**

### ***High Sensitivity***

This category represents the areas that have previously recorded historic buildings and structures that were documented by professionals on DPR 523 series forms and submitted to the SCCIC, usually as a result of cultural resources management studies for previous projects subject to state or federal law. These include the locations of known historic buildings and structures, as well as the areas between them where there is a higher density of resources recorded.

This model does not differentiate between previously recorded buildings that have since been removed, remodeled or impacted, and those that remain intact; however, projects that will occur in a known High Sensitivity area should expect a higher likelihood of encountering archaeological sites associated with previous historic structures, such as privies, cellars, foundations, and other subsurface features. For projects in known High Sensitivity areas that are seeking discretionary approval from the City, a field visit by a qualified professional architectural historian or cultural resources professional to verify integrity should be performed.

### ***Assumed High Sensitivity***

This category represents those areas that can be classified neither as known High nor Low, because they have not been surveyed for historic buildings and structures by professionals. This would include property such as private parcels that have never sought entitlements or approval from the City for projects subject to discretionary approval. They are assumed to be highly sensitive for built environment resources until these areas have been surveyed by professionals. Should future surveys result in a negative finding for historic buildings and structures, the subject property would be converted to either High or Low Sensitivity by City planning staff, in consultation with qualified professionals.

### ***Low Sensitivity***

This category represents areas that are reflected in the files at the Information Center as having been previously surveyed by qualified professionals, for which no historic buildings or structures were observed or recorded. Property within this category is not expected to be constrained by cultural resources; however, associated archaeological deposits are not always visible from the surface. Standard conditions and mitigation measures for unanticipated discovery should be utilized as appropriate, given the nature of the project.

## **SUMMARY**

ECORP, in support of the 2020 Moorpark General Plan Update, has developed a cultural resources sensitivity model for the City. This sensitivity model was developed by professional archaeologists with information acquired through the confidential CHRIS records search and a literature review of confidential and publicly accessible information. The purpose of this sensitivity model is to serve as a planning tool for future City projects and to identify particularly sensitive areas that have a high potential for cultural resources. The following recommendations represent the minimum effort required for each sensitivity level, but do not supersede the regulatory requirements for individual projects and should not be considered the only source of inquiry with respect to impacts to cultural resources.

### **Recommendations for High Sensitivity Areas**

High Sensitivity Areas are areas that are known to be sensitive for archaeological sites and built environment resources, and development in these areas should be contemplated with caution. There is a higher likelihood that cultural resources (currently visible or not) may be present and impacted by a project.

For projects in known High Sensitivity areas, ECORP recommends, at a minimum, a project-specific CEQA-compliant Phase I or Section 106-compliant study (as applicable) be conducted by a qualified professional. The study should include a records search of the CHRIS at the SCCIC, a search of the Sacred Lands File by the NAHC, and a field survey using protocol field methods. It should be noted that in addition to these efforts, projects in a High Sensitivity area for archaeology may require additional focused consultation with Native American tribes or consultation with specific special interest groups, such as historical societies or other ethnic groups.

### **Recommendations for Assumed High Sensitivity Areas**

Assumed High Sensitivity areas are areas that can be classified as neither High nor Low, because they have not been surveyed for archaeological sites or built environment resources by professionals. Development in these areas may or may not impact cultural resources, because enough about the baseline information is not known. The absence of surveys in the CHRIS records search results does not mean that there are no cultural resources present, because this information usually cannot be known until the properties are surveyed by qualified professionals.

ECORP recommends, at a minimum, a project-specific CEQA-compliant Phase I or Section 106-compliant study (as applicable) be conducted by a qualified professional. The study should include a records search of the CHRIS at the SCCIC, a search of the Sacred lands File by the NAHC, and a field survey using protocol field methods. Upon completion, City planning staff, in consultation with qualified professionals, can adjust the sensitivity level of a project area to known High or Low to reflect the results of the records search and field survey.



## Recommendations for Low Sensitivity Areas

Low Sensitivity areas are areas that have been previously surveyed by qualified professionals, which resulted either in no resources being observed, or for which known resources were previously determined to be not significant with agency concurrence, or for which significant resources were previously subjected to appropriate evaluation, treatment, and mitigation (if applicable) under state or federal law. Therefore, development of property within Low Sensitivity areas is not likely to result in impacts to cultural resources; however, there always exists the potential for buried subsurface materials that weren't encountered previously. In addition, some resources that were determined previously to not be old enough to be considered historic will, at some point, become old enough to warrant consideration.

ECORP recommends, at a minimum, a project-specific records search be conducted by a qualified professional to determine whether or not the previous documentation is sufficient and whether or not updated surveys are necessary based on changing ground conditions or to be compliant with applicable state or federal law.

## Other Considerations

For all projects, regardless of sensitivity level, if cultural resources are found within a project area, they need to be evaluated using CRHR and/or NRHP eligibility criteria to determine whether they are Historical Resources for the purposes of CEQA or Historic Properties for the purposes of Section 106 of the NHPA. An impact assessment/finding of effect should be carried out for identified Historical Resources and Historic Properties and mitigation measures be provided for Historical Resources that will be significantly impacted and Historic Properties that will suffer adverse effects. The results of the evaluation and the impacts assessment/finding of effect, as well as the mitigation measures, should be provided in the specific environmental document written for the project.

Archaeological sites are not always visible from the surface. This current study does not use geoarchaeological modeling to assess the likelihood for the Study Area to contain subsurface resources that are not visible on the surface. Standard conditions and mitigation measures for unanticipated discovery should be utilized as appropriate for all proposed projects, regardless of their sensitivity designation.

If you have any questions on this report, please do not hesitate to contact me at (858) 279-4040 or via email at [joconnor@ecorpconsulting.com](mailto:joconnor@ecorpconsulting.com).

Sincerely,



John O'Connor, Ph.D., RPA  
Southern California Cultural Resources Manager

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## **Appendix G      Paleontological Resources Report**

## Appendices

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# Summary of Paleontological Findings

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## Moorpark General Plan Update

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**September 2022**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

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## **1.0 INTRODUCTION**

### **1.1 Purpose of Study**

In support of the forthcoming Moorpark General Plan, PlaceWorks retained ECORP Consulting, Inc. (ECORP) to summarize the existing conditions of paleontological resources within all unincorporated lands that are subject to the City of Moorpark's land use jurisdiction (Figure 1). The study area is composed of all of the approximately 7,991 acres of the incorporated lands. Methods include a paleontological records search, a review of published and unpublished paleontological studies in the area, and discussions with the Curator of Geology at the Santa Barbara Museum of Natural History.

The objective of this study is to review and summarize available information regarding known paleontological resources within the boundaries of the City of Moorpark (City) to support an update of the City's General Plan. The proposed project is an update of the City of Moorpark General Plan and is intended to provide guidance for long-term growth, maintenance, preservation, and decision-making in the City over the next 20-plus years. Following its incorporation in 1983, the City of Moorpark adopted its current General Plan in 1992. The General Plan Update is expected to consist of the following elements: Land Use; Circulation; Housing; Noise; Open Spaces, Conservation and Recreation; and Safety and Multi-Hazard Mitigation Plan.

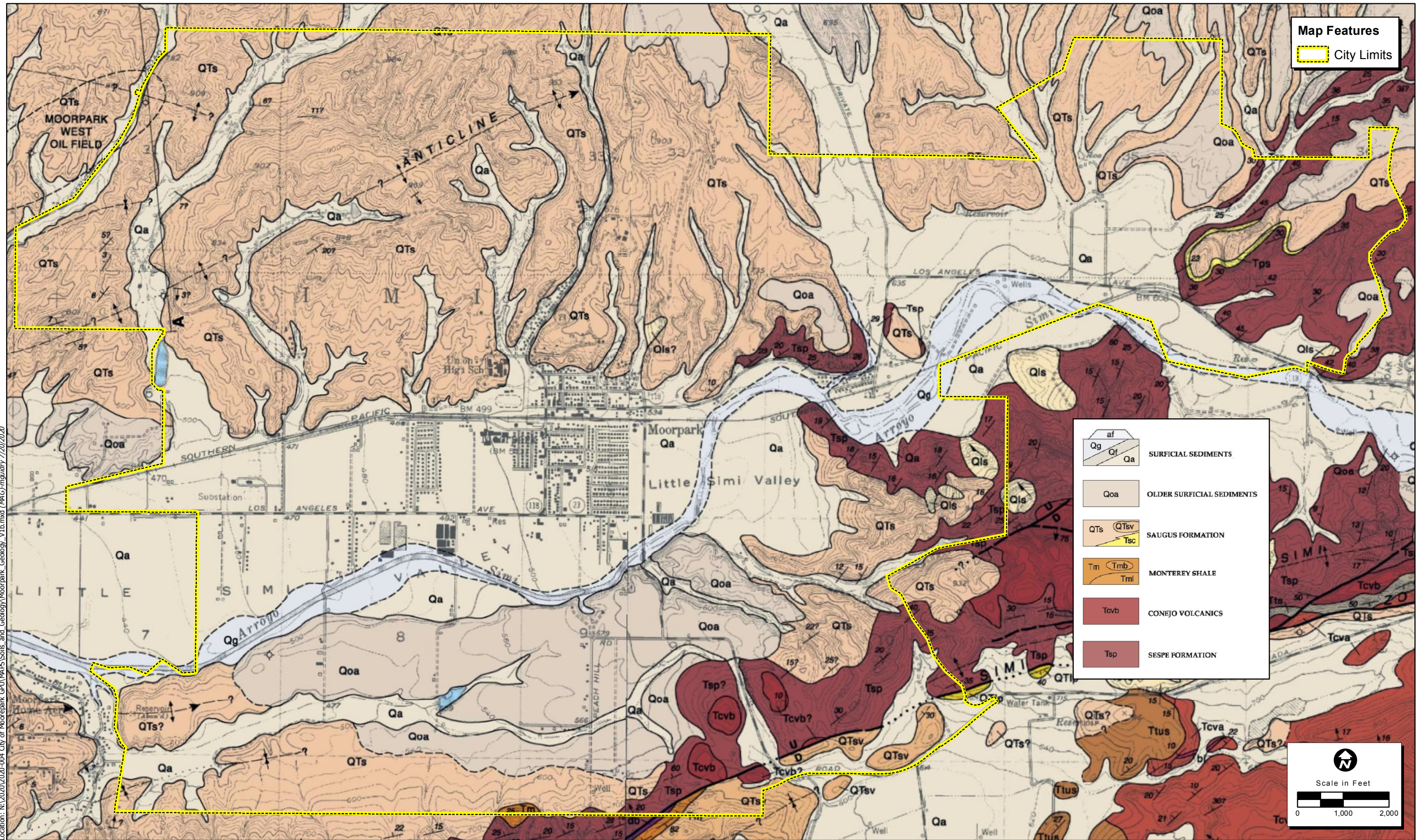
### **1.2 Project Location and Description**

Located in Ventura County, the City of Moorpark is located in Little Simi Valley (Figure 1). Big Mountain lies to the north, and the Las Posas Hills and the Tierra Rejada Valley to the south. The City of Moorpark is depicted on the Simi West and Moorpark 7.5' quadrangles (Figure 1).

### **1.3 Project Personnel**

ECORP conducted the paleontological resources studies. Qualifications of ECORP personnel are provided (Appendix A).

Joe Stewart served as the Principal Paleontologist for this project. Dr. Stewart has an M.A. in Systematics and Ecology and a Ph.D. in Systematics and Ecology from the University of Kansas. He has more than 40 years of experience in paleontology and more than 35 years of experience in southern California paleontology. He also has more than 40 peer-reviewed articles published in scientific books and journals.



Location: N:\2020\2020-004 City of Moorpark GPU\WAPS\Soils\_and\_Geology\Moorpark\_Geology\_V1b.mxd (WAG\mduffy.7/20/2020)

Map Date: 7/15/2020  
 Geologic map of the Simi and Moorpark quadrangles

**Figure 1. Geologic Map of City Footprint**

## **2.0 REGULATORY ENVIRONMENT**

### **2.1 California Environmental Quality Act of 1970 (CEQA)(PRC Section 21000 et seq.)**

CEQA states that: "It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and the procedures required are intended to assist public agencies in systematically identifying both the significant effects of proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects."

CEQA declares that it is state policy to "take all action necessary to provide the people of this state with ... historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the State. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered. If archaeological or paleontological resources are identified as being within the proposed project study area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

### **2.2 Public Resources Code Section 5097.5**

Section 5097.5: 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 sites, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

### **2.3 California Administrative Code, Title 14, Section 4307**

This section states that "No person shall remove, injure, deface or destroy any object of paleontological, archeological or historical interest or value."

## **3.0 BACKGROUND**

### **3.1 Geologic Setting**

Geologically, Moorpark is in the Simi Valley which lies in the western portion of the Transverse Ranges Geomorphic Province and is situated between the Coastal Ranges province to the north and the Peninsular Ranges province to the south (Wagner 2002). Emergence of the Simi Valley area above sea

level during the Cenozoic Era primarily reflects regional uplift of the area resulting from interaction of the western edge of the North American continental plate with the eastern edges of the crustal plates underlying the floor of the Pacific Ocean (Lander 1997). To a lesser extent, development of polar ice caps and corresponding global fall in sea level also contributed to this process. Another factor that has affected the region is the rotation of the Transverse Ranges due to movement along the San Andreas Fault Zone. The mountain ranges of this segment of the Pacific Plate once were parallel to those to the north and to the south.

Campbell et al. (2014) have mapped the geology of the Moorpark area at a scale of 1:100,000. Dibblee (1992a,1992b) has mapped the area at a scale of 1:24,000; it is those maps that have been used for this report. The footprint of the City of Moorpark is shown on those maps in Figure 1.

### 3.2 Paleontological Setting

The oldest rocks within the city date to the Eocene and Oligocene epochs. Volcanism took place from 17 to 14 million years ago (Ma). Some of that volcanism was submarine. The Monterey Formation sediments in the vicinity are evidence that the city was submerged during the Middle and Late Miocene Epoch. It had reemerged by Pliocene Epoch. Much of the city footprint is mapped as Saugus Formation, a terrestrial unit, which spans the late Pliocene and early Pleistocene epochs, ending around 780 thousand years ago (Ka).

The City transitioned from an equatorial climate during the Eocene and Oligocene epochs to increasingly arid terrestrial deposits from the Pleistocene to the Holocene. Annual precipitation during the Eocene Epoch was 49 to 75 inches, compared to 18 inches today (Peterson and Abbott 1979).

A search for paleontological records was completed by the Natural History Museum of Los Angeles County. Published literature, unpublished paleontological reports, and discussions were held with the Curator of Earth Sciences of the Santa Barbara Museum of Natural History.

### 3.3 Stratigraphy

Geologic mapping by Dibblee (1992a,1992b) shows that the footprint of the city includes six separate units ranging from modern deposits to Eocene sediments (Figure 1; Table 1. Geologic units are discussed in order from oldest to youngest.

<b>Table 1. Geologic Units within the City</b>			
<b>Epoch</b>	<b>Age Range</b>	<b>Unit Name</b>	<b>Paleoenvironment</b>
Modern	10 Ka	Surficial Sediments (Qa)	Unconsolidated alluvial deposits
Late Pleistocene	~130 Ka – 11.7 Ka	Older Surficial Sediments (Qoa)	Dissected, weakly consolidated alluvial deposits
Late Pliocene to Early Pleistocene	~ 850 – 780 Ka	Saugus Formation (QTs, QTsv)	Flood-plain, alluvial fan sediments
Middle to Late Miocene	~15 – 10 Ma	Monterey Shale (Tm)	Marine continental margin hemipelagic sediments

<b>Table 1. Geologic Units within the City</b>			
<b>Epoch</b>	<b>Age Range</b>	<b>Unit Name</b>	<b>Paleoenvironment</b>
Middle Miocene	~ 17 Ma - ~ 14 Ma	Conejo Volcanics (Tcvb)	Submarine to subaerial volcanic flows
Late Eocene to early Miocene	~23 Ma - ~16 Ma	Sespe Formation (Tsp)	Stream sediments

### **3.3.1 Late Eocene to Late Oligocene Deposits (~ 38 Ma to ~23 Ma)**

#### **Sespe Formation (Tsp)**

The Sespe Formation has yielded a wealth of fossils in the Moorpark area. Caltech paleontologists began research in the area in the 1930s. In the hills just east of the northeastern portion of the City footprint are 27 localities from the older Eocene portion of the Sespe Formation. Vertebrate fossils found there include insectivores, two types of primates, rodents, miacid carnivores, protoceratids, and camels. A list of all the species from those localities is included in Appendix D. In the Las Posas Hills, west-southwest of the City footprint, there is a very well-known Sespe Formation locality of Oligocene age. The holotype (name bearing) specimens alone from that locality include the fossil tortoise *Gopherus neglectus*, the fossil dogs *Archaeocyon pavidus* and *Mesocyon baileyi*, the fossil cats *Hoplophoneus belli* and *Nimravus meridianus*, the fossil rodent *Sespemys thurstoni*, the fossil rhinoceros *Subhyracodon kewi*, the fossil hypertragulid artiodactyl *Hypertragulus fontanus*, and the fossil camel *Dyseotylopus migrans*.

### **3.3.2 Middle Miocene Volcanic Deposits (~17 Ma to ~14 Ma)**

#### **Conejo Volcanics (Tcvb)**

These volcanic deposits will not produce paleontological resources (fossils).

### **3.3.3 Middle to Late Miocene Deposits (~15 Ma to ~ 10 Ma)**

#### **Monterey Formation (Tm)**

The Monterey Formation has produced hundreds of invertebrate, vertebrate, and plant fossils. In the Moorpark region, this formation consists of marine continental margin hemipelagic sediments. In the elevated terrain south of Tierra Rejada Road west of Peach Hill Road in the very southern portion of the proposed project area there are some relatively small exposures of the Monterey Shale (also referred to as the Modelo Formation in this area). The closest known Monterey Formation locality is northwest of the city footprint on the southwest side of Oak Ridge, that produced a fossils specimen of shearwater, *Puffinus*.

### **3.3.4 Late Pliocene to Early Pleistocene**

#### **Saugus Formation (Qts, QTsv)**

The Saugus Formation is an accumulation of fluvial and alluvial fan sediment. Until recently, some marine sediments were also considered part of the formation. However, marine strata formerly assigned to it are now assigned to the Pico Formation (Squires et al. 2006; Squires 2012; Swanson and Irvine 2015).

### **3.3.5 Late Pleistocene**

#### **Older Quaternary Alluvium (Qoa)**

There are considerable exposures of older Quaternary Alluvium in the proposed project area, frequently as fan deposits along the margins of the elevated terrain, and particularly south of Arroyo Simi in the southwestern portion of the proposed project area. There are no known localities in this unit within the city boundaries. The closest vertebrate fossil locality from these older Quaternary deposits is in the Las Posas Hills just south of due west of the southwestern-most portion of the city footprint. It produced a fossil specimen of horse, *Equus*. The next closest older Quaternary locality is due east of the northeastern portion of the city footprint on the south side of Alamos Canyon, that produced a fossil specimen of horse, *Equus occidentalis*. In the ravine west of Dry Canyon further east, another locality produced a fossil skeleton of mastodon, *Mammut americanum*. At Marr Ranch in the very northeastern part of Simi Valley, another older Quaternary locality produced another fossil specimen of mastodon, *Mammut*.

### **3.3.6 Modern**

#### **Surficial Sediments (Qa)**

Sediments from the Holocene Epoch (~11.7 Ka to present) are mostly alluvium of existing arroyos and scree, soils, or other materials that are primarily found at the base of hills. Historically, Holocene fossils have not been considered significant paleontological resources. However, the Guidelines of the Society for Vertebrate Paleontology (2010) indicate that paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years). Surficial sediments of many kinds are found within the city footprint. Only those older than 5,000 radiocarbon years will produce significant paleontological resources. However, any of the above fossil-producing rock units could be exposed at the surface and yield significant paleontological resources at the surface. In the active channel of Arroyo Simi that flows through the central portion of the area there are surface deposits of younger Quaternary gravels. Surface deposits in all the lower lying terrain in the proposed project area, especially in Little Simi Valley and in all drainages in the more elevated terrain, there are surface deposits of younger Quaternary Alluvium, derived as alluvial fan deposits from the surrounding more elevated terrain or as alluvial deposits from the Arroyo Simi drainage. These younger Quaternary deposits typically do not contain significant vertebrate fossils in the uppermost layers, but older sedimentary deposits found at depth may well contain significant fossil vertebrate remains.

## 4.0 RECORDS SEARCH AND LITERATURE REVIEW

### 4.1 Paleontological Records Search

ECORP requested a paleontological records search from the Natural History Museum of Los Angeles County on June 11, 2020. Dr. Samuel McLeod of that institution informed us on June 25, 2020 that the museum has no localities within the city boundaries, but that many specimens have been found nearby (McLeod 2020; Appendix B). Dr. Jonathan Hoffman of the Santa Barbara Natural History Museum was interviewed about specimens in that collection.

The Santa Barbara Natural History Museum has 34 specimen numbers in its collection from the Saugus Formation in the Meridian Hills neighborhood (J. Hoffman, pers. comm. 2020; Appendix C). Included in this collection are horses, camels, mammoth, gopher, pocket mouse, kangaroo rat, harvest mouse, wood rat, and vole. The unpublished report on the paleontological resource mitigation program that brought them to light was completed by Lander in 2007. That report showed 21 localities within that development (Lander 2007).

Other fossils have been recovered during a construction of the Moorpark Highlands Project. However, the fossils appear to be missing (see below).

### 4.2 Literature Review

Much of the known fossil collections known from Moorpark and adjacent areas are of Pleistocene age. Jefferson's compendia of California localities that have produced Pleistocene vertebrate fossils (Jefferson 1991a, 1991b) do not list any localities in Moorpark, because the Moorpark discoveries post-date those publications.

A published and an unpublished report were found for the Meridian Hills neighborhood of Moorpark. Lander (2007) detailed the results of the paleontological resource mitigation program carried out during that construction project. Numerous vertebrate fossils were recovered from the Saugus Formation. Twenty-one localities were recorded within the footprint of that project. The animal taxa recovered are discussed above. Wagner et al. (2007) discussed the species recovered from this project. An important aspect of the findings was that two species of mammoth, *Mammuthus meridionalis* and *Mammuthus columbi*, were present. This was one of only three known co-occurrences of these two species. A combination of the paleomagnetic studies at the site and the co-occurrence of these two mammoths permitted an age estimate of 850 Ka to 780 Ka for this fauna. This collection was accessioned by the Santa Barbara Museum of Natural History.

Another development known as Moorpark Highlands produced vertebrate fossils, and it lies farther to the northeast, across Walnut Canyon Road. The final report for the paleontological resource monitoring and mitigation effort by Chambers Group, Inc. (2007). They reported that a collection of mollusk fossils was obtained from the Pico Formation, and several vertebrate fossils, including a partial skeleton of a mastodon, *Mammuthus* sp., from the Saugus Formation. Fossils of horse, *Equus*, were also recovered. The report states that, "The specimens have since been cleaned, sorted, and analyzed and were recently curated into the collections of the Museum of Natural History, Los Angeles, California." An accession form

from the Natural History Museum of Los Angeles County was included in that report as Attachment F. The form, however, is undated, has no accession number, and is not signed by any staff member of the museum. Dr. Samuel McLeod of the Natural History Museum of Los Angeles County assured this author (pers. comm. February 2020) that no vertebrate fossils from that project were ever accessioned or curated by that museum. Furthermore, Jonathan Hoffman (pers. comm., Feb 2020) stated that no such collection had been curated at the Santa Barbara Museum of Natural History.

## **5.0 IMPACT ANALYSIS AND MITIGATION**

### **5.1 Paleontological Sensitivity**

A multilevel ranking system was developed by professional resource managers within the U.S. Bureau of Land Management (BLM) as a practical tool to assess the sensitivity of sediments for fossils. The Potential Fossil Yield Classification (PFYC) system (BLM 2016) has a multi-level scale based on demonstrated yield of fossils. The PFYC system provides additional guidance regarding assessment and management for different fossil yield rankings. Fossil resources occur in geologic units (e.g., formations or members). The probability for finding significant fossils in a project area can be broadly predicted from previous records of fossils recovered from the geologic units present in and/or adjacent to the study area. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria. Sediments that are close to their basement rock source are typically coarse; those farther from the basement rock source are finer. The chance of fossils being preserved greatly increases once the average size of the sediment particles is reduced to 5 millimeters (mm) or less in diameter. Moreover, fossil preservation also greatly increases after natural burial in rivers, lakes, or oceans. Remains left on the ground surface become weathered by the sun or consumed by scavengers and bacterial activity, usually within 20 years or less. Therefore, the sands, silts, and clays of rivers, lakes, and oceans are the most likely sediments to contain fossils. Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered important fossils or localities do not necessarily indicate a higher PFYC value; instead, the relative abundance of localities is intended to be the major determinant for the value assignment. No formations in the City are assigned a very high sensitivity (PFYC 5). The late Eocene to late Oligocene Sespe and the Monterey Formation; are assigned a high sensitivity (PFYC 4). The Older Alluvium is assigned a moderate sensitivity (PFYC 3). Surficial sediments are assigned a low sensitivity (PFYC 2).

## **6.0 PROPOSED MITIGATION MEASURES**

**MM PAL-1:** City staff shall require applicants for future proposed projects with planned impacts in undisturbed sediments ranked PFYC 3 or above to provide a technical paleontological assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified paleontologist (with a graduate degree and a specialization in vertebrate paleontology). If resources are known or reasonably anticipated, the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provides a fossil



recovery protocol that includes data to be collected, requires professional identification, radiocarbon dates and other special studies as appropriate, requires curation at local curation facility such as the Natural History Museum of Los Angeles County for fossils meeting significance criteria, requires a comprehensive final mitigation compliance report including a catalog of fossil specimens with museum numbers, and an appendix containing a letter from the museum stating that they are in possession of the fossils.

## 7.0 REFERENCES

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## **LIST OF APPENDICES**

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Appendix A. Qualifications

Appendix B. Paleontological Records Search Results

Appendix C. List Of Moorpark Fossils In The Santa Barbara Museum Of Natural History

Appendix D. Fossil Species From The Eocene Sespe Formation Near Moorpark

**APPENDIX A**

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Qualifications

# Joe Stewart, Ph.D.

## Senior Paleontologist, Principal Investigator

Joe Stewart is a vertebrate paleontologist with over 40 years of experience in paleontology and 33 years of experience with the geology and paleontology of California. He received a B.A. in Systematics and Ecology at the University of Kansas in 1979, and a Ph.D. in Systematics and Ecology at the University of Kansas in 1984. His main experience is with the paleontological resources of California, but he also has experience with projects in Wyoming, Utah, Colorado, Arizona, Nevada, Idaho, and Nebraska, and a substantial research history in Kansas. Dr. Stewart has extensive experience with permitting projects subject to CEQA and NEPA. His expertise includes the identification of fish fossils and Pleistocene microvertebrate faunal remains. He directed the paleontological monitoring and mitigation program for Path 15, a major transmission line project, and the paleontological aspects of permitting for the Gateway West transmission line project in Wyoming and Idaho. Joe has multiple BLM permits. He has published over 40 peer-reviewed paleontology articles in scientific books and journals. He is also a Research Associate at the Natural History Museum of Los Angeles County.

## Education

Ph.D., Systematics and Ecology, University of Kansas

B.A., Systematics and Ecology, University of Kansas

## Registrations, Certifications, Permits and Affiliations

- Riverside County Qualified Paleontologist
- Orange County Certified Paleontologist
- Principal Investigator on BLM California Paleontology Permit
- Research Associate, Natural History Museum of Los Angeles County

## Professional Experience

**Ivanpah Control Project, San Bernardino, Kern, and Inyo Counties – Southern California Edison (2018-2019).** Reviewed paleontological resources aspects of Southern California Edison’s Ivanpah-Control Project proponent’s environmental assessment (PEA) filing for California Public Utilities Commission.

**Strauss Wind Energy Project EIR, Santa Barbara County – Santa Barbara County Planning Department (2018).** Revised paleontological resource sections of an earlier EIR.

**San Onofre Nuclear Generating Station (SONGS) Units 2 & 3 Decommissioning Project, San Diego County – Southern California Edison (2018).** Reviewed draft Paleontological Resources Mitigation and Monitoring Plan.

**Puerco Canyon Camp and Trailhead Project, Malibu, Los Angeles County (2018).** Wrote the paleontological resources section of the EIS/EIR.

**Qualcomm Stadium Reconstruction, San Diego (2015-2016).** Wrote paleontological resources technical report and wrote paleontological resources sections of EIR.

**Foster Road Storm Drain Stage I, Temescal Creek – Riverside County Flood Control and Water Conservation District (2015-2016).** Monitored construction, supervised sediment sample processing, and wrote final report.

**Crenshaw/LAX Transit Corridor Rail Project, Los Angeles – Los Angeles County Metropolitan Transportation Authority (2014-2015).** Oversaw paleontological resources monitoring and mitigation of construction activities.

**SR-91 Corridor Improvement Project (2013-2017).** Wrote Paleontological Mitigation Plan and supervised paleontological monitoring and mitigation of construction activities.

**Calico Mineral Exploration Project, San Bernardino County (2013).** Obtained BLM Fieldwork Authorization, surveyed 350 acres, processed sediment samples, identified fossils, and wrote paleontological assessment for permitting of project.

**I-15/I-215 Interchange Improvement Project, Devore, San Bernardino County (2012-2013).** Supervised paleontological monitoring and mitigation of construction activities.

**Sun Valley to Morgan 500/230kV Transmission Line Project, Los Angeles County (2011-2012).** Wrote paleontological resources technical report for the project.

**California High Speed Rail Project, Palmdale to LA Union Station Segment (2010-2014).** Supervised pedestrian survey of Palmdale to LA Union Station Segment of the California High Speed Rail Project. Wrote paleontological resources technical report and paleontological sections of the EIS/EIR.

**Westside Subway Extension Draft EIS/EIR, Los Angeles County – Los Angeles County Metropolitan Transportation Authority (2009-2010).** Directed paleontological survey of route and wrote paleontological pedestrian survey. Wrote paleontological resources section of the draft EIS/EIR.

**I-805 Managed Lanes South Project, San Diego County – SANDAG (2008-2009).** Directed paleontological survey of 11.4-mile long project area in San Diego, National City, and Chula Vista and wrote the Paleontological Resource Assessment.

**I-805 North Corridor Project, San Diego County – SANDAG (2008).** Directed paleontological survey of 4.4-mile long project area in San Diego and wrote the Paleontological Resource Assessment.

**Mesquite General Aviation Airport Replacement Project, Mesquite, Nevada – Federal Aviation Administration (2009).** Researched geological literature and paleontological records and wrote the paleontological resources assessment.

**Solar 1 Solar Energy Project, San Bernardino County (2008).** Obtained BLM Fieldwork Authorization, supervised survey of 7,700 acres, and wrote paleontological resources section of Application for Certification submitted to the California Energy Commission.

**CalNev Pipeline Project, San Bernardino County and Clark County, Nevada - Kinder-Morgan (2008-2009).** Wrote the paleontological assessment based on records and literature searches and a paleontological survey of the 234-mile long proposed petroleum pipeline from Colton, CA to Las Vegas, NV. Directed the survey on private and federal lands.

**Cajon Main Third Track, Summit to Keenbrook Project, San Bernardino County – BNSF Railway (2007).** Participated in the writing, editing, and production of the Paleontological Resources Monitoring and Mitigation Plan and the Paleontological Resources Assessment.

**Ausra-Carrizo Solar Project, San Luis Obispo County (2007).** Participated in survey of 960 acres and edited the Application for Certification submitted to the California Energy Commission.

**Heritage Fields/The Great Park, City of Irvine, Orange County (2006-2007).** Participated in pedestrian survey of 3,700 acres, supervised excavations at three sites, and wrote the final technical report.

**Path 15 500-kV Power Transmission Line From Los Banos Substation to Gates Substation (2003-2005).** Supervised paleontological resource monitoring, excavations, specimen preparation, specimen identification, and report writing for 80-mile power line.

## **Selected Professional Publications/Papers/Presentations**

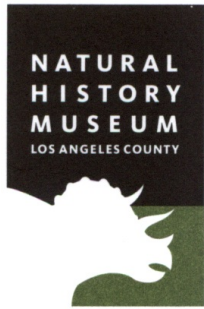
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Paleontological Records Search Results

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25 June 2020

ECORP Consulting, Inc.  
215 North Fifth Street  
Redlands, CA 92374

Attn: J. D. Stewart, Ph.D., Paleontologist

re: Paleontological resources for the proposed City of Moorpark GPU Project, ECORP  
Project # 2020-004, in the City of Moorpark, Ventura County, project area

Dear J. D.:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed City of Moorpark GPU Project, ECORP Project # 2020-004, in the City of Moorpark, Ventura County, project area as outlined on the portions of the Moorpark and Simi Valley West USGS topographic quadrangle maps that you sent to me via e-mail on 11 June 2020. We have no vertebrate fossil localities that lie directly within the proposed project area boundaries, but we do have localities nearby from the same sedimentary deposits that occur in the proposed project area.

In the southeastern portion of the proposed project area around Spring Road west of the Moorpark Freeway (Highway 23) there are some exposures of the middle Miocene Conejo Volcanics. These igneous rocks will not contain recognizable fossils.

In the active channel of Arroyo Simi that flows through the central portion of the proposed project area there are surface deposits of younger Quaternary gravels. Surface deposits in all the lower lying terrain in the proposed project area, especially in Little Simi Valley and in all drainages in the more elevated terrain, there are surface deposits of younger Quaternary Alluvium, derived as alluvial fan deposits from the surrounding more elevated terrain or as alluvial deposits from the Arroyo Simi drainage. These younger Quaternary deposits typically do

not contain significant vertebrate fossils in the uppermost layers, but older sedimentary deposits found at depth may well contain significant fossil vertebrate remains.

There are considerable exposures of older Quaternary Alluvium in the proposed project area, frequently as fan deposits along the margins of the elevated terrain, and particularly south of Arroyo Simi in the southwestern portion of the proposed project area. Our closest vertebrate fossil locality from these older Quaternary deposits is LACM (CIT) 560, in the Las Posas Hills just south of due west of the southwestern-most portion of the proposed project area, that produced a fossil specimen of horse, *Equus*. Our next closest older Quaternary locality is LACM 6107, due east of the northeastern portion of the proposed project area on the south side of Alamos Canyon, that produced a fossil specimen of horse, *Equus occidentalis*. In the ravine west of Dry Canyon further east, our older Quaternary locality LACM 7455 produced a fossil skeleton of mastodon, *Mammot americanum*. At Marr Ranch in the very northeastern part of Simi Valley our older Quaternary locality LACM 7594 produced another fossil specimen of mastodon, *Mammot*.

