



# Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance

Draft Program Environmental Impact Report

SCH#2021080222

*prepared by*

**County of San Luis Obispo**  
Department of Planning & Building  
1055 Monterey Street  
San Luis Obispo, California 93408  
Contact: Airlin Singewald, Planning Manager

**May 2022**

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# Executive Summary

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This document is a Program Environmental Impact Report (PEIR) analyzing the environmental effects of the proposed Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance (“planting ordinance,” “ordinance,” or “proposed project”). This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures associated with the proposed project.

## Project Synopsis

### Project Applicant

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### Project Description

This PEIR has been prepared to examine the potential environmental effects of the County of San Luis Obispo’s (County) PBLUMA Planting Ordinance. The following is a summary of the full project description, which can be found in Section 2, *Project Description*.

The PBLUMA consists of 313,661 acres within unincorporated San Luis Obispo County, and includes the unincorporated communities of Shandon, San Miguel, Creston, and Whitley Gardens. The majority of land within the PBLUMA is designated as Agriculture, Rural Lands, and Residential Rural by the County’s General Plan. Existing uses within the PBLUMA include agricultural uses, including seasonal grazing; residential, commercial, and industrial uses; and vacant, undeveloped land. The PBLUMA is bordered by Monterey County and agriculture uses to the north; grazing land to the east; agriculture uses, single-family residences, and the Los Padres National Forest to the south; and agriculture uses, single-family residences, Camp Roberts, the City of Paso Robles, and the City of Atascadero to the west.

### *Project Characteristics*

Based on direction provided by the County Board of Supervisors, the County is proposing a new ordinance framework that would allow the County to continue exercising its land use authority to regulate planting of production agriculture irrigated from groundwater wells within the PBLUMA after the termination date of the existing agricultural offset requirements on August 31, 2022. On July 12, 2022, the County Board of Supervisors will consider extending the existing agricultural offset

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requirements to January 31, 2023 to coincide with the anticipated effective date of the proposed planting ordinance, assuming it is adopted by the Board of Supervisors in December 2022. If the Board of Supervisors does not extend the existing agricultural offset requirements, then new irrigated plantings within the PBLUMA would not be limited in size or scope under the County's land use regulations.

The new ordinance would allow an exemption for farms to plant irrigated crops that were not able to be planted under the agricultural offset requirements. The proposed ordinance would require a planting permit or exemption verification for new or expanded planting of crops irrigated from groundwater wells within the PBLUMA. It is noted that issuance of planting permits and exemptions allowed under the proposed ordinance would be considered ministerial and would not require discretionary actions. As such, when administering the planting ordinance, County staff could only apply objective criteria to planting permits. The proposed ordinance would be in effect from January 31, 2023 to January 31, 2045, for a total of 22 years.

Under the proposed ordinance, new crop plantings that would be "water neutral" would be eligible for a ministerial planting permit. In this context, "water neutrality" refers to a balanced water demand inventory, where new crops are replacing previous crops and do not result in an overall increase in estimated water demand from groundwater wells within the PBLUMA. Environmental impacts of activities allowed by planting permits are accounted for in this PEIR, and no additional California Environmental Quality Act (CEQA) review would be necessary.

The proposed ordinance would also exempt new or expanded crop plantings with an estimated total water demand of 25 acre-feet per year (AFY) or less per site, including existing crops, with a site defined as contiguous parcels under common ownership upon the ordinance effective date. The property owner would be required to submit a planting plan and ownership verification for approval by the County prior to planting. Environmental impacts of exempt plantings are accounted for in this PEIR, and no additional CEQA review would be necessary.

Additionally, under the proposed ordinance, persons with agricultural offset clearances/exemptions issued under the existing agricultural offset requirements would be issued a new planting permit subject to the timelines and extension requirements of the new ordinance. Persons with a 5-AFY exemption from the agricultural offset requirements would be able to submit an updated planting plan to increase their total estimated irrigation for crops on site to up to 25 AFY under the new ordinance exemption standard. As described above, the environmental impacts of exempt plantings are accounted for in this PEIR, and no additional CEQA review would be necessary.

This PEIR analyzes proposed project activities of site preparation/development, crop planting, crop maintenance, and harvesting. As a reasonable impact scenario, the County has estimated that approximately 240 acres of previously uncultivated land would be affected by the proposed ordinance in the first year it is in effect, with an approximately 240-acre increase per year, for a total of 5,280 acres affected by January 31, 2045. This would equate to an annual increase in groundwater use of approximately 450 AFY, for a total increase of 9,900 AFY by January 31, 2045. This increase in irrigated acreage is based on an estimated issuance of 25-AFY groundwater per site exemptions. Appendix B of this PEIR provides details regarding how the estimated acreage and groundwater usage per year was determined. The reasonable impact scenario for site-specific impacts is based on a 20-acre wine grape vineyard, the crop with the lowest water duty factor in the draft ordinance (1.25 AFY per acre) that would allow the most acreage that could be planted under a 25-AFY per site exemption. The reasonable assumption of a 240-acre annual increase in irrigated crop production in the PBLUMA allowed by the ordinance equates to 12 new 20-acre vineyards per year allowed by the ordinance under a 25-AFY per site exemption.

The proposed ordinance would only regulate new and expanded planting of crops irrigated from groundwater wells within the PBLUMA; the ordinance would not allow new or expanded plantings not authorized by a planting permit or within the 25-AFY exemption. It is also reasonably assumed that new and expanded plantings would be predominately in rural, agricultural areas of the PBLUMA.

It is important to note the proposed ordinance would only regulate new and expanded crop production land uses irrigated from groundwater wells within the PBLUMA. The ordinance would not allow new or expanded plantings not authorized by a planting permit or within the 25-AFY exemption. Existing crop production irrigated from groundwater wells within the PBLUMA would not be affected by the proposed ordinance. The existing overdraft conditions in the Paso Robles Subbasin, which are projected to be 13,700 AFY in the Paso Robles Subbasin Groundwater Sustainability Plan (GSP), will be addressed through management actions implemented by the Groundwater Sustainability Agencies (GSAs). Such actions are separate from the proposed project and therefore are not subject to this PEIR.

## Project Objectives

The proposed planting ordinance would take effect when the County's existing agricultural offset requirements expire and would remain in effect until January 31, 2045. Objectives that the proposed planting ordinance would help the County to meet include:

- Continue to exercise the County's land use authority to regulate the planting of production agriculture irrigated from groundwater wells within the PBLUMA with ministerial permits not subject to CEQA review.
- Require new crop plantings that are to be irrigated from groundwater wells within the PBLUMA to be "water neutral," meaning new crops replace crops that are estimated to have had the same water demand and have been fallowed/removed within a certain time frame.
- Allowance of an exemption for farms to plant irrigated crops that were not able to under the existing agricultural offset requirements.
- Conserve groundwater resources in the PBLUMA for use by production agriculture in a manner that is equitable and consistent with groundwater rights.
- Support and promote a healthy and competitive agricultural industry in the PBLUMA, whose products are recognized in national and international markets as being produced in San Luis Obispo County.
- Encourage and facilitate smaller production agriculture operations.

## Alternatives

As required by CEQA, this PEIR examines alternatives to the proposed project. Studied alternatives include the following five alternatives. Based on the alternatives analysis included in Section 6, *Alternatives*, Alternative 4 was determined to be the environmentally superior alternative. See Section 6, *Alternatives*, for the complete alternatives analysis.

- Alternative 1: No Project – Existing Agricultural Offset Requirements Expire on January 31, 2023
- Alternative 2: Continuation of Existing Agricultural Offset Requirements Through 2025
- Alternative 3: No Exemptions Within Areas of Severe Groundwater Elevation Decline

- Alternative 4: No Exemptions
- Alternative 5: Exemptions Limited to Existing Williamson Act Contracts

**Alternative 1 (No Project – Existing Agricultural Offset Requirements Expire on January 31, 2023)**

assumes that the County Board of Supervisors would not adopt the proposed planting ordinance, and the existing agricultural offset requirements (Land Use Ordinance, Title 22, Section 22.30.204) would expire on January 31, 2023 and would not be further extended. (It is noted that the agricultural offset ordinance is currently set to expire on August 31, 2022. On July 12, 2022, the Board of Supervisors will hold a hearing to consider extending the agricultural offset ordinance to January 31, 2023 to coincide with anticipated effective date of the proposed planting ordinance). Under this alternative, the County would not adopt any land use regulations for new or expanded irrigated crops in the PBLUMA. Because it is not known at this time what future groundwater restrictions will be implemented as part of the Paso Basin GSP, this alternative does not account for a GSP area-specific pumping reduction program or other GSP management actions. Over 22 years (January 31, 2023 to January 31, 2045) with a compounding two percent annual increase from January 31, 2023 through December 31, 2025 and a one percent annual increase from January 1, 2026 through January 31, 2045, the total projected increase in groundwater extraction for the PBLUMA would be 17,254 AFY by 2045, with an annual increase ranging from 666 to 1,306 AFY. Total groundwater extraction would likely be lower once GSP management actions are adopted; however, it is currently too speculative to estimate how much of a reduction would occur.

Under this alternative, agricultural development would be approximately 65 percent greater when compared to the proposed project. As such, total ground disturbance, construction of new accessory infrastructure (e.g., groundwater wells, booster pumps, and ponds/reservoirs), and vehicle trips resulting from Alternative 1 would increase proportionally to the increase in acreage planted compared to the proposed project.

Alternative 1 would result in incrementally greater impacts to all environmental issue areas when compared to the proposed project. Additionally, this alternative would not meet any of the project objectives.

**Alternative 2 (Continuation of Existing Agricultural Offset Requirements Through 2025)** assumes that the County Board of Supervisors would not adopt the proposed planting ordinance and would extend the existing agricultural offset requirements (Land Use Ordinance, Title 22, Section 22.30.204) through December 31, 2025. On January 1, 2026, the existing agricultural offset requirements would expire. Without any groundwater management actions in place, a reasonable projected annual increase in groundwater extractions between January 1, 2026 and January 31, 2045 would be one percent of the total existing agricultural water use. Under this alternative, the existing agricultural offset requirements would serve as interim regulations for groundwater extractions for irrigated crops until the Paso Robles Subbasin GSP area-specific pumping reduction program is implemented, which is anticipated to occur in 2025. Because it is not known at this time what future groundwater restrictions will be implemented as part of the Paso Basin GSP, this alternative does not account for a GSP area-specific pumping reduction program or other GSP management actions. Thus, between January 31, 2023 and January 31, 2045, the total estimated increase in groundwater extraction resulting from Alternative 2 would be 13,360 AFY, and the total estimated increase in new irrigated crop production would be 6,745 acres.