The Plio-Pleistocene Saugus Formation is exposed extensively in the elevated terrain throughout the proposed project area, especially in the Simi Hills north of the Little Simi Valley. Our closest Saugus Formation locality is LACM (CIT) 585, west-southwest of the proposed project area on the south side of the Las Posas Hills, that produced a fossil specimen of an elephantoid. Geologic mapping indicates that in the very northeastern portion of the proposed project area there are some relatively thin exposures of the older marine or brackish water portion of the Saugus Formation that may be called the Sunshine Ranch Member. Our Saugus Formation localities that may come from this member, LACM 6236-6240, 6283 and 6285, occur northeast of the proposed project area between Tapo Canyon and Gillibrand Canyon. These localities have produced a predominantly marine fossil fauna including sturgeon, *Acipenser*, mackerel, Scombridae, rock bass, *Paralabrax*, sculpin, *Scorpaenichthys marmoratus*, tortoise, Testudinidae, sea snake, Hydrophiidae, scoter, *Melanitta*, auklet, *Mancalla milleri*, cormorant, *Phalacrocorax*, albatross, *Diomedea*, shearwater, *Puffinus kanakoffi*, sea lion, Otariidae, right whale, Balaenidae, and orca whale, Balaenopteridae.

In the elevated terrain south of Tierra Rejada Road west of Peach Hill Road in the very southern portion of the proposed project area there are some relatively small exposures of the marine late Miocene Monterey Shale [also referred to as the Modelo Formation in this area]. Our closest Monterey Formation locality is LACM 3174, northwest of the proposed project area on the southwest side of Oak Ridge, that produced a fossil specimen of shearwater, *Puffinus*.

In the elevated terrain in the eastern and southeastern portions of the proposed project area there are exposures of the Eocene to Oligocene Sespe Formation. In the hills just east of the northeastern portion of the proposed project area we have a great number of localities from the older Eocene portion of the Sespe Formation. The closest of these localities are LACM (CIT) 145, 218, LACM 3373-3378, 3390, 3548, 5611-5614, 5660-5661, 5855-5856, 5858, 5860, 5866, 5869, 5987-5988, 6081, 6096, and 6369. These localities have produced a rich suite of vertebrate fossils (see appendix for a composite fauna from these localities), although it is just a subset of the total fossil fauna known from the Sespe Formation. Specimens of several of the

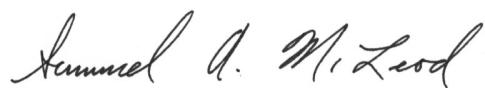
taxa from these localities have been published in the scientific literature including the geolabidid insectivore, *Centetodon aztecus*, the unitasoricid primate *Uintasorex montezumicus*, the miacid carnivore, *Miacis*, the eomyid rodent, *Metanoiamys fantasma*, the geomyid rodent *Griphomys alecer*, the paramyid rodents *Microparamys tricus* and *Microparamys woodi*, protoceratid artiodactyl *Leptoreodon stocki*, and the camelid artiodactyl *Protylopus pearsonensis* (see appendix for publications on these specimens). Most notably, however, the omomyid primate *Macrotarsius roederi* was named by T.S. Kelly in 1990 based on holotype (the name being specimen for a species new to science) from locality LACM 5660.

Exposures of the Sespe Formation become younger to the west. On the south slope of the Las Posas Hills west-southwest of the proposed project area, we have the Oligocene Sespe Formation locality LACM (CIT) 126 (Kew Quarry). The holotype (name bearing) specimens alone from locality LACM (CIT) 126 include the fossil tortoise *Gopherus neglectus* (Brattstrom, 1961), the fossil dogs *Archaeocyon pavidus* and *Mesocyon baileyi* (Stock, 1933 b), the fossil cats *Hoplophoneus belli* and *Nimravus meridianus* (Stock, 1933 b), the fossil rodent *Sespemys thurstoni* (Wilson, 1934), the fossil rhinoceros *Subhyracodon kewi* (Stock 1933 a), the fossil hypertragulid artiodactyl *Hypertragulus fontanus*, and the fossil camel *Dyseotylopus migrans* (Stock 1935).

Excavations in the igneous rocks exposed in the very southeastern portion of the proposed project area will not uncover any recognizable fossils. Shallow excavations in the younger Quaternary Alluvium and gravels exposed in the lowest lying terrain throughout the proposed project area are unlikely to uncover significant vertebrate fossils. Deeper excavations that extend down into older and perhaps finer-grained Quaternary deposits, and any excavations in the Saugus Formation, the Monterey Shale, or the Sespe Formation exposed in the proposed project area, however, may well encounter significant vertebrate fossils. Any substantial excavations in the sedimentary deposits in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,



Samuel A. McLeod, Ph.D.  
Vertebrate Paleontology

enclosures: appendices; invoice

Composite fossil fauna based on the specimens in the LACM collections  
from the Sespe Formation localities closest to northeastern Moorpark

Osteichthyes

Teleostei - bony fish

Reptilia

Chelonia - turtles & tortoises

Testudinidae

Crocodylia - crocodiles

Squamata - lizards & snake

Agamidae

*Tinosaurus*

Anguidae

*Glyptosaurus*

Boidae

*Boavus*

Iguanidae

*Parasauromalus*

Varanidae

Xantusiidae

*Paleoxantusia allisoni*

Mammalia

Ameridelphia - opossums

Didelphidae

*Peradectes californicus*

*Peratherium knighti*

Apatotheria - extinct insectivores

Apatemyidae

*Apatemys bellus*

Insectivora - insectivores

Dormaliidae

*Crypholestes*

Dormaliidae

*Proterixoides davisi*

*Sespedectes singularis*

Geolabididae

*Batodontoides*

*Centetodon aztecus*

- Published

Chiroptera - bats

Primates - primates

Omomyidae

*Dyseolemur pacificus*

*Macrotarsius roederi*

- HOLOTYPE

Uintasoricidae

*Uintasorex montezumicus*

- Figured

Mammalia

Creodonta - extinct carnivores

Carnivora - carnivores

Miacidae

*Miacis*

- Figured

Rodentia - rodents

Aplodontidae

*Eohaplomys*

Cylindrodontidae

*Pareumys milleri*

Eomyidae-

*Metanoiamys fantasma*

- Figured

*Metanoiamys korthi*

Geomyidae

*Griphomys alecer*

- Figured

Ischyromyidae

*Mytonomys*

Paramyidae

*Leptotomus*

*Microparamys tricus*

- Figured

*Microparamys woodi*

- Figured

*Rapamys*

Sciuravidae

*Sciuravus*

Simimyidae

*Simimys simplex*

Perissodactyla - odd toed ungulates

Amynodontidae

*Amynodontopsis bodei*

Brontotheriidae

Artiodactyla - even-toed ungulates

Agriochoeridae

*Protoreodon pacificus*

Camelidae

*Protylopus pearsonensis*

Hypertragulidae

*Simimeryx*

Oromerycidae

*Eotylopus*

Protoceratidae

*Leptoreodon stocki*

- Published

Publications on the specimens in the LACM collections  
from the Sespe Formation localities closest to Moorpark

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- Kelly, Thomas S. 1992. New Uintan and Duchesnean (Middle and Late Eocene) Rodents from the Sespe Formation, Simi Valley, California. *Bulletin of the Southern California Academy of Sciences*, 91(3):97-120.
- Kelly, Thomas S. and David P. Whistler. 1994. Additional Uintan and Duchesnean (Middle and Late Eocene) Mammals from the Sespe Formation, Simi Valley, California. *LACM Contributions in Science*, 439:1-29.
- Lander, E. Bruce. 1997. Geology and Vertebrate Paleontology of Cenozoic Nonmarine Rock Units in Simi Valley. *Simi Valley. A Journey Through Time*, 303-319.
- Stock, Chester. 1933. Perissodactyla from the Sespe of the Las Posas Hills, California. *Carnegie Institution of Washington Publication*, 440(3):15-28.
- Stock, Chester. 1933. Carnivora from the Sespe of the Las Posas Hills, California. *Carnegie Institution of Washington Publication*, 440(4):29-41.
- Stock, Chester. 1935. Artiodactyla from the Sespe of the Las Posas Hills, California. *Carnegie Institution of Washington Publication*, 453(8):119-125.

List of Moorpark Fossils in the Santa Barbara Museum of Natural History



<b>Taxon</b>	<b>Element</b>
<i>Equus</i> (large)	cervical vertebral prezygopophysis
Mammalia	bone fragment
Camelidae	trapezoid
<i>Mammuthus meridionalis</i>	skeleton (see next tab)
<i>Sylvilagus</i> ?, <i>Thomomys</i> ,	
<i>Perognathus</i> , <i>Dipodomys</i> ,	
<i>Reithrodontomys</i> , <i>Neotoma</i> ,	
<i>Pitymys meadensis</i>	Teeth
<i>Mammuthus</i> ?	Thoracic vertebral neural arch
<i>Equus occidentalis</i> ?	P2
<i>Mammuthus</i> ?	thoracic vertebral centrum
<i>Hemiauchenia macrocephala</i>	dentary with p2 or 3, m2
<i>Hemiauchenia macrocephala</i>	dentary with m2-3
<i>Equus</i> (large)	anterior sacral right wing
<i>Equus</i> (large)	proximal metacarpal
<i>Equus</i> (large)	proximal 1st phalanx
<i>Equus</i> (large)	distal tibia
<i>Mammuthus</i>	root of tooth
<i>Mammuthus columbi</i>	2 molars
<i>Equus</i> (large)	scaphoid fragment
<i>Proboscidea</i>	bone fragment
<i>Equus</i> (large)	cheek tooth fragment
<i>Equus</i> (large)	proximal scapula
<i>Equus?</i> (large)	scaupla shaft?
<i>Equus</i> (large)	acetabulum
<i>Equus</i> (large)	distal metatarsal
<i>Equus</i> (large)	proximal scapula
<i>Mammuthus</i>	occlusal cheek tooth fragment
<i>Equus</i> (large)	cervical vertebral fragment
<i>Equus occidentalis</i>	m1
Mammalia	bone fragment
<i>Equus</i> (large)	cheek tooth fragment
Camelidae	patellar fragment
Camelidae	posterior cervical vertebra VII neural arc
Camelidae	anterior lumbar vertebra
Camelidae	trapezoid

<b>Element</b>	<b>Quantity</b>	<b>Description</b>
Cranium	1	Left half of skull, cranial cap
Left tusk	1	
Hyoid apparatus	5	
Right dentary w/ molar (m3)	1	Partial
Left dentary fragment	1	
Isolated upper left molar (M3)	1	
Cervical vertebrae	7	atlas missing, axis present w/ 6 cervical verts
Thoracic vertebrae	10	
Lumbar vertebrae	12	
Sacral vertebrae	4	
Right scapula	1	
Left scapula	1	
Right humerus	1	proximal end and fragments of distal end
Right radius	1	
Right ulna	1	
Right unciform	1	
Right magnum	1	
Right pisiform	1	
Right cuneiform	1	
Right scaphoid	1	
Right trapezium	1	
Right trapezoid	1	
Right lunar	1	
Right metacarpals	4	
Right phalanges	5	
Left radius	1	Distal fragment
Left femur	1	
Left tibia	1	
Left fibula	1	
Right femur	1	Proximal end
Right tibia	1	
Right fibula	1	
Ribs	12	Complete and partial

Fossil Species From the Eocene Sespe Formation Near Moorpark

Composite fossil fauna based on the specimens in the LACM collections  
from the Sespe Formation localities closest to northeastern Moorpark

Osteichthyes

Teleostei - bony fish

Reptilia

Chelonia - turtles & tortoises

Testudinidae

Crocodylia - crocodiles

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Eomyidae-

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*Griphomys alecer* - Figured

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*Mytonomys*

Paramyidae

*Leptotomus*

*Microparamys tricus* - Figured

*Microparamys woodi* - Figured

*Rapamys*

Sciuravidae

*Sciuravus*

Simimyidae

*Simimys simplex*

Perissodactyla - odd toed ungulates

Amyndodontidae

*Amyndontopsis bodei*

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Agriochoeridae

*Protoreodon pacificus*

Camelidae

*Protylopus pearsonensis*

Hypertragulidae

*Simimeryx*

Oromerycidae

*Eotylopus*

Protoceratidae

*Leptoreodon stocki* - Published

## **Appendix H      Infrastructure Report**

## Appendices

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# 1 MOORPARK INFRASTRUCTURE CEQA TECHNICAL REPORT

## 1.1 Introduction

The City of Moorpark (“City”) is currently undergoing a General Plan Update (GPU) which is intended to shape development in the City over the following decades. The GPU includes twenty-one “Opportunity Sites” throughout the City, which will feature most of the land use changes and proposed increases in land use density. Under the Moorpark GPU, land use increases from the existing conditions to the current general plan (“no project alternative”), and development capacity (“proposed land use”) as identified in the tables below.

**Table 1 Summary Change: Existing Conditions to No Project Alternative**

Res'd Units	Non-Res'd SF	Employment	Population
+2,814	+2,273,637	+4,002	+8,890

**Table 2 Summary of Change: Existing Conditions to Proposed Land Use Plan**

Res'd Units	Non-Res'd SF	Employment	Population
+5,488	+4,783,912	+7,334	+17,336

**Table 3 Summary of Change: No Project Alternative to Proposed Land Use Plan**

Res'd Units	Non-Res'd SF	Employment	Population
+2,674	+2,510,274	+3,332	+8,446

This report analyzes the capacity of the infrastructure systems that serve the City under the proposed GPU land use conditions. The analysis includes a review and summary of the conditions of the water, sewer, and storm drainage facilities, as well as water supply availability and existing water quality regulations. As discussed in the sections below, the City, in conjunction with several other agencies such as Ventura County (“County”) Public Works and Waterworks District No. 1 (“District”), operate and maintain utility systems within the Moorpark GPU area. All entities managing the infrastructure in the City have a process in place for correcting deficiencies and addressing any potential capacity issues to ensure a robust infrastructure network. Summaries of each utility system are provided throughout this technical report. Any significant impacts will be identified by analyzing the CEQA thresholds of significance as they relate to water, sewer, storm drain, and water quality.





## 1.2 Water Facilities

### Existing Water System

Moorpark’s existing potable water system is managed by the special District of Ventura County Waterworks District No. 1 (“District”). Providing potable water and sanitation services to a population of approximately 37,000, the District’s boundaries encompass approximately 20,000 acres, including the City of Moorpark, as well as contiguous, unincorporated areas to the north and west of the City. The District’s customer accounts include over 11,000 residential and commercial connections and 156 agricultural service accounts. The District includes 175 miles of water lines, 4 groundwater wells, 18 tanks, 10 booster pump stations, and 4 lift stations.<sup>1</sup> Water supplies are procured from three sources: approximately 9 percent of water is reclaimed, 20 percent of water is extracted from local groundwater, which is managed by the Fox Canyon Groundwater Management Agency, and the remaining 71 percent is imported from the Calleguas Municipal Water District.

Distribution pipelines within the District range in diameter from 4 to 36 inches. The majority of the water pipes, 48 percent of the District network, are 8-inch pipes. Water distribution network piping material includes Asbestos-Cement Pipe, Cast-A-Seal, Corrosion Monitoring Location, Ductile Iron Pipe, and Polyvinyl Chloride, and Specialty Piping materials, with Polyvinyl Chloride used for the majority of the system.

### Existing Water Capacity Assessment and Water Planning

The 2008 Ventura County Waterworks District No. 1 Water System Master Plan Update (2008 WSMP) was developed to understand water supplies and demands better and create a hydraulic computer model to assess the capacity of the water infrastructure to meet projected demands through 2030. Two previous master plans were completed in 1981 and 1992. The methodology for the 2008 WSMP included an initial survey of the City’s existing water supply, storage, and pumping facilities, which used records searches, field investigations, and staff interviews. Population characteristics were determined based on population growth and land use. Based on these population characteristics, water use factors were then developed for pressure zones to determine the required existing and maximum water system supply based on existing water usage patterns. Three scenarios were modeled using WaterCAD 7.0 software to simulate various operation conditions and determine whether the water distribution system required changes to meet the City conditions. The three scenarios analyzed were minimal day, average day, and maximum day. Future conditions were determined using applicable land use criteria for the City and adjacent unincorporated areas in 10-year increments through 2030. Finally, the computer model was prepared of the facilities required to serve new developments, and recommendations were made for each 10-year increment (2010, 2020, and 2030).

<sup>1</sup> Ventura County, 2020 Urban Water Management Plan, Waterworks District No. 1 (Moorpark). Final Report, June 14, 2021.

In addition, the District regularly updates their Capital Improvement Plan (CIP) project list<sup>2</sup> based on needed improvements to water infrastructure. The WSMP projects are shown in *Table 4* and CIP project list shown in *Table 5*.

**Table 4 Water System Master Plan**

ITEM NAME	DESCRIPTION	ZONE	EXPECTED DATE OF COMPLETION	2022 COUNTY WATERWORKS DISTRICT UPDATES
1.5 MG Moorpark Yard Reservoir #1	This reservoir will address storage deficiencies found in Zone 757.	757	2010	This project was determined to be complete by District staff
1.5 MG Ridgemark Reservoir #1	This reservoir will provide needed storage capacity for Zone 944.	944	2010	No new updates, will be addressed in future CIP
1.0 MG Stockton Reservoir #1	This reservoir will provide needed storage capacity for Zone 994.	994	2010	No new updates, will be addressed in future CIP
New Pressure Regulating Station (1)	Increased development anticipated for this zone and will require a new pressure-regulating station.	757	2010	This project was determined to be complete by District staff
Emergency Booster Station Piping	Interconnection with Zone 757, which is lower in elevation, is recommended to allow flow from Zone 920.	920	2010	Proposed for design and construction in FY 2025-2027 per the current five-year CIP
1.5 MG Ridgemark Reservoir #2	This reservoir will provide needed storage capacity for Zone 944.	944	2020	No new updates, will be addressed in future CIP
1.0 MG Stockton Reservoir #2	This reservoir will address storage deficiencies found in Zone 994.	994	2020	Proposed for construction in FY 2022-2024 per the current five-year CIP
1.5 MG Moorpark Yard Reservoir #2	This reservoir will address storage deficiencies found in Zone 757.	757	2030	Proposed for design and construction in FY 2025-2027 per the current five-year CIP

<sup>2</sup> Ventura County Public Works Water and Sanitation Department 5-year CIP. Found here: <https://s29422.pcdn.co/wp-content/uploads/2022/06/Water-and-Sanitation-CIP-FY-2023-2027.pdf>



**Table 5 Five-year CIP Project List**

ITEM NAME	DESCRIPTION	PROJECT MENTIONED IN DISTRICT 2008 WSMP	2022 COUNTY WATERWORKS DISTRICT UPDATES
Moorpark Desalter Design and Environmental Study	Studies on stormwater diversion and mitigation to finalize desalter location and scope	No	Proposed for design in FY 2022-2024
Moorpark Desalter Stormwater Recharge Project	This desalter will address water quality and supply deficiencies throughout the region	No	Proposed for design in FY 2022-2023 and construction in FY 2023-2025
New 1.0 MG Stockton Reservoir #2	This reservoir will address storage deficiencies found in Zone 994.	Yes	Proposed for Construction in 2022-24
Replacement of Water Lines on Roberts, Esther, and Sherman Avenues (Walnut Acres Tract)	Installation of 8-inch water line to replace aging undersized lines	Yes	Proposed for design in FY 2024-2025 and construction in FY 2025-2027
Grimes Reservoir and 757 Zone Interconnections	This reservoir will address storage deficiencies found in Zone 757	No	Proposed for Design in FY 2022-24 and construction in FY 2024-2025
1.5 MG Moorpark Yard Reservoir #2	This reservoir will address storage deficiencies found in Zone 757.	Yes	Proposed for design and construction in FY 2025-2027 per the current five-year CIP
Re-drill Well No. 97	Re-drilling and replacement of ageing wells	No	Proposed for design and construction in FY 2022-2023
Well No. 95 & 98 Water Treatment Facility	This water treatment facility will address water quality throughout the region	No	Proposed for design and construction in FY 2025-2027
Emergency Booster Station Piping	Interconnection with Zone 757, which is lower in elevation, is recommended to allow flow from Zone 920.	Yes	Proposed for design and construction in FY 2025-2027 per the current five-year CIP
10-inch Water Line North Los Angeles Ave. and Hitch Blvd. Intersection.	This 10-inch water line will provide needed storage capacity for Zone 757	Yes	Proposed for design and construction in FY 2025-2027

General Water System Improvements	These general water system improvements will address storage and efficiency needs throughout the District	Yes	Proposed for design and construction in FY 2022-2027
SCADA Improvements	Increased development anticipated for the district which will require SCADA improvements	Yes	Proposed for design and construction in FY 2022-2027
Reservoirs Repairs, Relining & Recoating	Removal of waste, repairs to paint defects, corrosion, bolts, nuts, and other hardware	Yes	Proposed for design and construction in FY 2023-2027 <sup>1</sup>

Since the 2008 WSMP, several projects and water system improvements have been added to the current CIP list for the Districts<sup>3</sup> FY 2022-2027 as identified above.

The District has a formal process to ensure that the overall water system, including infrastructure, fire flow requirements, and water supply availability, is managed efficiently and functions properly. In summary, when a proposed development project starts, the City schedules a development review committee meeting with all reviewing and permitting departments, including the District, for preliminary comments. As the project moves forward, the District would ask for water and sewer hydraulic reports and improvement plans for the plan check. The District would be the lead agency for water supply assessments under SB 610 to confirm water availability in support of certain developments.

### Proposed Land Use Changes and Water Infrastructure and Supply Impact Assessment

Under the Moorpark GPU, additional dwelling units and Non-Residential square footage will be changing and may impact water infrastructure. An overall increase in water flows and demands are expected within the residential dwelling units (DUs) and Non-Residential square feet (SF) across the Opportunity Sites and remainder of the city. The potential impacts of these projections are further explored in this section.

The anticipated water flows and demands from existing conditions to development capacity are shown below in **Table 6**. These calculations account for the overall changes throughout the GPU, by noting the changes between Single Family Residences (SFRs), Multiple Family Residences (MFR), and Non-Residential SF. See Appendix A for a more detailed breakdown of the water demands throughout the Opportunity Sites and remainder of the City. Water use factors were applied to account for differences between existing and proposed Non-Residential SF, SFR, and MFR dwelling units. For the existing land use plan water demands were calculated by reviewing the UWMPs retail water demands for 2020

<sup>1</sup> Ventura County, 2020 Urban Water Management Plan, Waterworks District No. 1 (Moorpark). Final Report, June 14, 2021

<sup>3</sup> Ventura County Water and Sanitation Department, Ventura County Waterworks District No. 1, Water, Five-Year Capital Improvement Program, <https://s29422.pcdn.co/wp-content/uploads/2022/06/Water-and-Sanitation-CIP-FY-2023-2027.pdf>



(reference UWMP Submittal Table 4-1). Dividing the retail water demands in the UWMP by the land use totals provided by Placeworks resulted in the existing per capita water use factors of 162 gallons per capita per day (GPCD) for SFR, 71 GPCD for MFR, and 0.14 GPD/SF for Non-Residential SF. For the proposed land use, updated demand factors from a recent WSA were utilized which were provided by the District. These water use factors account for water conservation requirements and green building code efficiencies.

**Table 6 Water Demands Under the GPU**

Existing Land Use	DU	ppDU <sup>1</sup>	Factor <sup>2</sup>		GPD	AFY
SFR	8,628	3.23	160	GPCD	4,458,950	4,994
MFR	2,908	3.23	66	GPCD	619,927	694
Non-Res	8,783,171		0.12	GPD/SF	1,053,981	1,180
<b>TOTAL</b>					<b>6,132,858</b>	<b>6,869</b>
Proposed Land Use	DU	ppDU <sup>1</sup>	Factor <sup>3</sup>		GPD	AFY
SFR	+1,459	3.23	135	GPCD	+636,197	+713
MFR	+4,030	3.23	60	GPCD	+781,014	+875
Non-Res	+4,783,912		0.09	GPD/SF	+430,552	+482
<b>TOTAL</b>					<b>+1,847,763</b>	<b>+2,069</b>
<b>Additional Considerations for Water Supply Planning</b>						
Existing Specific Plans Water Demand incorporated in UWMP projections						-1,277
New Recycled Water Planned for 2045						-1,182
<b>Total Anticipated 2045 Potable Water Demand</b>						<b>+6,479</b>

<sup>1</sup> California Department of Finance. 2021. CA DOF E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark

<sup>2</sup>2020 District UWMP revised demands per communication with the District.

<sup>3</sup>Hitch Ranch, 2020 Water Supply Assessment, Hitch Ranch Project, February 2020 for residential DUs and 20% reduction on UWMP Non-Residential demand factor.

<sup>4</sup>Non-residential demand factor for proposed land use reduces the 2020 existing Non-Residential demand from the UWMP by 20% to account for efficiencies in new developments per green building code requirements.

Note: GPCD = gallons per capita per day, GPD = gallons per day, AFY = Acre-Feet per Year

As shown above, under the development capacity of the Proposed Land Use water flows/demands would increase by 1.8 million gallons per day (MGD) or 2,069 acre-feet per year (AFY). This increase in flows may impact both water infrastructure systems as well as result in an increase in water demands. An assessment of impacts to infrastructure and water supply/demand capacity is provided below.

## Water Infrastructure

The water system improvements identified in the Districts 2022-2027 CIP typically include reservoir improvements, water infrastructure relining, and other as-needed improvements. These are listed and shown in Appendix A; none of the improvements overlay the opportunity sites where the majority of the land use changes will occur. In addition, the WSMP assessed that the buildout population between 2010 to 2030 would grow from 42,729 to 55,803 people, while the GPU's development capacity projects the population to grow from 36,445 to 53,781 from 2021 to 2050. Similarly, the water demand associated with the WSMP's conservative population is 14,215 to 17,097 AFY, which is within the GPU's proposed buildout projections of 6,479 AFY (see Table 6) for SFR, MFR and Non-Residential (commercial, industrial, and institutional/governmental) land uses only. Thus, no additional deficiencies are anticipated beyond what is noted in the WSMP.

See Figure 1 below for improvement projects within the vicinity of the opportunity sites. See Appendix B for a detailed exhibit showing all the improvements projects and how they are all located outside of opportunity sites.

# Ventura County Waterworks District No.1 (Moorpark)

## Existing to Proposed Land Use

### Within Opportunity Sites

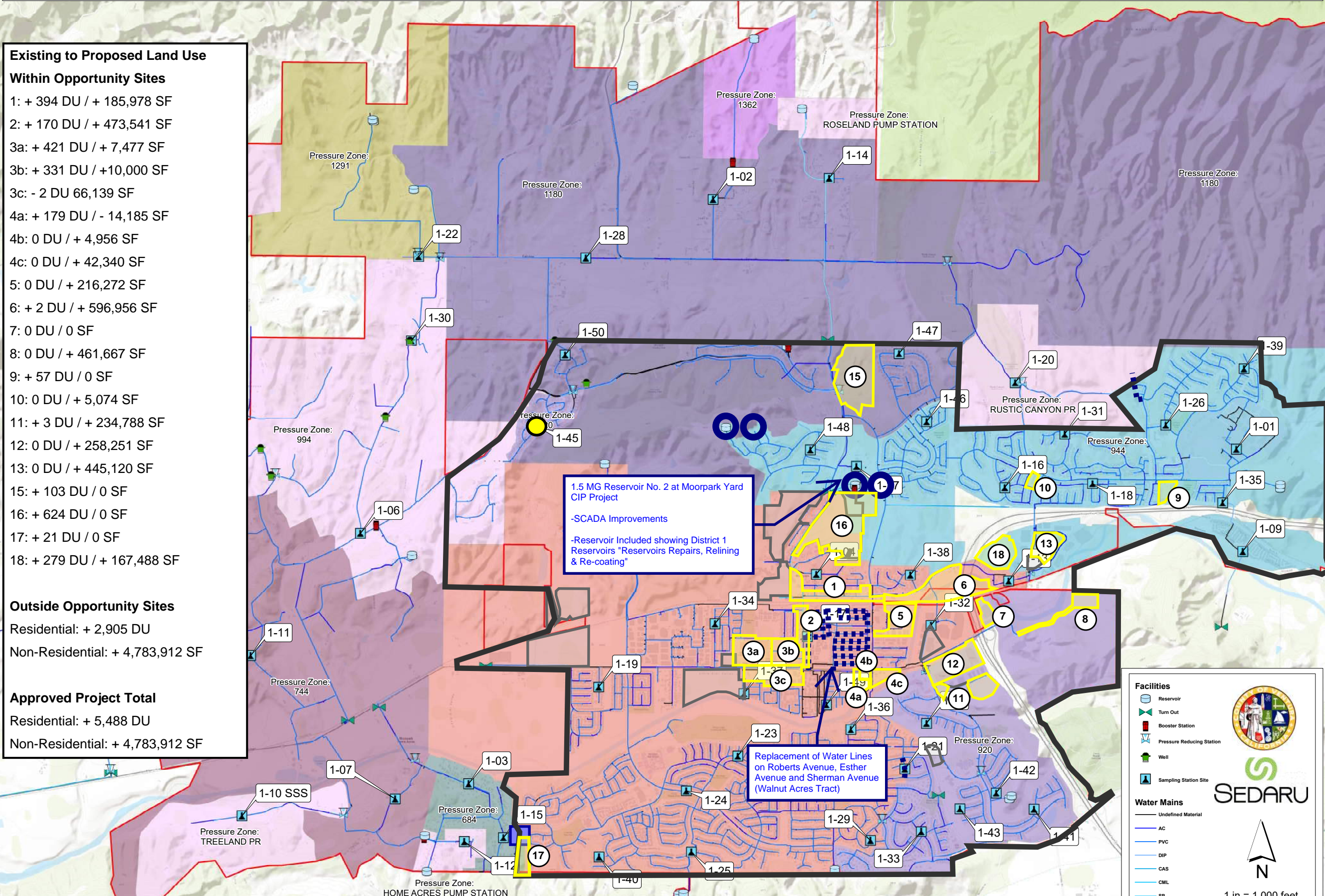
- 1: + 394 DU / + 185,978 SF
- 2: + 170 DU / + 473,541 SF
- 3a: + 421 DU / + 7,477 SF
- 3b: + 331 DU / +10,000 SF
- 3c: - 2 DU 66,139 SF
- 4a: + 179 DU / - 14,185 SF
- 4b: 0 DU / + 4,956 SF
- 4c: 0 DU / + 42,340 SF
- 5: 0 DU / + 216,272 SF
- 6: + 2 DU / + 596,956 SF
- 7: 0 DU / 0 SF
- 8: 0 DU / + 461,667 SF
- 9: + 57 DU / 0 SF
- 10: 0 DU / + 5,074 SF
- 11: + 3 DU / + 234,788 SF
- 12: 0 DU / + 258,251 SF
- 13: 0 DU / + 445,120 SF
- 15: + 103 DU / 0 SF
- 16: + 624 DU / 0 SF
- 17: + 21 DU / 0 SF
- 18: + 279 DU / + 167,488 SF

### Outside Opportunity Sites

- Residential: + 2,905 DU
- Non-Residential: + 4,783,912 SF

### Approved Project Total

- Residential: + 5,488 DU
- Non-Residential: + 4,783,912 SF



**Facilities**

- Reservoir
- Turn Out
- Booster Station
- Pressure Reducing Station
- Well
- Sampling Station Site

**Water Mains**

- Undefined Material
- AC
- PVC
- DIP
- CAS
- CML
- SP

**District Boundary**

1 in = 1,000 feet  
1/31/2020

**Figure 1 - Water System Projects**

## Water Supply

The purpose of the 2020 Ventura County Waterworks District No. 1 Urban Water Management Plan (UWMP) is to provide the District and its partners with an updated plan that evaluates long-term water use, supplies, deliveries, and demands. Therefore, this is the guiding document to determining any impacts to local and regional water supply and demand balance associated with the Moorpark GPU.

As mentioned above, the Moorpark GPU will be increasing SFR, MFR and Non-Residential land uses throughout the City. The water supply analysis to ensure there are adequate water supplies to meet these increased demands includes a review of current and projected water demand/supplies through 2045 via the 2020 UWMP. The 2020 actual volumes within the City were reported to be 6,862 for SFR, MFR and Non-Residential uses including commercial, industrial, institutional/governmental (referred to herein as Non-Residential) not including agricultural irrigation, losses or other potable uses which are assumed to remain constant over the next 20-year period. This existing demand from the UWMP aligns with the calculated demand from **Table 6** of 6,869 AFY.

To estimate proposed demand increases under the Moorpark GPU, demand factors that represent future conservation as well as advances in more water efficient buildings were employed and result in an increase in demand of 2,069 AFY for a total demand of 8,931 AFY (6,862 AFY + 2,069 AFY). However, it is important to note that the 2020 UWMP included four specific plans<sup>4</sup> in its projections, that are also included in the Moorpark GPU demand increases of 2,069 AFY. Therefore, these specific plans are subtracted from the total. In addition, as noted in Section -1103068656.522.-11030686561.3, recycled water capacity is increasing by approximately 1,182 AFY which will also offset potable demands within areas of new development. Therefore, total water demands are estimated to be 6,479 AFY. This number is well within the 2045 projected demand of 7,755 AFY for SFR, MFR and Non-Residential within the 2020 UWMP.

## Water Supply and Infrastructure CEQA Impact Assessment

California Environmental Quality Act (CEQA) significance criteria are used to evaluate the degree of impact caused by a development project on environmental resources including water infrastructure. According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would impact any of the items listed below.

- 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 Assessment:** The GPU will not require the relocation or construction of existing water infrastructure. The GPUs supply and population projections fall within the WSMP that was utilized to

<sup>4</sup> Carlsberg, Hitch Ranch, Moorpark Highlands, and the Downtown specific plans were all included within the UWMP projections for water demands as confirmed by the District on September 22, 2022 via email communication.





assess the capacity of the water infrastructure throughout the City. Therefore, the findings of this analysis are relevant, and no new deficiencies are anticipated.

For new developments that connect to existing District water mains, construction impacts associated with private water infrastructure to support development within the opportunity sites and throughout the City would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of water infrastructure will be limited to on-site water distribution and minor off-site work associated with connections to the public main. No upgrades to the public main are anticipated. Any work that may affect services to the existing water lines will be coordinated with the City and District. Furthermore, a Construction Management Plan, which would ensure safe pedestrian access as well as emergency vehicle access and safe vehicle travel in general, will be implemented to reduce any temporary pedestrian and traffic impacts occurring as a result of construction activities. Moreover, when considering impacts resulting from the installation of any required water infrastructure, all impacts are of a relatively short-term duration and would cease to occur once the installation is complete. Therefore, Project impacts on water associated with construction activities would be less than significant.

- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

**Impact Assessment:** As noted above, there are sufficient water supplies available to support future developments under the Moorpark GPU. When compared to the UWMPs supply projections for 2025 to 2045, the Moorpark GPU demands fit within the projections during normal, single, and multiple dry years. In addition to the regional water supply planning under the UWMPs, the City and District must comply with Senate Bill (SB) 610 and SB 221 which are in place to improve the link between information on water supply availability and certain land use decisions made by cities and counties. Specifically, the inclusion of Water Supply Assessments (WSAs) in environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to CEQA may be required. Therefore, the City and District are able to more closely monitor water supplies available as development projects come online under general plan updates.

## Conclusions

As identified above, there are no significant water infrastructure improvement projects that would impact development within the opportunity sites of the remainder of the City under the Moorpark GPU. The District has an established process to track the condition of water infrastructure—through master planning efforts, established CIP projects, and review of required project documentation. Due to the City's rigorous planning and project approval process, it is not anticipated that constraints on proposed development under implementation of the GPU will be encountered. For individual future developments within the City, the District requires the developer to conduct water supply assessments as appropriate,

and water hydraulic analysis on a case-by-case basis, usually based on the size of the proposed development (number of dwelling units, number of acres, etc.). Therefore, there are processes in place for all future developments to ensure water infrastructure and service will be provided in an efficient and reliable manner.

## 1.3 Sewer Facilities

### Existing Sewer System

The sewer system in the City is maintained by the District. The City sewer system consists of seven sewer pump stations and associated force mains, one wastewater treatment plant, standard and trunk manholes, and an approximately 368-mile network of gravity sewer pipes ranging from 4 inches to 30 inches in diameter. Most of the District's sewer network consists of pipes that are 16 inches in diameter and less. Sewer network piping materials include Asbestos-Cement Pipe, Vitrified Clay Pipe, Ductile Iron Pipe, and Polyvinyl Chloride materials, with Polyvinyl Chloride making up the majority of the system.

The District owns and operates one wastewater treatment plant, the Moorpark Water Reclamation Facility (MWRf) with a capacity of 5 MGD, and the effluent produced meets criteria for California Title 22 reuse. The MWRf was originally constructed as a secondary treatment plant in 1965 and is just west of the City limits along SR-118. The plant began supplying Title 22 recycled water for golf course irrigation in 2003 when tertiary treatment facilities were constructed. There are eight active recycled water customers, including the plant itself, and the plant produced 599 acre-feet (AF) of recycled water in 2015. Also as of 2015, the MWRf had a total treatment capacity of 5.0 MGD (5,600 AFY) and a tertiary treatment capacity of 1.5 MGD (1,680 AFY). The plant is required to annually discharge a minimum 0.76 MGD (850 AFY) of its treated effluent to percolation basins for groundwater recharge. The Moorpark Country Club Estate's 27-hole golf course also uses recycled water from the MWRf for irrigation<sup>3</sup>.

The existing wastewater flow within the system is approximately 2 MGD as of 2015, resulting in an available capacity of 3 MGD.<sup>5</sup> The District anticipates the need to expand the plant's tertiary treatment capacity so that recycled water supply will reach 1.96 MGD (AFY) by 2040 to accommodate the need from a growing customer base (2,200 AFY). Existing recycled water distribution in 2021 totaled 1,018 AFY which would therefore result in a new recycled water availability of 1,182 AFY.<sup>6</sup>

When a development project starts, the City schedules a development review committee meeting with all reviewing and permitting departments, including the District. As the project moves forward, the District would ask for water and sewer hydraulic reports, and improvement plans for plan check. This process allows for the District to track capacity of the sewer system throughout the City, as described in the next paragraph.

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<sup>5</sup> Ventura County General Plan 2040, Chapter 7 Public Facilities, Services, and Infrastructure. May 5, 2020. [https://vc2040.org/images/uploads/2017/VCGPU\\_07-BR-Pub\\_Fac-Serv-Inf\\_PRD\\_March\\_2017.pdf](https://vc2040.org/images/uploads/2017/VCGPU_07-BR-Pub_Fac-Serv-Inf_PRD_March_2017.pdf)

<sup>6</sup> Communication with District staff, September 8, 2022.



## Existing Sewer Capacity Assessment

The capacity of the District’s existing gravity sewer system relies primarily on new development and redevelopment projects, which are required to install sewer flow monitoring devices upstream and downstream of the project’s proposed point of connection to ensure there is adequate capacity in the sewer main or trunk line for the additional flow from the new project.<sup>7</sup> Pipes should meet the District’s established criteria:

- Existing pipes < 18 inches in diameter: Pipes are to be ½ full at peak flow conditions.
- Existing pipes ≥ 18 inches in diameter: Pipes are to be ¾ full at peak flow conditions.

Project-by-project monitoring of sewer flow capacity currently ensures that the sewer system is functioning efficiently and effectively for the District’s service area and customers. The District includes sewer system upgrade projects on the CIP list. There is currently one sewer system project within City limits on the CIP list for the District<sup>8</sup> between the years 2019 and 2024, as shown in Table 7. In addition, there are several ongoing project-based sewer improvements associated with various land development projects as well as improvements to other sewer infrastructure outside of the City limits (e.g., MWTF and Moorpark Desalter access road).

**Table 7 District CIP Projects Planned for 2019–2024**

ITEM NAME	DESCRIPTION	2020 UPDATES FROM COUNTY WATERWORKS DISTRICT
Sewer Replacement and Relining	Replacement and relining of sewer lines near Los Angeles Ave.	No new updates since 2019-2020 CIP

For an exhibit of the future project proposed within the District, see Figure 2.

<sup>7</sup> Conversation with County of Ventura Staff. May 7, 2020.

<sup>8</sup> Ventura County Water & Sanitation Department, Ventura County Waterworks District No. 1 – Sewer, Five-Year Capital Improvement Program. May 6, 2020. <https://s29422.pcdn.co/wp-content/uploads/2019/07/WSCIP2019-2.pdf>

# County of Ventura, District 1 Wastewater Drainage Basins, 2019

## Existing to Proposed Land Use

### Within Opportunity Sites

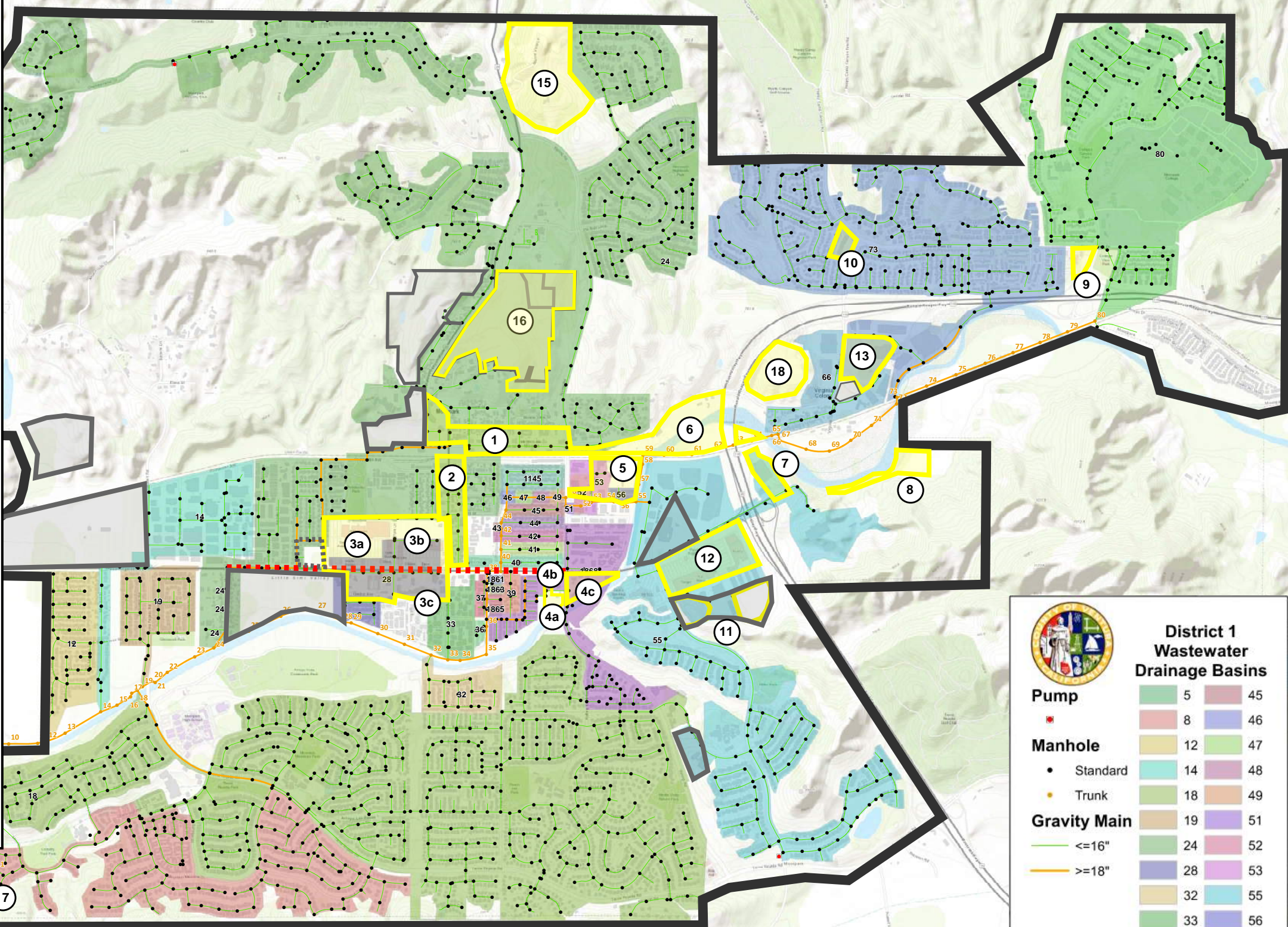
- 1: + 394 DU / + 185,978 SF
- 2: + 170 DU / + 473,541 SF
- 3a: + 421 DU / + 7,477 SF
- 3b: + 331 DU / +10,000 SF
- 3c: - 2 DU 66,139 SF
- 4a: + 179 DU / - 14,185 SF
- 4b: 0 DU / + 4,956 SF
- 4c: 0 DU / + 42,340 SF
- 5: 0 DU / + 216,272 SF
- 6: + 2 DU / + 596,956 SF
- 7: 0 DU / 0 SF
- 8: 0 DU / + 461,667 SF
- 9: + 57 DU / 0 SF
- 10: 0 DU / + 5,074 SF
- 11: + 3 DU / + 234,788 SF
- 12: 0 DU / + 258,251 SF
- 13: 0 DU / + 445,120 SF
- 15: + 103 DU / 0 SF
- 16: + 624 DU / 0 SF
- 17: + 21 DU / 0 SF
- 18: + 279 DU / + 167,488 SF


### Outside Opportunity Sites

- Residential: + 2,905 DU
- Non-Residential: + 4,783,912 SF

### Approved Project Total

- Residential: + 5,488 DU
- Non-Residential: + 4,783,912 SF





**Pump**

- Standard
- Trunk

**Manhole**

- Standard
- Trunk



**Gravity Main**

- <=16"
- >=18"






**District 1 Wastewater Drainage Basins**

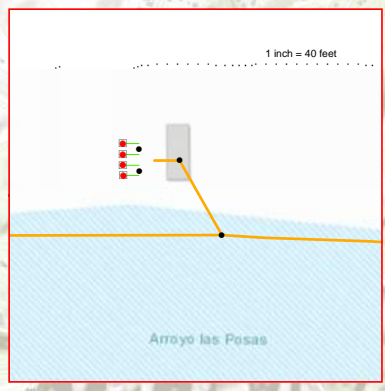
5	45
8	46
12	47
14	48
18	49
19	51
24	52
28	53
32	55
33	56
36	66
37	73
39	80
40	1145
41	1861
42	1863
43	1865
44	1868

1 inch = 700 feet  
10/10/2019

**Figure 4:  
Future Sewer Projects**

-  City of Moorpark Boundary
-  Future Project: District's Five-Year CIP 2020/24
-  Hot Spot Sewer Relining for Commercial Establishments on Los Angeles Ave
-  Approved Projects Within City Limits
-  Opportunity Sites Within City Limits





## Proposed Land Use Changes and Sewer System Impact Assessment

There is an overall increase in water and sewer flows and demands under the Moorpark GPU. As previously stated, these changes result from the increase in residential dwelling units (DUs) and Non-Residential SF across the Opportunity Sites and remainder of the city. Therefore, the potential impacts of these projections are further explored in this section.

Anticipated sewer flows and demands are calculated for both existing and proposed conditions by applying a factor of 0.8 to the water demands as shown in *Table 8*. This methodology is considered conservative in estimating sewer flows. In addition, as mentioned in Section 1.3 sewer flows will likely be less due to implementation of future recycled water distribution lines and use which will offset potable water demands and subsequent sewer flows. See Appendix A for a detailed breakdown of the water and sewer demands throughout the Opportunity Sites and remainder of the City.

**Table 8 Sewer Flows Under the GPU**

Existing Land Use	DU	ppDU <sup>1</sup>	Factor <sup>2</sup>		GPD <sup>5</sup>	MGD
SFR	8,628	3.23	160	GPCD	<b>3,567,160</b>	3.6
MFR	2,908	3.23	66	GPCD	<b>495,942</b>	0.5
Non-res	8,783,171		0.12	GPD/SF	<b>843,184</b>	0.8
<b>TOTAL</b>					4,906,287	<b>4.9</b>
Proposed Land Use	DU	ppDU <sup>1</sup>	Factor <sup>3</sup>		GPD <sup>5</sup>	MGD
SFR	+1,459	3.23	135	GPCD	<b>+508,958</b>	+0.5
MFR	+4,030	3.23	60	GPCD	<b>+624,811</b>	+0.6
Non-res	+4,783,912		0.09	GPD/SF	<b>+344,442</b>	+0.3
<b>TOTAL</b>					+1,478,210	<b>+1.5</b>

<sup>1</sup> State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2021-2022

<sup>2</sup> 2020 District UWMP revised demands per communication with the District.

<sup>3</sup> Hitch Ranch, 2020 Water Supply Assessment, Hitch Ranch Project, February 2020 for residential DUs and 20% reduction on UWMP Non-Residential demand factor.

<sup>4</sup> Non-residential demand factor for proposed land use reduces the 2020 existing Non-Residential demand from the UWMP by 20% to account for efficiencies in new developments per green building code requirements.

<sup>5</sup> Sewer demands estimated by multiplying water demands by 0.8.

Note: GPCD = gallons per capita per day, GPD = gallons per day, AFY = Acre-Feet per Year

As shown above, under the development capacity of the Proposed Land Use sewer flows would increase by 1.5 MGD. This increase in flows may impact both sewer infrastructure systems as well as regional treatment capacity. An assessment of impacts to infrastructure is provided below.

## Sewer Infrastructure

Sewer infrastructure is not majorly impacted by the proposed land use under the Moorpark GPU. Within the sewer improvement projects planned for the District's 2023 to 2027 CIP cycle, there is only a sewer relining project within Los Angeles Avenue within the City. As this is a relining project, not a capacity project, there are no anticipated impacts from the proposed developments within the upstream opportunity sites. The other projects include upgrades to Pump Station #1, MWRF, MWTP, and increased storage and quality for recycled water. None of the improvements overlay the opportunity sites where the majority of the land use changes occur. Furthermore, the District actively tracks development projects as they come online and requires sewer capacity studies to ensure sewer infrastructure can serve existing and new developments.

## Sewer Treatment Capacity

At development capacity the GPU proposes an increase in sewer flows of 1.5 MGD, and there is currently 3 MGD of capacity available, as noted in the Ventura County General Plan for 2040 and confirmed by District staff.<sup>9</sup> Thus, there are no anticipated issues with treatment capacity or flows throughout the District.

## Sewer System CEQA Impact Assessment

California Environmental Quality Act (CEQA) significance criteria are used to evaluate the degree of impact caused by a development project on environmental resources including water infrastructure. According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would impact any of the items listed below.

- 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 Analysis:** As noted above, sewer flows are anticipated to increase by 1.5 MGD throughout the Moorpark GPU area including the opportunity sites and remainder of the City. There are no sewer infrastructure projects downstream of any of the opportunity sites that would be impacted by this additional growth. In addition, if any new deficiencies were identified, the District has policies in place to prioritize improvements projects within their current CIP processes. The District is also involved on a project-by-project basis. When a development project starts, the City schedules a development review committee meeting with all reviewing and permitting departments, including the District. As the project moves forward, the District may request sewer hydraulic reports, and improvement plans for plan check. This process allows for the District to track capacity of the sewer system throughout the City.

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<sup>9</sup> Communication with District staff on September 21, 2022. Conference call.



Finally, construction impacts associated with private wastewater infrastructure to support development within the opportunity sites and throughout the City would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of wastewater infrastructure will be limited to on-site wastewater distribution and minor off-site work associated with connections to the public main. No upgrades to the public main are anticipated. Any work that may affect services to the existing sewer lines will be coordinated with the City and District. Furthermore, a Construction Management Plan, which would ensure safe pedestrian access as well as emergency vehicle access and safe vehicle travel in general, will be implemented to reduce any temporary pedestrian and traffic impacts occurring as a result of construction activities. Moreover, when considering impacts resulting from the installation of any required wastewater infrastructure, all impacts are of a relatively short-term duration and would cease to occur once the installation is complete. Therefore, Project impacts on wastewater associated with construction activities would be less than significant.

- 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 Analysis:** The increase in sewer flows of approximately 1.5 MGD will also impact the existing wastewater treatment capacity of the MWRF. The existing wastewater flow within this system is approximately 2 MGD as of 2015, resulting in an available capacity of 3 MGD. Therefore, the development anticipated under the Moorpark GPU will not exceed the available wastewater treatment capacity of the MWRF.

## Conclusions

As shown above, there is one improvement project within the City associated with sewer infrastructure, which is managed and overseen by the District. In addition, there is adequate wastewater treatment capacity at the MWRF to handle increased sewer flows as part of the Moorpark GPU. The District has a rigorous process to track the condition of sewer infrastructure. This is conducted through established CIP projects and project-by-project review of required documentation, which results in no exceptional constraints on future developments within the City under the General Plan Update. For future developments, the District requires the developer to conduct sewer studies on a case-by-case basis, usually based on the size of the proposed development (number of dwelling units, number of acres, etc.). Therefore, there are processes in place for all future developments to ensure sewer infrastructure and service will be provided in an efficient and reliable manner.

## 1.4 Storm Drainage Facilities

### Existing Drainage Facilities

Storm drain main lines are primarily maintained by the City or private property owners, whereas the larger main drainages are maintained by the Ventura County Watershed Protection District (VCWPD). Portions of the City also drain to watercourses that are under the jurisdiction of VCWPD. Storm drain pipe diameters range from 4" to 114" and materials for storm drain structures include Reinforced Concrete Pipe (RCP), Extruded Polyethylene Coating (APC), Corrugated Steel Pipe (CSP), Corrugated Metal Pipe (CMP), and Cured-in-place pipe (CIPP) within the City. The storm drain system within the City is comprised of ten (10) main storm drain facilities summarized below:

- **Arroyo Simi:** Arroyo Simi is the largest watercourse within the City and flows southwesterly through the middle portion of the City. Arroyo Simi becomes Arroyo Las Posas immediately west of the City's border. Approximately 5 miles of Arroyo Simi runs through the City. There is also a detention basin (Line "C") located near Spring Road.<sup>10</sup> The facility cannot convey the 1% annual chance design storm and some urban areas within the City are in a FEMA Special Flood Hazard Area.
- **Castro-Williams Drain:** Castro-Williams Drain flows southerly towards Arroyo Simi in the northeastern portion of the City. There is a debris basin constructed in the 1950s upstream of developed areas, near its confluence with Arroyo Simi near Los Angeles Ave and Spring Road.<sup>11</sup>
- **Gabbert Canyon:** Gabbert Canyon drains southwesterly towards Arroyo Simi and flows through the northwestern portion of the City. This facility receives flow from the north portion of the City and from Walnut Canyon Channel before its confluence with Arroyo Simi. There is a debris basin located near Gabbert Road and Aspen Hills Road. Gabbert Canyon upstream of the debris basin is under the jurisdiction of VCWPD.<sup>12</sup>
- **Happy Camp Canyon:** Happy Camp Canyon is a large VCWPD-maintained wash in the northeastern portion of the City. Flows drain southwesterly into Arroyo Simi.
- **Moorpark Storm Drain No 1:** Moorpark Storm Drain No 1 is in the central portion of the City and drains southerly towards Walnut Canyon. This storm drain line crosses Princeton Avenue before outletting into Walnut Canyon near Princeton Avenue and Hedyland Court.
- **Moorpark Storm Drain No 2:** Moorpark Storm Drain No 2 is in the southwestern portion of the City and drains southerly towards Arroyo Simi. This storm drain line crosses W Los Angeles Avenue

<sup>10</sup> Ventura County Watershed Protection District, VCWPD-Zone 3. May 6, 2020. [https://s29422.pcdn.co/wp-content/uploads/2019/04/Debris\\_Basin\\_Report\\_VCWPD\\_2005.pdf](https://s29422.pcdn.co/wp-content/uploads/2019/04/Debris_Basin_Report_VCWPD_2005.pdf)

<sup>11</sup> Ventura County Watershed Protection District, VCWPD-Zone 3. May 6, 2020. [https://s29422.pcdn.co/wp-content/uploads/2019/04/Debris\\_Basin\\_Report\\_VCWPD\\_2005.pdf](https://s29422.pcdn.co/wp-content/uploads/2019/04/Debris_Basin_Report_VCWPD_2005.pdf)

<sup>12</sup> Ventura County Watershed Protection District, VCWPD-Zone 3. May 6, 2020. [https://s29422.pcdn.co/wp-content/uploads/2019/04/Debris\\_Basin\\_Report\\_VCWPD\\_2005.pdf](https://s29422.pcdn.co/wp-content/uploads/2019/04/Debris_Basin_Report_VCWPD_2005.pdf)





before outletting into Arroyo Simi directly south of the intersection between Shasta Avenue and W Los Angeles Avenue.

- **No 2 Canyon:** No 2 Canyon drains southwesterly into Arroyo Simi and is in the northeastern most section of the City. Flows from No 2 Canyon converge with Arroyo Simi south of Moorpark College. There is a debris basin east of Moorpark College.
- **Peach Hill Wash:** Peach Hill Wash is a trapezoidal channel located in the southwestern portion of the City and drains generally to the west before connecting with Arroyo Simi to the north. There is a retention basin located adjacent to Mountain Trail Street in the Mt Meadows development.
- **Strathearn Canyon:** Strathearn Canyon is in the northeastern portion of the City. Consisting primarily of a concrete trapezoidal channel, flows drain southeast into Arroyo Simi southwest of Moorpark College. North of Middle Ranch Road, Strathearn Canyon is a soft-bottom wash under VCWPD jurisdiction.
- **Walnut Canyon:** Walnut Canyon is in the northwest portion of the City and is tributary to Gabbert Canyon. Flows drains southerly and converge just west of the intersection of W High Street and Moorpark Avenue. The portion of the facility north of Waterworks Road is under the jurisdiction of the VCWPD. Basin 0 is located just north of Meridian Hills Road.

Other facilities include Strathearn Canyon East Fork, Campus Road Canyon, Big Mountain Oil Field Canyon, North Basin, and the Home Acres Drain. The City maintains a master plan of drainage to ensure the storm drain facilities are functioning effectively and protective of property and residents.

### City of Moorpark Storm Drain Master Plan

The City of Moorpark's Master Plan of Drainage Master Plan (1995 MPD) was first prepared in 1995 by Hawks & Associates. The purpose of the 1995 MPD is to analyze the capacity of the storm drain facilities within the City and identify any deficiencies or capital improvements needed. The City used the 50-year design storm to quantify peak runoff to analyze existing storm drain facilities and size potential improvements. Regional flood control facilities, such as detention basins, are sized for the 100-year storm event. This sizing criteria, along with flood capacities within the street, serves to provide 100-year protection of structures throughout the City. This remains in line with the FEMA Flood Insurance program as all new developments and re-developments must achieve 100-year storm protection. Land Use from the 1992 City General Plan was considered in computing imperviousness calculations as well as geographical features and soil classifications that were used to determine rate of runoff. Flow rates were calculated at select points of concentration and were used to evaluate existing systems as well as to plan for needed additional facilities within those drainage areas.

The VCWPD Hydrology Manual and the FO601 Computer Program were utilized in the analysis. A deficiency analysis of the existing drainage system was prepared for all City mainline systems elements. Because the City desires to maintain storm drain system elements within the street right-of-way, and

maintain current direction of storm flows, five (5) types of drainage system structures were identified within the MPD. For all new improvements it was advised that the City look at implementing RCPs, RCBs, Detention Basins, Unlined Channels, and Concrete Lined Channels. These would depend on the location and type of use for the proposed developments.

According to the 1995 MPD, there were approximately thirteen (13) proposed improvements that were identified within the City. These proposed facilities were sized according to deficiencies found in older, existing infrastructure. To finance the construction of new storm drain facilities, the 1995 MPD proposed accounting for right-of-way costs, construction costs, associated engineering and administrative costs, and contingency costs. Locations for all proposed drainage facilities were mapped in the 1995 MPD appendix "plates" numbering from A to L. These improvements are summarized in

Table 9 below.

**Table 9 Drainage Master Plan Proposed Project List**

PROJECT ID	DESCRIPTION	2022 UPDATES FROM CITY PUBLIC WORKS DEPARTMENT
E-1	Spring Rd Drain – North of High St	No new updates since 1995 MPD
E-2, H-5	Moorpark Avenue Drain	Completed in 1997
E-5	Bard St Catch Basin	No new updates since 1995 MPD
G-1	Shasta Drain – Shasta Ave	A portion of Shasta drain, north of Los Angeles Ave, is approved for construction in the "Adopted Operating and Capital Improvement Projects Budget, Fiscal Year 2022-2023"
G-2, H-2	Shasta Drain – Lassen Ave to Poindexter	No new updates since 1995 MPD
G-3	Liberty Bell Drain	No new updates since 1995 MPD
G-4	Arroyo Vista Park Drain	No new updates since 1995 MPD
H-1	Spring Rd Drain – Los Angeles Ave to Minor St	Completed in 1997
H-3, E-4	Fremont Drain (Millard Drain)	The Millard Drain project, north of Los Angeles Ave, is approved for construction in the "Adopted Operating and Capital Improvement Projects Budget, Fiscal Year 2022-2023"
H-4	Lorraine Ln Drain	Completed in 2004
H-6	New Los Angeles Ave Drain	Completed in 2000
H-7	Science Dr Drain	Completed in 1998
H-8	Park Ln Drain	No new updates since 1995 MPD



Since the 1995 MPD, improvements have been made to the storm drain system and ongoing monitoring occurs through the City Public Works Department. Out of the 13 projects listed in the 1995 MPD, five have been completed. Another two projects mentioned in the 1995 MPD are either in design, in construction, or have had funding approved. The remaining six projects mentioned in the 1995 MPD have not yet been executed or approved.

In addition to tracking projects from the 1995 MPD, the City manages storm drain projects on an annual basis through the Adopted Operating and Capital Improvement Projects Budget. After determining several projects with the highest priority, the selected projects are incorporated into the current fiscal year budget. The projects on the 2022-2023 budget are listed in *Table 9* below.

Additionally, the County prepares a Capital Improvement Projects (CIP) Plan every five years to ensure Countywide capital needs are met. This Five-Year Plan development involves all County departments and agencies. Each department/agency is requested to review capital needs for a five-year period, then CIP requests are submitted to the Capital Planning Committee for review and prioritization. Improvements to storm drain infrastructure are included in the Watershed Protection Plan. The planned projects in the City of Moorpark on the 2022-2027 CIP Plan are included in *Table 9* below.

**Table 10 Current City Drainage Improvement Projects Planned Based on the Adopted Operating and Capital Improvement Projects Budget and Ventura County Public Works Five-Year Capital Improvement Program**

PROJECT NAME	JURISDICTION	DESCRIPTION	PROJECT CROSS LISTED IN CITY 1995 MPD	2022 UPDATES FROM CITY PUBLIC WORKS DEPARTMENT
Shasta Drain	City	Construction of storm drainage infrastructure improvements to serve the residential area north of the intersection of Los Angeles Avenue and Shasta Avenue, as identified in the City's Master Plan of Drainage (G-1 Shasta Drain).	Yes (G-1)	A portion of Shasta drain, north of Los Angeles Ave, is approved for construction.

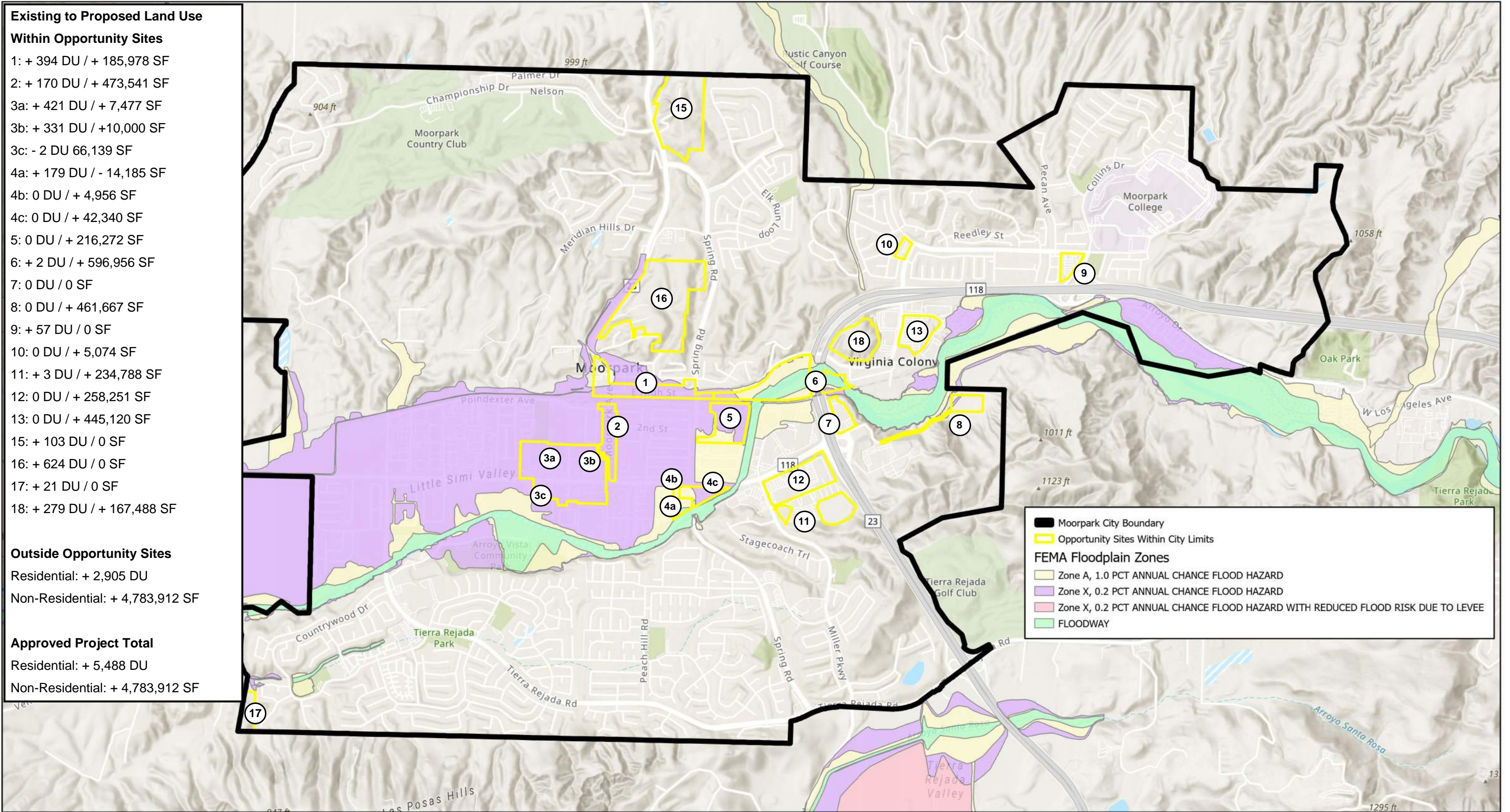
PROJECT NAME	JURISDICTION	DESCRIPTION	PROJECT CROSS LISTED IN CITY 1995 MPD	2022 UPDATES FROM CITY PUBLIC WORKS DEPARTMENT
Millard Drain	City	Construction of storm drainage infrastructure improvements to serve the residential area north of the intersection of Los Angeles Avenue and Millard Street.	Yes (H-3, E-4)	The Millard Drain project, north of Los Angeles Ave, is approved for construction.
Los Angeles Avenue Widening – Spring Road to Moorpark Avenue	City	Street widening and improvements for additional vehicle travel lanes, an emergency lane, curb and gutter, and sidewalk along the south side of Los Angeles Avenue, from Moorpark Avenue to Spring Road. Project scope of work will also include storm drainage infrastructure improvements along the south side of Los Angeles Avenue.	No	No updates from City staff.
Arroyo Simi Grade Stabilization at Leta Yancy	County	Project scope includes the design and reconstruction of the existing damaged stabilizer downstream of Leta Yancy to eliminate scour and degradation within the project reach.	No	No updates from City staff.
Castro Williams Debris Basin Safety Retrofits	County	The objective of this project is to retrofit or replace the existing emergency spillway to meet District dam freeboard requirements.	No	No updates from City staff.



## Existing Floodplain Mapping

The National Flood Insurance Act (1968) established the National Flood Insurance Program, which is based on the minimal requirements for flood plain management and is designed to minimize flood damage within Special Flood Hazard Areas. The Federal Emergency Management Agency (FEMA) is the agency that administrates the National Flood Insurance Program. Special Flood Hazard Areas (SFHA) are defined as areas that have a 1 percent chance of flooding within a given year, also referred to as the 100-year flood. Flood Insurance Rate Maps (FIRMs) were developed to identify areas of flood hazards within a community.

According to the Flood Zone determination, the majority of the City does not have a designated flood zone. The remainder is designated as Zone X and A. Zone X is defined as the area determined to be outside the 500-year flood, protected by levee from 100-year flood, and with a minimal or 0.2% chance of flooding. Opportunity Sites in this Zone include portions of 1, 2, 3a-c, portions of 4c, portions of 5, portions of 6, and portions of 8. Parts of the City along the westerly boundary, Gabbert Road, Arroyo Simi, and parallel to Spring Road are designated as Zone A, which represents areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. These channels are located towards the central portions of the City and flows are routed southwesterly. Opportunity Sites 4a-b, portions of 5, and portions of 6 are in Zone A. See Figure 3 for a map of the FEMA flood zones within Moorpark.



# FEMA Flood Zones with Opportunity Site Overlay

Moorpark, CA



# Exhibit 1

9/27/2022





## Existing Water Quality Conditions

In California, water quality conditions are protected by the State Water Board and the Regional Water Quality Control Boards. Each Water Board has jurisdiction to enforce water quality standards, to minimally meet the federal regulations established by the Clean Water Act in 1972. A list of water bodies that do not meet water quality standards are provided through the California's Clean Water Act Section 303(d) List. This list is assessed by the Regional Water Quality Control Board every two years and approved by the U.S. EPA.

To improve the water quality of the impaired water bodies, a Total Maximum Daily Load (TMDL) is developed. The TMDL establishes the maximum allowable amount of a pollutant to be discharged to a particular water body. In addition, The Municipal Storm Water Program regulates conveyances owned or operated by the State through MS4 permits and monitors discharges to water bodies. These programs are designed to improve the quality of urban stormwater runoff by preventing and/or reducing pollutants. Ultimately, water quality regulations for surface and groundwater are required by federal law, but more stringent regulations are enforced through state, region, county, and city guidelines. The most current version of the 303(d) List and adopted TMDLs is in the 2020-2022 California Integrated Report, which can be accessed [here](#). The Water Board has also provided a GIS mapping visualization tool for this version of the report that can be accessed [here](#).