Under this alternative, agricultural development would be approximately 28 percent greater when compared to the proposed project. As such, total ground disturbance, construction of new accessory infrastructure (e.g., groundwater wells, booster pumps, and ponds/reservoirs), and

vehicle trips resulting from Alternative 2 would increase proportionally to the increase in acreage planted compared to the proposed project.

Although this alternative would generally meet the project objectives, Alternative 2 would result in incrementally greater impacts to all environmental issue areas when compared to the proposed project but incrementally less impacts than Alternative 1.

**Alternative 3 (No Exemptions Within Areas of Severe Groundwater Elevation Decline)** assumes the County Board of Supervisors would adopt the planting ordinance as proposed with one change: exclude the 25-AFY exemptions within designated areas of severe groundwater elevation decline. The boundary of the “areas of severe decline” would be defined as the areas where pumping reductions are required by a GSP area-specific reduction program (once adopted by the Paso Robles Subbasin GSAs). In the interim until such GSP program is adopted, the area of severe decline would be defined using the designation in the existing agricultural offset requirements (Section 22.30.205.B, of the County Code), which include areas that experienced a springtime groundwater decline exceeding 50 feet from 1997 through 2013 and from 1997 through 2017 (Figure 6-1), which includes 37,072 acres of the 313,661-acre PBLUMA. Because the boundary of a GSP area-specific pumping reduction program is not defined at this time, the analysis for Alternative 3 is based on the areas of severe groundwater elevation decline as defined in the existing agricultural offset requirements. By January 31, 2045, the total estimated increase in groundwater extraction for Alternative 3 would be approximately 8,712 AFY (or 396 AFY). The estimated reasonable increase in irrigated crop production would be up to 200 acres per year, for a total increase of up to 4,400 acres by January 31, 2045.

Under this alternative, agricultural development would be approximately 17 percent smaller when compared to the proposed project. As such, total ground disturbance, construction of new accessory infrastructure (e.g., groundwater wells, booster pumps, and ponds/reservoirs), and vehicle trips resulting from Alternative 3 would decrease proportionally to the reduction in acreage planted compared to the proposed project. As with the proposed project, the same mitigation measures would be required.

Although this alternative would generally meet the project objectives, Alternative 3 would result in incrementally less impacts to all environmental issue areas when compared to the proposed project and Alternatives 1 and 2. Additionally, Alternative 3 would avoid increased pumping for irrigated agriculture in the most severely impacted areas of the subbasin.

**Alternative 4 (No Exemptions)** assumes the County Board of Supervisors would adopt the proposed planting ordinance modified to exclude the 25-AFY per site exemption allowance; the ordinance would only allow “water neutral” planting permits.

Alternative 4 would not increase total groundwater extraction for irrigated crops within the PBLUMA. It is too speculative to estimate site-specific changes in crop acreage or intensity of labor or vehicle demands for “water neutral” planting permits that may convert from a higher-to-lower or lower-to-higher water and/or labor intensive crop. Therefore, this alternative assumes there would be no increase in overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA.

Overall, in comparison to the proposed project, Alternative 4 would eliminate significant and unavoidable impacts to air quality, biological resources, cultural resources, paleontological resources, GHG emissions, hydrology and water quality, land use and planning, tribal cultural resources, and utilities and service systems. In contrast to the proposed planting ordinance, no mitigation measures would be required for this alternative. However, this alternative would not

meet Objective 3 (allowance of an exemption for farms to plant irrigated crops that were not able to under the existing agricultural offset requirements) or Objective 5 (support and promote a healthy and competitive agricultural industry in the PBLUMA). Alternative 4 would result in incrementally lower impacts to all environmental issue areas when compared to the proposed project and Alternatives 1 through 3.

Because Alternative 4 would result in the least amount of impacts to the environmental issues analyzed in detail in Section 4, *Environmental Impact Analysis*, it is considered the environmentally superior alternative, although it would not meet the project objectives.

**Alternative 5 (Exemptions Limited to Existing Williamson Act Contracts)** assumes the planting ordinance would limit the 25-AFY exemption allowance for use by sites that are entirely or partially under a Williamson Act land conservation contract in place when the planting ordinance takes effect that can meet current Williamson Act qualification requirements with the allowed increase in water use. The estimated reasonable increase in irrigated crop production would be approximately 133.5 acres per year, for a total increase of 2,937 acres by January 31, 2045, resulting in an estimated increase in groundwater extraction of 5,825 AFY, for an average annual increase of 265 AFY.

Under this alternative, agricultural development would be approximately 44 percent smaller when compared to the proposed project. As such, total ground disturbance, construction of new accessory infrastructure (e.g., groundwater wells, booster pumps, and ponds/reservoirs), and vehicle trips resulting from Alternative 5 would decrease proportionally to the reduction in acreage planted compared to the proposed project. As with the proposed project, the same mitigation measures would be required.

Alternative 5 would result in incrementally fewer impacts to all environmental issue areas when compared to the proposed project. However, this alternative would not meet Objective 3 (allowance of an exemption for farms to plant irrigated crops that were not able to under the existing agricultural offset requirements) or Objective 5 (support and promote a healthy and competitive agricultural industry in the PBLUMA).

## Areas of Known Controversy

Section 15123 of the *CEQA Guidelines* requires that a PEIR identify areas of controversy. Potential areas of controversy include those environmental issues areas where a potentially significant, unavoidable impact is identified. During the PEIR scoping process, the County received responses to the Notice of Preparation of a Draft PEIR and input at the PEIR scoping meeting held by the County related to agricultural resources, biological resources, hydrology and water quality, tribal cultural resources, and water supply. See Table 1-1 and Table 1-2 Section 1, *Introduction*, for a summary of written and verbal comments received during the scoping period for the PEIR. The comment letters are included in Appendix A.

## Issues to be Resolved

The proposed project would include amendments to the County Health and Sanitation Ordinance (Title 8), the County Land Use Ordinance (Title 22), and the Agriculture and Conservation and Open Space Elements of the County General Plan. These amendments are necessary to require planting permits for new production agriculture irrigated from groundwater wells within the PBLUMA, and additional detail can be found in Section 2.5.4, *County Ordinance and General Plan Amendments*. Additionally, the proposed ordinance requires approval by the County of San Luis Obispo's Board of

Supervisors, and review by the County of San Luis Obispo’s Airport Land Use Committee and Planning Commission.

## Issues Not Studied in Detail in the PEIR

As indicated in the Initial Study (see Appendix A), there is no substantial evidence that significant impacts would occur to the following issue areas: Aesthetics, Hazards and Hazardous Materials, Population and Housing, Public Services, Recreation, and Wildfire. The Initial Study also determined that the proposed ordinance would not result in adverse impacts for some of checklist questions for Biological Resources, Energy, Geology and Soils, Hydrology and Water Quality, Land Use and Planning, Noise, Transportation, and Utility and Service Systems. A summary of the analysis of issue areas for which no significant adverse impacts were identified is provided in Section 4.14, *Effects Found Not to be Significant*.

## Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if feasible). Mitigation feasibility<sup>1</sup> is limited by the ministerial permitting approval authorized by the proposed planting ordinance, which is limited to the use of fixed standards or objective measurements and cannot require the exercise of subjective judgement by County staff. Mitigation measures that would require County staff to exercise subjective judgement would be infeasible and are therefore not included in this document. Mitigation Measures included in this document can be applied through the ministerial permit process and would not require County staff to exercise subjective judgement. The goal of the ordinance is to provide a ministerial streamlined permitting process to encourage and facilitate smaller agricultural endeavors that would otherwise not be able to compete against larger concerns. Imposing additional measures that are costly and out of proportion with the acreage of land under consideration for purposes of the ordinance would create an undue and disproportional burden on the smaller enterprises that is not required for existing or larger enterprises. Moreover, requiring a discretionary permitting process for agriculture would be inconsistent with the County’s Agriculture Element of the County General Plan, which is the County’s overarching policy document for land use in agricultural areas of the county. The preface to the Agriculture Element Policies Chapter states, “It is the intent to **not** require permits for agriculturally-related projects that are currently exempt, and to **keep** the required level of permit processing for non-exempt projects at the lowest possible level consistent with the protection of agricultural resources and sensitive habitats.” [emphasis included in the original text]

Impacts are categorized as follows:

- **Significant and Unavoidable (Class I).** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per Section 15093 of the *CEQA Guidelines*.
- **Less than Significant with Mitigation Incorporated (Class II).** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the *CEQA Guidelines*.

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<sup>1</sup> Pursuant to Public Resources Code 21061.1, feasible means “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technical factors.”



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- **Less than Significant (Class III).** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact (Class IV).** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

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

Impact	Mitigation Measure(s)	Residual Impact
<b>Agriculture and Forestry Resources</b>		
<b>Impact AG-1:</b> The proposed planting ordinance would not convert Farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) to non-agricultural use. Impacts would be less than significant (Class III).	None required.	Less than significant (Class III).
<b>Impact AG-2:</b> The proposed planting ordinance would not conflict with existing zoning for agricultural use or a Williamson Act contract. Impacts would be less than significant (Class III).	None required.	Less than significant (Class III).
<b>Impact AG-3:</b> The proposed planting ordinance would not convert Farmland to non-agricultural use or convert forest land to non-forest use. Impacts would be less than significant (Class III).	None required.	Less than significant (Class III).
<b>Cumulative Impacts:</b> Cumulative impacts to agricultural resources would be significant. However, the proposed ordinance’s contribution to cumulative impacts would not be considerable.	None required.	Not cumulatively considerable.
<b>Air Quality</b>		
<b>Impact AQ-1:</b> The proposed planting ordinance would not conflict with or obstruct implementation of the San Luis Obispo County Air Pollution Control District (SLOAPCD) 2001 Clean Air Plan. Impacts would be less than significant (Class III).	None required.	Less than significant (Class III).
<b>Impact AQ-2.</b> The proposed planting ordinance would generate criteria pollutants that would exceed applicable SLOAPCD thresholds. Impacts would be significant and unavoidable (Class I).	<b>AQ-1 Construction Emissions Reduction.</b> Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following Condition of Approvals in Section 22.30.205 of Title 8 of the San Luis Obispo County Code: <ul style="list-style-type: none"> <li>▪ Construction equipment used for the development of individual agricultural sites shall be Tier 4 unless the attainment of such equipment proves infeasible.</li> <li>▪ For unpaved roadways associated with the agricultural sites, individual projects shall implement one of the following:</li> </ul>	Significant and unavoidable (Class I).

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Impact	Mitigation Measure(s)	Residual Impact
	<ul style="list-style-type: none"> <li>a) For the life of the project, pave and maintain the roads, driveways, and/or parking areas; or</li> <li>b) For the life of the project, maintain the unpaved roads, driveways, and/or parking area with a dust suppressant (consistent with the San Luis Obispo Air Pollution Control District [SLOAPCD] Approved Dust Suppressant section of the SLOAPCD’s CEQA Handbook), such that fugitive dust emissions do not exceed the APCD 20% opacity limit for greater than 3 minutes in any 60-minute period (APCD Rule 401) or prompt nuisance violations (APCD Rule 402). To improve the dust suppressant’s long-term efficacy, the planting permit applicant or property owners utilizing an exemption shall also implement and maintain design standards to ensure vehicles that use the on-site unpaved road are physically limited (e.g., speed bumps) to a posted speed limit of 15 mph or less.</li> </ul>	
<p><b>Cumulative Impacts:</b> The proposed planting ordinance would not have cumulatively considerable impacts to localized sensitive receptors. However, emissions resulting from the proposed ordinance would be cumulatively considerable from a regional standpoint.</p>	<p>Mitigation Measure AQ-1 (see above).</p>	<p>Cumulatively considerable.</p>
<p><b>Biological Resources</b></p>		
<p><b>Impact BIO-1:</b> The proposed planting ordinance would potentially result in substantial adverse impacts on special status plant and animal species, either directly or through habitat modifications. Impacts would be significant and unavoidable (Class I).</p>	<p>Mitigation Measures UTIL-1 and UTIL-2 (see below).</p>	<p>Significant and unavoidable (Class I).</p>
<p><b>Impact BIO-2:</b> The proposed planting ordinance may result in substantial adverse impacts on sensitive habitats, including riparian and wetland habitats. Impacts would be significant and unavoidable (Class I).</p>	<p><b>BIO-1 Riparian and Wetland Habitat Setback.</b> Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following planting requirement in Section 22.30.205 of Title 22 of the San Luis Obispo County Code:</p> <ul style="list-style-type: none"> <li>▪ Proposed planting plans for planting permits and 25-AFY exemptions shall be required to include a setback of at least 50 feet from the proposed planting areas to the edge of riparian vegetation and wetland areas.</li> </ul>	<p>Significant and unavoidable (Class I).</p>

Impact	Mitigation Measure(s)	Residual Impact
<b>Impact BIO-3:</b> The proposed planting ordinance could indirectly impact water quality within riparian and wetland areas. Impacts would be less than significant (Class III).	None required.	Less than significant (Class III).
<b>Impact BIO-4:</b> The proposed planting ordinance may substantially interfere with wildlife movement, including fish migration and/or impede the use of a native wildlife nursery. Impacts would be significant and unavoidable (Class I).	There are no feasible mitigation measures for this impact.	Significant and unavoidable (Class I).
<b>Cumulative Impacts:</b> Given the large scale of the PBLUMA, the proposed planting ordinance would have a considerable contribution to cumulative biological resources impacts.	There are no feasible mitigation measures for cumulative impacts.	Cumulatively considerable.
<b>Cultural Resources</b>		
<b>Impact CUL-1:</b> The proposed planting ordinance could result in potentially significant impacts to historical resources either directly and/or indirectly, as well as impacts to historical settings from introduction of a new land use (i.e., agriculture). Impacts would be significant and unavoidable (Class I).	There are no feasible mitigation measures for this impact.	Significant and unavoidable (Class I).
<b>Impact CUL-2:</b> The proposed planting ordinance could result in potentially significant and unavoidable impacts to archeological resources (Class I).	There are no feasible mitigation measures for this impact.	Significant and unavoidable (Class I).
<b>Impact CUL-3:</b> The proposed planting ordinance may result in ground-disturbing activities that could result in damage to human remains. Impacts would be less than significant (Class III).	None required.	Less than significant (Class III).
<b>Cumulative Impacts.</b> The proposed planting ordinance would result in a cumulatively considerable contribution to cumulative cultural resource impacts.	There are no feasible mitigation measures for cumulative impacts.	Cumulatively considerable.
<b>Energy</b>		
<b>Impact E-1:</b> The proposed planting ordinance result in a less than significant effect regarding wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation (Class III).	None required.	Less than significant (Class III).

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Impact	Mitigation Measure(s)	Residual Impact
<p><b>Cumulative Impacts:</b> The proposed planting ordinance’s contribution to cumulative impacts due to wasteful, inefficient, and unnecessary consumption of energy related to electricity, diesel, or gasoline fuels would not be cumulatively considerable.</p>	<p>None required.</p>	<p>Not cumulatively considerable.</p>
<p><b>Geology and Soils</b></p>		
<p><b>Impact GEO-1:</b> The proposed planting ordinance would not exacerbate risk of seismic activity. Impacts would be less than significant (Class III).</p>	<p>None required.</p>	<p>Less than significant (Class III).</p>
<p><b>Impact GEO-2:</b> The proposed planting ordinance would not exacerbate risk of liquefaction or other ground failure. Impacts would be less than significant (Class III).</p>	<p>None required.</p>	<p>Less than significant (Class III).</p>
<p><b>Impact GEO-3:</b> The proposed planting ordinance would not exacerbate risk of landslides. Impacts would be less than significant (Class III).</p>	<p>None required.</p>	<p>Less than significant (Class III).</p>
<p><b>Impact GEO-4.</b> The proposed planting ordinance has the potential to impact paleontological resources through ground-disturbing activities. Impacts would be significant and unavoidable (Class I).</p>	<p>There are no feasible mitigation measures for this impacts.</p>	<p>Significant and unavoidable (Class I).</p>
<p><b>Cumulative Impacts.</b> Cumulative impacts related to geology and soils would be less than significant and the proposed ordinance’s contribution to such impacts would not be cumulatively considerable. However, the proposed ordinance’s contribution to cumulative impacts to paleontological resources would be cumulatively considerable.</p>	<p>There are no feasible mitigation measures for cumulative impacts.</p>	<p>Cumulatively considerable (paleontological resources impacts only).</p>
<p><b>Greenhouse Gas Emissions</b></p>		
<p><b>Impact GHG-1.</b> The proposed planting ordinance would generate greenhouse gas emissions in excess of the significant thresholds. Impacts would be significant and unavoidable (Class I).</p>	<p><b>GHG-1 Carbon Sequestration.</b> Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following planting requirement in Section 22.30.205 of Title 22 of the San Luis Obispo County Code:</p> <ul style="list-style-type: none"> <li>▪ The applicants of 25-AFY exemptions shall include conservation practices (e.g., cover cropping, composting) to sequester carbon and/or reduce GHG emissions by at least 0.15 MT CO<sub>2</sub>e per acre of planting area (1:1 offset) as estimated by COMET-Planner according</li> </ul>	<p>Significant and unavoidable (Class I).</p>

Impact	Mitigation Measure(s)	Residual Impact
	to the CDFA Healthy Soils Program guidelines, to be implemented prior to final planting.	
<p><b>Impact GHG-2:</b> The proposed planting ordinance would be potentially inconsistent with applicable plans, policies, and regulations designed to reduce GHG emissions. Impacts would be significant and unavoidable (Class I).</p>	Mitigation Measure GHG-1 (see above).	Significant and unavoidable (Class I).
<p><b>Cumulative Impacts:</b> As GHG emissions are inherently a cumulative impact issue, the proposed ordinance would result in cumulatively considerable impacts to GHG emissions.</p>	Mitigation Measure GHG-1 (see above).	Cumulatively considerable.
<p><b>Hydrology and Water Quality</b></p>		
<p><b>Impact HYD-1:</b> The proposed planting ordinance would not violate any water quality standards or waste discharge requirements, and would not degrade surface water quality. Impacts would be less than significant (Class III).</p>	None required.	Less than significant (Class III).
<p><b>Impact HYD-2:</b> The proposed planting ordinance would result in a combination of decreasing water levels and increasing pollutant amounts throughout the PBLUMA that may degrade surface or groundwater quality. Impacts would be significant and unavoidable (Class I).</p>	Mitigation Measures UTIL-1 and UTIL-2 (see below).	Significant and unavoidable (Class I).
<p><b>Impact HYD-3:</b> The proposed planting ordinance would decrease groundwater supplies such that sustainable groundwater management of the Paso Robles Subbasin would be impeded. Impacts would be significant and unavoidable (Class I).</p>	Mitigation Measures UTIL-1 and UTIL-2 (see below).	Significant and unavoidable (Class I).
<p><b>Impact HYD-4:</b> The proposed planting ordinance would not substantially increase impervious surfaces or obstruct natural or artificial groundwater percolation or recharge. Impacts would be less than significant (Class III).</p>	None required.	Less than significant (Class III).
<p><b>Impact HYD-5:</b> The proposed planting ordinance may result in water quality impacts within the Paso Robles Subbasin that conflict with goals reducing water quality pollution, achieving water quality objectives, and maintaining beneficial uses identified in the Basin Plan. Impacts would be significant and unavoidable (Class I).</p>	Mitigation Measures UTIL-1 and UTIL-2 (see below).	Significant and unavoidable (Class I).