Additionally, the Ventura Countywide Stormwater Quality Management Program intends to develop a Watershed Management Program (WMP) to achieve compliance with water quality standards including achieving TMDLs. The City will be a participating program permittee when the WMP is established.<sup>13</sup>

On a local level, the City's Department of Public Works administer the Stormwater Management Program.<sup>14</sup> The City of Moorpark is within Ventura County and is regulated by the Los Angeles Regional Water Quality Control Board (LARWQCB), which is subject to the Regional Phase I Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit, Order No. R4-2021-0105, effective July 23, 2021. These regulations require the City to enforce a stormwater program to protect water quality in downstream receiving waters. As such, certain development projects within the City must implement Low Impact Development (LID) Best Management Practices (BMPs) to improve stormwater quality.

In addition to the protection of surface water quality, groundwater is also managed within the City of Moorpark. The Las Posas Valley groundwater basin underlies Moorpark and is managed by the Fox Canyon Groundwater Management Agency. Groundwater resources support agricultural, municipal, industrial, and environmental uses. The Groundwater Sustainability Plan (GSP) for the Las Posas Valley Basin was developed in 2019. The GSP is intended to protect the groundwater by monitoring groundwater

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<sup>13</sup> Ventura Countywide Stormwater Quality Management Program, Watershed Management Program. September 27, 2022. <https://www.vcstormwater.org/programs/watershed-management-program>

<sup>14</sup> City of Moorpark website, Stormwater. September 27, 2022. <https://moorparkca.gov/138/Stormwater>.

elevations and groundwater quality. Land use and activities may be coordinated amongst agencies and assessed to prevent risks to groundwater quantity and quality.<sup>15</sup>

### Proposed Land Use Changes and Drainage Impact Assessment

Under the Moorpark GPU, additional dwelling units and Non-Residential square footage are proposed which may impact drainage and water quality conditions within the City. Primarily, areas that are currently vacant land will experience increases in peak flow runoff which may impact drainage facilities. In addition, new developments may contribute to increased pollutants entering water bodies. These impacts are assessed elaborated upon in the following sections.

#### Storm Drain Infrastructure

The City has an existing storm drain network and drainage system in place. As noted above, the City utilizes the Capital Improvement Projects Budget to prioritize necessary storm drain improvements. Annually, the remaining uncompleted projects are prioritized and incorporated into the next fiscal year budget. Currently, no City drainage improvement projects are proposed downstream of any Opportunity Sites.

It is anticipated that the Opportunity Sites with currently vacant land would produce the largest change in peak flow runoff due to the change in impervious area. This includes Opportunity Site 1, 3a-c, 5-7, 11, and 15-17 which include vacant portions of land. However, there are no downstream storm drain improvements projects that would be impacted by the development within the opportunity sites. In addition, if a deficiency in the capacity of the drainage systems downstream of the Opportunity Sites is identified in the future, the City and/or County could require improvements to the drainage systems or onsite detention systems for those developments.

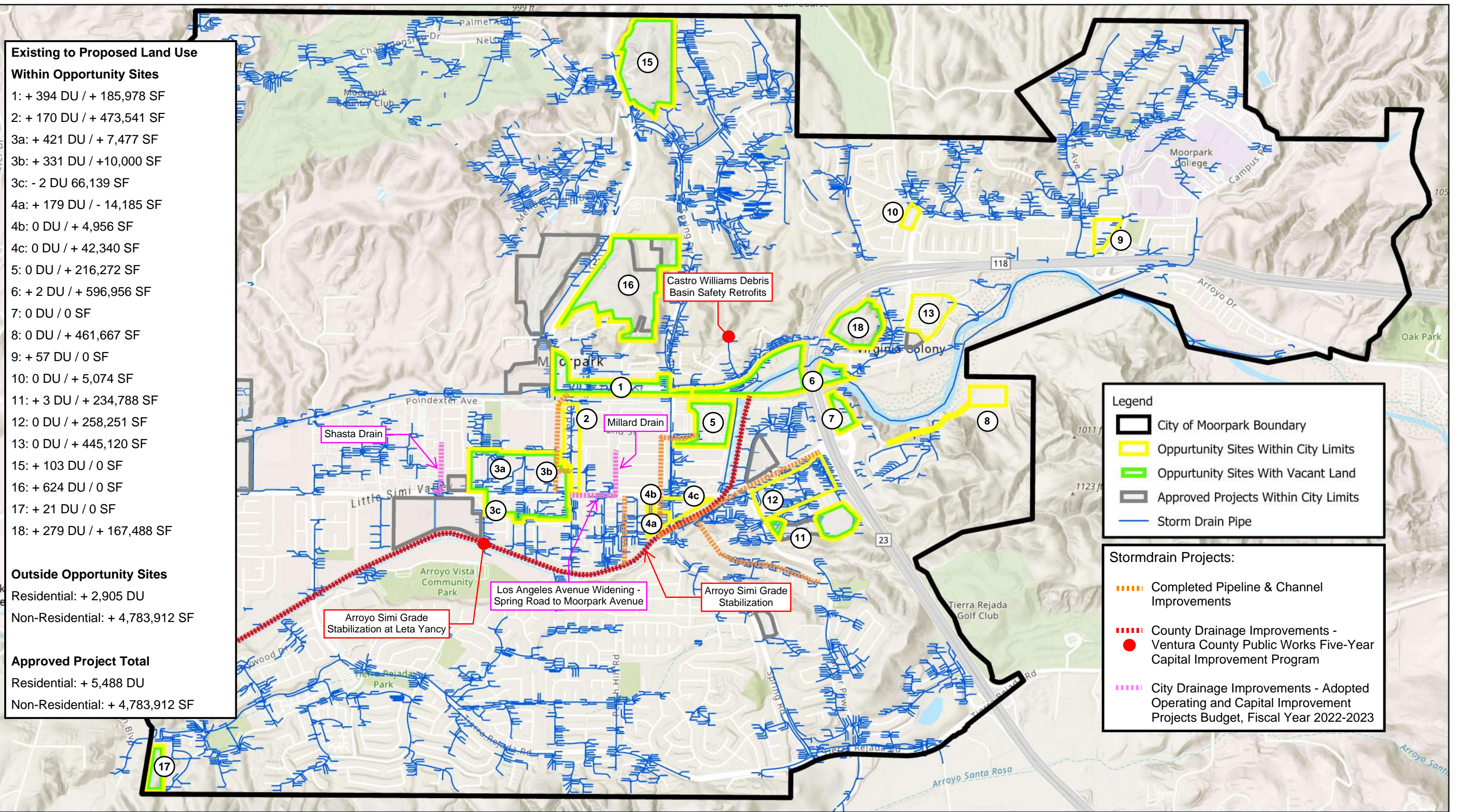
Additionally, note that the County has been improving Arroyo Simi for grade stabilization to protect the waterway from erosion. The County may require detention systems to prevent siltation and protect the structure of the receiving water bodies.

See Figure 4 below for the current storm drain improvements projects as well as the opportunity sites.

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<sup>15</sup> Groundwater Sustainability Plan for the Las Posas Valley Basin. September 27, 2022.  
[http://pwportal.ventura.org/WPD/FoxCanyon/GroundwaterReports/LasPosasValleyFinal/signed\\_final\\_las%20posas%20valley%20basin%20gsp.pdf](http://pwportal.ventura.org/WPD/FoxCanyon/GroundwaterReports/LasPosasValleyFinal/signed_final_las%20posas%20valley%20basin%20gsp.pdf)





**Existing to Proposed Land Use**

**Within Opportunity Sites**

1: + 394 DU / + 185,978 SF  
 2: + 170 DU / + 473,541 SF  
 3a: + 421 DU / + 7,477 SF  
 3b: + 331 DU / +10,000 SF  
 3c: - 2 DU / 66,139 SF  
 4a: + 179 DU / - 14,185 SF  
 4b: 0 DU / + 4,956 SF  
 4c: 0 DU / + 42,340 SF  
 5: 0 DU / + 216,272 SF  
 6: + 2 DU / + 596,956 SF  
 7: 0 DU / 0 SF  
 8: 0 DU / + 461,667 SF  
 9: + 57 DU / 0 SF  
 10: 0 DU / + 5,074 SF  
 11: + 3 DU / + 234,788 SF  
 12: 0 DU / + 258,251 SF  
 13: 0 DU / + 445,120 SF  
 15: + 103 DU / 0 SF  
 16: + 624 DU / 0 SF  
 17: + 21 DU / 0 SF  
 18: + 279 DU / + 167,488 SF

**Outside Opportunity Sites**

Residential: + 2,905 DU  
 Non-Residential: + 4,783,912 SF

**Approved Project Total**

Residential: + 5,488 DU  
 Non-Residential: + 4,783,912 SF

**Legend**

- City of Moorpark Boundary
- Opportunity Sites Within City Limits
- Opportunity Sites With Vacant Land
- Approved Projects Within City Limits
- Storm Drain Pipe

**Stormdrain Projects:**

- Completed Pipeline & Channel Improvements
- County Drainage Improvements - Ventura County Public Works Five-Year Capital Improvement Program
- City Drainage Improvements - Adopted Operating and Capital Improvement Projects Budget, Fiscal Year 2022-2023

**Storm Drain and Drainage Improvement Projects with Project Site Overlay**

C:\Users\anovak\Documents\ArcGIS\Projects\Moorpark1\Moorpark2022-09-14.aprx

## Water Quality Requirements

Water quality standards throughout the City will be met for new development and redevelopment projects associated with the Moorpark GPU through implementation of Low Impact Development (LID) Best Management Practices (BMPs). Applicants may refer to the Ventura County Technical Guidance Manual (TGM) for Stormwater Quality Control Measures for further guidance.<sup>16</sup>

The TGM will also provide groundwater quality requirements such as a minimum of 100 feet of separation between infiltration BMPs and potable wells, non-potable wells, drain fields, and springs. In addition, the Las Posas Valley groundwater basin groundwater quality will be protected by the requirements set forth by the GSP, which is managed by the Fox Canyon Groundwater Management Agency.

Therefore, surface water and groundwater quality will be protected with the construction of new development projects as they come online under the GPU, and no negative impacts are anticipated.

## Drainage and Water Quality CEQA Impact Assessment

California Environmental Quality Act (CEQA) significance criteria are used to evaluate the degree of impact caused by a development project on environmental resources including storm drain infrastructure and water quality. According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would impact any of the items listed below.

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

**Impact Assessment:** As noted in previous sections, the City requires compliance with regional jurisdiction, including the LARWQCB, which is subject to the Regional Phase I MS4 NPDES Permit, Order No. R4-2021-0105. Water quality standards will be met for new development and redevelopment projects through LID BMPs. Groundwater quality for the Las Posas Valley groundwater basin is actively managed by the Fox Canyon Groundwater Management Agency.

Additionally, the City will observe and follow all requirements of the region wide waste discharge requirements, for example, the Water Reclamation Requirements for Recycled Water Use, such that violations do not occur.<sup>17</sup>

Therefore, no impacts to water quality standards, waste discharge requirements or groundwater quality are anticipated.

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<sup>16</sup> Ventura County Technical Guidance Manual for Stormwater Quality Control Measures. September 27, 2022.

[https://www.vcstormwater.org/images/stories/NPDES\\_Documents/TGM/TGM\\_2018\\_Errata/Ventura-Technical-Guidance-Manual-Rev-06\\_29\\_18.pdf](https://www.vcstormwater.org/images/stories/NPDES_Documents/TGM/TGM_2018_Errata/Ventura-Technical-Guidance-Manual-Rev-06_29_18.pdf)

<sup>17</sup> California Water Boards Website, Waste Discharge Requirements Program. September 27, 2022.

[https://www.waterboards.ca.gov/water\\_issues/programs/waste\\_discharge\\_requirements/](https://www.waterboards.ca.gov/water_issues/programs/waste_discharge_requirements/)



- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

**Impact Assessment:** The Las Posas Valley groundwater basin underlies Moorpark and is managed by the Fox Canyon Groundwater Management Agency. A GSP is in place to protect the groundwater by monitoring groundwater elevations and groundwater quality. Additionally, development projects will be required to infiltrate, where feasible, to recharge groundwater and meet water quality standards. To protect the groundwater basin, infiltration may not be allowable in areas with a history of contamination or within 100 feet of potable wells, non-potable wells, drain fields, and springs. Therefore, there will be no significant negative impacts to groundwater supplies or recharge.

- 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:

- (i) Result in a substantial erosion or siltation on- or off-site;

**Impact Assessment:** All projects shall comply with County and local approval agency regulations on floodplain and floodway management. Additionally, increased instability and erosion due to increased runoff volumes, flow durations, and higher stream velocities, also known as “hydromodification impacts,” will need to be mitigated. According to the Ventura County TGM, the Southern California Stormwater Monitoring Coalition (SMC) is developing a regional methodology mitigate hydromodification impacts. Watershed-specific Hydromodification Control Plans (HCPs) will be developed and implemented after the completion of the SMC study. Until it the HCPs are developed, the TGM provides necessary guidance.<sup>18</sup> As such, substantial erosion or siltation is not anticipated.

- (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

**Impact Assessment:** As noted above, all projects will be subject to City and/or County requirements for flood control detention systems. Therefore, the City and County have policies in place to ensure that runoff volumes, flow durations, and velocities are at a rate that will not result in flooding and no significant impacts are anticipated.

- (iii) 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

<sup>18</sup> Ventura County Technical Guidance Manual for Stormwater Quality Control Measures, 2.9 Step 8: Continue Project Design Process: Flood Control and Hydromodification Requirements. September 27, 2022.

[https://www.vcstormwater.org/images/stories/NPDES\\_Documents/TGM/TGM\\_2018\\_Errata/Ventura-Technical-Guidance-Manual-Rev-06\\_29\\_18.pdf](https://www.vcstormwater.org/images/stories/NPDES_Documents/TGM/TGM_2018_Errata/Ventura-Technical-Guidance-Manual-Rev-06_29_18.pdf)

**Impact Assessment:** The current fiscal year Adopted Operating and Capital Improvement Projects Budget and Ventura County Public Works Five-Year Capital Improvement Program have no drainage improvement projects downstream of Opportunity Sites that would require an upsize of the storm drain pipe. However, if a pipe ever became deficient and needed to be upsized, the City has policies in place to require the developer to enter a cost share mechanism to improve the storm drain pipe or require on-site detention for the project. Runoff will be subject to City and County water quality standards. These programs and regulations will prevent runoff that would exceed the capacity of stormwater drainage systems or sources that exceed pollutant limits.

- (iv) Impede or redirect flood flows?

**Impact Assessment:** All projects will comply with aforementioned City and County guidelines, regulations, and policies regarding flood flows and detention systems. Therefore, developments are not expected to impede or redirect flood flows.

- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

**Impact Assessment:** Portions of the City are designated as Zone X and Zone A, see Figure 3 for a map of the FEMA flood zones within Moorpark. If applicable to the development, the FEMA flood zone must be shown on the site plan. Additionally, building sites may be subject to a City Floodplain Development Permit or Flood Zone Clearance. All development projects should follow the City Municipal Code, which outlines construction standards including the required building elevation above the Base Flood Elevation, dependent on the flood zone.<sup>19</sup> Flooding should not be anticipated if all codes and standards are followed.

There is no risk from tsunami or seiche zones within Moorpark.

- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**Impact Assessment:** As noted above, the City requires compliance with regional jurisdiction, including the LARWQCB, which is subject to the Regional Phase I MS4 NPDES Permit. Projects will also comply with the Ventura County TGM for Stormwater Quality Control Measures for further guidance. Groundwater quality for the Las Posas Valley groundwater basin may be subject to requirements set forth by the GSP. These programs and standards will ensure no impacts to water quality nor sustainable groundwater management.

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<sup>19</sup> Moorpark, California Municipal Code, Chapter 15.24 Floodplain Management. September 27, 2022.  
[https://library.qcode.us/lib/moorpark.ca/pub/municipal\\_code/item/title\\_15-chapter\\_15\\_24](https://library.qcode.us/lib/moorpark.ca/pub/municipal_code/item/title_15-chapter_15_24)



## Conclusions

As shown above, there are several drainage improvements that have been conducted since the 1995 MPD. The remaining improvements identified by the City and VCWPD will be prioritized under current and future planning efforts. These improvements are typically discussed between City and VCWPD staff on an ongoing basis.

The City has a process in place for identifying and prioritizing drainage improvements through master planning efforts, CIP projects as well as project-by-project specific requirements. Per the City's Municipal Code, prior to the issuance of a grading permit or final map approval, applicants must identify any necessary storm drain improvements and temporary and permanent best management practices (BMP) for the control of non-point water discharges, to ensure flood protection as well as protection of water quality. In addition, drainage improvements must be designed so that after-development, drainage to adjacent parcels would not be increased above pre-development drainage quantities for any stormwater model between and including the ten (10) year and one hundred (100) year storms, nor will surface runoff be concentrated by this project. All drainage measures necessary to mitigate stormwater flows must be provided to the satisfaction of the City engineer and public works director. The applicant shall make any on-site and downstream improvements, required by the City, to support the proposed development. Therefore, the City has established procedures to ensure flood and water quality protection is provided by new developments which results in no exceptional constraints on future developments within the City under the general plan update. Therefore, no significant impacts are anticipated for drainage and water quality conditions under the Moorpark GPU.

## 2 TECHNICAL APPENDICES

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Appendix A Water Demand and Sewer Flow Calculations

Appendix B Water Infrastructure CIP Projects



# Appendix A: Water Demand and Sewer Flow Calculations

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### Moorpark GPU Water Demand and Sewer Flow Calculations

Sites	Existing Development				Proposed General Plan				Delta - Proposed to Existing							
	Opportunity Site Name	Total Units	SFR	MFR	Non-Res'd (in SqFt)	Total Units	SFR	MFR	Non-Res SF	SFR	MFR	Non-Res SF	Water Demand (gpd)	Water Demand (AFY)	Sewer Flows (gpd)	Sewer Flows (MGD)
1	High Street Corridor	6	6	-	160,280	400	-	400	346,258	-6	+400	+185,978	+91,642	+103	+73,313	0.073
2	Moorpark Avenue Corridor	30	15	15	76,564	200	-	200	550,105	-15	+185	+473,541	+71,931	+81	+57,545	0.058
3a	Mission Bell	-	-	-	273,049	421	-	421	280,526	+0	+421	+7,477	+82,300	+92	+65,840	0.066
3b	Moorpark Town Center	-	-	-	162,095	331	-	331	172,095	+0	+331	+10,000	+65,048	+73	+52,038	0.052
3c	Tuscany Square/Village Retail Area	2	2	-	182,414	-	-	-	248,553	-2	+0	+66,139	+5,080	+6	+4,064	0.004
4a	Duncan Ashley	-	-	-	14,185	179	-	179	-	+0	+179	-14,185	+33,351	+37	+26,681	0.027
4b	Commercial Center	-	-	-	23,794	-	-	-	28,750	+0	+0	+4,956	+446	+0	+357	0.000
4c	Moorpark Plaza	-	-	-	62,422	-	-	-	104,762	+0	+0	+42,340	+3,811	+4	+3,048	0.003
5	Industrial District/Enegren Building	-	-	-	230,218	-	-	-	446,490	+0	+0	+216,272	+19,464	+22	+15,572	0.016
6	Princeton Avenue Industrial/Concrete Batching	-	-	-	26,661	2	-	2	623,617	+0	+2	+596,956	+54,111	+61	+43,289	0.043
7	WDC/Ortho Commercial Center	-	-	-	121,267	-	-	-	121,267	+0	+0	+0	+0	+0	+0	0.000
8	Ensign Bickford Adjacent Vacant Property	-	-	-	-	-	-	-	461,667	+0	+0	+461,667	+41,550	+47	+33,240	0.033
9	Moorpark Campus Plaza	-	-	-	55,157	57	-	57	55,157	+0	+57	+0	+11,053	+12	+8,843	0.009
10	Varsity Park Plaza	-	-	-	34,130	-	-	-	39,204	+0	+0	+5,074	+457	+1	+365	0.000
11	Patriot Commerce Center Vacant Sites	-	-	-	-	3	-	3	234,788	+0	+3	+234,788	+21,747	+24	+17,398	0.017
12	Moorpark Marketplace Parking Lot	-	-	-	371,191	-	-	-	629,442	+0	+0	+258,251	+23,243	+26	+18,594	0.019
13	Penny Mac (incl. parking lot)	-	-	-	256,196	-	-	-	701,316	+0	+0	+445,120	+40,061	+45	+32,049	0.032
15	Canyon Crest/Birdsall	1	1	-	-	104	104	-	-	+103	+0	+0	+44,913	+50	+35,931	0.036
16	The Vistas at Moorpark/City Ventures	-	-	-	-	624	218	406	-	+218	+406	+0	+173,742	+195	+138,993	0.139
17	Special Needs Housing Study Area	3	3	-	-	24	-	24	-	-3	+24	+0	+3,343	+4	+2,674	0.003
18	Hilltop Site	-	-	-	-	279	-	279	167,488	+0	+279	+167,488	+69,144	+77	+55,315	0.055
<b>Outside of Opportunity Sites (including Specific Plans)</b>		11,495	8,601	2,893	6,733,548	14,400	9,765	4,636	8,355,598	+1,164	+1,743	+1,622,050	+991,326	+1,110	+793,061	0.793
<b>TOTAL</b>		<b>11,537</b>	<b>8,628</b>	<b>2,908</b>	<b>8,783,171</b>	<b>17,025</b>	<b>10,087</b>	<b>6,938</b>	<b>13,567,083</b>	<b>+1,459</b>	<b>+4,030</b>	<b>+4,783,912</b>				
<b>Total Water Demand Increase</b>													<b>+1,847,763</b>	<b>+2,069</b>	<b>+1,478,210</b>	<b>1.478</b>

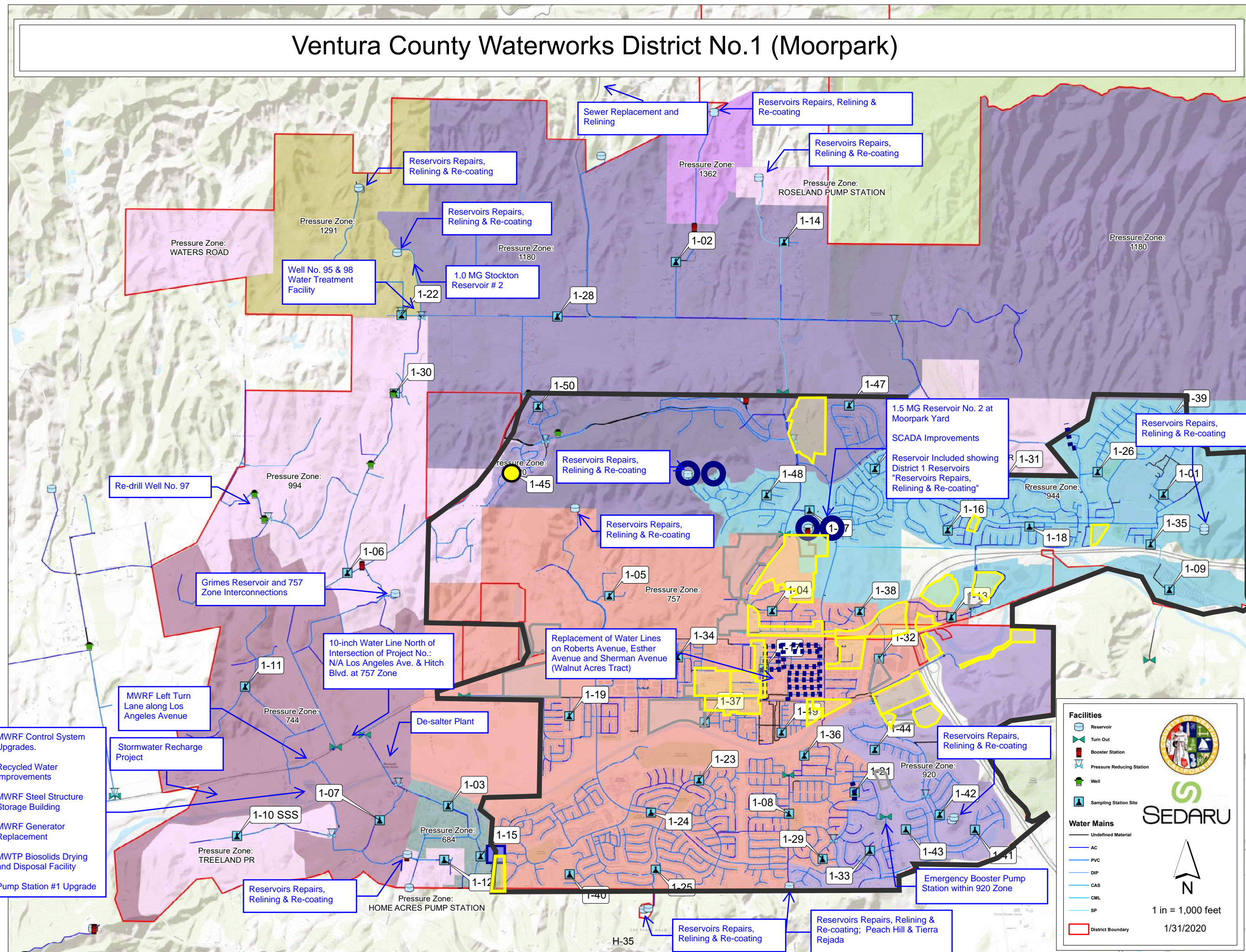
Notes  
Proposed Water Demand Factors 135 gpcd for SFR; 58 gpcd for MFR, and 0.09 gpd/SF for Non-Res; Sewer flows calculated by multiplying water demands by 0.8.



## Appendix B: Water Infrastructure CIP Projects

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# Ventura County Waterworks District No.1 (Moorpark)



**Facilities**

- Reservoir
- Turn Out
- Booster Station
- Pressure Reducing Station
- Well
- Sampling Station Site

**Water Mains**

- Undefined Material
- AC
- PVC
- DIP
- CAS
- CML
- SP

**District Boundary**

**SEDARU**

1 in = 1,000 feet  
1/31/2020

## **Appendix I      Noise Monitoring and Modeling**

## Appendices

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# NOISE MODELING SPREADSHEETS

Traffic Noise Calculator: FHWA 77-108

Project Title: MPK-03 - Existing

ID	Output						Inputs													
	dBA at 50 feet			Distance to CNEL Contour			Roadway	Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Receiver
	L <sub>eq-24hr</sub>	L <sub>dn</sub>	CNEL	70 dBA	65 dBA	60 dBA														
1	62.1	65.3	65.6	26	55	119	Grimes Cyn Rd	Los Angeles Ave to Championship Dr	3,615	50	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
2	60.8	64.0	64.4	21	45	98		Championship Dr to Broadway	2,710	50	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
3	55.0	58.2	58.6	9	19	40	Championship Dr	Grimes Canyon Rd to Augusta Dr	900	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
4	60.3	63.5	63.8	19	42	90		Augusta Dr to Walnut Canyon Rd	3,040	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
5	62.7	65.9	66.3	28	61	131	High St	Walnut Canyon Rd to Spring Rd	12,200	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
6	67.8	71.0	71.3	61	132	285	Princeton Ave	Spring Rd to SR-118 ramps	22,030	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
7	62.3	65.4	65.8	26	56	121	Poindexter Ave	Gabbert Rd to Sierra Ave	6,140	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
8	63.9	67.1	67.5	34	73	157		Sierra Ave to Walnut Cyn Rd	9,020	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
9	74.2	77.4	77.8	165	355	765	Los Angeles Ave	Grimes Cyn Rd to Buttercreek Rd	26,510	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
10	74.3	77.5	77.8	166	358	771		Buttercreek Rd to Tierra Rejada Rd	26,510	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	3	Soft	50
11	74.9	78.1	78.5	183	395	851		Tierra Rejada Rd to Moorpark Ave	28,580	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	6	Soft	50
12	75.7	78.9	79.2	205	443	954		Moorpark Ave to Spring Rd	33,915	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	6	Soft	50
13	76.3	79.5	79.8	225	485	1045		Spring Rd to Miller Pkwy-Science Dr	38,920	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	6	Soft	50
14	76.6	79.8	80.1	237	510	1099		Miller Pkwy-Science Dr to SR-23 ramps	41,950	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	6	Soft	50
15	73.9	77.1	77.5	157	338	728		Between SR-23 ramps	23,910	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	4	Soft	50
16	52.2	55.4	55.8	6	12	26	Gabbert Rd	North of Poindexter Ave	610	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
17	61.7	64.9	65.2	24	52	112		Poindexter Ave to Los Angeles Ave	5,405	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
18	68.0	71.2	71.5	63	136	293	Tierra Rejada Rd	Los Angeles Ave to Mountain Trail St	17,240	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
19	68.1	71.2	71.6	64	137	296		Mountain Trail St to Mountain Meadow Dr	17,545	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
20	68.5	71.6	72.0	68	146	315		Mountain Meadow Dr to Walnut Creek Rd	19,270	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
21	69.2	72.4	72.7	76	163	352		Walnut Creek Rd to Peak Hill Rd	23,065	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
22	69.2	72.4	72.7	76	163	352		Peach Hill Rd to Spring Rd	22,730	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
23	70.8	74.0	74.3	97	209	451		Spring Rd to Miller Pkwy-Moorpark Rd	32,985	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
24	72.2	75.4	75.8	121	261	562		Miller Pkwy-Moorpark Rd to SR-23 ramps	45,855	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
25	71.6	74.8	75.2	111	238	513		Between SR-23 ramps	40,070	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
26	71.4	74.6	74.9	107	230	495	Walnut Cyn Rd	Broadway Rd to Championship Dr	16,160	40	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
27	72.1	75.3	75.6	119	255	550		Championship Dr to Spring Rd	18,920	40	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
28	69.6	72.8	73.1	81	174	375		Spring Rd to Meridian Hills	10,640	40	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
29	68.3	71.5	71.9	67	144	309		Meridian Hills to High St	7,980	40	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
30	63.9	67.1	67.4	34	72	156	Moorpark Ave	High St to Poindexter Ave-1st St	15,885	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
31	62.1	65.2	65.6	25	55	118		Poindexter Ave-1st St to Los Angeles Ave	10,490	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
32	61.5	64.7	65.0	23	50	109		South of Los Angeles Ave	9,250	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
33	60.2	63.4	63.7	19	41	88	Peach Hill Rd	North of Tierra Rejada Rd (n-s segment)	5,020	35	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
34	61.1	64.3	64.6	22	47	102		West of Spring Rd (e-w segment)	6,230	35	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
35	67.5	70.7	71.0	59	126	272	Spring Rd	Walnut Canyon Rd to Ridgecrest Dr	15,430	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
36	69.1	72.3	72.6	75	161	348		Ridgecrest Dr to High St-Princeton Ave	22,340	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
37	69.2	72.4	72.7	76	164	352		High St-Princeton Ave to Los Angeles Ave	22,780	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
38	67.0	70.2	70.6	54	117	253		Los Angeles Ave to Peach Hill Rd	14,255	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
39	66.6	69.8	70.1	51	109	236		Peach Hill Rd to Tierra Rejada Rd	12,860	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
40	56.1	59.3	59.6	10	22	47	Science Dr	North of Los Angeles Ave	2,650	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
41	62.4	65.6	66.0	27	58	125	Miller Pkwy	Los Angeles Ave to Tierra Rejada Rd	6,385	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
42	66.3	69.5	69.8	49	105	226	Collins Dr	Campus Park Dr to SR-118 ramps	19,890	35	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
43	64.7	67.8	68.2	38	81	175		Between SR-118 ramps	13,650	35	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
44	77.9	81.1	81.4	290	624	1344	SR-118	Princeton Ave to Los Angeles Ave	69,240	65	0.0%	94.5%	4.4%	1.2%	80.0%	8.0%	12.0%	6	Soft	50
45	77.5	80.7	81.1	273	589	1269	SR-23	Los Angeles Ave to Tierra Rejada Rd	63,480	65	0.0%	94.5%	4.4%	1.2%	80.0%	8.0%	12.0%	6	Soft	50

ID	Output						Roadway	Segment	Inputs											
	dBA at 50 feet			Distance to CNEL Contour					ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Receiver
	L <sub>eq-24hr</sub>	L <sub>dn</sub>	CNEL	70 dBA	65 dBA	60 dBA														
1	63.0	66.2	66.5	29	63	136	Grimes Cyn Rd	Los Angeles Ave to Championship Dr	4,460	50	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
2	61.8	64.9	65.3	24	52	113		Championship Dr to Broadway	3,340	50	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
3	56.4	59.5	59.9	11	23	49	Championship Dr	Grimes Canyon Rd to Augusta Dr	1,220	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
4	60.4	63.6	63.9	20	42	91		Augusta Dr to Walnut Canyon Rd	3,100	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
5	63.3	66.5	66.8	31	66	142	High St	Walnut Canyon Rd to Spring Rd	13,850	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
6	68.3	71.5	71.8	66	143	307	Princeton Ave	Spring Rd to SR-118 ramps	24,700	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
7	62.7	65.9	66.2	28	60	130	Poindexter Ave	Gabbert Rd to Sierra Ave	6,810	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
8	64.0	67.1	67.5	34	73	158		Sierra Ave to Walnut Cyn Rd	9,100	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
9	74.5	77.7	78.0	171	369	795	Los Angeles Ave	Grimes Cyn Rd to Buttercreek Rd	28,100	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
10	74.5	77.7	78.1	173	372	802		Buttercreek Rd to Tierra Rejada Rd	28,100	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	3	Soft	50
11	75.3	78.5	78.8	194	417	899		Tierra Rejada Rd to Moorpark Ave	31,040	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	6	Soft	50
12	76.4	79.6	79.9	229	494	1064		Moorpark Ave to Spring Rd	39,990	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	6	Soft	50
13	77.3	80.5	80.8	263	567	1222		Spring Rd to Miller Pkwy-Science Dr	49,210	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	6	Soft	50
14	77.0	80.2	80.6	253	545	1175		Miller Pkwy-Science Dr to SR-23 ramps	46,390	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	6	Soft	50
15	74.7	77.8	78.2	175	378	815		Between SR-23 ramps	28,280	45	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	4	Soft	50
17	67.3	70.5	70.8	57	122	262		Poindexter Ave to Los Angeles Ave	19,500	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
18	68.4	71.5	71.9	67	144	310	Tierra Rejada Rd	Los Angeles Ave to Mountain Trail St	18,770	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
19	69.0	72.1	72.5	73	158	340		Mountain Trail St to Mountain Meadow Dr	21,560	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
20	68.8	72.0	72.3	72	154	333		Mountain Meadow Dr to Walnut Creek Rd	20,910	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
21	70.1	73.3	73.6	87	187	404		Walnut Creek Rd to Peak Hill Rd	27,940	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
22	70.1	73.2	73.6	87	187	403		Peach Hill Rd to Spring Rd	27,850	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
23	71.5	74.6	75.0	108	232	499		Spring Rd to Miller Pkwy-Moorpark Rd	38,420	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
24	73.1	76.3	76.7	139	300	646		Miller Pkwy-Moorpark Rd to SR-23 ramps	56,610	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
25	72.6	75.7	76.1	127	274	591		Between SR-23 ramps	49,470	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
26	72.5	75.7	76.0	126	272	586	Walnut Cyn Rd	Broadway Rd to Championship Dr	20,810	40	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
27	73.2	76.4	76.7	140	302	651		Championship Dr to Spring Rd	24,360	40	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
28	73.0	76.2	76.5	136	293	632		Spring Rd to Meridian Hills	23,310	40	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
29	72.7	75.9	76.2	130	280	604		Meridian Hills to High St	21,760	40	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
30	64.6	67.8	68.1	37	81	174	Moorpark Ave	High St to Poindexter Ave-1st St	18,770	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
31	65.2	68.4	68.7	41	88	190		Poindexter Ave-1st St to Los Angeles Ave	21,490	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
32	61.5	64.7	65.1	23	51	109		South of Los Angeles Ave	9,300	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
33	60.2	63.4	63.8	19	41	89	Peach Hill Rd	North of Tierra Rejada Rd (n-s segment)	5,100	35	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
34	61.7	64.9	65.3	24	52	112		West of Spring Rd (e-w segment)	7,180	35	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
35	68.3	71.5	71.9	67	144	309	Spring Rd	Walnut Canyon Rd to Ridgecrest Dr	18,740	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
36	69.9	73.1	73.5	85	183	395		Ridgecrest Dr to High St-Princeton Ave	27,050	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
37	71.9	75.1	75.5	116	249	537		High St-Princeton Ave to Los Angeles Ave	42,860	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
38	68.9	72.0	72.4	72	155	335		Los Angeles Ave to Peach Hill Rd	21,760	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
39	68.2	71.4	71.7	65	140	302		Peach Hill Rd to Tierra Rejada Rd	18,610	45	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
40	57.0	60.2	60.5	12	25	54	Science Dr	North of Los Angeles Ave	3,270	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
41	64.3	67.5	67.9	36	78	167	Miller Pkwy	Los Angeles Ave to Tierra Rejada Rd	9,930	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50
42	66.4	69.5	69.9	49	106	228	Collins Dr	Campus Park Dr to SR-118 ramps	20,190	35	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
43	64.7	67.9	68.2	38	82	177		Between SR-118 ramps	13,860	35	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
44	78.3	81.4	81.8	306	659	1419	SR-118	Princeton Ave to Los Angeles Ave	75,080	65	0.0%	94.5%	4.4%	1.2%	80.0%	8.0%	12.0%	6	Soft	50
45	78.1	81.3	81.6	298	641	1382	SR-23	Los Angeles Ave to Tierra Rejada Rd	72,150	65	0.0%	94.5%	4.4%	1.2%	80.0%	8.0%	12.0%	6	Soft	50
46	67.2	70.4	70.8	56	121	261	North Hills Pkwy	East of Gabbert Rd	18,800	40	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	4	Soft	50
47	68.8	72.0	72.3	71	153	330	High St	West of Moorpark Ave	12,600	30	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
48	71.9	75.1	75.5	115	249	536	Gabbert Rd	South of North Hills Pkwy to High St	18,200	40	0.0%	73.7%	11.4%	14.9%	80.0%	8.0%	12.0%	2	Soft	50
49	64.1	67.3	67.6	35	75	161	Meridian Hills Rd	West of Walnut Cyn Rd	16,700	30	0.0%	95.0%	3.0%	2.0%	80.0%	8.0%	12.0%	2	Soft	50