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Impact	Mitigation Measure(s)	Residual Impact
<p><b>Impact HYD-6.</b> Increased groundwater extraction allowed by the proposed planting ordinance would conflict with the GSP’s goal of sustainable groundwater management and with the GSP’s projections for groundwater extraction within the Paso Robles Subbasin. Impacts would be significant and unavoidable (Class I).</p>	<p>Mitigation Measures UTIL-1 and UTIL-2 (see below).</p>	<p>Significant and unavoidable (Class I).</p>
<p><b>Cumulative Impacts:</b> The proposed ordinance would result in a cumulatively considerable contribution to significant cumulative impacts related to groundwater storage and supplies, surface and groundwater quality, and potential inconsistencies with a groundwater management plan.</p>	<p>There are no feasible mitigation measures for cumulative impacts.</p>	<p>Cumulatively considerable.</p>
<p><b>Land Use and Planning</b></p>		
<p><b>Impact LU-1:</b> The proposed planting ordinance would result in potential General Plan policy inconsistencies regarding air quality, groundwater, biological resources, greenhouse gas emissions, cultural, tribal cultural, and paleontological resources. Impacts would be significant and unavoidable (Class I).</p>	<p>Mitigation Measures AQ-1 and GHG-1 (see above) and Mitigation Measures UTIL-1 and UTIL-2 (see above).</p>	<p>Significant and unavoidable (Class I).</p>
<p><b>Cumulative Impacts:</b> The proposed ordinance would incrementally contribute to significant cumulative impacts related to potential conflict with land use plans.</p>	<p>There are no feasible mitigation measures for cumulative impacts.</p>	<p>Cumulatively considerable.</p>
<p><b>Noise</b></p>		
<p><b>Impact NOI-1.</b> The proposed planting ordinance would not result in groundborne noise and vibration in the vicinity of sensitive receivers that have not already been impacted by similar agricultural activity. Impacts would be less than significant (Class III).</p>	<p>None required.</p>	<p>Less than significant (Class III).</p>
<p><b>Cumulative Impacts:</b> Cumulative groundborne noise and vibration impacts would be less than significant, and the proposed ordinance would not contribute to significant cumulative groundborne noise and vibration impacts.</p>	<p>None required.</p>	<p>Not cumulatively considerable.</p>

Impact	Mitigation Measure(s)	Residual Impact
<b>Transportation</b>		
<b>Impact TRA-1:</b> The proposed planting ordinance would generate daily VMT below the significance threshold and would not conflict or be inconsistent with <i>CEQA Guidelines</i> Section 15064.3, subdivision (b). Impacts would be less than significant (Class III).	None required.	Less than significant (Class III).
<b>Cumulative Impacts:</b> Cumulative VMT impacts would potentially be significant. However, the proposed ordinance’s contribution to cumulative impacts would not be considerable.	None required.	Not cumulatively considerable.
<b>Tribal Cultural Resources</b>		
<b>Impact TCR-1.</b> The proposed planting ordinance includes activities that may involve surface excavation, which has the potential to impact previously unidentified tribal cultural resources. Impacts would be significant and unavoidable (Class I).	There are no feasible mitigation measures for this impacts.	Significant and unavoidable (Class I).
<b>Cumulative Impacts:</b> The proposed ordinance would result in a cumulatively considerable contribution to cumulative tribal cultural resource impacts.	There are no feasible mitigation measures for cumulative impacts.	Cumulatively considerable.
<b>Utilities and Service Systems</b>		
<b>Impact UTIL-1:</b> The proposed planting ordinance may require the relocation or construction of new or expanded water, stormwater, and electric power or natural gas facilities in the PBLUMA; however, such relocation and construction would not cause significant environmental effects beyond those already identified in this PEIR. Impacts would be less than significant (Class III).	None required.	Less than significant (Class III).
<b>Impact UTIL-2.</b> Implementation of the proposed planting ordinance would increase water use and exacerbate overdraft conditions within the PBLUMA. Impacts would be significant and unavoidable (Class I).	<p><b>UTIL-1 Well Metering and Reporting.</b> Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following Condition of Approval in Section 22.30.205 of Title 8 of the San Luis Obispo County Code:</p> <ul style="list-style-type: none"> <li>▪ The planting permit applicant shall install well meter(s) in accordance with County standards to measure all groundwater used to irrigate plantings allowed by a planting permit or exemption under this section prior to beginning irrigation of the new or</li> </ul>	Significant and unavoidable (Class I).



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Impact	Mitigation Measure(s)	Residual Impact
	<p>expanded plantings. The property owner or responsible party designated by the property owner must read the water meter and record the water usage on or near the first day of the month with a date-stamped photo or other date verification method, maintain monthly meter records, and submit an annual report of groundwater usage to the County of San Luis Obispo, Department of Planning &amp; Building. The metered groundwater use for irrigation shall not exceed the estimated annual water demand based on the methodology in Section G, subject to the enforcement provisions of Chapter 22.74.</p> <p><b>UTIL-2 Hydrology Report.</b> Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following Condition of Approval in Section 22.30.205 of Title 8 of the San Luis Obispo County Code:</p> <ul style="list-style-type: none"> <li>▪ As part of the planting permit application, the planting permit applicant shall submit a hydrology report to the County of San Luis Obispo. The hydrology report shall verify that the proposed water use on site will not negatively impact nearby wells not owned by the planting permit applicant.</li> </ul>	
<p><b>Cumulative Impacts:</b> Cumulative impacts regarding stormwater drainage would not be significant, and the proposed ordinance would not contribute to cumulative impacts to natural gas or electrical supply. However, the proposed ordinance would result in a cumulatively considerable contribution to significant cumulative water supply impacts.</p>	<p>Mitigation Measures UTIL-1 and UTIL-2 (see above).</p>	<p>Cumulatively considerable (water supply impacts only).</p>

# 1 Introduction

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This document is a Program Environmental Impact Report (PEIR) for the proposed Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance (“planting ordinance,” “ordinance,” or “project”). The PBLUMA includes the area within the boundary from the 2002 Final Report for the Paso Robles Groundwater Basin Study (Fugro West, Inc. and Cleath and Associates 2002) that falls within County jurisdiction, excluding the Atascadero Subbasin. The proposed planting ordinance would require a ministerial land use permit (“planting permit”) for new or expanded planting of irrigated crops using groundwater from wells within the PBLUMA until January 31, 2045. A planting permit would only allow “water neutral” plantings where new crops replace previous crops irrigated within the six previous years and do not result in an overall increase in estimated groundwater demand. The ordinance would allow an exemption for sites (adjacent sites under common ownership when the ordinance takes effect) to plant crops if the total estimated groundwater demand for crop irrigation on site is 25 acre-feet per year (AFY) or less. Existing crop production irrigated from groundwater wells within the PBLUMA and dry farming and grazing operations would not be affected by the proposed ordinance and are not included in the scope of this environmental review.

The proposed project consists of amendments to the County of San Luis Obispo (County) Land Use Ordinance (Title 22), Health and Sanitation Ordinance (Title 8), and Agriculture and Conservation and Open Space Elements of the County General Plan (LRP2021-00001).

This section discusses (1) the project and PEIR background; (2) the legal basis for preparing a PEIR; (3) the scope and content of the PEIR; (4) issue areas found not to be significant by the Initial Study; (5) the lead, responsible, and trustee agencies; and (6) the environmental review process required under the California Environmental Quality Act (CEQA). The proposed project is described in detail in Section 2, *Project Description*.

## 1.1 Environmental Impact Report Background

The County of San Luis Obispo distributed a Notice of Preparation (NOP) of the PEIR for a 30-day agency and public review period starting on August 12, 2021 and ending on September 13, 2021. In addition, the County held a virtual PEIR Scoping Meeting on September 1, 2021 from 6:00 PM to 7:30 PM to provide information to and solicit input from members of public agencies, interested stakeholders, and residents/community members about the scope and focus of the PEIR. The NOP is presented in Appendix A of this PEIR, along with the Initial Study that was prepared for the project.

## 1.2 Purpose and Legal Authority

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

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

Agencies generally prepare PEIRs for programs or a series of related actions that are linked geographically; are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways. By its nature, a PEIR considers the “macro” effects associated with implementing a proposed program such as the planting ordinance.

The *CEQA Guidelines* (Section 15165) encourage the preparation of a single PEIR where individual projects are to be undertaken and where the total undertaking comprises a project/program with significant environmental effects. The proposed planting ordinance falls into this category.

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

If this PEIR is certified by the lead agency’s (County) decision-makers, the County would be able to issue ministerial planting permits for water neutral crop plantings if such plantings meet the requirement presented in Section 2.5, *Project Characteristics*. Certification of the PEIR would also result in exemption of new or expanded crop plantings with an estimated total water demand of 25 AFY or less per site, including existing crops. No subsequent activities that would be allowed by the proposed ordinance would require discretionary permits from the County. Therefore, additional CEQA clearance would not be required for individual requests to allow plantings once the proposed ordinance is effective.

## 1.3 Scope and Content

This PEIR addresses impacts identified by the Initial Study to be potentially significant. The following issues were found to include potentially significant impacts and have been studied in the PEIR:

- Agriculture and Forestry Resources (agriculture only)
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning

- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

In preparing the PEIR, use was made of pertinent County policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents. A full reference list is contained in Section 7, *References*.

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

## 1.4 Lead, Responsible, and Trustee Agencies

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

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. The California Department of Fish and Wildlife (CDFW), California Department of Water Resources (DWR), California Department of Conservation Division of Land Resources, and Regional Water Quality Control Board (RWQCB) are responsible agencies. The PEIR will also be submitted to CDFW and the local RWQCB for review and comment.

A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. CDFW is also a trustee agency because the CDFW has jurisdiction over state listed as endangered or threatened species, including those that be affected by project implementation.

## 1.5 Environmental Review Process

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

1. **NOP, Initial Study, and Scoping Meeting.** After deciding that a PEIR is required, the lead agency (County of San Luis Obispo) must file a NOP soliciting input on the PEIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk’s office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the project could create significant environmental impacts. The County issued an NOP for the preparation of a PEIR and notice of a virtual scoping meeting on September 1, 2021 from 6:00 p.m. to 7:30 p.m. The public scoping meeting was held to solicit input on the scope and content of this PEIR. The 30-day public review period for the NOP began August 12, 2021 and ended on September 13, 2021. The County received eight comment letters based on the NOP, which are summarized in Table 1-1. Verbal comments were also received during public scoping meeting, which are summarized in Table 1-2. Written

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comments received during the public review period for the NOP are included in Appendix A of this PEIR.

2. **Draft PEIR Prepared.** The Draft PEIR must contain: (1) table of contents or index; (2) summary; (3) project description; (4) environmental setting; (5) significant impacts (direct, indirect, cumulative, and growth-inducing impacts, including any unavoidable impacts); (6) alternatives; (7) mitigation measures; and (8) irreversible changes.
3. **Notice of Completion (NOC) and Notice of Availability (NOA).** Upon completion of a Draft PEIR, the lead agency must file an NOC with the State Clearinghouse and prepare an NOA of a Draft PEIR. The lead agency must submit the NOA to the County Clerk's office and send a copy of the NOA to anyone who requested it (*CEQA Guidelines* Section 15087). Additionally, public notice of Draft PEIR availability must be given through at least one of the following procedures: (1) publication in a newspaper of general circulation; (2) posting on and off the project site; and/or (3) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public and respond in writing to all comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a Draft PEIR is 30 days. When a Draft PEIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (Public Resources Code 21091). This Draft PEIR will have a public review period of a minimum of 45 days.
4. **Final PEIR.** A Final PEIR must include: (1) the Draft EIR; (2) copies of comments received during public review; (3) list of persons and entities that commented on the Draft EIR; and (4) responses to comments.
5. **Certification of Final PEIR.** Prior to making a decision on a proposed project, the lead agency must certify that: (1) the Final PEIR has been completed in compliance with CEQA; (2) the Final PEIR was presented to the decision-making body of the lead agency; and (3) the decision-making body reviewed and considered the information in the Final PEIR prior to approving a project (*CEQA Guidelines* Section 15090).
6. **Lead Agency Project Decision.** The lead agency may: (1) disapprove a project because of its significant environmental effects; (2) require changes to a project to reduce and/or avoid significant environmental effects; or (3) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the PEIR, the lead agency must find, based on substantial evidence, that either: (1) the project has been changed to avoid and/or substantially reduce the magnitude of the impact; (2) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or (3) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
8. **Mitigation Monitoring Reporting Program (MMRP).** When the lead agency makes findings on significant effects identified in the PEIR, it must adopt an MMRP for mitigation measures that were adopted or made conditions of approval for a project to mitigate significant effects.
9. **Notice of Determination (NOD).** A lead agency must file an NOD after deciding to certify a Final PEIR (*CEQA Guidelines* Section 15094). A lead agency must file the NOD with the County Clerk's

office. The NOD must be posted for 30 days and sent to anyone previously requesting notification. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

**Table 1-1 Written Comments Received During the Public Scoping Period**

Commenter	Comment/Request	Where Comment is Addressed
California Department of Fish and Wildlife (CDFW)	CDFW requests that the PEIR fully identify potential impacts to biological resources, including but not limited to special status species and habitats known to occupy the project area. Suitable habitat for crotch bumble bee ( <i>Bombus crotchii</i> ) and obscure bumble bee ( <i>Bombus caliginosus</i> ) also occurs in the project vicinity.	Impacts to biological resources, including special status species and habitats, are discussed in Section 4.3, <i>Biological Resources</i> . It is noted that this PEIR analyzes potential environmental impacts for the proposed planting ordinance at a program-level document as the specific sites that would be planted under the ordinance are currently unknown. See Section 4.3, <i>Biological Resources</i> , for a discussion of biological resources impacts associated with the proposed ordinance. Agricultural operators would be required to comply with the Federal and California Endangered Species Acts, Migratory Bird Treaty Act, and California Fish and Game Code, pursuant to federal and State laws. Crotch bumble bee and obscure bumble bee are not addressed in the PEIR because they are not special status species.
	CDFW requests that the PEIR fully identify potential impacts to wetlands and riparian habitats.	Impacts to wetlands and riparian habitat are discussed in Section 4.3, <i>Biological Resources</i> . Agricultural operators would be required to comply with the Federal Clean Water Act and California Fish and Game Code, pursuant to federal and State laws.
	CDFW recommends that the PEIR include an analysis of project-related activities and groundwater pumping in relation to the Paso Robles Subbasin Groundwater Sustainability Plan, including analysis of potential undesirable results and adverse impacts to groundwater dependent ecosystems.	Indirect impacts to wetlands and riparian habitat are discussed in Section 4.3, <i>Biological Resources</i> . Also see Section 4.8, <i>Hydrology and Water Quality</i> .
	CDFW recommends that the PEIR analyze how the drawdown of groundwater from the project may affect surface and subsurface water levels, including drawdown from confined aquifers.	Impacts to surface water and groundwater are discussed in Section 4.8, <i>Hydrology and Water Quality</i> , and Section 4.13, <i>Utilities and Service Systems</i> .
	CDFW recommends that the PEIR include specific triggers for evaluating changes to surface and ground water levels and monitoring wetland and riparian habitats that would be affected by these changes.	Direct and indirect impacts to wetlands and riparian habitat are discussed in Section 4.3, <i>Biological Resources</i> . Also see Section 4.8, <i>Hydrology and Water Quality</i> , and Section 4.13, <i>Utilities and Service Systems</i> . Agricultural operators would be required to comply with the Federal Clean Water Act and California Fish and Game Code, pursuant to federal and State laws.

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Commenter	Comment/Request	Where Comment is Addressed
	<p>CDFW recommends the PEIR fully identify potential impacts to beds, banks, and channels of streams and associated wetlands that may require issuance of a Lake or Streambed Alteration Agreement.</p>	<p>Direct and indirect impacts to jurisdictional areas are discussed in Section 4.3, <i>Biological Resources</i>. Agricultural operators would be required to comply with the Federal Clean Water Act and California Fish and Game Code, pursuant to federal and State laws.</p>
	<p>CDFW encourages that project implementation occur during the bird non-nesting season. However, if project activities must occur during the breeding season (February through mid-September), the project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or the California Fish and Game Code.</p>	<p>Impacts to nesting birds are discussed in Section 4.3, <i>Biological Resources</i>. Agricultural operators would be required to comply with the Federal and California Endangered Species Acts, Migratory Bird Treaty Act, and California Fish and Game Code, pursuant to federal and State laws.</p>
<p>California Department of Conservation, Geologic Energy Management Division (CalGEM)</p>	<p>There are approximately 100 or more plugged and abandoned oil and gas prospect wells located throughout the PBLUMA. These wells, most of which are labeled as “Dry Hole” in CalGEM records, have the potential to be impacted by development activities. Public Resources Code Section 3208.1 establishes well re-abandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. CalGEM categorically advises against building over, or in any way impeding access to, plugged and abandoned oil wells. CalGEM should be contacted for recommendations and comment regarding proposed development in areas where plugged and abandoned oil wells are located.</p>	<p>Agricultural operators would be required to comply with applicable federal laws and regulations, including those pertaining to plugged and abandoned oil wells.</p>
<p>Native American Heritage Commission (NAHC)</p>	<p>The NAHC recommends Assembly Bill (AB) 52 and Senate Bill (SB) 18 consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project as early as possible to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.</p>	<p>A summary of coordination with California Native American tribes per AB 52 and SB 18, as well as potential impacts to tribal cultural resources, are discussed in Section 4.12, <i>Tribal Cultural Resources</i>.</p>
<p>County of Monterey</p>	<p>The County of Monterey requests inclusion of an estimate of reasonably foreseeable new acreage that could be planted throughout the PBLUMA under the proposed planting ordinance.</p> <p>A clear baseline setting needs to be established.</p> <p>The PEIR should analyze impacts to oak woodland removal.</p>	<p>An estimate of baseline conditions and reasonable projections of acreage affected by the proposed ordinance and estimated increase in groundwater extraction is included in Section 2, <i>Project Description</i>, with a detailed explanation included in Appendix B.</p> <p>The proposed ordinance’s potential effects associated with oak woodland removal were</p>

Commenter	Comment/Request	Where Comment is Addressed
		determined to be less than significant in the Initial Study under Response “d” in <i>Agriculture and Forestry Resources</i> (see Appendix A and Section 4.14, <i>Effects Found Not to Be Significant</i> ).
	Foreseeable impacts that the proposed planting ordinance may have on removing agricultural land to provide offsets to allow new plantings should be discussed.	Foreseeable impacts to agricultural resources are discussed in Section 4.1, <i>Agriculture and Forestry Resources</i> .
	In the impact analysis for Agriculture and Forestry Resources, the PEIR should analyze whether the project would cause additional overdraft and result in the loss of existing irrigated cropland due to lack of groundwater availability.	
	Expected impacts resulting from changes to water releases from, or reductions in storage at, Nacimiento Reservoir need to be disclosed.	The proposed ordinance would not increase use of imported State Water Project water or water from Lake Nacimiento. The proposed ordinance would increase use of groundwater, which is discussed in Section 4.8, <i>Hydrology and Water Quality</i> , and Section 4.13, <i>Utilities and Service Systems</i> .
	The status of applicable Groundwater Sustainability Plans (GSPs) should be disclosed in the Draft PEIR.	The Paso Robles Subbasin GSP is discussed in Section 4.8, <i>Hydrology and Water Quality</i> .
	The PEIR should include more than reliance on the six potential sources of water described on page 48 of the Initial Study (see Appendix A) to mitigate for overdraft of the groundwater basin.	As stated on page 48 of the Initial Study (Appendix A), the Paso Robles Subbasin GSP identifies six potential sources of water for projects to make new water supplies available to the Paso Robles Subbasin: recycled water from wastewater treatment plants operated by the San Miguel Community Services District and the City of Paso Robles, State Water Project water, Nacimiento Water Project water, Salinas Dam/Santa Margarita Reservoir water, local recycled water, and flood flows/stormwater from local rivers and streams. Obtaining new sources of water for the County is the responsibility of the GSA and the water agencies within the County and is beyond the scope of the proposed planting ordinance and therefore not addressed in this PEIR.
	The PEIR should analyze whether the proposed project has adequate protections to improve the groundwater overdraft or propose mitigation measures that can avoid or reduce potential impacts.	Impacts related to groundwater overdraft and proposed mitigation measures are discussed Section 4.8, <i>Hydrology and Water Quality</i> , and Section 4.13, <i>Utilities and Service Systems</i> .
	The analysis of cumulative impacts should include Monterey County as an Area of Potential Effect on topics that would have potential environmental effects on Monterey County.	Cumulative impacts are discussed throughout Section 4, <i>Environmental Impact Analysis</i> .