**Amtrack/Metrolink**

**FRA Grade Crossing Noise Model**

User Input	
Noise Situation (Pick from List)	1
Horn Lmax (dBA) @ 100 feet	91
Horn Location on Locomotive(Pick from List)	2
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	4
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	40
Future Train Speed (mph)	40
Number of Existing Trains in one Direction	11
Number of Future Trains in one Direction	16.5
Existing Number of Day Trains (7 am to 10 p.m.)	8.5
Future Number of Day Trains (7 am to 10 p.m.)	13
Existing Number of Night Trains (10 p.m. to 7 am)	2.5
Future Number of Night Trains (10 p.m. to 7 am)	3.5
Existing Average Number of Cars	6
Future Average Number of Cars	6
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive	
National Average (50% front, 50% middle)	1
All Front Mounted	2
All Middle Mounted	3
User Defined 80 % front mounted horns	4

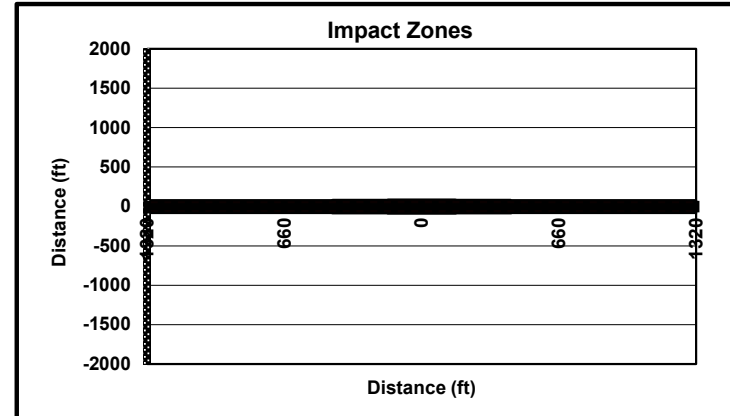
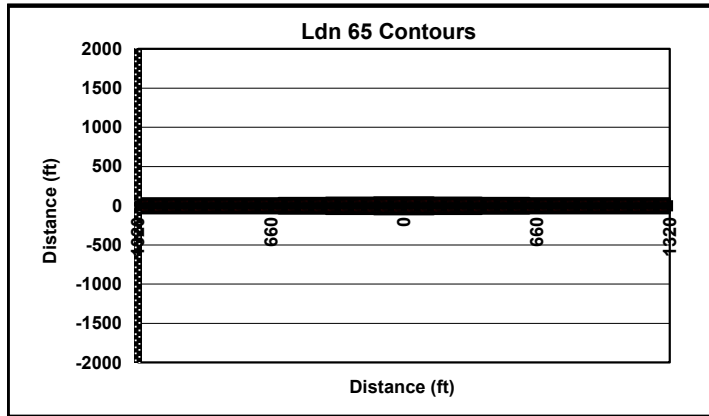
Non Train Noise Environment	
Urban	1
Suburban	2
Rural	3
User Defined Ldn = 50 dBA	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	89
Future 65 Ldn Contour at X-ing	109
Existing 65 Ldn Contour at 1/2 zone length	79
Future 65 Ldn Contour at 1/2 zone length	97
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	90
Severe Impact Distance at X-ing	0
Impact Distance at 1/2 zone length	80
Severe Impact Distance at 1/2 zone length	0
Zone Length	1320
1/2 Zone Length	660





Noise Model

Noise Model Based on Federal Transit Administration General Transit Noise Assessment  
 Developed for Chicago Create Project  
 Copyright 2006, HMMH Inc.  
 Case: Moorpark GP Existing Conditions

<b>RESULTS</b>			
<b>Noise Source</b>	<b>Ldn (dB)</b>	<b>Leq - daytime (dB)</b>	<b>Leq - nighttime (dB)</b>
<b>All Sources</b>	65	63	56
Source 1	57	59	41
Source 2	55	57	27
Source 3	48	49	37
Source 4	45	46	24
Source 5	62	57	55
Source 6	57	52	50
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

<b>NOISE SOURCE PARAMETERS</b>						
<b>Parameter</b>	<b>Source 1</b>		<b>Source 2</b>		<b>Source 3</b>	
<b>Source Num.</b>	Freight Locomotive	9	Freight Cars	10	Commuter Diesel Locomotive	2
<b>Distance (source to receiver)</b>	distance (ft)	50	distance (ft)	50	distance (ft)	50
<b>Daytime Hours (7 AM - 10 PM)</b>	speed (mph)	40	speed (mph)	40	speed (mph)	40
	trains/hour	0.13	trains/hour	0.13	trains/hour	0.13
	locos/train	4	length of cars (ft) / train	3000	locos/train	1
<b>Nighttime Hours (10 PM - 7 AM)</b>	speed (mph)	40	speed (mph)	40	speed (mph)	40
	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	0	length of cars (ft) / train	0	locos/train	0
<b>Wheel Flats?</b>		0.00%	% of cars w/ wheel flats	0.00%		
<b>Jointed Track?</b>	Y/N	n	Y/N	n	Y/N	n
<b>Embedded Track?</b>	Y/N	n	Y/N	n	Y/N	n
<b>Aerial Structure?</b>	Y/N	n	Y/N	n	Y/N	n
<b>Barrier Present?</b>	Y/N	n	Y/N	n	Y/N	n
<b>Intervening Rows of Buildings</b>	number of rows	0	number of rows	0	number of rows	0

Noise Model

Source 4		Source 5		Source 6	
Commuter Rail Cars	3	Commuter Diesel Locomotive	2	Commuter Rail Cars	3
distance (ft)	50	distance (ft)	50	distance (ft)	50
speed (mph)	40	speed (mph)	40	speed (mph)	40
trains/hour	0.13	trains/hour	1	trains/hour	1
cars/train	12	locos/train	1	cars/train	6
speed (mph)	40	speed (mph)	40	speed (mph)	40
trains/hour	0	trains/hour	0.55	trains/hour	0.55
cars/train	0	locos/train	1	cars/train	6
% of cars w/ wheel flats		% of cars w/ wheel flats		% of cars w/ wheel flats	
Y/N	n	Y/N	n	Y/N	n
Y/N	n	Y/N	n	Y/N	n
Y/N	n	Y/N	n	Y/N	n
Y/N	n	Y/N	n	Y/N	n
number of rows	0	number of rows	0	number of rows	0

## **Appendix J      Public Service Responses**

## Appendices

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**From:** [Fazio, Victor](#)  
**To:** [Emma Haines](#); [Douglas Spondello](#)  
**Cc:** [Nicole Vermilion](#)  
**Subject:** Re: Moorpark EIR  
**Date:** Monday, June 20, 2022 11:46:03 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Hi, Emma,

You can grab the crime data from <https://www.venturasheriff.org/UCR.html>

That site has an interactive dashboard that you can use to filter information needed for your document.

For number 2: the changes are 10 patrol tahoes and 4 motorcyles.

For number 3: instead of Traffic Motors 3, it should now be Traffic Motor Sgt 1, Traffic Motor 1, Traffic Deputies 2 and the total should increase by 1.

Hope this helps.

Vic

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**From:** Emma Haines <ehaines@placeworks.com>  
**Date:** Monday, June 20, 2022 at 10:00 AM  
**To:** Douglas Spondello <DSpondello@MoorparkCA.gov>  
**Cc:** Fazio, Victor <Victor.Fazio@ventura.org>, Nicole Vermilion <nvermilion@placeworks.com>  
**Subject:** RE: Moorpark EIR

**WARNING:** If you believe this message may be malicious use the Phish Alert Button to report it or forward the message to [Email.Security@ventura.org](mailto:Email.Security@ventura.org).

Hi Doug and Victor,

Thank you for confirming the exiting conditions report. This should be adequate for our analysis. Could you please confirm these remaining three questions?

1. Could you please provide the updated crime data?
2. Could you please update the text below with the changes in motor and traffic cars?

“Additionally, the Police Service Center is equipped with 8 patrol Tahoes, 2 cadet pickup trucks, 5 motorcycles. 5.75 detective cars, and 2 Volunteering in Policing cars.”

3. Could you please confirm that staffing in Table 6.6-1 of the existing conditions report is still

accurate and does not require changes? (See snip below)

**Table 6.6-1 Existing Staffing Levels**

TYPE	STAFFING
Captain	.5
Management Assistant II	.5
Administrative Assistant	1
Patrol Officers	23.5
Traffic Motors	3
Traffic Cadets	1
Detective Sergeant	0.75
Detectives	1.5
Special Enforcement Deputies	2
School Resource Officers	1
Investigator	1
Community Service Officer	1
<b>TOTAL</b>	<b>36.75 (33.25 Sworn)</b>

Source: VCSO 2020.

Thank you,

**EMMA HAINES**

**Project Planner**

*she/her*

213.623.1443 ext. 2132

---

**From:** Douglas Spondello <DSpondello@MoorparkCA.gov>

**Sent:** Wednesday, June 15, 2022 2:18 PM

**To:** Emma Haines <ehaines@placeworks.com>

**Cc:** Victor Fazio <victor.fazio@ventura.org>

**Subject:** FW: Moorpark EIR

Hi Emma,

I've chatted through the Police Department data request with Captain Fazio. They have minor staffing updates (see below) and updated crime data available. Otherwise, the information presented in the Existing Conditions Report remains current. Could you let us know if you'd like additional info beyond that below and what was provided previously?

Thank you,

Doug

Doug Spondello, AICP  
Deputy Community Development Director  
Community Development Department  
City of Moorpark | 799 Moorpark Ave. | Moorpark, CA 93021  
(805) 517-6251 | [dspondello@moorparkca.gov](mailto:dspondello@moorparkca.gov)  
[www.moorparkca.gov](http://www.moorparkca.gov)



---

**From:** Fazio, Victor <[Victor.Fazio@ventura.org](mailto:Victor.Fazio@ventura.org)>  
**Sent:** Wednesday, June 15, 2022 2:14 PM  
**To:** Douglas Spondello <[DSpondello@MoorparkCA.gov](mailto:DSpondello@MoorparkCA.gov)>  
**Subject:** RE: Moorpark EIR

The only thing that changed was we have one less traffic motor and two traffic cars now. I could also provide updated crime stats if needed. If they are desirous of an update of these minor details could you have someone from Placeworks call me? Otherwise, we are good.

Thanks,  
Vic

---

**From:** Douglas Spondello <[DSpondello@MoorparkCA.gov](mailto:DSpondello@MoorparkCA.gov)>  
**Sent:** Wednesday, June 15, 2022 2:02 PM  
**To:** Fazio, Victor <[Victor.Fazio@ventura.org](mailto:Victor.Fazio@ventura.org)>  
**Subject:** RE: Moorpark EIR

**WARNING:** If you believe this message may be malicious use the Phish Alert Button to report it or forward the message to [Email.Security@ventura.org](mailto:Email.Security@ventura.org).

Hi Vic,  
Yes, you did indeed. Those responses were reflected in the City's [Existing Conditions Report](#). If that information is still accurate please confirm and you're good.

Doug Spondello, AICP  
Deputy Community Development Director  
Community Development Department  
City of Moorpark | 799 Moorpark Ave. | Moorpark, CA 93021  
(805) 517-6251 | [dspondello@moorparkca.gov](mailto:dspondello@moorparkca.gov)  
[www.moorparkca.gov](http://www.moorparkca.gov)



---

**From:** Fazio, Victor <[Victor.Fazio@ventura.org](mailto:Victor.Fazio@ventura.org)>  
**Sent:** Wednesday, June 15, 2022 1:56 PM  
**To:** Douglas Spondello <[DSpondello@MoorparkCA.gov](mailto:DSpondello@MoorparkCA.gov)>  
**Subject:** FW: Moorpark EIR

Hi, Doug,  
I believe I already completed this for the general plan update. Correct?  
Vic

---

**From:** Buschow, Eric <[Eric.Buschow@ventura.org](mailto:Eric.Buschow@ventura.org)>  
**Sent:** Wednesday, June 15, 2022 1:52 PM  
**To:** Fazio, Victor <[Victor.Fazio@ventura.org](mailto:Victor.Fazio@ventura.org)>  
**Subject:** FW: Moorpark EIR

Victor,

Please see the question below from Sheriff Ayub.

Thanks,

-E

---

**From:** Ayub, William  
**Sent:** Wednesday, June 15, 2022 12:01 PM  
**To:** Buschow, Eric <[Eric.Buschow@ventura.org](mailto:Eric.Buschow@ventura.org)>  
**Subject:** Moorpark EIR

Hey Eric ~

Have you seen this document and/or do you know if anyone has completed it and returned it to the City of Moorpark?

Thanks,

Bill





Bill Ayub, Sheriff

800 S. Victoria Ave.

Ventura, CA 93009 (805) 654-2381

[www.venturasheriff.org](http://www.venturasheriff.org)

**From:** [Lynn David](#)  
**To:** [Emma Haines](#); [Nicole Vermilion](#)  
**Cc:** [Lynn David](#); [Denise Berrington](#); [Julie Tedder](#); [Janice Wilson](#)  
**Subject:** From Moorpark USD  
**Date:** Tuesday, October 4, 2022 7:09:05 PM  
**Attachments:** [Developer Fee Justification Study 2122 FINAL 6-1-22.pdf](#)

---

Hi Emma and Nicole. Thank you for your patience in responding to your request for information.

1. Please provide MUSD's current student generation rates and development impact fees?  
**Please see the Developer Fee Justification Study from June 2022 attached.**

2. Are there any existing plans to expand school facilities with MUSD? If so, please describe these planned expansions.

**No existing plans to expand school facilities. Schools will be modernized to support instructional methodology and student support for current and future students.**

3. . Is there any existing Safe Routes to School program in place? If yes, please indicate  
**No Safe Routes to School program in place currently. The City pays for crossing guards at two locations across major streets. The district pays for additional crossing guards to ensure safe arrival and departure of students based on current traffic levels and patterns.**

4. Please provide any additional comments you wish to make regarding the Proposed Project.  
**District staff believe that the proposed project with residential and commercial development as well as changes in parking areas and roadway adjustments will definitely have an impact on school enrollment and safety. We would like the City to work with the district to clarify the number of various types of housing units to be constructed along, price ranges, and the expected start and occupancy dates for the project(s) to ensure we have time to make any adjustments to school boundaries or facilities. We would also like the City to work with the district and safety experts to ensure that all roadways are marked to support safe travel by families, employees, buses, and district vehicles, and signage around schools supports the foot, bike, and vehicle traffic patterns and volume typical for our sites.**

**Please contact me for any further clarification. Thank you.**

Response Prepared By:

--

**Lynn David**  
**Assistant Superintendent, Business Services**  
Moorpark Unified School District  
5297 Maureen Lane  
Moorpark, CA 93021  
805-378-6300



► **RESIDENTIAL AND  
COMMERCIAL/INDUSTRIAL  
DEVELOPMENT SCHOOL FEE JUSTIFICATION  
STUDY**

**MOORPARK UNIFIED SCHOOL DISTRICT**

**JUNE 2, 2022**

**Prepared For:**

Moorpark Unified School District  
5297 Maureen Lane  
Moorpark, California 93021  
805.378.6300

**Prepared By:**

Cooperative Strategies  
2855 Michelle Drive, Suite 230  
Irvine, CA 92606  
844.654.2421



**COOPERATIVE  
STRATEGIES**  
ASSESS • PLAN • FUND • BUILD

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## EXHIBITS

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### **EXHIBIT A:**

Updated School Facilities Capacity Calculation

## EXECUTIVE SUMMARY

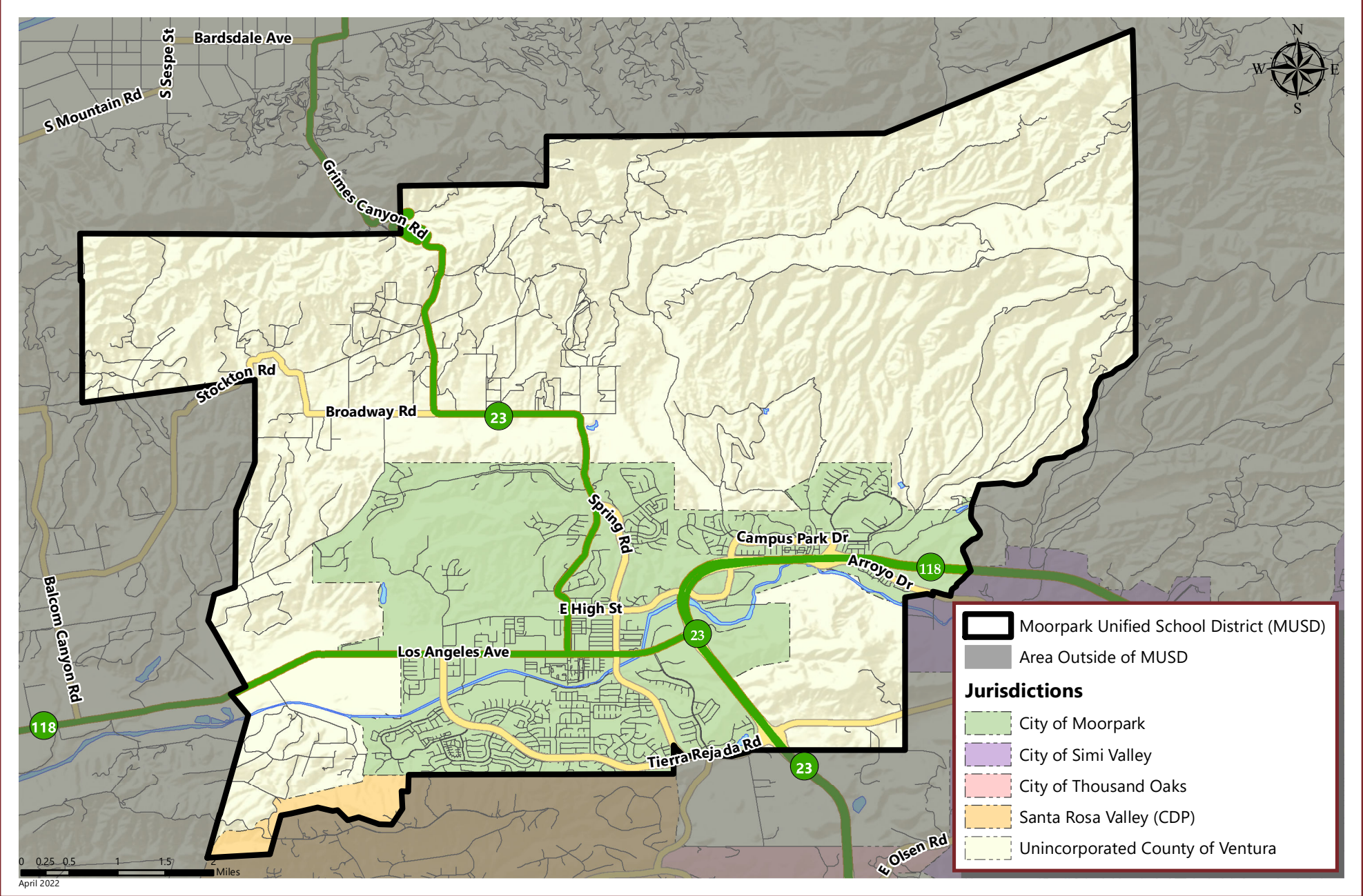
This Residential and Commercial/Industrial Development School Fee Justification Study ("Study") is intended to determine the extent to which a nexus can be established in the Moorpark Unified School District ("School District") between residential and commercial/industrial development ("CID") and (i) the need for school facilities, (ii) the cost of school facilities, and (iii) the amount of statutory school fees ("School Fees") per residential and CID building square foot that may be levied for schools pursuant to the provisions of Section 17620 of the Education Code, as well as Sections 65995 and 66001 of the Government Code, Assembly Bill ("AB") 181, and subdivision (e) of Section 17621 of the Education Code.

The School District provides education to students in grades transitional kindergarten ("TK") through 12 residing within the City of Moorpark ("City") and a portion of the unincorporated County of Ventura ("County") (please see map on following page for a geographic profile of the School District). Collectively, the School District's school facilities in school year 2021/2022 have a capacity of 7,426 students based on capacity data provided by the School District. Of these 7,426 seats, 2,996 are at the elementary school level (i.e., grades kindergarten through 5), 2,081 are at the middle school level (i.e., grades 6 through 8), and 2,349 are at the high school level (i.e., grades 9 through 12). Please see Exhibit A for an updated school facilities capacity calculation. Based on data provided by the School District, student enrollment is 5,845 in school year 2021/2022. Comparing student enrollment to facilities capacity reveals that facilities capacity exceeds student enrollment at all school levels in school year 2021/2022 (please see Section IV for more information on student enrollment and facilities capacity).

To establish a nexus and a justifiable residential School Fee level, the Study evaluated the number and cost of new facilities required to house students generated from future residential development within the School District. Based on residential development data prepared by the City, approximately 1,917 additional residential units are currently planned to be constructed within the School District's boundaries ("Future Units"). Of these 1,917 Future Units, 1,023 are expected to be single family detached ("SFD") and 894 are expected to be multi-family attached ("MFA") units.

# MOORPARK UNIFIED SCHOOL DISTRICT

# GEOGRAPHIC PROFILE



To determine the impact on the School District from Future Units, the Study first multiplied the number of Future Units by the student generation factors ("SGFs") calculated by Cooperative Strategies, to determine the projected student enrollment from Future Units. The results were that 363 unhoused elementary school students are anticipated to be generated from Future Units. These numbers include a reduction of the number of students projected to be housed by existing excess seats ("Projected Unhoused Students").

To adequately house the Projected Unhoused Students, the School District will need to expand existing elementary school facilities. Using design capacities of 25 students per classroom at the elementary school level, the School District will need to construct 15 new elementary school classrooms to accommodate the Projected Unhoused Students from the Future Units projected to be constructed at this time. The cost of expanding the existing elementary school facilities by adding additional teaching stations is based on per-pupil grant amounts established by Senate Bill ("SB") 50. Additionally, the School District will need to reconstruct and modernize its existing elementary school, middle school, and high school facilities. Based on cost estimates provided by the School District, modernization costs are estimated to be \$14,696 per elementary school seat, \$18,128 per middle school seat, and \$22,337 per high school seat.

In addition to the school facilities cost impacts, the School District will experience Central Administrative and Support Facilities cost impacts. In January 1994, the State Allocation Board ("SAB") approved a policy of four (4) square feet of Central Administrative and Support Facilities per student, which based on School District cost estimates equates to a per-student cost of \$800. Multiplying these costs by the facilities needed and the students generated yielded the total school facilities cost impacts shown in Table ES-1.

T A B L E E S - 1

**TOTAL SCHOOL FACILITIES COST IMPACTS FROM FUTURE UNITS (2022\$)**

<b>School Levels</b>	<b>Cost Per Teaching Station/Student</b>	<b>Teaching Stations Required/Students Generated</b>	<b>Total School Facilities Cost Impacts</b>
<b>Elementary School</b>	\$744,250	14.5200	\$10,806,510
<b>Central Admin Impacts</b>	\$800	363	\$290,400
<b>ES Modernization</b>	\$14,696	55	\$808,280
<b>MS Modernization</b>	\$18,128	206	\$3,734,368
<b>HS Modernization</b>	\$22,337	297	\$6,634,089
<b>Total</b>	<b>N/A</b>	<b>N/A</b>	<b>\$22,273,647</b>

The amounts listed in Table ES-1 were apportioned to each land use class based on the number of students generated from such residential land use. Thereafter, the school facilities cost impacts for each land use class were divided by the number of Future Units to calculate the school facilities cost impacts per residential unit. Table ES-2 below lists the school facilities cost impacts per residential unit.

T A B L E E S - 2

**SCHOOL FACILITIES COST IMPACTS PER RESIDENTIAL UNIT (2022\$)**

<b>Land Use</b>	<b>Total School Facilities Cost Impacts</b>	<b>Future Units</b>	<b>School Facilities Cost Impacts per Residential Unit</b>
<b>Single Family Detached</b>	\$12,561,424	1,023	\$12,279
<b>Multi-Family Attached</b>	\$9,712,223	894	\$10,864

To determine the school facilities cost impacts per square foot of residential construction, the school facilities cost impacts per unit were divided by the average square footage of a residential unit in each land use class. Table ES-3 below lists the school facilities cost impacts per average residential square foot.



T A B L E E S - 3

**SCHOOL FACILITIES COST IMPACTS PER RESIDENTIAL SQUARE FOOT  
(2022\$)**

<b>Land Use</b>	<b>School Facilities Cost Impacts per Future Units</b>	<b>Average Square Footage</b>	<b>School Facilities Cost Impacts per Residential Square Foot</b>
<b>Single Family Detached</b>	\$12,279	2,500	\$4.91
<b>Multi-Family Attached</b>	\$10,864	1,750	\$6.21

To determine the commercial/industrial School Fee levels that satisfy the rigorous nexus requirements of AB 181, the Study divides CID into seven (7) land use categories: retail and services, office, research and development, industrial/warehouse/ manufacturing, hospital, hotel/motel, and self-storage. The employment impacts of each of these land uses, in terms of the number of employees per 1,000 square feet of building space, are based on information from the San Diego Association of Governments ("SANDAG") pursuant to Section 17621 (e)(1)(B) of the Education Code. These employee impacts are shown in Table ES-4.

T A B L E E S - 4

**EMPLOYMENT IMPACTS PER 1,000 SQUARE FEET CID**

<b>CID Land Use Category</b>	<b>Square Feet per Employee</b>	<b>Employees per 1,000 Square Feet</b>
<b>Retail and Service</b>	447	2.2371
<b>Office</b>	286	3.4965
<b>Research and Development</b>	329	3.0395
<b>Industrial/Warehouse/Manufacturing</b>	371	2.6954
<b>Hospital</b>	360	2.7778
<b>Hotel/Motel</b>	883	1.1325
<b>Self-Storage</b>	15,552	0.0643

Additional data from the Southern California Association of Governments ("SCAG"), the U.S. Bureau of Census ("Census"), and CoreLogic provide a basis for estimating net school district household impacts. This number includes only those households occupying new housing units within the School District, as opposed to existing units whose previous occupants may have included school-aged children. Multiplying net school district households by (i) the number of students per household and (ii) total school facilities costs per student, results in estimates of school facilities cost impacts. Collectively, this calculation represents the total school facilities cost impacts per 1,000 square feet of commercial/industrial floor space, expressed in 2022 dollars. These results are summarized in Table ES-5.

T A B L E E S - 5  
**GROSS SCHOOL FACILITIES COSTS IMPACTS  
 PER HOUSEHOLD (2022\$)**

School Level	Total Student Generation Impacts	Cost per Student	Gross School Facilities Costs Impacts per Unit
<b>Elementary School</b>	0.0077	\$28,481	\$219.30
<b>Middle School</b>	0.0046	\$18,128	\$83.39
<b>High School</b>	0.0096	\$22,337	\$214.44
<b>Total</b>	<b>N/A</b>	<b>N/A</b>	<b>\$517.13</b>

The revenue component of the Study estimates the potential fee revenues generated by CID, including residential fees paid by CID related households, as well as CID School Fees. CID related residential revenues are calculated based on the proposed residential School Fee of \$4.79 per square foot, justified in this study. The residential revenues per household are then subtracted from the impact per household listed above. This results in net impact per household, as summarized in Table ES-6.

T A B L E E S - 6  
**NET SCHOOL FACILITIES COST IMPACTS PER HOUSEHOLD (2022\$)**

Item	Amount
<b>Impact per Household</b>	\$517.13
<b>Residential Revenue Per Household</b>	\$180.23
<b>Net School Facilities Cost Impacts Per Household</b>	<b>\$336.90</b>

The net impact per household is then divided by the appropriate square feet per employee for each of the seven (7) CID land use categories to determine the cost impact per square foot of CID for each CID category, as shown in Table ES-7.

T A B L E E S - 7

**SCHOOL FACILITIES COST IMPACTS PER SQUARE FOOT (2022\$)**

<b>School Level</b>	<b>Net Impact per Household</b>	<b>Square Feet per Employee</b>	<b>Cost Impact per Square Foot Of CID</b>
<b>Retail and Services</b>	\$336.90	447	\$0.754
<b>Office</b>	\$336.90	286	\$1.178
<b>Research and Development</b>	\$336.90	329	\$1.024
<b>Industrial/Warehouse/Manufacturing</b>	\$336.90	371	\$0.908
<b>Hospital</b>	\$336.90	360	\$0.936
<b>Hotel/Motel</b>	\$336.90	883	\$0.382
<b>Self-Storage</b>	\$336.90	15,552	\$0.022

On February 23, 2022, the SAB increased the maximum Residential and CID School Fees authorized by Section 17620 of the Education Code from \$4.08 to \$4.79 per residential building square foot, and from \$0.61 to \$0.66 per CID square foot for unified school districts.

As shown in Table ES-3, the impact per residential square foot exceeds the maximum residential School Fee per square foot and, therefore, the Study concludes that the School District is fully justified in levying the maximum residential School Fee of \$4.79 per square foot for all new residential development within its boundaries, subject to the limitations under the law.

Justification of the CID School Fee is based on a comparison of cost impacts per CID square foot, as shown in Table ES-7, against the maximum CID Fee per square foot as noted above. As shown in Table ES-8 on the following page, the School District is justified in levying:

T A B L E E S - 8

**MAXIMUM SCHOOL FEE PER SQUARE FOOT OF CID**

<b>CID Land Use Category</b>	<b>Maximum School Fee</b>
<b>Retail and Service</b>	\$0.754
<b>Office</b>	\$0.780
<b>Research and Development</b>	\$0.780
<b>Industrial/Warehouse/Manufacturing</b>	\$0.780
<b>Hospitals</b>	\$0.780
<b>Hotel/Motel</b>	\$0.382
<b>Self-Storage</b>	\$0.022

## I. INTRODUCTION

SB 50, which Governor Wilson signed on August 27, 1998, was enacted on November 4, 1998, following the approval of Proposition 1A by the voters of the State in the general election on November 3, 1998. SB 50 includes provisions for the following:

1. Issuance of State general obligation bonds in an amount not to exceed \$9.2 billion;
2. Reformation of the State School Building Program; and
3. Reformation of the School Fee mitigation payment collection procedure.

Additionally, Assembly Bill ("AB") 16, which Governor Davis signed on April 26, 2002, was enacted following the approval of Proposition 47 ("Prop 47") by the voters of the State in the general election on November 5, 2002. Prop 47 includes the authorization for issuance of State general obligation bonds in the amount of \$13.05 billion, and AB 16 provides for additional reformation of the State School Building Program into the School Facilities Program. On March 2, 2004, the voters of the State approved Proposition 55 ("Prop 55"). Prop 55 includes the authorization for the additional issuance of State general obligation bonds in the amount of \$12.3 billion. Finally AB 127, which Governor Schwarzenegger signed on May 20, 2006, was enacted following the approval of Proposition 1D ("Prop 1D") by the voters of the State in the general election of November 7, 2006. Prop 1D includes the authorization for the issuance of State general obligation bonds in the amount of \$10.4 billion. On November 8, 2016, the voters of the State approved Proposition 51 ("Prop 51"). Prop 51 includes the authorization for the issuance of State general obligation bonds in the amount of \$9 billion.

The Mira-Hart-Murrieta Decisions, which formerly permitted school districts to seek mitigation payments in excess of School Fees under certain circumstances, are suspended by AB 127. In lieu of the powers granted by the Mira-Hart-Murrieta Decisions, SB 50 and subsequent legislation provide school districts with an alternative School Fee collection procedure that, subject to certain conditions, authorizes school districts to collect Alternative Fees on residential developments. However, not all school districts will qualify to charge Alternative Fees.

Therefore, school districts must still rely on School Fees as a funding source for school facilities required by new development. However, before a school district can levy School Fees on new development, State law requires that certain nexus findings must be made and documented. The objective of this Study is to provide a rigorous basis for such findings.

## II. LEGISLATION

State legislation, specifically AB 2926 and AB 1600, provides guidelines, procedures, and restrictions on the levy of School Fees for school facilities. Certain provisions of this legislation and history are summarized below:

**A. AB 2926**

AB 2926 was enacted by the State in 1986. Among other things, AB 2926 added various sections to the Government Code which authorize school districts to levy School Fees on new residential and commercial/industrial developments in order to pay for school facilities. In addition, AB 2926 provides for the following:

1. No city or county can issue a building permit for a development project unless such School Fees have been paid.
2. School Fees for commercial/industrial development must be supported by the finding that such School Fees "are reasonably related and limited to the needs for schools caused by the development."
3. School Fees for 1987 were limited to \$1.50 per square foot on new residential construction and \$0.25 per square foot for new commercial/industrial construction.
4. Every year, School Fees are subject to annual increases based on the Statewide cost index for Class B construction, as determined by the SAB at its January meeting (This provision was changed to every other year by AB181).

The provisions of AB 2926 have since been expanded and revised by AB 1600.

**B. AB 1600**

AB 1600, which created Sections 66000 et seq. of the Government Code, was enacted by the State in 1987. AB 1600 requires that all public agencies satisfy the following requirements when establishing, increasing or imposing a fee as a condition of approval for a development project.

1. Determine the purpose of the fee.
2. Identify the facilities to which the fee will be put.

3. Determine that there is a reasonable relationship between the need for public facilities and the type of development on which a fee is imposed.
4. Determine that there is a reasonable relationship between the amount of the fee and the public facility or portion of the public facility attributable to the development on which the fee is imposed.
5. Provide an annual accounting of any portion of the fee remaining unexpended, whether committed or uncommitted, in the School District's accounts five or more years after it was collected.

In other words, AB 1600 limits the ability of a school district to levy School Fees unless (i) there is a need for the School Fee revenues generated and (ii) there is a nexus or relationship between the need for School Fee revenues and the type of development project on which the School Fee is imposed. (The requirements of AB 1600 were clarified with the passage in 2006 of AB 2751, which codifies the findings of *Shapell Industries vs. Milpitas Unified School District*.) The Study will provide information necessary to establish such a nexus between School Fees and residential development.

**C. AB 181**

AB 181, enacted by the State in 1989, made significant changes in several State Codes, including Sections 53080 et seq. of the Government Code which was re-codified as Sections 17620 et seq. of the Education Code on January 1, 1998. Changes in Section 53080 included additional requirements and procedures for imposing School Fees and other conditions on new development. Specifically, AB 181 imposes more stringent nexus requirements on school districts that wish to levy School Fees on CID, as follows:

1. In order to levy a School Fee on CID, a formal study must be conducted to determine the impact of "the increased number of employees anticipated to result" from new CID on the "cost of providing school facilities within the School District".
2. Only that portion of the School Fee justified by the "nexus findings" contained in this study may be levied. Nexus findings must be made on an individual project basis or on the basis of categories of CID and must "utilize employee generation estimates that are based on commercial/industrial factors within the school district."

Categories to be evaluated may include, but are not limited to, office, retail, transportation, communications and utilities, light industrial, heavy industrial, research and development, and warehouse uses.

- 3. Starting in 1990, maximum School Fees for residential and CID will be subject to increases every two (2) years rather than annually.
- 4. An appeals procedure shall be established whereby the levy of School Fees on a commercial/industrial project may be appealed to the governing board of a school district. Grounds for an appeal must include, but are not limited to, improper project classification by commercial/industrial category, or the application of improper or inaccurate employee or student generation factors to the project.

In summary, AB 181 establishes additional requirements which must be satisfied by school districts prior to their levying School Fees on CID.



### III. METHODOLOGY OF STUDY

Cooperative Strategies is projecting an increase in student enrollment attributable to new development in future years. This projected growth will create a demand for new school facilities to be constructed within the School District and the need to incur significant school facilities costs to meet that demand. As a result, the School District has determined that School Fees should be levied on new development projects. The objective of the Study is to provide a basis for such findings consistent with the requirements of AB 2926, AB 1600, AB 181, and the provisions of Section 66001 of the Government Code.

#### A. RESIDENTIAL METHODOLOGY

Cooperative Strategies has determined that School Fees must be levied on new residential projects, if findings can be made that such projects will lead to higher student enrollment and increased facilities costs. In order to evaluate the existence of a nexus, the Study identifies and analyzes the various connections or linkages between residential development and (i) the need for school facilities, (ii) the cost of school facilities, and (iii) the amount of School Fees that can justifiably be levied. The primary linkages identified include the following:

1. Housing projections - The number of future residential units to be constructed within the boundaries of the School District.
2. Student generation - The number of students generated from a residential unit within the School District.
3. Facility requirements - The number of new school facilities required to house students generated from new residential units
4. School facilities cost impacts - The costs to the School District associated with the construction of new school facilities.
5. School Fee requirements – The School District's need to levy School Fees to cover the cost of new school facilities.

The above linkages result in a series of impacts which (i) connect new residential development with increased school facilities costs and (ii) connect School Fees per residential building square foot with increased facilities costs.

**B. COMMERCIAL/INDUSTRIAL METHODOLOGY**

Cooperative Strategies has also determined that School Fees must be levied on new CID projects. In order to determine the nexus relationships identified in AB 181, the Study analyzes the various linkages between CID and (i) the need for school facilities, (ii) the cost of school facilities, and (iii) the amount of the School Fee that can justifiably be levied. The primary connections or linkages include the following:

- 1. Job creation (i.e., new CID within the School District creates new jobs);
- 2. Household formation (i.e., job creation within the School District leads to the formation of new households in the School District);
- 3. Student generation (i.e., household formation within the School District generates new students);
- 4. Facilities requirements (i.e., student generation within the School District leads to the need to incur additional costs for new school facilities); and
- 5. School Fee requirements (i.e., additional costs for new school facilities within the School District leads to the need to levy School Fees for new development).

The above linkages result in a series of impacts which (i) connect new CID with increased school facilities costs and (ii) connect increased school facilities costs with School Fees on CID buildings. These impacts are identified for different CID land use categories, based on a "prototypical unit" of 1,000 square feet of new commercial or industrial floor space for each category. These "linkage impacts" include five (5) major types:

- 1. Employment Impacts
- 2. Household Impacts
- 3. Student Generation Impacts
- 4. School Facilities Cost Impacts
- 5. Fee Revenues

The nature and components of these impacts are summarized in Section III.C, along with the key assumptions and data sources used in estimating their magnitude.

Analysis of the first four (4) linkage impacts provides an estimate of the gross school facilities cost impacts per 1,000 square feet of floor space for each CID category. Analysis and comparison of all five (5) impacts provide an estimate of (i) net school facilities cost impacts (i.e., gross school facilities cost impacts minus residential revenues) per 1,000 square feet of CID floor space and (ii) the maximum commercial/industrial School Fee that can be justified.

**C. COMMERCIAL/INDUSTRIAL LAND USE CATEGORIES**

Linkage impacts are analyzed for the following CID land use categories:

- 1. Retail and Services
- 2. Office
- 3. Research and Development
- 4. Industrial/Warehouse/Manufacturing
- 5. Hospital
- 6. Hotel/Motel
- 7. Self-Storage

**RETAIL AND SERVICES**

The retail and services category includes commercial establishments which sell general merchandise, building materials, hard goods, apparel, and other items and services to consumers. Additional establishments in the retail and services category include nurseries, discount stores, restaurants, entertainment theme parks, new/used car sales facilities, service stations, supermarkets, banks, real estate sales offices, and similar uses.

**OFFICE**

A general office building houses one (1) or more tenants and is the location where affairs of a business, commercial or industrial organization, professional person or firm are conducted. The building or buildings may be limited to one (1) tenant, either the owner or lessee, or contain a mixture of tenants including professional services, insurance companies, investment brokers, company headquarters, and services for the tenants such as a bank or savings and loan, a restaurant or cafeteria, and service retail and services facilities. There may be large amounts of space used for file storage or data processing.

The office category may also include medical offices that provide diagnoses and outpatient care on a routine basis, but which are unable to provide prolonged in-house medical/surgical care. A medical office is generally operated by either a single private physician or a group of doctors.

**RESEARCH AND DEVELOPMENT**

Research and development facilities are those primarily associated with the application of scientific research to the development of high technology products. Areas of concentration include materials, science, computer, electronic, and telecommunications products. Facilities may also contain offices and fabrication areas. Activities performed range from pure research to product development, testing, assembly, and distribution.

**INDUSTRIAL/WAREHOUSE/MANUFACTURING**

Warehouses are facilities that are primarily devoted to the storage of materials. They may also include office and maintenance areas. This category also includes buildings in which a storage unit or vault is rented for the storage of goods.

Manufacturing facilities are building structures where the primary activity is the conversion of raw materials or parts into finished products. Size and type of activity may vary substantially from one facility to another. In addition to actual production of goods, manufacturing facilities generally have office, warehouse, research and associated functions. This category includes light industrial facilities such as printing plants, material testing laboratories, assemblers of data processing equipment, and power stations.

**HOSPITAL**

Hospital refers to any institution where medical or surgical care is given to non-ambulatory and ambulatory patients. The term does not however, refer to medical clinics (facilities that provide diagnoses and outpatient care only) or to nursing homes (facilities devoted to the care of persons unable to care for themselves).

**HOTEL/MOTEL**

Hotels and motels are commercial establishments primarily engaged in providing lodging, or lodging and meals, for the general public. As defined by Government Code Section 65995(d), the hotel/motel category includes, but is not limited to, any hotel, motel, inn, tourist home, or other lodging for which the maximum term of occupancy does not exceed 30 days.

It does not, however, include any residential hotel as defined by Section 50519(b)(1) of the Health and Safety Code.

**SELF-STORAGE**

This category includes buildings in which a storage unit or vault is rented for the storage of goods and/or personal materials. This category may also include office areas associated with storage.

Note that CID land use categories may include different industry types. For example, firms in the transportation, communications, or utilities industries may be classified in up to six (6) of the seven (7) land use categories shown above. Similarly, retail firms may also occupy office or industrial space (e.g., for corporate headquarters or warehousing) and manufacturing firms may occupy retail space (e.g., factory retail outlets). In evaluating any given project, the School District should assign the project to whichever CID category is the predominant use within the project.

# IV. FACILITIES CAPACITY AND STUDENT ENROLLMENT

In order to determine whether the School District's existing school facilities contain excess capacity to house students generated by new residential and CID development, school year 2021/2022 student enrollment and school facilities capacity of the School District were evaluated.

Collectively, the School District's school facilities in school year 2021/2022 have a capacity of 7,426 students based on capacity information provided by the School District (see Exhibit A for an updated school facilities capacity calculation). Of these 7,426 existing seats, 2,996 are at the elementary school level, 2,081 are at the middle school level, and 2,349 are at the high school level. The enrollment of the School District in school year 2021/2022 is 5,845 students. As shown in Table 1 below, the School District's facilities capacity exceeds student enrollment at all school levels in school year 2021/2022.

T A B L E 1

## EXISTING SCHOOL FACILITIES CAPACITY AND STUDENT ENROLLMENT

School Level	2021/2022 Facilities Capacity	2021/2022 Student Enrollment	Excess/ (Shortage) Capacity
Elementary School (Grades TK-5)	2,996	2,556	440
Middle School (Grades 6-8)	2,081	1,299	782
High School (Grades 9-12)	2,349	1,990	359
<b>Total</b>	<b>7,426</b>	<b>5,845</b>	<b>1,581</b>

As indicated in Table 1, 440 elementary school seats, 782 middle school seats, and 359 high school seats are available to house students generated from Future Units. Due to the planned expansion to universal TK by school year 2025/2026, Cooperative Strategies matriculated existing TK students forward four (4) years to determine whether any existing surplus seats at the elementary school level will be needed to house future TK students generated from existing residential units. This resulted in a reduction of surplus seats to 55 at the elementary school level. These surplus seats will be addressed in Section V.

Additionally, due to the age of the School District’s facilities and their current state, the School District will need to perform significant reconstruction and modernization of its existing school facilities, to adequately house students in the future. These reconstruction needs will be discussed in Section V.E.

# V. IMPACT OF RESIDENTIAL DEVELOPMENT ON SCHOOL FACILITIES NEEDS

As discussed in Section III, the objective of the Study is to determine the appropriateness of the imposition of a School Fee to finance school facilities necessitated by students to be generated from new residential development. Section III outlined the methodology which was employed in the Study to meet that objective. Section V is a step-by-step presentation of the results of the analysis.

## A. PROJECTED RESIDENTIAL DEVELOPMENT WITHIN THE SCHOOL DISTRICT

The initial step in developing a nexus as required by AB 2926 and AB 1600 is to determine the number of Future Units to be constructed within the School District's boundaries. Based on residential development data prepared by the City, approximately 1,917 Future Units are currently planned within the School District. Of these 1,917 Future Units, 1,023 are expected to be SFD units and 894 are expected to be MFA units. Table 2 distinguishes Future Units by land use.

TABLE 2  
FUTURE UNITS

Land Uses	Total Future Units
Single Family Detached	1,023
Multi-Family Attached	894
<b>Total Units</b>	<b>1,917</b>

## B. RECONSTRUCTION

Reconstruction is the act of replacing existing structures with new construction, which may have an alternative land use (i.e., commercial/industrial versus residential) or may consist of different residential unit types (i.e., SFD versus MFA, etc.).



**B1. RESIDENTIAL RECONSTRUCTION**

Residential Reconstruction consists of voluntarily demolishing existing residential units and replacing them with new residential development. To the extent Reconstruction increases the residential square footage beyond what was demolished ("New Square Footage"), the increase in square footage is subject to the applicable School Fee as such construction is considered new residential development. As for the amount of square footage constructed that replaces only the previously constructed square footage ("Replacement Square Footage"), the determination of the applicable fee, if any, is subject to a showing that the Replacement Square Footage results in an increase in student enrollment and, therefore, an additional impact being placed on the School District to provide school facilities for new student enrollment.

Prior to the imposition of fees on Replacement Square Footage, the School District shall undertake an analysis on any future proposed projects(s) to examine the extent to which an increase in enrollment can be expected from Replacement Square Footage due to any differential in SGFs as identified in the Study for the applicable unit types between existing square footage and Replacement Square Footage. Any such fee that is calculated for the Replacement Square Footage shall not exceed the School Fee that is in effect at such time.

**B2. RECONSTRUCTION OF COMMERCIAL/INDUSTRIAL CONSTRUCTION INTO RESIDENTIAL CONSTRUCTION**

The voluntary demolition of existing commercial/industrial buildings and replacement of them with new residential development is a different category of Reconstruction. Cooperative Strategies is aware that such types of Reconstruction may occur within the School District in the future, however, Cooperative Strategies was unable to find information (i) about the amount planned within the School District in the future or (ii) historical levels, which might indicate the amount to be expected in the future. Due to the lack of information, the School District has decided to evaluate the impacts of Commercial/Industrial Reconstruction projects on a case-by-case basis and will make a determination of whether a fee credit is justified based on the nature of the project.

**C. STUDENT GENERATION FACTORS PER RESIDENTIAL UNIT**

In order to analyze the impact on the School District’s student enrollment from Future Units, Cooperative Strategies calculated SGFs for SFD and MFA units. The process of determining SGFs involved cross-referencing the School District’s enrollment data against the County Assessor residential data.

Sorting and extracting the County Assessor records by land use, Cooperative Strategies developed a database of 8,935 SFD units. This database was then compared with the School District's student enrollment database to identify address matches. Upon comparison of the two (2) databases, 4,309 student matches were found, resulting in the SGFs shown in Table 3.

T A B L E 3

**STUDENT GENERATION FACTORS FOR SINGLE FAMILY DETACHED UNITS**

School Level	Students Matched	Single Family Detached Units	Student Generation Factors
Elementary School	1,977	8,935	0.2213
Middle School	961	8,935	0.1076
High School	1,371	8,935	0.1534
<b>Total</b>	<b>4,309</b>	<b>N/A</b>	<b>0.4823</b>

A procedure identical to the one used in calculating the SGFs for SFD units was used to determine SGFs for MFA units. A total of 1,039 students matched to the MFA database which consisted of 2,442 units. The resulting SGFs for MFA units are shown in Table 4 on the following page.

**T A B L E 4**  
**STUDENT GENERATION FACTORS FOR MUTLI-FAMILY ATTACHED UNITS**

<b>School Level</b>	<b>Students Matched</b>	<b>Multi-Family Attached Units</b>	<b>Student Generation Factors</b>
<b>Elementary School</b>	485	2,442	0.1986
<b>Middle School</b>	233	2,442	0.0954
<b>High School</b>	321	2,442	0.1314
<b>Total</b>	<b>1,039</b>	<b>N/A</b>	<b>0.4254</b>

However, due to incomplete and incorrect address information in both the student enrollment and residential databases, Cooperative Strategies was unable to match all of the School District's students. The results are SGFs that understate the number of students generated by SFD and MFA units. After accounting for incoming interdistrict students that reside outside of the School District's boundaries, there were 306 unmatched students. Therefore, Cooperative Strategies adjusted the SGFs listed in Tables 3 and 4 based on a rate which considers the number of students successfully matched to a school level and land use. The adjusted SGFs for each land use by school level are shown in Table 5.

**T A B L E 5**  
**ADJUSTED STUDENT GENERATION FACTORS**

<b>School Levels</b>	<b>Single Family Detached Units</b>	<b>Multi-Family Attached Units</b>
<b>Elementary School</b>	0.2292	0.2056
<b>Middle School</b>	0.1137	0.1007
<b>High School</b>	0.1666	0.1425
<b>Total</b>	<b>0.5095</b>	<b>0.4488</b>

**D. SCHOOL DISTRICT FACILITIES REQUIREMENTS**

By multiplying the Future Units as listed in Table 2 by the SGFs identified in Table 5, the Study determined the projected number of new students to be generated from Future Units. The Projected Student Enrollment by school level is shown in Table 6.

T A B L E 6

**PROJECTED STUDENT ENROLLMENT FROM FUTURE UNITS**

School Level	Projected Student Enrollment from Future SFD Units	Projected Student Enrollment from Future MFA Units	Projected Student Enrollment from Future Units
Elementary School	234	184	418
Middle School	116	90	206
High School	170	127	297
<b>Total</b>	<b>520</b>	<b>401</b>	<b>921</b>

As indicated in Section IV, 55 surplus elementary school seats, 782 surplus middle school seats and 359 surplus high school seats are available to accommodate the Projected Student Enrollment. Therefore, the Projected Unhoused Students are less than the Projected Student Enrollment at all school levels. Table 7 shows Projected Unhoused Students for the School District.

T A B L E 7

**PROJECTED UNHOUSED STUDENTS FROM FUTURE UNITS**

School Levels	Projected Students from Future Units	Surplus Seats	Projected Unhoused Students
Elementary School	418	55	363
Middle School	206	782	0
High School	297	359	0
<b>Total</b>	<b>921</b>	<b>1,196</b>	<b>363</b>

To determine the number of elementary school, middle school, and high school facilities necessary to adequately house the Projected Unhoused Students, Cooperative Strategies divided the Projected Unhoused Students by the estimated school facilities capacity at each school level, as provided by the School District. The additional school facilities requirements are identified in Table 8.

T A B L E 8

**ADDITIONAL SCHOOL FACILITIES FOR PROJECTED UNHOUSED STUDENTS**

<b>School Levels</b>	<b>Projected Unhoused Students</b>	<b>Estimated Teaching Station Capacity</b>	<b>Additional Teaching Stations Needed</b>
<b>Elementary School</b>	363	25	14.5200

**E. SCHOOL DISTRICT FACILITIES COSTS**

The cost of expanding the existing elementary school facilities by adding additional teaching stations is based on per-pupil grant amounts established by SB 50. It must be noted that the facilities costs are in 2022 dollars and do not include interest costs associated with debt incurred to finance the construction of facilities. The estimated site costs and facility construction costs by school level are shown in Table 9.

T A B L E 9

**ESTIMATED SCHOOL FACILITIES COSTS (2022\$)**

<b>School Levels</b>	<b>Estimated Total Cost per Teaching Station</b>
<b>Elementary School</b>	\$744,250

As mentioned in Section IV, due to the age of the existing school facilities and their current state, the School District will need to perform significant reconstruction and modernization at all school levels in order to adequately serve students in the future.

In order to determine the reconstruction impact of students generated from Future Units, Cooperative Strategies utilized modernization estimates provided by the School District. Based on this information, reconstruction and modernization costs are estimated to be \$14,696 per elementary school seat, \$18,128 per middle school seat, and \$22,337 per high school seat.

The costs in Table 9 do not include costs associated with Central Administrative and Support Facilities. As indicated in Table 7, Future Units will cause the enrollment of the School District to increase by approximately 363 students. In accordance with the Provisions of Chapter 341, Statutes of 1992, SB 1612, the SAB adopted a report on January 26, 1994, requiring approximately four (4) square feet of central administrative and support facilities for every student. Based on this report and the estimated cost per square foot to construct and furnish these types of facilities, the Study incorporates a Central Administrative and Support Facilities cost impact of \$800 per student.

**F. TOTAL SCHOOL FACILITIES COST IMPACTS**

To determine the total school facilities cost impacts caused by Future Units, Cooperative Strategies (i) multiplied the school facilities costs (Table 9) by the additional school facilities needed (Table 8) and (ii) multiplied the central administrative and support facilities costs per student (above paragraph) by the Projected Unhoused Students (Table 7). Table 10 illustrates the total school facilities cost impacts from future residential development.

T A B L E 1 0  
**TOTAL SCHOOL FACILITIES COST IMPACTS FROM FUTURE UNITS (2022\$)**

School Levels	Cost Per Teaching Station/Student	Teaching Stations Required/Students Generated	Total School Facilities Cost Impacts
<b>Elementary School</b>	\$744,250	14.5200	\$10,806,510
<b>Central Admin Impacts</b>	\$800	363	\$290,400
<b>ES Modernization</b>	\$14,696	55	\$808,280
<b>MS Modernization</b>	\$18,128	206	\$3,734,368
<b>HS Modernization</b>	\$22,337	297	\$6,634,089
<b>Total</b>	<b>N/A</b>	<b>N/A</b>	<b>\$22,273,647</b>

**G. SCHOOL FACILITIES COST IMPACTS PER RESIDENTIAL UNIT**

To determine the total school facilities cost impacts per future residential unit, the total school facilities cost impacts listed above need to first be apportioned by land use based on the number of students to be generated from such land use. Table 11 shows total school facilities cost impacts by land use.

T A B L E 1 1  
**TOTAL SCHOOL FACILITIES COST IMPACTS BY LAND USE (2022\$)**

School Level	Single Family Detached Units	Multi-Family Attached Units	Total School Facilities Cost Impacts
Elementary School	\$6,661,286	\$5,243,904	\$11,905,190
Middle School	\$2,102,848	\$1,631,520	\$3,734,368
High School	\$3,797,290	\$2,836,799	\$6,634,089
<b>Total</b>	<b>\$12,561,424</b>	<b>\$9,712,223</b>	<b>\$22,273,647</b>

Total school facilities cost impacts for each land use were then divided by the number of Future Units in such land use to determine school facilities cost impacts per SFD unit and MFA unit. These impacts are shown in Table 12.

T A B L E 1 2  
**SCHOOL FACILITIES COST IMPACTS PER FUTURE UNIT (2022\$)**

Land Uses	Total School Facilities Cost Impacts	Future Units	School Facilities Cost Impacts per Residential Unit
Single Family Detached	\$12,561,424	1,023	\$12,279
Multi-Family Attached	\$9,712,223	894	\$10,864

**H. SCHOOL FACILITIES COST IMPACTS PER SQUARE FOOT**

To determine the school facilities cost impacts per square foot of residential construction for each land use, the school facilities cost impacts per unit listed in Table 12 were divided by the average square footage of such type of residential unit. Using square footage information for units constructed within the School District obtained from ParcelQuest, Cooperative Strategies estimates that the average square footage of an SFD unit in the School District is projected to be 2,500 square feet while the average square footage of an MFA unit is projected to be 1,750 square feet. Table 13 shows the school facilities cost impacts per square foot of residential construction in the School District.

T A B L E 1 3

**SCHOOL FACILITIES COST IMPACTS PER RESIDENTIAL SQUARE FOOT (2022\$)**

<b>Land Uses</b>	<b>School Facilities Cost Impacts per Residential Unit</b>	<b>Average Square Footage</b>	<b>School Facilities Cost Impacts per Square Foot</b>
<b>Single Family Detached</b>	\$12,279	2,500	\$4.91
<b>Multi-Family Attached</b>	\$10,864	1,750	\$6.21



# VI. IMPACT OF COMMERCIAL/INDUSTRIAL DEVELOPMENT ON SCHOOL FACILITIES NEEDS

This section presents the quantitative findings of the commercial/industrial nexus analysis summarized in Section III. In particular, this section presents estimates of the following:

1. All "linkage impacts" discussed in Section III, by CID land use category.
2. Gross school facilities cost impacts per 1,000 square feet of commercial/industrial floor space.
3. Net school facilities cost impacts (i.e., gross school facility cost impacts minus residential revenues) per 1,000 square feet of commercial/industrial floor space.
4. The percentage of the maximum CID School Fee per square foot allowed by law that can be justified to pay for new school facilities.

## A. EMPLOYMENT IMPACTS

As indicated in Section III, employment impacts for different CID categories equal the estimated number of on-site employees generated per 1,000 square feet of commercial/industrial floor space, which are referred to in the Study as CID Land Use Categories. Consistent with the provisions of Section 17621(e)(1)(B) of the Education Code, employment impacts for each category are based on data from SANDAG. The employment impacts are shown in Table 14 on the following page.

T A B L E 1 4

**EMPLOYMENT IMPACTS PER 1,000 SQUARE FEET (2022\$)**

<b>CID Land Use Category</b>	<b>Square Feet per Employee</b>
<b>Retail and Services</b>	447
<b>Office</b>	286
<b>Research and Development</b>	329
<b>Industrial/Warehouse/Manufacturing</b>	371
<b>Hospital</b>	360
<b>Hotel/Motel</b>	883
<b>Self-Storage</b>	15,552

**B. HOUSEHOLD IMPACTS**

As noted in Section III, household impacts equal the estimated number of households associated with each category of employment impacts, per 1,000 square feet of commercial/industrial floor space. Household impacts include the following components:

1. Households per Employee

The average number of households per employee are calculated based on information obtained from the Census. Based on this information, the total household impacts are 0.6226 households per employee within the School District.

2. Employed Persons Living within the School District

In order to determine the number of employed persons who live within the School District, Cooperative Strategies utilized data from the Census. Based on this data, approximately 34.58 percent of the employed persons within the School District are estimated to live within the School District. This trend is expected to increase as new residential and CID projects are approved and additional homes and jobs are created within the School District.

3. Propensity to Occupy New Homes

The propensity to occupy new housing within the general area of the School District helps determine the number of employees generated from new homes. Based on data on recent resales and new home sales obtained from CoreLogic, new home sales in the School District are estimated to equal 8.14 percent of the total housing units which will experience occupant turnover.

4. Total Household Impact

In order to determine the Total Household Impact of new residential units, the Study multiplied the average employed persons per household, employed person living within the School District, and the propensity to occupy new homes. This helps determine the number of new employees coming to live and work within the School District produced by new residential development, as shown in Table 15.

T A B L E 1 5

**TOTAL HOUSEHOLD IMPACTS FROM NEW CID**

Household Impact	Factor
<b>Households per Employees</b>	0.6226
<b>Employees Living within the School District</b>	34.58%
<b>Households with Employees Working within the School District</b>	<b>0.2153</b>
<b>Propensity to Occupy New Homes</b>	8.14%
<b>Total Household Impacts</b>	<b>0.0175</b>

**C. STUDENT GENERATION IMPACTS**

As noted in Section III, student generation impacts equal the number of the School District's students associated with each category of CID space. Separate student generation impacts are estimated for each CID category and school level.

**1. RESIDENTIAL STUDENT GENERATION IMPACTS**

In order to analyze household formation as a result of new CID, the SGFs shown in Table 5 must be blended. To blend the SGFs of the two (2) land uses into a single SGF for each school level, the land uses were weighted in proportion to each type's percentage of the future residential units to be constructed within the School District. Applying these weighting factors yields the following blended SGFs shown in Table 16.

T A B L E 1 6

**BLENDED STUDENT GENERATION FACTORS**

School Level	Student Generation Factors
Elementary School	0.2182
Middle School	0.1076
High School	0.1554

**2. TOTAL STUDENT GENERATION IMPACTS**

Multiplying total household impacts shown in Table 15 by the blended SGFs shown in Table 16 results in the average student generation impacts. These average student generation impacts are shown by school level in Table 17.

T A B L E 1 7

**AVERAGE STUDENT GENERATION IMPACTS**

School Level	Student Generation Factors	Total Household Impacts	Average Student Generation Impacts
Elementary School	0.2182	0.0175	0.0038
Middle School	0.1076	0.0175	0.0019
High School	0.1554	0.0175	0.0027

**D. INTER-DISTRICT TRANSFER IMPACTS**

The Study also evaluates the impact of students attending the School District on an inter-district transfer basis. The inter-district transfer rate is determined by calculating the ratio of student transfers into the School District's schools by the number of persons employed within its boundaries. Based on information provided by the School District, total student transfers into the School District's schools for school year 2021/2022 total 61 at the elementary school level, 42 at the middle school level, and 108 at the high school level. Employment within the School District's area is estimated at 15,761 persons based on employment estimates provided by SCAG. Table 18 shows the inter-district transfer impacts by school level.

T A B L E 1 8

**INTER-DISTRICT TRANSFER IMPACTS**

School Level	Inter-District Transfer Impacts
Elementary School	0.0039
Middle School	0.0027
High School	0.0069

**E. TOTAL STUDENT GENERATION IMPACT**

To determine the total student generation impacts of CID on the School District, the average student generation impacts from Table 17 are added to the inter-district transfer impacts from Table 18. The resulting total student generation impacts are displayed in Table 19.

T A B L E 1 9

**TOTAL STUDENT GENERATION IMPACTS**

School Level	Average Student Generation Impacts	Inter-District Transfer Impacts	Total Student Generation Impacts
Elementary School	0.0038	0.0039	0.0077
Middle School	0.0019	0.0027	0.0046
High School	0.0027	0.0069	0.0096

**F. GROSS SCHOOL FACILITIES COST IMPACTS**

As noted in Section III, school facilities cost impacts equal the gross school facilities cost impacts (exclusive of residential revenues) associated with the total student generation impact of each CID category.

**1. SCHOOL FACILITIES COSTS PER STUDENT**

The school facilities costs per student are the average cost impact produced by students generated from Future Units. This impact estimate is derived from the school facilities costs (Table 11) divided by the Projected Student Enrollment from Future Units (Table 7) by school level. Multiplying the total student generation impacts by the school facilities costs per student results in the gross school facilities cost impacts shown in Table 20.

T A B L E 2 0

**GROSS SCHOOL FACILITIES COSTS IMPACTS PER HOUSEHOLD (2022\$)**

School Level	Total Student Generation Impacts	Cost per Student	Gross School Facilities Costs Impacts per Household
Elementary School	0.0077	\$28,481	\$219.30
Middle School	0.0046	\$18,128	\$83.39
High School	0.0096	\$22,337	\$214.44
<b>Total</b>	<b>N/A</b>	<b>N/A</b>	<b>\$517.13</b>

**G. FEE REVENUES**

As noted in Section III, fee revenues include two (2) components: residential revenues and potential CID School Fee revenues.

**1. RESIDENTIAL REVENUES AND NET SCHOOL FACILITY COSTS**

Residential revenues equal the maximum revenues from residential development associated with each school level. These revenues are derived from a weighted average of the School District's proposed School Fee of \$4.79 per square foot multiplied by the School District's weighted average square footage for residential units of 2,150 square feet. Based on this calculation, the residential revenues per unit in the School District are estimated to be \$10,299. Multiplying the total household impact shown in Table 15 by residential revenues results in the residential revenues per student shown in Table 21.

T A B L E 2 1

**RESIDENTIAL REVENUES PER HOUSEHOLD (2022\$)**

Item	Amount
<b>Revenue per Residential Unit</b>	\$10,299
<b>Total Household Impact</b>	0.0175
<b>Residential Revenue per Household</b>	<b>\$180.23</b>

**2. NET SCHOOL FACILITIES COST IMPACTS**

In order to calculate the net school facilities cost impacts per grade level, the residential revenues shown in Table 21 were subtracted from the gross school facilities cost impacts shown in Table 20. The results are the net school facilities cost impacts that must be funded by CID School Fees, as shown in Table 22.

T A B L E 2 2

**NET SCHOOL FACILITIES COST IMPACTS PER HOUSEHOLD (2022\$)**

Item	Amount
<b>Gross School Facilities Cost Impacts per Household</b>	\$517.13
<b>Residential Revenue per Household</b>	\$180.23
<b>Net School Facilities Cost Impacts per Household</b>	<b>\$336.90</b>

**H. JUSTIFICATION OF COMMERCIAL/INDUSTRIAL SCHOOL FEES**

Dividing net school facilities cost impacts shown in Table 22 by total the square feet per employee for each land use category, as shown in Table 14, results in the CID impacts shown in Table 23.

T A B L E 2 3

**SCHOOL FACILITIES COST IMPACTS PER SQUARE FOOT (2022\$)**

<b>CID Land Use Category</b>	<b>Net Impact per Household</b>	<b>Square Feet per Employee</b>	<b>Cost Impact per Square Foot Of CID</b>
<b>Retail and Services</b>	\$336.90	447	\$0.754
<b>Office</b>	\$336.90	286	\$1.178
<b>Research and Development</b>	\$336.90	329	\$1.024
<b>Industrial/Warehouse/Manufacturing</b>	\$336.90	371	\$0.908
<b>Hospital</b>	\$336.90	360	\$0.936
<b>Hotel/Motel</b>	\$336.90	883	\$0.382
<b>Self-Storage</b>	\$336.90	15,552	\$0.022



# VII. CONCLUSION

On February 23, 2022, the SAB increased the maximum Residential and CID School Fees authorized by Section 17620 of the Education Code from \$4.08 to \$4.79 per residential building square foot, and from \$0.66 to \$0.78 per CID square foot for unified school districts.

This section summarizes the findings of the Study for new residential and commercial/industrial construction within the School District. In particular, this section summarizes the following:

## 1. RESIDENTIAL FEES

As shown in Table 13, the impact per residential square foot exceeds the maximum residential School Fee per square foot, therefore, the Study concludes that the School District is fully justified in levying \$4.79 per square foot for all new residential development within its boundaries subject to the limitations under the law. Based on this information, the School District is justified in charging the Statutory Fee Amounts per square foot shown in Table 24 on new residential construction:

T A B L E 2 4

**MAXIMUM JUSTIFIED STATUTORY RESIDENTIAL FEE PER SQUARE FOOT (2022\$)**

Item	Residential Fee per Square Foot
<b>Single Family Detached</b>	\$4.79
<b>Multifamily Attached</b>	\$4.79

## 2. COMMERCIAL/INDUSTRIAL FEES

As shown in Table 23, the impact per CID square foot does not exceed the maximum CID School Fee of \$0.79 per square foot for all CID land use categories. Based on this information, the School District is justified in charging the Statutory Fee Amounts per square foot shown in Table 25 on new CID construction:

T A B L E 2 5  
MAXIMUM JUSTIFIED STATUTORY CID FEE  
PER SQUARE FOOT (2022\$)

CID Land Use Category	CID Fee per Square Foot
<b>Retail and Services</b>	\$0.754
<b>Office</b>	\$0.780
<b>Research and Development</b>	\$0.780
<b>Industrial/Warehouse/Manufacturing</b>	\$0.780
<b>Hospital</b>	\$0.780
<b>Hotel/Motel</b>	\$0.382
<b>Self-Storage</b>	\$0.022

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**EXHIBIT A**  
UPDATED SCHOOL FACILITIES CAPACITY  
CALCULATION

**Moorpark Unified School District**  
**School Facilities Capacity Calculation**

<b>Application</b>	<b>Elementary School</b>	<b>Middle School</b>	<b>High School</b>
Arroyo West Active Learning Academy	536		
Flory Academy of Sciences & Technology	524		
Mountain Meadows 21st Century Learning Academy	536		
Peach Hill Academy	475		
Walnut Canyon School	450		
Campus Canyon College Preparatory Academy	475	182	
Chaparral Middle School		1,008	
Mesa Verde Middle School		891	
Moorpark High School			2,349
<b>Total Capacity</b>	<b>2,996</b>	<b>2,081</b>	<b>2,349</b>

**MOORPARK GENERAL PLAN UPDATE**  
***City of Moorpark Library Services – Moorpark City Library***

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1. Please confirm or correct:  
The Moorpark Library at 699 Moorpark Avenue would serve the project area.  
Confirmed.
  