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Commenter	Comment/Request	Where Comment is Addressed
	Description of regulations that minimize or avoid impacts should be included in a Regulatory Setting section rather than as part of the Environmental Setting for clarity.	Each section in Section 4, <i>Environmental Impact Analysis</i> , includes a separate Regulatory Setting section, which is provided immediately following the Setting section.
	The PEIR should provide details of the proposed planting ordinance in the project description or as an appendix.	The activities allowed under the proposed planting ordinance are described in Section 2, <i>Project Description</i> , with additional details included in Appendix B.
Shandon-San Juan Water District Groundwater Sustainability Agency (GSA)	The PEIR needs to address the increased groundwater extraction due to the proposed planting ordinance and effect on groundwater basin overdraft.	Potential impacts associated with increased groundwater extraction from the proposed ordinance are discussed throughout Section 4, <i>Environmental Impact Analysis</i> . Existing conditions and impacts to groundwater supply are discussed in Section 4.8, <i>Hydrology and Water Quality</i> , and Section 4.13, <i>Utilities and Service Systems</i> .
	The PEIR needs to define “site” and consider the site definition in impact analysis.	The project site for the proposed planting ordinance is described in Section 2, <i>Project Description</i> . Potential impacts discussed throughout Section 4, <i>Environmental Impact Analysis</i> , are based on the project site and the proposed activities under the ordinance.
	The PEIR should consider using the existing GSP and Sustainable Groundwater Management Act (SGMA) as the preferred alternative.	The Paso Robles Subbasin GSP is currently being developed separately from the proposed planting ordinance. However, Alternatives 3 through 5 included in Section 6, <i>Alternatives</i> , would result in reduced groundwater use, compared to the proposed ordinance.
Environmental Center of San Luis Obispo (ECOSLO)	The PEIR should consider a reduced project alternative that would not allow for groundwater pumping to exceed current regulations.	Alternative 4 included in Section 6, <i>Alternatives</i> , would result in no groundwater usage.
San Luis Obispo County Farm Bureau	The PEIR should include the assumptions used to estimate the number of potential sites that could increase water usage under the proposed planting ordinance.	The project site and the reasonable impact scenario under the proposed planting ordinance are described in Section 2, <i>Project Description</i> , with additional details regarding assumptions included in Appendix B.
	The PEIR should explain how individual “sites” that could be affected by the proposed project is defined.	
	The PEIR should discuss how changes to the levels of groundwater could affect hydrology in the PBLUMA.	
	The PEIR should consider including a fallowing registry or the allowance of off-site offsets to mitigate impacts from increased groundwater pumping.	
	Long-term effects of the proposed planting ordinance should be disclosed in the PEIR.	Potential impacts, including long-term effects, associated with the proposed ordinance are discussed throughout Section 4, <i>Environmental Impact Analysis</i> .

Commenter	Comment/Request	Where Comment is Addressed
	The EIR should consider the potentially significant impact on agriculture resources from restricting irrigated crop planting beyond anticipated GSP management actions for the life of the proposed planting ordinance and the increased regulatory burden for growers from creating a second set of regulations in addition to GSP management actions.	As discussed in Section 4.1, <i>Agriculture and Forestry Resources</i> , impacts to agricultural resources under the proposed ordinance would be less than significant and no mitigation is required.
	The PEIR should consider alternatives that would still allow farms to plant irrigated crops that have not been able to under the Agricultural Offset Requirements.	One of the objectives of the proposed planting ordinance is to allow an exemption for farms to plant irrigated crops that were not able to under the existing agricultural offset requirements. See Section 2, <i>Project Description</i> .
	The PEIR should consider mitigating impacts to groundwater supply by requiring investment in new sources.	As discussed in Section 4.8, <i>Hydrology and Water Quality</i> , and Section 4.13, <i>Utilities and Service Systems</i> , the proposed ordinance's impacts to groundwater supply would be significant and unavoidable.
Sierra Club, Santa Lucia Chapter	The PEIR should consider the worst-case scenario of the maximum acreage and AFY of groundwater that might be affected/used under the proposed planting ordinance.	As discussed in Section 2, <i>Project Description</i> , the environmental impact analysis in the PEIR is based on a reasonable impact scenario under the proposed ordinance. Additional details regarding how the reasonable impact scenario was determined are included in Appendix B.
	The PEIR should specifically assess potential impacts and conflicts with the GSP. The PEIR should also consider the deficiencies in the GSP cited in DWR's June 3, 2021 letter.	The proposed ordinance's impacts and conflicts with the Paso Robles Subbasin GSP are discussed in Section 4.8, <i>Hydrology and Water Quality</i> .
	The PEIR needs to be based on current water data for the Paso Robles Groundwater Subbasin, including current groundwater usage for agricultural land use, and current crop water demands, accounting for drought and excessive heat conditions.	The reasonable impact scenario used to analyze environmental impacts in this PEIR is described in Section 2, <i>Project Description</i> . See Appendix B for a detailed explanation of how the reasonable impact scenario was determined.
	The PEIR should assess impacts to hydrology considering long-term drought and extreme heat trends and how cumulative changes in vegetative cover resulting from the planting ordinance would affect the groundwater basin's ability to recharge.	The proposed ordinance's impacts to water resources are discussed in Section 4.8, <i>Hydrology and Water Quality</i> , and Section 4.13, <i>Utilities and Service Systems</i> . See Section 4.3, <i>Biological Resources</i> , for a discussion of impacts to sensitive vegetation communities.
	The PEIR should disclose impacts, including long-term and cumulative impacts, to biological resources, geology, and soils while considering global climate change (e.g., changes in intensity and frequency of rainfall patterns).	Long-term and cumulative impacts associated with the proposed planting ordinance are discussed throughout Section 4, <i>Environmental Impact Analysis</i> . Specifically, impacts to biological resources are included in Section 4.3, <i>Biological Resources</i> , impacts related to geology and soils are included in Section 4.6, <i>Geology and Soils</i> , and impacts associated with global climate change are

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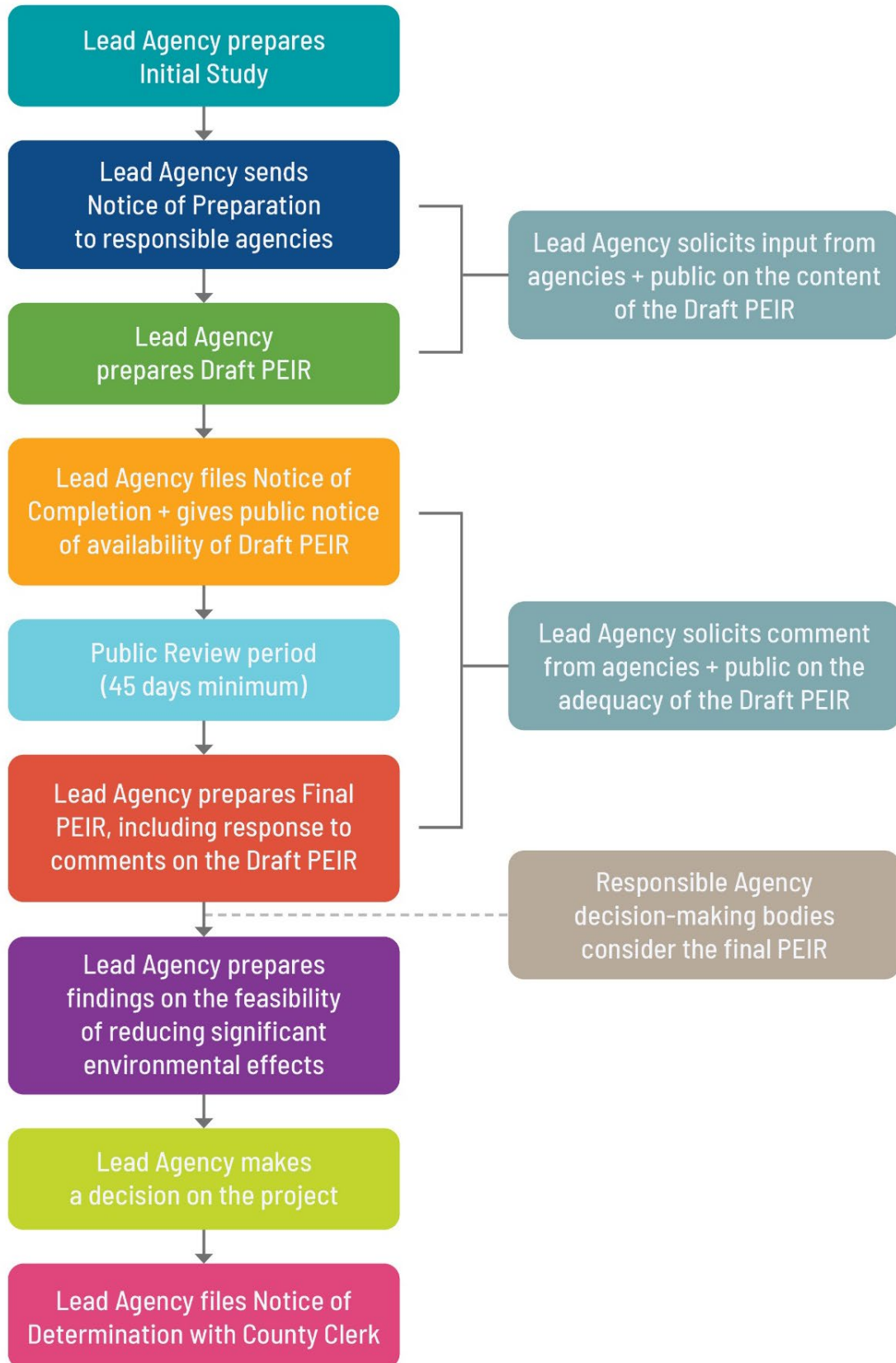
Commenter	Comment/Request	Where Comment is Addressed
		included in Section 4.7, <i>Greenhouse Gas Emissions</i> .
	The EIR should discuss how the proposed ordinance would directly conflict with the goals of SGMA, GSA, and the Paso Robles Groundwater Basin GSP.	The proposed ordinance’s potential to conflict with the Paso Robles Subbasin GSP are discussed in Section 4.8, <i>Hydrology and Water Quality</i> .
	The PEIR should disclose impacts of additional groundwater pumping on rural residential wells.	The proposed ordinance’s impacts to groundwater supply are discussed in Section 4.13, <i>Utilities and Service Systems</i> .
	The PEIR should analyze the impacts of potential degradation of water quality related to additional groundwater pumping.	The proposed ordinance’s impacts to water quality are discussed in Section 4.8, <i>Hydrology and Water Quality</i> .
	The County should consider conducting individual site visits to determine if a previously unplanted site has adequate emergency access, and how the County would require agriculture access road improvements.	The proposed ordinance’s impacts related to emergency access were determined to be less than significant in the Initial Study under Response “d” in <i>Transportation</i> (see Appendix A and Section 4.14, <i>Effects Found Not to be Significant</i> ).
	The PEIR should consider project impacts on wildlife corridors and movement throughout the PBLUMA.	Potential project impacts to wildlife corridors/movement are discussed in Section 4.3, <i>Biological Resources</i> .
	The PEIR should consider if additional herbicides, pesticides, and rodenticides might pose a threat to wildlife and protected species.	Indirect impacts to sensitive species are discussed in Section 4.3, <i>Biological Resources</i> .