2. What is the square footage of the existing Moorpark City Library? What resources and special services are provided at this location?  
See attached
  - a. Are the existing library space and number of books considered adequate for the existing population within the libraries' service area?  
See attached
  
  - b. If not, what are the estimated deficits of:
    - i. Building area in square feet?
    - ii. Volumes or collection size?
    - iii. Other resources (computers, etc.)?
  
3. What demand factors or standards are used to determine the amount of library space and number of volumes, or collection size, needed to serve a given population?  
See attached
  
4. Are there any plans for future library expansion or new libraries that would potentially serve the proposed project? If so, how would these facilities be funded?  
See attached

**MOORPARK GENERAL PLAN UPDATE**  
***City of Moorpark Library Services – Moorpark City Library***

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5. What measures, if any, would you recommend to reduce project impacts to library facilities and/or collections?

We would suggest that development impact fees be collected to reduce project impacts to library facilities and/or collections.

6. Please add any other comments you may wish to make regarding this project.

**Response Prepared By:**

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**Name**

**Title**

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**Agency**

**Date**

## GP Library Questionnaire Attachment

2. The existing library is 7,092 square feet. The library provides traditional library resources including books, periodicals, media, and electronic resources. In addition to those on site, the library has access to the robust resources of consortium of LS&S client libraries including Riverside County and other regional libraries. The library provides public use computers and printers, access to high-speed Internet and wide variety of educational, cultural, and entertainment programs. The Friends of the Library offer used books for sale and reasonable prices. The library is heavily used by teens and K-12 children with popular children's story times and summer reading programs.

A. Are the existing library space and number of books considered adequate for the existing population within the libraries service area?

No they are not. Books stacks are overflowing severely limiting collection growth. Study space, quiet reading space, and collaborative spaces are in short supply. With no community room, the library has difficulty presenting larger programs, such as the summer reading program which has over 300 participants per year.

B. If not, what are the estimated deficits of :

i. Building area in square feet? 10,100 square feet

ii. Volumes or collection size: The collection deficit is approximately 25,000 items or 68% of the existing holdings.

iii. Other resources: Quiet reading spaces, collaborative workspaces, group study rooms, community meeting room, dedicated storytime area, Friends' storage and workroom, Staff workspace and storage space, comfortable reading chairs, appropriate furniture for preschoolers, appropriate furniture for elementary school children, self-service technology, innovative technology, outdoor spaces. Other deficiencies include lack of natural light, lack of acoustical separation, sightlines for security and safety, browsing area for new materials and inadequate space for programs requested by the community.

3. What demand factors or standards are used to determine the amount of library space and number of volumes, or collection size, needed to serve a given population?

Since the American Library Association (ALA) and the Public Library Association (PLA) abandoned the 1966 Standards for Public Libraries in the 1980s, there are currently no universal professional standards to dictate size, reader seating, meeting seats, technology workstations, and collection size. A limited number of county and state jurisdictions have adopted their own standards but none of these are universally applied or accepted. In lieu of these standards, the ALA and the PLA have advocated a community-based Needs Assessment to ensure that each community library is designed with appropriate space and collections to meet the specific needs of their community. The Needs Assessment is typically supplemented with a benchmark study of similar sized jurisdictions which also share similar demographic characteristics. A third factor is the trend of recently constructed public libraries; information which is readily available in California.

The factor used to right-size this project is .5 square feet per capita based on current population. The California statewide average is .43 square feet per capita with newer branch libraries being planned at .65 to .75 square feet per capita and new main libraries at 75 to 1.25 square feet per capita. As the

GP Library Questionnaire Attachment

population of Moorpark continues to grow, the .5 square feet per capita will drop below .5 square feet per cap. Statewide the number of print materials held in public libraries totals 1.36 items per capita. The Moorpark Library is planned to house 1.58 items per capita, including non-print media. The number of e-books, which typically can exceed the number of print books held, does not factor into the facility planning.

Moorpark prepared a list of comparable jurisdictions. Of these 10 jurisdictions, the volumes held per capita ranged from .87 to 3.88 with Moorpark at the Median with 1.57 planned collection size.

	Population	Facility Size	SF per cap	FTE	Volumes	Vols per cap
Beaumont	83,997	11,700	0.14	12.25	73,293	0.87
Diamond Bar	56,655	18,245	0.32	12.5	71,794	1.27
Walnut	30,248	10,000	0.33	7.5	42,977	1.42
Poway	50,182	20,000	0.40	11	73,676	1.47
<b>Moorpark (planned)</b>	<b>36,481</b>	<b>18,000</b>	<b>0.49</b>	<b>7.5</b>	<b>57,336</b>	<b>1.57</b>
San Dimas	34,226	13,628	0.40	11	59,150	1.73
Aliso Viejo	50,312	20,700	0.41	14.5	89,071	1.77
La Quinta	37,467	19,000	0.51	10	77,154	2.06
Yorba Linda	67,890	28,350	0.42		173,016	2.548
Morgan Hill	51,786	28,000	0.54	21.43	200,800	3.88

With a current facility of 7,900 square feet and collection holdings at 34,000, the Moorpark Library is far below the benchmark for peer jurisdictions.

Statewide, jurisdictions serving similar sized populations (avg. 36,000) square feet with single main libraries include: Menlo Park (34,046 SF), Burlingame (47,000 SF), Monrovia (28,000 SF), Beverly Hills (72,500 SF), Palm Springs (34,100 SF) and Covina (20,144 SF.)

4. Are there any plans...

The City currently working on a project to construct a new 18,000 square foot library on its Civic Center site. In addition to the 18,000 square foot facility, the Library will also include a 2,450 square foot reading patio at the front entrance, a 1,150 square foot teen and adult outdoor program area and a 1,230 square foot children exterior program area. These will not be conditioned spaces, but they will be fully covered shielding them from the sun and other elements.

The project will be funded with developer fees, grants, and donations.



**MOORPARK GENERAL PLAN UPDATE**  
**Fire Services – Ventura County Fire Department (VCFD)**

1. Please **confirm or update** the following information for the Ventura County Fire Department:

**Stations, Staff, and Apparatus**

- a. The nearest (first- and second-in) fire stations to the City of Moorpark are Stations 40 and 42. Please provide the equipment and staffing information for each of the stations in the following table.

**Long Beach Fire Department Stations**

<b>Station No.</b>	<b>Location</b>	<b>Apparatus (Number and Type of Emergency Vehicles)</b>	<b>Daily Staffing (Number and Type of Personnel)</b>
Station 40	4185 Cedar Spring Street Moorpark, CA 93021	<b>2 -Type 1 Fire Engines</b> <b>ME-40 First run</b> <b>E-140 Reserve</b> <b>1- Water Tender</b> <b>WT-40</b> <b>Urban Search &amp; Rescue Apparatus</b> <b>US&amp;R-40</b> <b>Utility Truck</b> <b>TS&amp;R-40</b>	<b>3 personnel</b> <b>1 Fire Captain</b> <b>1 Engineer</b> <b>1 Firefighter Paramedic</b>
Station 42	295 High Street Moorpark, CA 93021	<b>1 -Type 1 Fire Engine</b> <b>E-42 First run</b> <b>E-142 Reserve</b> <b>1 -Type 3 Fire Engine</b> <b>E-342</b>	<b>3 personnel</b> <b>1 Fire Captain</b> <b>1 Engineer</b> <b>1 Firefighter</b>

**Performance Standard**

- b. Please provide Ventura County Fire Department’s response time goals in the following table. Please feel free to revise the activity/incident types as necessary.

**Moorpark Fire Department Performance Standards**

<b>Activity / Incident Type</b>	<b>Overall Time in Minutes/Seconds (from receipt of call to arrival onsite)</b>
First-in Response Unit	<b>8 min 30 sec</b>
First-in Engine Truck	<b>8 min 30 sec</b>
First-in Basic Life Support Response Unit	<b>8 min 30 sec</b>

**MOORPARK GENERAL PLAN UPDATE**  
**Fire Services – Ventura County Fire Department (VCFD)**

First-in Advanced Life Support Response Unit	<b>VCFD is a responder to the overall EMSA system AMR has the ALS Contract-we do provide ALS in Moorpark @Station 40</b>
First-in Paramedic Assessment	<b>VCFD is a responder to the overall EMSA system AMR has the ALS Contract-we do provide ALS in Moorpark @ Station 40</b>

c. What was the average response time (if available) for the first-in response unit for the latest year for which data is available? **CODE Calls 6 min 08 sec**

d. Are there any service agreements with other local or regional fire agencies (other than VCFD) for additional support? **Yes. Ventura County Fire has service agreements with several entities that provide enhanced services throughout Ventura County including the City of Moorpark.**

- 1. California Department of forestry and fire protection**
- 2. California Fire Assistance agreement (CFAA)**
- 3. LACOFD (Los Angeles County Fire Department)**
- 4. VEN (Ventura City Fire) OXN –(OXNARD) Regional partners**
- 5. MRCA (Mountain Recreation & Conservation Authority) (Happy Camp)**
- 6. LAFD (Los Angeles City Fire)**
- 7. USFS (United States Forest Service)**
- 8. KRN (Kern County Fire)**
- 9. NPS (National Park Service)**
- 10. USCG (United States Coast Guard) inland waterways response**

**MOORPARK GENERAL PLAN UPDATE**  
**Fire Services – Ventura County Fire Department (VCFD)**

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- e. Are there any existing deficiencies (personnel, equipment) in the fire protection service currently at Station 40 or Station 42? **No.**

Do you currently meet the National Fire Protection Association recommended standard of one firefighter for every 1,000 population? **No.**

What is your current standard for firefighter to population ratio? **We do not utilize the NFPA standard for this question. We deploy based upon performance objectives that align emergency type to effective response force in each established time frame.**

***Funding***

- f. Please describe the funding sources/mechanisms (e.g., City development impacts fees, secured fire protection agreements, City general funds) that are used to provide fire protection services to the City and County? **Primary Funding sources for the Ventura County Fire Protection District are the following:**
- 1. Property Tax revenues**
  - 2. Contractual Funding from the State of California Department of Forestry and Fire protection as contract county for services.**

2. Are there any existing deficiencies (personnel, equipment) in the fire protection service currently provided to the City of Moorpark? **NONE**
3. Please summarize any plans for fire service improvements plans or expanded capacity (personnel, equipment), if any, that would serve the City of Moorpark. **The following are VCFD plans to expand county-wide services that directly benefit the city of Moorpark.**
- 1. Expansion of Wildfire mitigation through additional crews to combat Wildfire Fiscal year 23-24**
  - 2. ALS (Advanced Life Support expansion into the East County are TBD fiscal year 23-24**

**MOORPARK GENERAL PLAN UPDATE**  
**Fire Services – Ventura County Fire Department (VCFD)**

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- a. What are the funding sources for the planned improvements? **NA**  
**Primary Funding sources for the Ventura County Fire Protection District are the following:**
- 1. Property Tax revenues**
  - 2. Contractual Funding from the State of California Department of Forestry and Fire protection as contract county for services.**
4. Would the General Plan Update affect VCFD's ability to provide services? Please comment on any area of specific concern. **YES, as with all expansion plans a thorough review and an updated Standards of Cover (SOC-STUDY) would identify potential changes to resource allocations into the city as well as time and distance studies to assure desired response times are met with an effective force.**
5. Please provide any additional comments and/or information regarding fire service provision in the City of Moorpark related to the General Plan Update. **No additional comments**

**MOORPARK GENERAL PLAN UPDATE**  
***Fire Services – Ventura County Fire Department (VCFD)***

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**Response Prepared By:**

Chad Cook

Deputy Fire Chief

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**Name**

**Title**

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**Agency** Ventura County Fire  
10/25/22

**Date**

Appendices

**Appendix K      VMT Memorandum**

## Appendices

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## DRAFT MEMORANDUM

**To:** City of Moorpark

**From:** Iteris, Inc.

**Date:** October 4, 2022

**RE:** Moorpark General Plan Update – **Draft** CEQA Transportation Impact Analysis

### INTRODUCTION

This memorandum describes the California Environmental Quality Act (CEQA) transportation impact analysis for the City of Moorpark General Plan Update (GPU). The evaluation is consistent with CEQA Guidelines effective December 28, 2018. The General Plan Update's impacts are evaluated per Appendix G Environmental Checklist Form of the current CEQA guidelines, which assesses projects by the four criteria listed below:

***T-1** Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

***T-2** Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

***T-3** Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

***T-4** Would the project result in inadequate emergency access?*

### METHODOLOGY

For impact criteria T-1, T-3, and T-4, relevant plans were reviewed and compared to the General Plan Update goals and policies to determine if any potential significant impacts would occur as a result of the Project.

For impact criteria T-2, a technical analysis was performed using the Ventura County Transportation Model (VCTM), a computerized travel demand model maintained by the Ventura County Transportation Commission. Iteris utilized the VCTM to generate the VMT statistics. This land-use based model, which is a subarea model of the Southern California Association of Government's (SCAG) travel demand model, is consistent with the 2016 SCAG RTP/SCS travel-demand model assumptions and inputs. The model consists of a 2016 base year scenario and 2040 future year scenario. The VCTM consists of a detailed traffic analysis zone (TAZ) structure in the City of Moorpark, including 19 TAZ's within the City.

For the impact criteria T-2 analysis, all VMT for trips beginning or ending in the City were accounted for,



consistent with the Governor’s Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA. While other methodologies measure only the amount of VMT traveling on streets within the City, or only half the distance of trips from outside of the City (as in SB 375 Regional Plan Climate Target analysis), the General Plan Update analyzes the full extent of vehicle travel from the Project.

For the purposes of the analysis, the VCTM 2040 scenario is used to represent the General Plan buildout year of 2050. This is a conservative approach, as a review of SCAG 2016 RTP/SCS and 2020 RTP/SCS shows a reduction in population and employment forecasts in Ventura County in SCAG’s buildout year 2045 versus 2040. In addition, for this analysis, the base year 2016 model scenario inputs were interpolated, outside of the City of Moorpark, to represent existing year 2022, for consistency within the EIR. Within the City of Moorpark, existing year 2022 land use inputs were provided by the project team.

In order to determine the GPU project’s potential level of impact, a new VCTM scenario was prepared, incorporating the 2050 land use projections (within the City of Moorpark) and circulation network components of the General Plan Update. For land use plans which include both residential and employment uses, the appropriate analysis metric is VMT per service population, where service population is defined as the number of residents plus the number of jobs. **Table 1** summarizes the General Plan Update’s proposed net changes in land use, which were incorporated into the TAZ’s based on the location of opportunity sites.

**Table 1: Proposed General Plan Update Net Land Use Changes**

Land Use Type	Existing (2022)	Proposed Land Use Plan (2050)	Net Change
<b>Residential</b>			
Residential Units	11,537 units	17,025 units	+5,488 units
Population	36,445 residents	53,781 residents	+17,336 residents
<b>Non-Residential</b>			
Square Footage	8,783,171 sq ft	13,567,083 sq ft	+4,783,912 sq ft
Employment	12,915 jobs	20,249 jobs	+7,334 jobs

As shown, the GPU’s anticipated change in dwelling units and non-residential square footage over the 2050 estimated buildout is:

- Addition of 5,488 residential units and 17,336 residents; and
- Addition of 4,783,912 square feet of non-residential uses and 7,334 jobs.

## IMPACT ANALYSIS

This section presents the CEQA impact evaluation for each of the four criteria.

### T-1 Impact Evaluation

The General Plan Update includes modifications to the circulation network that was included as part of the currently adopted General Plan. The following roadway network and bicycle network modifications are included as part of the General Plan Update:

- Roadway Network
  - New North Hills Parkway facility
  - Extension of Meridian Hills Drive
  - Extension of Casey Road
  - Extension of High Street
  - Extension of Gabbert Road
- Bicycle Network
  - Class I bike path along the Arroyo Simi
  - Class II bike lanes along High Street
  - Class II bike lanes along Gabbert Road
  - Class II bike lanes along Princeton Avenue
  - Class II bike lanes along Arroyo Drive
  - Class III shared bike lanes along Meridian Hills Drive
  - Class III shared bike lanes along Casey Road

The following relevant goals and policies, as part of the General Plan, would have an effect on the circulation network:

- **Land Use Element Goal 1:** Sustainable growth through well-planned development that provides for the needs of Moorpark’s residents and businesses, makes efficient use of land and infrastructure, protects important environmental resources, promotes the health of the community, and maintains the unique character distinguishing the City as a special place in the region
  - **Policy 1.4: Public services to support growth.** Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted.
- **Land Use Element Goal 4:** A city of distinct, compact, and walkable centers and corridors, surrounded by diverse and complete neighborhoods, and connected to a unifying network of greenways and open spaces
  - **Policy 4.2: Focused development.** Reinforce existing patterns of development by concentrating development in key centers and districts serving as destinations and gathering places for the community that are linked by pedestrian connections to adjoining residential neighborhoods, such as the downtown High Street corridor, Mission-Bell/Moorpark Town Center, and Moorpark Marketplace.
  - **Policy 4.3: Residential neighborhoods.** Maintain a development pattern of distinct

- residential neighborhoods oriented around parks, schools, and community facilities that are connected with neighborhood-serving businesses and public transit.
- **Policy 4.4: Multi-family housing.** Promote the development of multiple-family dwellings in close proximity to employment opportunities, shopping areas, public parks, and transit lines, with careful consideration of the proximity to and compatibility with single-family neighborhoods.
  - **Policy 4.5: Community-serving uses.** Encourage uses that meet the daily needs of residents such as grocery stores, local-serving restaurants, and service businesses to be located within safe walking distance of residents.
  - **Policy 4.6: Highway-oriented development.** Cluster commercial development in compact areas along major roadways and provide pedestrian links to adjacent residential areas.
  - **Policy 4.8: Enhanced industrial districts.** Support new industrial development adjacent to and as infill within existing industrial uses and along major transportation corridors.
- **Land Use Element Goal 5:** A well-designed community contributing to the City’s distinct identity and quality of life of residents
    - **Policy 5.3: Special design districts.** Establish design concepts for the overall community and special treatment areas, such as the downtown district, which may include guidelines for architecture, landscape architecture, signage, streetscape, and infrastructure.
    - **Policy 5.4: Landscapes for quality development.** Require the use of landscaping around residential, commercial and industrial buildings and parking areas as well as along easements of flood control channels, roadways, railroad right of ways, and other public and private areas, to soften the urban environment and enhance views from roadways and surrounding uses.
  - **Land Use Element Goal 7:** Land uses and development intensities that are compatible with scenic and natural resources and that encourage environmental preservation
    - **Policy 7.1: Mitigate environmental impacts.** Locate and design new development to minimize adverse visual and/or environmental impacts to the community.
  - **Land Use Element Goal 8:** Land use development practices that protects environmental resources, reduces greenhouse gas emissions, removes carbon from the atmosphere, and is resilient to climate change
    - **Policy 8.6: Sustainable streetscapes.** Consider improvements of the City’s streetscapes addressing the impacts of climate change by such techniques as tree canopies to reduce heat islands and use of pervious paving, and bioswales to capture stormwater and percolate into the groundwater.
  - **Land Use Element Goal 9:** Land use development practices that contribute to healthy lives for Moorpark’s residents
    - **Policy 9.1: Healthy buildings and places.** Promote a healthy built environment by encouraging the design and rehabilitation of buildings and sites for healthy living and working conditions, including promoting enhanced pedestrian-oriented circulation, lighting, building materials and universal accessibility using existing tools, practices, and

- programs.
  - **Policy 9.2: Active pedestrian environment.** Locate and design new development to foster active pedestrian access and use by such techniques as locating a mix of uses and buildings around common plazas and open spaces to promote outdoor gatherings and walking among businesses, inclusion of bicycle storage facilities, and pedestrian walkways and connections to adjoining residential neighborhoods.
  - **Policy 9.3: Age-friendly living.** Encourage the development of barrier-free buildings and streets, enhanced mobility, and independence of people with disabilities and safe neighborhoods to support a life-long process of active aging by making Moorpark an “age friendly” city that strives to create a positive, socially inclusive, and supportive environment.
  - **Policy 9.4: Active transportation.** Promote infrastructure improvements that support active transportation with safe, attractive, and comfortable facilities that meet community needs.
- **Land Use Element Goal 10:** Fair and equitable access for all residents to employment, housing, parks, education, recreation, transportation, retail, and public services, including participation in governmental decision-making
  - **Policy 10.1: Access to services and amenities.** Strive to ensure that recreational, health, public service, and other desired services and neighborhood amenities are distributed equitably throughout the city.
  - **Policy 10.4: Overconcentration of impact uses.** Avoid the overconcentration of high-impact uses and facilities that disproportionately affects a particular neighborhood, center, or corridor to ensure that such uses do not result in an inequitable environmental burden on low-income or minority neighborhoods.
  -
- **Land Use Element Goal 11:** A city composed of neighborhoods with a variety of housing types that are desirable places to live, contribute to the quality of life, and well-maintained
  - **Policy 11.3: Pedestrian-oriented neighborhoods.** Maintain sidewalks, parkways, street tree canopies, and landscaping throughout the residential neighborhoods to promote walking as an enjoyable and healthy activity and alternative to automobile use.
- **Land Use Element Goal 12:** New housing that is compatible with the character of existing individual neighborhoods and minimizes land use incompatibility
  - **Policy 12.6: Inclusion of public spaces.** Provide ample public spaces and tree-lined sidewalks or pathways furnished with appropriate pedestrian amenities that contribute to comfortable and attractive settings for pedestrian activity in multi-family neighborhoods.
- **Land Use Element Goal 13:** Vital, active, prosperous, and well-designed commercial centers and corridors that offer a diversity of goods, services, and entertainment and contribute a positive experience for Moorpark’s residents and visitors
  - **Policy 13.7: Connections with neighborhoods and districts.** Require the development of external cross-connections between commercial uses so as to reduce the number of curb

cuts and number of vehicle trips on adjacent roadways.

- **Land Use Element Goal 14:** New commercial development that is compatible with surrounding land uses
  - **Policy 14.2: Managed truck access.** Require that automobile and truck access to commercial properties be located so as to minimize impacts to adjacent uses.
  
- **Land Use Element Goal 15:** A diversity of well-designed districts and corridors containing an integrated mix of commercial, office, and/or housing that enable Moorpark’s residents to live close to businesses and employment, reduce automobile use, and actively engage and enhance pedestrian activity
  - **Policy 15.7: Parking.** Encourage that parking be located and accessed from the rear of buildings along corridor frontages, while supporting the development of shared parking structures as an alternative to individual on-site parking.
  
- **Land Use Element Goal 16:** A diversity of industrial uses that are located and designed in a compatible manner with surrounding land uses
  - **Policy 16.8: Bicycle access.** Encourage major business park and industrial projects, as defined in the Municipal Code, to incorporate facilities that promote employee access by bicycles such as secured storage, showers, and lockers.
  
- **Land Use Element Goal 19:** Revitalize the downtown commercial core (Moorpark Avenue area, Walnut Street, Bard Street, Magnolia Avenue, and High Street)
  - **Policy 19.2: Complementary development.** Promote the development of new commercial and office uses, housing, park or recreational facilities, public parking, and a potential multimodal transportation center in the commercial core
  - **Policy 19.3: Relationship to transit station.** Locate and design development to capitalize on and reflect its adjacency to the Metrolink station, including developing direct pedestrian connections.
  - **Policy 19.7: Pedestrian-oriented development.** Require that buildings are located along and oriented to the street frontage of High Street to maintain an active pedestrian environment.
  - **Policy 19.9: Parking.** Consider creative programs to provide sufficient parking for commercial and mixed-use developments on High Street.
  
- **Economic Development Element Goal 1:** A self-sustaining, innovative, and resilient local economy that provides goods and services desired by local residents, attracts regional consumer spending, and contributes to Moorpark’s premier quality of life
  - **Policy 1.9: Metrolink and transit.** Collaborate with transit service providers to improve awareness of and access to transit services for current and future residents and workers.
  
- **Parks and Recreation Element Goal 1:** Public parkland is acquired, maintained, and provided for both passive and active use that is equally accessible on a neighborhood, community, and regional basis

- **Policy 1.7: Recreational activities.** Facilitate the development and provision of recreational activities that are both active and passive, e.g., hiking, biking, running, sightseeing, swimming.
- **Parks and Recreation Element Goal 3:** A network of multi-use trails enhances connections to local and regional parks and open space resources and expands the City's non-motorized circulation infrastructure
  - **Policy 3.1: Trail planning.** Develop and adopt a Plan assessing the opportunities for, and guiding the provision and maintenance of, an interconnected network of trails serving Moorpark residents and visitors.
  - **Policy 3.2: Network of trails.** Support the development of a comprehensive and interconnected network of trails that provides public access to arroyos and creeks, connects residents with open space and nature, and links urban areas with parks and recreational facilities.
  - **Policy 3.3. Regional connection.** Connect Moorpark's trails with those of Thousand Oaks, Simi Valley, and County areas as feasible to establish a continuous regional network consistent with neighboring jurisdictions General Plan and trail plans and with the proposed Moorpark Trails Master Plan.
  - **Policy 3.4: Implementation of Arroyo Simi Trail.** Pursue funding to implement the Arroyo Simi Trail as recommended in the Arroyo Simi Trail Feasibility Study (2003).
  - **Policy 3.5: Nature centers.** Pursue the development of nature observation and interpretative centers, viewpoints, and other amenities along trails to provide an amenity for hikers, cyclists, and other users.
  - **Policy 3.6: Trail Design.** Design trails and pathways to incorporate universal design (ADA) and safety considerations to allow residents of all ages and abilities to safely use trails.
  - **Policy 3.7: Equestrian trails in new development.** Require that new development projects consider the appropriateness of integrating equestrian trail linkages to regional parks and regional trail systems consistent with the multi-use/equestrian trail network.
  - **Policy 3.8: Safety.** Ensure a safe multi-use/equestrian trail network.
  - **Policy 3.9: HOA property.** Encourage the provision of public trails and trail access in coordination with Homeowners Associations on HOA property

The proposed General Plan Update's land use plan and roadway network modifications would not be in conflict with any of these policies.

The proposed project's planned transportation networks, goals and policies provide consistency related to regional active transportation plans, transit plans, and other mobility infrastructure; specifically the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy and Ventura County Transportation Commission Comprehensive Transportation Plan.

## SCAG Regional Transportation Plan/Sustainable Communities Strategy

Moorpark is a member of the SCAG Regional Council, the decision-making body of the SCAG Joint Powers Authority under California state law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under state law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG **Regional Transportation Plan/Sustainable Communities Strategy** (RTP/SCS), Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The Connect SoCal RTP/SCS is a planning document for the region, allowing project sponsors to qualify for federal funding. In addition, Connect SoCal 2024 will identify a combination of transportation and land use strategies that help the region achieve state greenhouse gas emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, and support our vital goods movement industry.

The City coordinates with SCAG to integrate General Plan land use and transportation plans in the RTP/SCS. The following regionally significant transportation improvements are included in the 2020 Connect SoCal in the City of Moorpark<sup>1</sup>.

RTP ID: VEN051213 Route 23 Moorpark Avenue from Third Street to Casey Road – widen from one lane in each direction to one lane northbound and two lanes southbound. Realign First Street/Poindexter Intersections and upgrade rail crossing.

- General Plan defines Moorpark Avenue as a Principal Arterial (State Highway) which range from two to four lanes. The General Plan Update does not include this project, however the project is not inconsistent with the General Plan designation of Moorpark Avenue

RTP ID VEN34089 Los Angeles Avenue from Route 23 (Moorpark Avenue) to east of Spring (0.6 miles) – reconstruct sidewalks, realign roadway, and widen from four to six lanes.

- General Plan defines Los Angeles Avenue as a Principal Arterial (State Highway) with up to six-lanes, therefore the project is consistent with the General Plan Update

RTP ID 5A0742 – North Hills Parkway – Construct four-lane freeway (total of both directions) connection on new alignment

- General Plan does not include the freeway version of North Hills Parkway. North Hills Parkway is a new arterial within the City of Moorpark from Spring Road to the west city limit with no direct connection to SR-118.

RTP ID 5A0743 - Princeton Avenue – widen, realign, and reconstruct from two lanes to two lanes plus center turn lane and bike lanes.

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<sup>1</sup>[https://scag.ca.gov/sites/main/files/file-attachments/dpeir\\_connectsocial\\_appendix02\\_planprojectlist.pdf?1606004008](https://scag.ca.gov/sites/main/files/file-attachments/dpeir_connectsocial_appendix02_planprojectlist.pdf?1606004008)

- General Plan defines Princeton Avenue as a Minor Arterial which range from two to four lanes. The General Plan Update does not include this project, however the project is not inconsistent with the General Plan designation of Princeton Avenue

RTP ID 5A0703 – SR-118 – Interchange and signal improvement. Widen westbound off-ramp to add a free right-turn lane and signal modification.

- General Plan does not include this Caltrans Project, however the project is not inconsistent with the General Plan

The RTP/SCS is updated every four years and the City will work with SCAG to update the RTP/SCS to be consistent with the City’s General Plan.

The General Plan includes strategies to focus development in the City’s High Quality Transit Area (HQTa) as defined by SCAG around the Metrolink Station. The strategies that focus development in these transit rich areas allow transit and land use to work together. The California Air Resources Board’s (CARB) 2016 Mobile Source Strategy recognizes that coordinated regional planning can improve California’s land use patterns and transportation policy in a way that reduces transportation related emissions by reducing growth in VMT.

The following relevant goals and policies, as part of the General Plan, would support development in the HQTa area:

- **Land Use Element Goal 3:** A mix of land uses that meets the diverse needs of the Moorpark community
  - **Policy 3.7: Transit-oriented development.** Promote opportunities to develop uses that can economically benefit from their proximity to the Moorpark Metrolink station and promote increased ridership.
- **Land Use Element Goal 19:** Revitalize the downtown commercial core (Moorpark Avenue area, Walnut Street, Bard Street, Magnolia Avenue, and High Street)
  - **Policy 19.3: Relationship to transit station.** Locate and design development to capitalize on and reflect its adjacency to the Metrolink station, including developing direct pedestrian connections.
- **Economic Development Element Goal 1:** A self-sustaining, innovative, and resilient local economy that provides goods and services desired by local residents, attracts regional consumer spending, and contributes to Moorpark’s premier quality of life
  - **Policy 1.9: Metrolink and transit.** Collaborate with transit service providers to improve awareness of and access to transit services for current and future residents and workers

### **Ventura County Transportation Commission (VCTC) Comprehensive Transportation Plan**

The VCTC Comprehensive Transportation Plan (CTP) is a transportation vision for Ventura County and identify ways of achieving this vision within constrained resources. The CTP is a long-range policy document, built from community-based, local priorities and community-expressed need to enhance



regional connections. It is aimed at ensuring mobility and enhancing the quality of life for all Ventura County residents. The CTP provides a framework for future community-based planning and collaboration and inform Ventura County's long range transportation decisions. The City's General Plan Update is consistent with the CTP Shared Vision of the Future<sup>2</sup> of the transportation system:

- Preserving Quality of Life
- A Connected and Integrated Transportation System
- Convenient and Accessible Options
- Inclusive of All Community Members and Needs
- Safe
- Balances All Interests
- Built from a Sustainable Plan

In addition, the General Plan Update is consistent with the identified local priorities for Moorpark:

- Expanding the bicycle network and safety
- Improving local roads for all users
- Balancing expansion of intercity connections with preserving rural character
- Focusing on critical and lifeline connections (i.e., seniors and medical, youth and schools)
- Improving access to public information and communications
- Access to Moorpark College

The General Plan Update is consistent with programs, plans, ordinances and policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, making the impact **less-than-significant** and no further mitigation would be required.

Recommend as a Policy in the Moorpark General Plan 205 - Coordinate with SCAG to update the SCS/RTP North Hills Parkway project as the arterial roadway project without the direct connection to the SR-118 Freeway.

## T-2 Impact Evaluation

Under criteria T-2, the proposed General Plan Update's effects on Vehicle Miles Traveled (VMT) are evaluated, as described in the following sub-sections.

### VMT Impact Analysis

The thresholds of significance, for use in this analysis, are defined as:

- The project would result in a significant impact if the project conditions (i.e., the General Plan Update conditions) average daily citywide VMT per service population exceeds 15% below the existing conditions average daily citywide VMT per service population.

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<sup>2</sup>[https://scag.ca.gov/sites/main/files/file-attachments/dpeir\\_connectsocial\\_appendix02\\_planprojectlist.pdf?1606004008](https://scag.ca.gov/sites/main/files/file-attachments/dpeir_connectsocial_appendix02_planprojectlist.pdf?1606004008)

Applying the described land use and circulation network modifications, citywide VMT outputs were developed using the VCTM. **Table 2** summarizes the daily citywide VMT per service population for the existing and future year 2050 with General Plan Update scenarios. Detailed VMT calculations are provided in **Appendix A**.

**Table 2: Citywide VMT Summary**

Scenario	Total Home-based Daily VMT	Total Work-based Daily VMT	Total Daily VMT	Residents	Employees	Service Population	VMT / Service Population
Existing (2022)	826,750	262,244	1,088,994	36,445	12,915	49,360	22.06
Future Year 2050 With General Plan Update	1,087,963	281,597	1,369,560	53,781	20,249	74,030	18.50

As shown in **Table 2**, the future year 2050 with General Plan Update citywide VMT per service population is forecast to be 18.50, while the existing (2022) citywide VMT per service population is currently 22.06. As such, the threshold VMT per service population, which is 15% below existing, is 18.75. Therefore, the future year 2050 with General Plan Update citywide VMT per service population is forecast to be below the threshold.

Thus, this impact is considered **less than significant**.