**Table 1-2 Verbal Written Comments Received During the Public Scoping Period**

Topic	Comment/Request	Where Comment is Addressed
Groundwater Usage	The PEIR needs to provide information on how the baseline and projected groundwater use was estimated.	The baseline and projected groundwater usage are included in Section 2, <i>Project Description</i> , with detailed explanations included in Appendix B.
	The PEIR should provide a comparison of existing and projected groundwater use.	The PEIR provides a comparison between baseline and projected groundwater use throughout the document. See Section 2, <i>Project Description</i> , and Appendix B for details regarding the baseline and projected groundwater use.
	The PEIR should address consistency with the GSP.	The proposed ordinance’s consistency with the Paso Robles Subbasin GSP and impacts to groundwater are discussed in Section 4.8, <i>Hydrology and Water Quality</i> .
	The PEIR should discuss how the proposed project would impact the Paso Basin groundwater within Monterey County.	The proposed ordinance’s impacts to groundwater is discussed in Section 4.8, <i>Hydrology and Water Quality</i> . Cumulative impacts to the neighboring Salinas Valley-Upper Valley Aquifer is discussed in Section 4.8.4, <i>Cumulative Impacts</i> , in Section 4.8, <i>Hydrology and Water Quality</i> .

Topic	Comment/Request	Where Comment is Addressed
Agricultural Resources	The PEIR should include an impacts analysis on Williamson Act contract lands.	Potential impacts to Williamson Act contract lands are discussed in Section 4.1, <i>Agriculture and Forestry Resources</i> .
Alternatives	The PEIR should consider alternatives to the proposed planting ordinance, including the current agricultural offset requirements as an alternative.	Section 6, <i>Alternatives</i> , includes five alternatives to the proposed ordinance. The current agricultural offset requirements are set to expire on August 31, 2022; however, County Department of Planning & Building staff have applied for an extension of the existing agricultural offset requirements until January 31, 2023, which is expected to be approved by the County Board of Supervisors on July 12, 2022.
	The preferred alternative should be in compliance with the GSP and SGMA.	As discussed in Section 4.8, <i>Hydrology and Water Quality</i> , the project is potentially inconsistent with the GSP due to the increased groundwater extraction allowed by the proposed planting ordinance.
	The PEIR should include an alternative that requires use of other water sources (besides groundwater) for new and additional commercial crop plantings.	As stated on page 48 of the Initial Study, the Paso Robles Subbasin GSP identifies six potential sources of water for projects to make new water supplies available to the Paso Robles Subbasin: recycled water from wastewater treatment plants operated by the San Miguel Community Services District and the City of Paso Robles, State Water Project water, Nacimiento Water Project water, Salinas Dam/Santa Margarita Reservoir water, local recycled water, and flood flows/stormwater from local rivers and streams. Obtaining new sources of water for the County is the responsibility of the GSA and the water agencies within the County and is beyond the scope of the proposed planting ordinance and therefore not addressed in this EIR.

Figure 1-1 PEIR Environmental Review Process



## 2 Project Description

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This section describes the proposed Paso Basin Land Use Management Area Planting (PBLUMA) Ordinance (“planting ordinance,” “ordinance,” or “project”), including the applicant of the planting ordinance, the affected project area, the characteristics of the project, and objectives related to the proposed project.

The proposed planting ordinance would take effect when the County’s existing agricultural offset requirements would expire on August 31, 2022 and would remain in effect until January 31, 2045. The County Board of Supervisors is scheduled to hold a hearing on July 12, 2022 to consider extending the existing agricultural offset requirements to January 31, 2023 to coincide with the anticipated effective date of the proposed planting ordinance, assuming it is adopted by the Board of Supervisors in December 2022. If the Board of Supervisors does not extend the existing agricultural offset requirements, then new irrigated plantings within the PBLUMA would not be limited in size or scope under the County’s land use regulations.

See Section 2.5, *Project Characteristics*, for details regarding the proposed project. Issuance of planting permits allowed under the proposed ordinance would be considered ministerial and would not require discretionary actions.

### 2.1 Project Applicant

County of San Luis Obispo  
Department of Planning & Building  
976 Osos Street  
San Luis Obispo, California 93408

### 2.2 Lead Agency Contact Person

Kylie Hensley, Planner  
County of San Luis Obispo  
Department of Planning & Building  
976 Osos Street  
San Luis Obispo, California 93408  
805-781-4979

### 2.3 Project Background

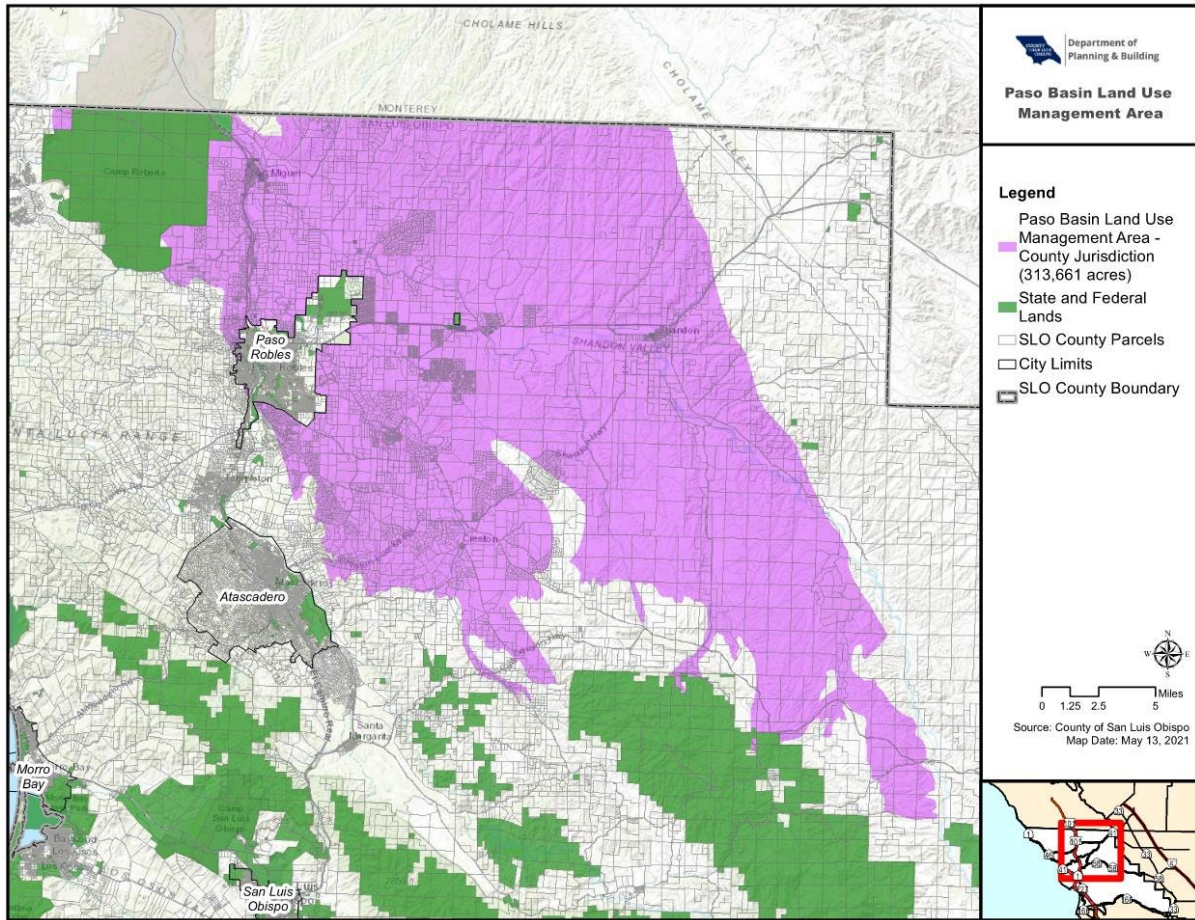
#### 2.3.1 Paso Basin Land Use Management Area (PBLUMA)

The PBLUMA includes 313,661 acres located within the Shandon-Carrizo (North), El Pomar-Estrella, Salinas River, Las Pilitas, Los Padres (North), Adelaida, and Nacimiento Sub Areas of the North County Planning Area and includes the communities of Shandon, San Miguel, Creston, and Whitley Gardens. The PBLUMA was created using the boundary from the 2002 Final Report Paso Robles Groundwater Basin Study (Fugro West, Inc. and Cleath and Associates 2002; excluding the Atascadero Sub-basin), per County Board of Supervisors direction, modified to exclude federal and State lands as well as land within the City of Paso Robles and Monterey County. The PBLUMA is

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defined in the proposed planting ordinance and would differ from the “Salinas Valley – Paso Robles Area Subbasin” (Paso Robles Subbasin) boundary defined by the California Department of Water Resources (DWR) and used for Sustainable Groundwater Management Act (SGMA) purposes (see below). Figure 2-1 shows the location of the PBLUMA within unincorporated San Luis Obispo County.

**Figure 2-1 Paso Basin Land Use Management Area (PBLUMA)**



In this Program Environmental Impact Report (PEIR), “Paso Robles Subbasin” is used to refer to the groundwater resource, as defined by DWR’s physical boundary and used for Sustainable Groundwater Management Act (SGMA) efforts. “PBLUMA” is used to refer to the area subject to the proposed planting ordinance, as defined in the ordinance.

### 2.3.2 Sustainable Groundwater Management Act

California depends on groundwater for a major portion of its annual water supply, particularly during times of drought. This reliance on groundwater, in addition to several other factors, has resulted in unsustainable groundwater usage in many of California’s basins, including the Paso Robles Subbasin in San Luis Obispo County.

On September 16, 2014, California Governor Jerry Brown signed into law a three-bill legislative package (composed of Assembly Bill [AB] 1739, Senate Bill [SB] 1168, and SB 1319), collectively known as the Sustainable Groundwater Management Act (or “SGMA”). SGMA was enacted to bring

all groundwater basins in California into sustainable conditions, with balanced levels of use and recharge. To accomplish this, SGMA identifies deadlines for the formation of Groundwater Sustainability Agencies (GSAs), development of Groundwater Sustainability Plans (GSPs), and achievement of sustainable groundwater conditions, with deadlines corresponding to basin designations and priority rankings determined by DWR and published in DWR's Bulletin 118. SGMA requires that all high- and medium-priority groundwater basins be managed by a designated GSA or collection of GSAs in accordance with a GSP (or coordinated GSPs) or GSP alternative, unless the basin is identified as an exempt adjudicated area (and thereby managed in accordance with an Adjudication Judgement) and certain conditions are met.