**Goals and Policies Affecting VMT Reduction**

The following relevant goals and policies, as part of the General Plan Circulation Element, would have an effect on reducing VMT:

- **Goal 1:** A transportation system supporting uses accommodated by the Land Use Plan and providing for the safe and efficient movement of people of all ages and abilities, goods, and services into, out of, and through the City of Moorpark
  - **Policy 1.2:** Design, plan, maintain, and operate streets using complete streets principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes.
  - **Policy 1.7:** Require that no roadway widening, beyond current width, would be approved without further evaluation and Council approval.
- **Goal 2:** A circulation system which supports existing, approved and planned uses throughout the City while maintaining a desired level of service on all streets and at all intersections
  - **Policy 2.2:** Maintain CEQA transportation significance thresholds for residential, commercial and industrial uses of a minimum reduction of per capita vehicle miles travelled (VMT) of 15% below existing and no net increase in per capita VMT compared to existing for all other land use types, and periodically review and adjust this threshold

as appropriate in consideration of actual vehicle miles and greenhouse gas emissions resulting from implementation of the Land Use Plan.

- **Policy 2.3:** Require the analysis of VMT per resident or per employee as part of CEQA environmental review and a mitigation program developed to reduce any significant impacts as required by State law.
- **Policy 2.4:** Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to nonautomotive modes of transportation.

In addition, as discussed in T-1, several other policies (in other elements of the General Plan) would have the effect of reducing VMT.

### T-3 Impact Evaluation

The objective of the General Plan is to ensure future development and transportation facilities would improve connectivity and linkages throughout the City. As mentioned, the General Plan Update includes improvements to the roadway and bicycle network. These proposed improvements included in the General Plan will be designed to City and State engineering design standards to meet sight distance requirements, including visibility of pedestrians and bicyclists. The General Plan does not propose any incompatible uses that would increase hazards. As a result, the General Plan will have a beneficial impact on geometric design features and incompatible uses. In addition, the following relevant goal and policies, as part of the General Plan, would have a positive effect on geometric design:

- **Land Use Element Goal 1:** Sustainable growth through well-planned development that provides for the needs of Moorpark’s residents and businesses, makes efficient use of land and infrastructure, protects important environmental resources, promotes the health of the community, and maintains the unique character distinguishing the City as a special place in the region
  - **Policy 1.5: Development timing.** Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character
- **Land Use Element Goal 2:** A logical Sphere of Influence ensuring consistency with Moorpark’s visions and values
  - **Policy 2.1: Growth beyond the City’s boundaries.** Evaluate the appropriateness of expanding Moorpark’s Sphere of Influence to manage conservation and uses adjoining the City boundary, consistent with the community’s visions and values and consideration of the area’s environmental resources, hazards, accessibility of infrastructure and services and local and regional growth policies and regulations.
- **Land Use Element Goal 5:** A well-designed community contributing to the City’s distinct identity and quality of life of residents
  - **Policy 5.5: Compatible land uses.** Require design features that provide visual relief and separation between land uses of conflicting character.
  - **Policy 5.8: Entryways.** Encourage the development of identifiable entryways for the

overall community, and unique or principal business/commercial districts of the City (i.e. City core and transportation corridors) and establish design standards for these areas that include landscape setbacks, sign monumentation and other special design treatments.

- **Land Use Element Goal 6:** Development is located and designed to maintain the qualities distinguishing Moorpark and ensure effective transitions among neighborhoods and districts
  - **Policy 6.1: Land use compatibility.** Require that development is located and designed to assure compatibility among land uses.
  - **Policy 6.3: Design for safety.** Require that development and public spaces are designed to enhance public safety and discourage crime by providing street-fronting uses, adequate lighting, and features that cultivate a sense of community ownership.
  - **Policy 6.7: Protection from environmental hazards.** Prohibit or effectively control land uses that pose potential environmental hazards to Moorpark’s neighborhoods and districts.
  
- **Land Use Element Goal 7:** Land uses and development intensities that are compatible with scenic and natural resources and that encourage environmental preservation
  - **Policy 7.2: Design development to respect natural setting.** Require that new development respect, integrate with, and complement the natural features of the land including conforming building massing to topographic forms, restricting grading of steep slopes and encouraging the preservation of visual horizon lines and significant hillsides as prominent visual features.
  - **Policy 7.3: Protect uses from hazards.** Require that new development be located and designed to avoid or mitigate any potentially hazardous conditions.
  - **Policy 7.4: Open space corridor.** Preserve and enhance the flood control easement area adjacent to the Arroyo Simi floodway as an important natural and scenic feature of the community.
  - **Policy 7.5: Arroyo Simi corridor recreation.** Encourage the development of compatible open space/recreational uses of the Arroyo Simi floodway that are consistent with the provisions of the Federal Emergency Management Agency for floodway uses.
  
- **Land Use Element Goal 8:** Land use development practices that protects environmental resources, reduces greenhouse gas emissions, removes carbon from the atmosphere, and is resilient to climate change
  - **Policy 8.9: Design to avoid hazards.** Require that development in significant hazard areas is located and designed to ensure safety in accordance with the Safety Element.
  
- **Land Use Element Goal 11:** A city composed of neighborhoods with a variety of housing types that are desirable places to live, contribute to the quality of life, and well-maintained
  - **Policy 11.4: Safe neighborhoods.** Require that residential developments be designed to facilitate and enhance neighborhood surveillance for safety.
  - **Policy 11.5: Sustained development standards.** Preserve and enhance residential neighborhoods through enforcement of land use and property standards, ensuring that adjacent nonresidential uses are buffered from residences in harmonious and attractive

ways.

- **Land Use Element Goal 13:** Vital, active, prosperous, and well-designed commercial centers and corridors that offer a diversity of goods, services, and entertainment and contribute a positive experience for Moorpark’s residents and visitors
  - **Policy 13.6: Quality commercial design.** Require that new development and renovated or remodeled multi-tenant commercial centers and corridors be designed to complement existing uses, as appropriate, and exhibit a high quality of architecture and site planning in consideration of the following principles as feasible and appropriate to the site:
    - Seamless connections and transitions with existing buildings, in terms of building scale, elevations, and materials
    - Landscaping contributing to the appearance and quality of development
    - Clearly delineated pedestrian connections between business areas, parking areas, and to adjoining neighborhoods and districts
    - Incorporation of plazas and expanded sidewalks to accommodate pedestrian, outdoor dining, and other activities.
  - **Policy 13.8: Coordinated design.** Encourage adjacent commercial developments to coordinate design with regard to access, parking, and architectural features.
- **Land Use Element Goal 16:** A diversity of industrial uses that are located and designed in a compatible manner with surrounding land uses
  - **Policy 16.6: Design for compatibility.** Require that industrial uses incorporate design features, such as screen walls, landscaping and setbacks, and include height and lighting restrictions, so as to minimize adverse impacts on adjacent uses and enhance the visual characteristics of the area.
- **Land Use Element Goal 17:** Governmental, utility, institutional, educational, recreational, cultural, religious, and social facilities and services are located and designed to complement Moorpark’s neighborhoods, centers, and corridors
  - **Policy 17.4: Compatibility with adjoining Uses.** Ensure that City-owned buildings, sites, and infrastructure are designed to be compatible in scale, character, and landscape with the district or neighborhood in which they are located, and minimize potential impacts such as traffic, noise, and lighting.
- **Open Space, Parks and Recreation Element Goal 1:** Public parkland is acquired, maintained, and provided for both passive and active use that is equally accessible on a neighborhood, community, and regional basis
  - **Policy 1.9: Flood control areas.** Limit the use of areas designated for flood control purposes to passive recreation activities (e.g., hiking, fishing, bike riding), consistent with requirements to maintain the integrity of these areas to protect public safety.
  - **Policy 1.10: Properties unsuitable for development.** Promote the use of the properties unsuitable for development due to hazards or other safety constraints (as defined by the Safety Element) for recreation uses provided that they can be safely integrated and do not require infrastructure (e.g., hiking, fishing, bike riding).

- **Policy 1.11. Locating and design.** Require that parklands, recreation facilities, and community centers are located and designed to conform and respect their natural environmental setting, are compatible with adjoining uses and protect users from hazards.
- **Health and Safety Element Goal 6:** Open Spaces contribute to the health and safety of Moorpark residents
  - **Policy 6.1: Limitations on development.** Maintain open space lands for health and safety by limiting development in areas susceptible to flood, seismic risk, geologic instability, and wildfire, as detailed in the Safety Element
- **Health and Safety Element Goal 4:** Minimized injury, loss of life, and damage to property from wildfire and structural fires
  - **Policy 4.1: Fire hazard reduction.** Continue to work with the Ventura County Fire Department and the Ventura Regional Fire Safe Council to implement fire hazard reduction policies and projects, to the extent they are relevant to Moorpark, in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan, the Community Wildfire Protection Plan, the General Plan, and the Capital Improvement Program.
- **Circulation Element Goal 3:** Transportation system design criteria and roadway standards support and maintain the desired character of the City of Moorpark
  - **Policy 3.1: Roadway Classifications.** Maintain roadway design standards that specify right-of-way, cross-sections, and other design criteria for designated roadway classifications.
  - **Policy 3.3: Natural Features.** Require that roadways in hillside areas be located and designed to preserve ridgelines and natural features to the extent feasible.
- **Noise Element Goal 2:** Existing and future land uses are compatible with current and projected local and regional noise conditions
  - **Policy 2.5: Design of roadway projects.** Encourage the employment of noise attenuation measures in the design of roadway improvement projects consistent with existing and future funding.
- **Noise Element Goal 3:** Minimize noise impacts from non-transportation-related sources, motor vehicle traffic, and railroad operations on sensitive receptors
  - **Policy 3.1: Transportation sources.** Identify sound attenuation measures that can be applicable to transportation related noise impacts.
  - **Policy 3.5: State Motor Vehicle Standards.** Encourage the enforcement of state motor vehicle noise standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and Moorpark Police Department
  - **Policy 3.6: Protection from mobile sources.** Require that residential and other noise-sensitive land uses adjacent to the 118 and 23 highways, major arterials, and railroad tracks be designed to incorporate elements reducing noise exposure from these sources, including such elements as walls, berms, and landscape features.

Based on the goals and policies of the General Plan, the Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Thus, this impact is considered **less than significant**.

#### T-4 Impact Evaluation

The General Plan Update does not include elements that would impede emergency vehicle access. Public roadways and buildings would conform to City and County Fire Department standards for access. In addition, the following relevant goals and policies, as part of the General Plan, would have a positive effect on emergency access:

- **Safety Element Goal 1:** An emergency management framework that effectively prepares and responds to natural and human-caused emergencies
  - **Policy 1.1: Multi-jurisdictional cooperation.** Continue the development of local preparedness plans and multi-jurisdictional cooperation and communication for emergency situations
  - **Policy 1.2: Emergency preparedness education.** Educate residents and businesses regarding appropriate actions to safeguard life and property during and immediately after emergencies.
  - **Policy 1.3: Emergency coordination.** Coordinate with Ventura County, neighboring cities, and non-governmental partners to effectively prepare for and respond to hazards and natural disasters.
  - **Policy 1.4: Emergency alerts.** Work with Ventura County Office of Emergency Services to provide alerts about potential, developing, and ongoing emergency situations through extensive early-warning and notification systems that convey information to all residents, in multiple languages and formats to ensure it is widely accessible, including persons with access and functional needs.
  - **Policy 1.5: Hazard Mitigation Plan.** Incorporate the most recent version of the Ventura County Hazard Mitigation Plan, Moorpark Annex, most recently certified by FEMA in 2022, into this Safety Element by reference, as permitted by California Government Code Section 65302.6.
  - **Policy 1.9: Multi-Hazard Evacuation Plan.** Identify evacuation routes and develop a multi-hazard evacuation plan, in coordination with surrounding jurisdictions, to ensure evacuation routes remain open and functional during emergencies. Reassess the effectiveness of the evacuation routes with the update of the Ventura County Multi-Jurisdictional Hazard Mitigation Plan.
  - **Policy 1.10: Ingress and egress.** Require new development to have two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.
  - **Policy 1.11: Secondary ingress and egress.** Explore secondary means of ingress and egress in areas with evacuation constraints for new subdivisions or developments of 10 units or more.
  - **Policy 1.12: Evacuation assistance program.** Develop an evacuation assistance program, in coordination with Moorpark City bus, paratransit, and dial-a-ride agencies to help those with limited mobility or lack of access to a vehicle evacuate safely.

- **Policy 1.15: Hazard mapping.** Update hazard mapping with each update to the Safety Element, or earlier if new information becomes available, to ensure the City relies on best available hazard mapping to inform decisions.
  - **Policy 1.16: Agency coordination.** Coordinate with Ventura County Fire Department, Ventura County Sheriff's Office, and City Manager's Office to ensure effective preparation, response, and recovery services are available throughout the community before, during, and after a seismic event.
  - **Policy 1.17: Accessible hazard preparedness education and outreach.** Promote hazard preparedness with education and outreach available in multiple languages and formats appropriate for people with access and functional needs.
  - **Policy 1.18: Ready Ventura County Program.** Coordinate with the Ventura County Sheriff's Office of Emergency Services to update and coordinate the Ready Ventura County Program as relevant to the City of Moorpark.
- **Safety Element Goal 4:** Minimized injury, loss of life, and damage to property from wildfire and structural fires
    - **Policy 4.7: Egress and ingress.** Require new development within a Very High Fire Hazard Severity Zone to have at least two egress and ingress options, visible street signs that identify evacuation routes, and adequate water supply for structural suppression.

Thus, this impact is considered **less than significant**.



# APPENDIX A – VMT Calculations

City of Moorpark - Baseline 2022			
ID	Purpose	Productions	Attractions
1	Home-based Work	441,267	246,532
2	Home-based School	15,145	13,353
3	Home-based University	8,331	144,997
4	Home-based Shopping	45,362	69,772
5	Home-based Social-Recreational	132,268	61,684
6	Home-based Serve Passenger	37,483	24,157
7	Home-based Other	146,894	55,948
8	Work-Based Other	15,712	41,084
9	Other Based Other	100,268	104,822
Total VMT		942,730	762,347
Total Home-based VMT			826,750
Total Work-based VMT			262,244

City of Moorpark - 2050 With GPU			
ID	Purpose	Productions	Attractions
1	Home-based Work	656,362	264,070
2	Home-based School	28,551	11,424
3	Home-based University	10,876	127,527
4	Home-based Shopping	43,863	132,690
5	Home-based Social-Recreational	146,793	81,466
6	Home-based Serve Passenger	47,460	33,537
7	Home-based Other	154,058	96,183
8	Work-Based Other	17,528	41,895
9	Other Based Other	119,469	141,928
Total VMT		1,224,960	930,720
Total Home-based VMT			1,087,963
Total Work-based VMT			281,597

<b>Travel Model Update Moorpark_22BY</b>			
<b>Moorpark Trip Ends (All Vehicles)</b>	<b>Moorpark Trip Ends (All Vehicles)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total Trips</b>
<b>Moorpark</b>	33,540	50,034	<b>83,575</b>
<b>External</b>	48,639	N/A	<b>48,639</b>
<b>Total Trips</b>	<b>82,179</b>	<b>50,034</b>	<b>132,213</b>
<b>Moorpark VMT (SB 375) (All Vehicles)</b>	<b>Moorpark VMT (SB 375) (All Vehicles)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total VMT</b>
<b>Moorpark</b>	63,885	415,853	<b>479,738</b>
<b>External</b>	401,949	N/A	<b>401,949</b>
<b>Total VMT</b>	<b>465,834</b>	<b>415,853</b>	<b>881,687</b>

<b>Moorpark Trip Ends (Auto)</b>	<b>Moorpark Trip Ends (Auto)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total Trips</b>
<b>Moorpark</b>	33,187	48,779	<b>81,966</b>
<b>External</b>	47,383	N/A	<b>47,383</b>
<b>Total Trips</b>	<b>80,570</b>	<b>48,779</b>	<b>129,348</b>
<b>Moorpark VMT (SB 375) (Auto)</b>	<b>Moorpark VMT (SB 375) (Auto)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total VMT</b>
<b>Moorpark</b>	63,011	384,407	<b>447,418</b>
<b>External</b>	368,663	N/A	<b>368,663</b>
<b>Total VMT</b>	<b>431,675</b>	<b>384,407</b>	<b>816,081</b>

<b>Moorpark Trip Ends (Truck)</b>	<b>Moorpark Trip Ends (Truck)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total Trips</b>
<b>Moorpark</b>	353	1,256	<b>1,609</b>
<b>External</b>	1,256	N/A	<b>1,256</b>
<b>Total Trips</b>	<b>1,609</b>	<b>1,256</b>	<b>2,865</b>
<b>Moorpark VMT (SB 375) (Truck)</b>	<b>Moorpark VMT (SB 375) (Truck)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total VMT</b>
<b>Moorpark</b>	874	31,446	<b>32,320</b>
<b>External</b>	33,286	N/A	<b>33,286</b>
<b>Total VMT</b>	<b>34,159</b>	<b>31,446</b>	<b>65,606</b>

Moorpark Trip Ends (LHDT)	Moorpark Trip Ends (LHDT)		
	Average Daily		
	Moorpark	External	Total Trips
Moorpark	156	380	536
External	380	N/A	380
<b>Total Trips</b>	<b>536</b>	<b>380</b>	<b>916</b>
Moorpark VMT (SB 375) (LHDT)	Moorpark VMT (SB 375) (LHDT)		
	Average Daily		
	Moorpark	External	Total VMT
Moorpark	327	6,381	6,707
External	8,037	N/A	8,037
<b>Total VMT</b>	<b>8,364</b>	<b>6,381</b>	<b>14,745</b>

Moorpark Trip Ends (MHDT)	Moorpark Trip Ends (MHDT)		
	Average Daily		
	Moorpark	External	Total Trips
Moorpark	141	308	449
External	308	N/A	308
<b>Total Trips</b>	<b>449</b>	<b>308</b>	<b>757</b>
Moorpark VMT (SB 375) (MHDT)	Moorpark VMT (SB 375) (MHDT)		
	Average Daily		
	Moorpark	External	Total VMT
Moorpark	397	4,440	4,837
External	5,127	N/A	5,127
<b>Total VMT</b>	<b>5,524</b>	<b>4,440</b>	<b>9,964</b>

Moorpark Trip Ends (HHDT)	Moorpark Trip Ends (HHDT)		
	Average Daily		
	Moorpark	External	Total Trips
Moorpark	56	568	624
External	568	N/A	568
<b>Total Trips</b>	<b>624</b>	<b>568</b>	<b>1,191</b>
Moorpark VMT (SB 375) (HHDT)	Moorpark VMT (SB 375) (HHDT)		
	Average Daily		
	Moorpark	External	Total VMT
Moorpark	150	20,625	20,775
External	20,122	N/A	20,122
<b>Total VMT</b>	<b>20,272</b>	<b>20,625</b>	<b>40,897</b>

<b>VCTM Model Update Moorpark_40BL_V3_Preferred</b>			
<b>Moorpark Trip Ends (All Vehicles)</b>	<b>Moorpark Trip Ends (All Vehicles)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total Trips</b>
<b>Moorpark</b>	55,481	63,444	<b>118,926</b>
<b>External</b>	61,337	N/A	<b>61,337</b>
<b>Total Trips</b>	<b>116,819</b>	<b>63,444</b>	<b>180,263</b>
<b>Moorpark VMT (SB 375) (All Vehicles)</b>	<b>Moorpark VMT (SB 375) (All Vehicles)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total VMT</b>
<b>Moorpark</b>	100,597	509,595	<b>610,192</b>
<b>External</b>	494,180	N/A	<b>494,180</b>
<b>Total VMT</b>	<b>594,777</b>	<b>509,595</b>	<b>1,104,372</b>

<b>Moorpark Trip Ends (Auto)</b>	<b>Moorpark Trip Ends (Auto)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total Trips</b>
<b>Moorpark</b>	55,162	62,040	<b>117,202</b>
<b>External</b>	59,933	N/A	<b>59,933</b>
<b>Total Trips</b>	<b>115,095</b>	<b>62,040</b>	<b>177,136</b>
<b>Moorpark VMT (SB 375) (Auto)</b>	<b>Moorpark VMT (SB 375) (Auto)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total VMT</b>
<b>Moorpark</b>	99,793	472,185	<b>571,978</b>
<b>External</b>	456,559	N/A	<b>456,559</b>
<b>Total VMT</b>	<b>556,352</b>	<b>472,185</b>	<b>1,028,537</b>

<b>Moorpark Trip Ends (Truck)</b>	<b>Moorpark Trip Ends (Truck)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total Trips</b>
<b>Moorpark</b>	319	1,404	<b>1,723</b>
<b>External</b>	1,404	N/A	<b>1,404</b>
<b>Total Trips</b>	<b>1,723</b>	<b>1,404</b>	<b>3,128</b>
<b>Moorpark VMT (SB 375) (Truck)</b>	<b>Moorpark VMT (SB 375) (Truck)</b>		
	<b>Average Daily</b>		
	<b>Moorpark</b>	<b>External</b>	<b>Total VMT</b>
<b>Moorpark</b>	804	37,410	<b>38,215</b>
<b>External</b>	37,620	N/A	<b>37,620</b>
<b>Total VMT</b>	<b>38,425</b>	<b>37,410</b>	<b>75,835</b>

Moorpark Trip Ends (LHDT)	Moorpark Trip Ends (LHDT)		
	Average Daily		
	Moorpark	External	Total Trips
Moorpark	144	419	563
External	419	N/A	419
<b>Total Trips</b>	<b>563</b>	<b>419</b>	<b>982</b>
Moorpark VMT (SB 375) (LHDT)	Moorpark VMT (SB 375) (LHDT)		
	Average Daily		
	Moorpark	External	Total VMT
Moorpark	312	8,366	8,678
External	9,492	N/A	9,492
<b>Total VMT</b>	<b>9,804</b>	<b>8,366</b>	<b>18,171</b>

Moorpark Trip Ends (MHDT)	Moorpark Trip Ends (MHDT)		
	Average Daily		
	Moorpark	External	Total Trips
Moorpark	128	338	466
External	338	N/A	338
<b>Total Trips</b>	<b>466</b>	<b>338</b>	<b>804</b>
Moorpark VMT (SB 375) (MHDT)	Moorpark VMT (SB 375) (MHDT)		
	Average Daily		
	Moorpark	External	Total VMT
Moorpark	366	5,000	5,366
External	5,689	N/A	5,689
<b>Total VMT</b>	<b>6,055</b>	<b>5,000</b>	<b>11,055</b>

Moorpark Trip Ends (HHDT)	Moorpark Trip Ends (HHDT)		
	Average Daily		
	Moorpark	External	Total Trips
Moorpark	47	647	694
External	647	N/A	647
<b>Total Trips</b>	<b>694</b>	<b>647</b>	<b>1,341</b>
Moorpark VMT (SB 375) (HHDT)	Moorpark VMT (SB 375) (HHDT)		
	Average Daily		
	Moorpark	External	Total VMT
Moorpark	126	24,044	24,170
External	22,439	N/A	22,439
<b>Total VMT</b>	<b>22,566</b>	<b>24,044</b>	<b>46,610</b>

## **Appendix L      Tribal Consultation Responses**



## Appendices

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*Santa Ynez Band of Chumash Indians  
Tribal Elders' Council*

*P.O. Box 517 ♦ Santa Ynez ♦ CA ♦ 93460*

*Phone: (805)688-7997 ♦ Fax: (805)688-9578 ♦ Email: elders@santaynezchumash.org*

May 24, 2022

City of Moorpark  
Community Development Department  
799 Moorpark Avenue  
Moorpark, CA 93021

Att.: Doug Spondello, Deputy Community Development Director

Re: City of Moorpark General Plan Amendment

Dear Mr. Spondello:

Thank you for contacting the Tribal Elders' Council for the Santa Ynez Band of Chumash Indians.

At this time, the Elders' Council requests no further consultation on this project; however, we understand that as part of NHPA Section 106, we must be notified of the project.

Thank you for remembering that at one time our ancestors walked this sacred land.

Sincerely Yours,

*Crystal Mendoza*

Crystal Mendoza  
Administrative Assistant | Cultural Resource Management  
Santa Ynez Band of Chumash Indians | Tribal Hall  
(805) 325-5537  
cmendoza@santaynezchumash.org

**From:** [Shanna Farley](#)  
**To:** [Nicole Vermilion](#); [Emma Haines](#)  
**Cc:** [Douglas Spondello](#)  
**Subject:** FW: FTBMI AB52 SB18 City of Moorpark General Plan Update  
**Date:** Thursday, September 1, 2022 1:29:31 PM

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Hi Nicole and Emma,

The following email concludes the consultation from the Fernandefio Tataviam Band of Mission Indians. Upon further clarification, the last email was sent to note that the tribe hopes to provide further consultation on future planning or civic related issues beyond those that would typical warrant cultural tribal consultation as required by State Law. The tribes hope is to engage communities in decisions that may for example include (in his words) things like naming of streets, placement and design of new trails, park planning, etc. His goal seems to not only address existing artifacts or spaces, but also to encourage public education and outreach, to ensure future residents are more educated and aware of the presence of native peoples in the area through outreach, art and public spaces.

We can discuss further, but I wanted to at least clarify how our last discussion evolved.

Thanks,  
Shanna

Shanna Farley  
Principal Planner  
Community Development Department  
City of Moorpark | 799 Moorpark Ave. | Moorpark, CA 93021  
(805) 517-6236 | [sfarley@moorparkca.gov](mailto:sfarley@moorparkca.gov)  
[www.moorparkca.gov](http://www.moorparkca.gov)

---

**From:** Jairo Avila <jairo.avila@tataviam-nsn.us>  
**Sent:** Thursday, September 01, 2022 12:46 PM  
**To:** Shanna Farley <SFarley@moorparkca.gov>  
**Cc:** Miguel Luna <Miguel.Luna@tataviam-nsn.us>  
**Subject:** Re: FTBMI AB52 SB18 City of Moorpark General Plan Update

Hello Shanna,

I appreciate the call and opportunity to go over my last email. The CRM Division asks that the update general plan indicate that the Fernandefio Tataviam Band of Mission Indians request to be notified and consulted on issues related to land use, housing, open space, conservation and recreation. It is important that tribal knowledge, obtained through tribal consultation, is considered during future planning. You can include this information in each of the five element sections or in the tribal consultation section of the

general document as a request made by the FTBMI.

If you have any other questions, please let me know.

Thank you,

**Jairo F. Avila, M.A., RPA.**

*Tribal Historic and Cultural Preservation Officer*

Cultural Resources Management Division

**Tribal Historic and Cultural Preservation Department**

**Fernandeño Tataviam Band of Mission Indians**

1019 Second Street, Suite 1

San Fernando, California 91340

Office: (818) 837-0794

Website: <http://www.tataviam-nsn.us>

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**From:** Jairo Avila <[jairo.avila@tataviam-nsn.us](mailto:jairo.avila@tataviam-nsn.us)>

**Sent:** Thursday, September 1, 2022 9:14 AM

**To:** Shanna Farley <[SFarley@moorparkca.gov](mailto:SFarley@moorparkca.gov)>

**Cc:** Miguel Luna <[Miguel.Luna@tataviam-nsn.us](mailto:Miguel.Luna@tataviam-nsn.us)>

**Subject:** Re: FTBMI AB52 SB18 City of Moorpark General Plan Update

Hello Shanna,

Thank you for the quick response. The CRM Division is not concerned with making changes to the Cultural Resources Report. Our office is interested in assuring that the general plan update is inclusive of the FTBMI and local tribes. As part of our consultation effort, the CRM Division request that FTBMI is recognized and consulted on issues of land use, housing, open space, conservation and recreation.

We can go ahead and conclude consultation on this General Plan Update if necessary. Our office will review the public version once available.

Thank you,

**Jairo F. Avila, M.A., RPA.**

*Tribal Historic and Cultural Preservation Officer*

Cultural Resources Management Division

**Tribal Historic and Cultural Preservation Department**

**Fernandeño Tataviam Band of Mission Indians**

1019 Second Street, Suite 1

San Fernando, California 91340  
Office: (818) 837-0794  
Website: <http://www.tataviam-nsn.us>

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**From:** Shanna Farley <[SFarley@moorparkca.gov](mailto:SFarley@moorparkca.gov)>  
**Sent:** Thursday, September 1, 2022 8:26 AM  
**To:** Jairo Avila <[jairo.avila@tataviam-nsn.us](mailto:jairo.avila@tataviam-nsn.us)>  
**Cc:** Miguel Luna <[Miguel.Luna@tataviam-nsn.us](mailto:Miguel.Luna@tataviam-nsn.us)>  
**Subject:** RE: FTBMI AB52 SB18 City of Moorpark General Plan Update

**[CAUTION]** EXTERNAL Email. Exercise caution.

Good Morning Again,

It is not anticipated that there would be substantial changes to the Cultural Resources Technical Report reviewed by the Tribe. However, the Draft Environmental Impact Report (EIR) for the Moorpark General Plan 2050 is currently in progress. The Draft EIR will incorporate the information included in this Technical Report as well as identify additional mitigation measures to protect Tribal Cultural Resources based on input from the Tribes identified during the SB 18/AB 52 consultation meetings.

Would your tribe like to continue consultation at this time? The expected schedule for release of public documents will be in later in 2022 and early 2023. We have added your tribes email address, [miguel.luna@tataviam-nsn.us](mailto:miguel.luna@tataviam-nsn.us), to our outreach email list so that you will be aware of the publication of the EIR and Draft General Plan for public review.

Please let me know so that we can conclude the aspects of the EIR that will include reference to this consultation timeline.

Thank you,  
Shanna

Shanna Farley  
Principal Planner  
Community Development Department  
City of Moorpark | 799 Moorpark Ave. | Moorpark, CA 93021  
(805) 517-6236 | [sfarley@moorparkca.gov](mailto:sfarley@moorparkca.gov)  
[www.moorparkca.gov](http://www.moorparkca.gov)

---

**From:** Shanna Farley  
**Sent:** Thursday, September 01, 2022 8:17 AM  
**To:** 'Jairo Avila' <[jairo.avila@tataviam-nsn.us](mailto:jairo.avila@tataviam-nsn.us)>  
**Cc:** Miguel Luna <[Miguel.Luna@tataviam-nsn.us](mailto:Miguel.Luna@tataviam-nsn.us)>  
**Subject:** RE: FTBMI AB52 SB18 City of Moorpark General Plan Update

Good Morning Jairo,

I am working with our consultant to prepare an email to summarize the EIR and General Plan and how we expect the tribal concerns to be addressed. Since the documents are in constant preparation, formal changes have not been made as the documents and their various sections will not be publicly available for several months. The intent of this early outreach is to ensure that your tribes concerns are considered and incorporated throughout. I will send over the consultants response as soon as possible.

I am sorry to hear that you will no longer be working for the tribe. I have appreciated your insight and thoughtfulness on various projects for which you have provided consultation. Best of luck on your next endeavors.

Shanna

Shanna Farley  
Principal Planner  
Community Development Department  
City of Moorpark | 799 Moorpark Ave. | Moorpark, CA 93021  
(805) 517-6236 | [sfarley@moorparkca.gov](mailto:sfarley@moorparkca.gov)  
[www.moorparkca.gov](http://www.moorparkca.gov)

---

**From:** Jairo Avila <[jairo.avila@tataviam-nsn.us](mailto:jairo.avila@tataviam-nsn.us)>  
**Sent:** Thursday, September 01, 2022 7:54 AM  
**To:** Shanna Farley <[sFarley@moorparkca.gov](mailto:sfarley@moorparkca.gov)>  
**Cc:** Miguel Luna <[Miguel.Luna@tataviam-nsn.us](mailto:Miguel.Luna@tataviam-nsn.us)>  
**Subject:** Re: FTBMI AB52 SB18 City of Moorpark General Plan Update

Hello Shanna,

I appreciate the opportunity to consult on the Moorpark General Plan Update. I would appreciate if you can provide an overview of our consultation and let me know there are any changes being made or added pertaining to tribal consultation for various components of the general plan.

I would also like to share with you that I will be leaving my position with the FTBMI. As such, our THCP Director, Miguel Luna, or an assigned representative will continue discussions on this plan after September 9, 2022. I have CC'd him in this email. Any future tribal notification letters after 9/9 should be directed to our Tribal President, Rudy J. Ortega, Jr. at [rortega@tataviam-nsn.us](mailto:rortega@tataviam-nsn.us)

It has been a pleasure working with you.

Thank you,

**Jairo F. Avila, M.A., RPA.**

*Tribal Historic and Cultural Preservation Officer*

Cultural Resources Management Division

**Tribal Historic and Cultural Preservation Department**

**Fernandeño Tataviam Band of Mission Indians**

1019 Second Street, Suite 1

San Fernando, California 91340

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---

**From:** Shanna Farley <[SFarley@moorparkca.gov](mailto:SFarley@moorparkca.gov)>

**Sent:** Monday, August 22, 2022 9:47 AM

**To:** Jairo Avila <[jairo.avila@tataviam-nsn.us](mailto:jairo.avila@tataviam-nsn.us)>

**Subject:** RE: FTBMI AB52 SB18 City of Moorpark General Plan Update

**[CAUTION]** EXTERNAL Email. Exercise caution.

Good Morning Jairo,

We met on July 7, 2022 to discuss the General Plan Update. At that time you asked a few questions about the process and how it differed from a formal development review.

Can you confirm that you have concluded your consultation regarding the General Plan Update at this time? If not, can you let me know if you have any further questions or suggested mitigations or details that you would like use to incorporate into the EIR for the General Plan Update?

Thank you,

Shanna

Shanna Farley

Principal Planner

Community Development Department

City of Moorpark | 799 Moorpark Ave. | Moorpark, CA 93021

(805) 517-6236 | [sfarley@moorparkca.gov](mailto:sfarley@moorparkca.gov)

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**From:** Jairo Avila <[jairo.avila@tataviam-nsn.us](mailto:jairo.avila@tataviam-nsn.us)>

**Sent:** Wednesday, June 22, 2022 7:54 AM

**To:** Shanna Farley <[SFarley@moorparkca.gov](mailto:SFarley@moorparkca.gov)>

**Subject:** FTBMI AB52 SB18 City of Moorpark General Plan Update

Dear Shanna Farley,

On behalf of the Cultural Resource Management (CRM) Division of the Fernandeano Tataviam Band of Mission Indians (FTBMI), thank you for the formal notification and opportunity to participate in the consultation for the proposed City of Moorpark General Plan Update. This message constitutes a formal request for tribal consultation under the provisions of the California Environmental Quality Act (CEQA) (as amended, 2015), CA Public Resources Code section 21080.3.1, and Government Code Section 65352.3(a)(2). The CRM Division would like to schedule a call to discuss the Project, incorporation of Tribal perspectives into environmental documents, and management protocols that are inclusive of Tribes. Can you provide me with your availability starting July 5, 2022, to schedule a meeting? I appreciate your time and look forward to discussing this Project with you.

Respectfully,

**Jairo F. Avila, M.A., RPA.**

*Tribal Historic and Cultural Preservation Officer*

Cultural Resources Management Division

**Tribal Historic and Cultural Preservation Department**

**Fernandeano Tataviam Band of Mission Indians**

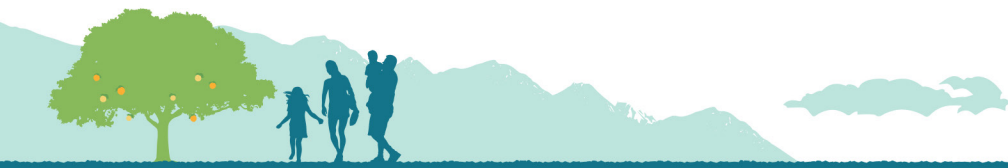
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