SGMA requires each GSA of a basin identified by DWR subject to critical conditions of overdraft to adopt a GSP for its basin by January 31, 2020, and achieve sustainable groundwater conditions within 20 years, by 2040. The critically overdrafted designation is applied by DWR to basins where continuation of current water management practices would likely result in significant adverse effects associated with groundwater overdraft, including the consideration of environmental, social, and economic impacts; such typically result from a chronic lowering of groundwater levels, which indicate a persistent depletion of supply if continued over the planning and implementation horizon. For high- and medium-priority groundwater basins (not critically overdrafted), GSAs must adopt a GSP by January 31, 2022 and achieve sustainable groundwater conditions by 2042.

The long-term planning required by SGMA is meant to provide a buffer between the effects of drought and climate change on available water supplies, and the reliability of such water supplies through droughts of varying intensities.

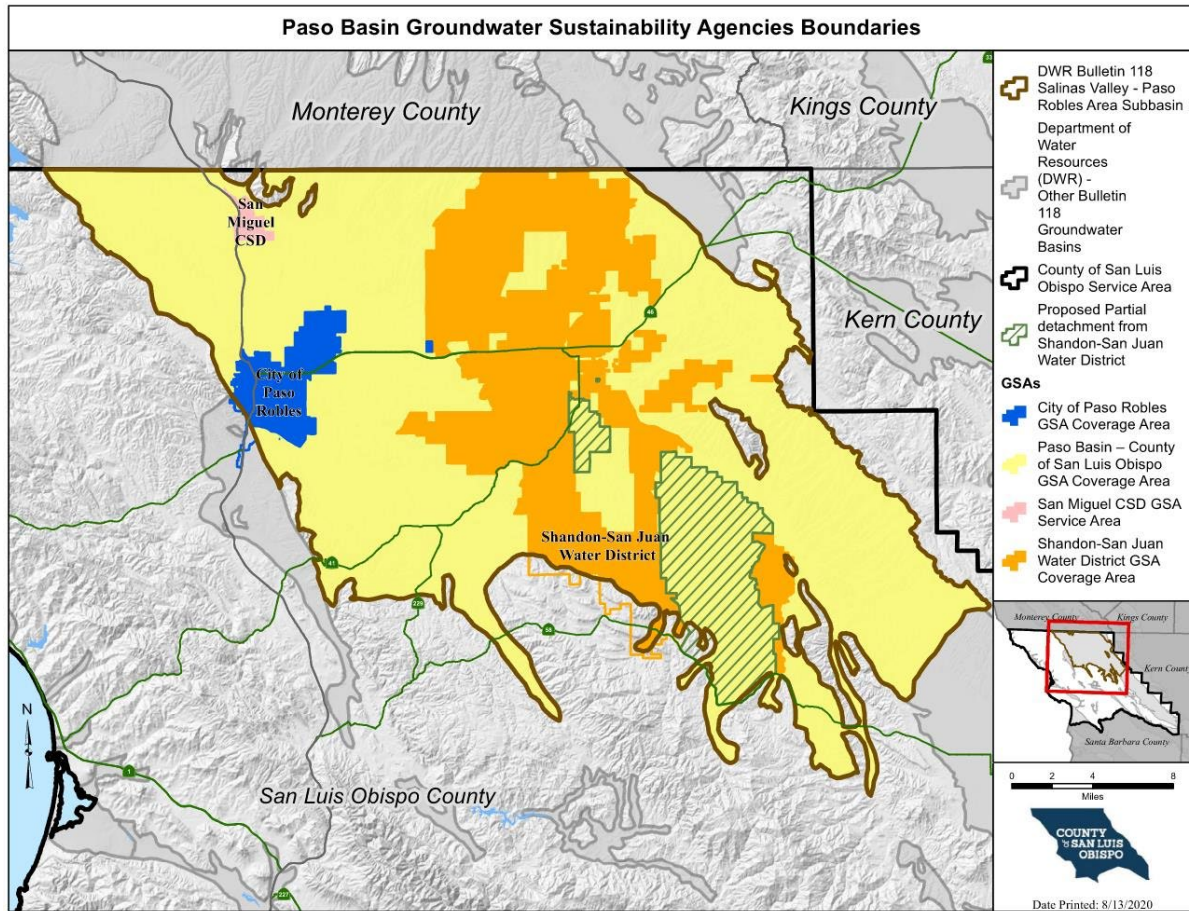
A planting permit issued under the proposed planting ordinance would not be construed as bestowing any vested right or entitlement to pump groundwater from the Paso Robles Subbasin. In addition, the use of groundwater from the Paso Robles Subbasin in connection with allowed plantings would be subject to the Paso Robles Subbasin GSP and any amendments thereto, as well as any regulations and requirements that may be adopted to implement the GSP, including, but not limited to, monitoring and reporting requirements, groundwater pumping fees, and mandatory pumping limitations. For more information about the GSP, visit [www.slocounty.ca.gov/sgma](http://www.slocounty.ca.gov/sgma).

### 2.3.3 Existing Groundwater Conditions

DWR has designated the Paso Robles Subbasin as one of 21 groundwater basins in the state that are critically overdrafted. As noted above, GSPs for critically overdrafted basins were required to be adopted by January 31, 2020. There are currently four local agencies within the Paso Robles Subbasin that have become GSAs under the process described in SGMA and that are collectively responsible for implementing a basin-wide GSP, including: the County of San Luis Obispo, City of Paso Robles, Shandon-San Juan Water District, and San Miguel Community Services District. Figure 2-2 shows the boundaries of the four GSAs within Paso Robles Subbasin.



**Figure 2-2 Paso Robles Subbasin GSAs**



On February 11, 2019, DWR published its Final 2018 Basin Boundary Modifications (DWR 2019), which revised the Paso Robles Subbasin boundary that was previously established in DWR’s 2003 Bulletin 118 (DWR 2003); this is important to note because SGMA applies DWR’s most recent boundaries, which are not reflected in maps of the Paso Robles Subbasin that were published before 2019. As currently defined by DWR and therefore applied under SGMA, the northern boundary of the Paso Robles Subbasin (as a subbasin of the Salinas Valley Groundwater Basin) coincides with the San Luis Obispo County-Monterey County boundary such that the Paso Robles Subbasin is located entirely within San Luis Obispo County and formal consultation between the San Luis Obispo County GSAs and the Monterey County GSA is optional.

Paso Robles Subbasin is designated as a water supply with a Level of Severity (LOS) III pursuant to the County’s Resource Management System, indicating that water demand in the basin equals or exceeds the dependable supply, or the time required to correct the problem is longer than the time available before the dependable supply is reached; this is consistent with the DWR’s determination that the Paso Robles Subbasin is critically overdrafted. The Paso Robles Subbasin GSAs published a GSP for the Paso Robles Subbasin on November 13, 2019 and each individually adopted the GSP as required by SGMA for submittal to DWR before the January 31, 2020 deadline.

The GSP projects a 13,700-acre-feet per year (AFY) deficit in groundwater storage in the Paso Robles Subbasin (i.e., each year, approximately 13,700 acre-feet [AF] more water exits the subbasin than is recharged to it). The Paso Robles Subbasin Water Year 2020 Annual Report prepared to meet SGMA

reporting requirements estimates 90 percent of groundwater extractions is used for the agriculture sector.

### 2.3.4 Existing Agricultural Offset Requirements

The County's existing agricultural offset requirements are currently set to expire on August 31, 2022. On July 12, 2022, the Board of Supervisors will hold a hearing to consider extending the agricultural offset ordinance to January 31, 2023 to coincide the with anticipated effective date of the proposed planting ordinance. The proposed planting ordinance would remain in effect until January 1, 2045.

The County adopted an urgency ordinance for the Paso Basin in August 2013 before SGMA went into effect, in response to declining groundwater levels, groundwater wells going dry, drought conditions, and large acreages of new irrigated crop plantings being planted on properties overlying the groundwater basin. The urgency ordinance required new development and new irrigated crop plantings to offset new water use at a 1:1 ratio. The urgency ordinance expired in August 2015.

The County adopted agricultural offset requirements (Land Use Ordinance, Title 22, Section 22.30.204) in October 2015 to continue exercising land use authority to maintain water neutrality for irrigated crop production in the Paso Basin. In this context, "water neutrality" refers to a balanced water supply inventory, where new uses (of groundwater) that are replacing previous uses or relying on unused water supply credits do not result in an overall increase in water demands to the groundwater basin. The existing ordinance requires growers in the Paso Basin to apply for and receive Agricultural Offset Clearance from the County Department of Planning & Building before planting new or expanded irrigated crops, and requires water use for the crops to be offset at a 1:1 ratio per the crop-specific water duty factors specified in the ordinance. The ordinance has been interpreted to only apply to production agriculture, as defined in the Agriculture Element of the County's General Plan.

In addition, the ordinance allows an exemption for the continuation of annual and rotational crop production and replanting of the same crop type and acreage if the crops have been irrigated within the last five years ("lookback period") and a one-time planting using up to 5 AFY per site for unirrigated properties outside areas identified by the County monitoring network and hydrologic modeling to be experiencing severe groundwater elevation decline.

The ordinance was intended to be a temporary measure set to expire when the Paso Robles Subbasin GSP was adopted. In November 2019, the ordinance was amended to extend the termination date to January 1, 2022 to avoid a gap in management actions, accounting for the time needed to implement the GSP. The ordinance was also amended to no longer allow transferring of planting credits between sites (known as "Off-Site Offsets"). In August 2021, the ordinance was amended to extend the termination date to August 31, 2022 to avoid a gap in management actions, accounting for the time needed to develop the new planting ordinance. Additionally, as noted above, on July 12, 2022, the County Board of Supervisors is scheduled to consider extending the existing ordinance to January 31, 2023 to coincide with the anticipated effective date of planting ordinance.

### 2.3.5 Paso Robles Subbasin GSP and GSA Authority

The Paso Robles Subbasin GSP calls for the development and implementation of an area-specific pumping reduction program and certain basin-wide management actions (i.e., monitoring and outreach and promotion of best management practices [BMPs], stormwater capture and voluntary

fallowing) to achieve groundwater sustainability by 2040. GSP implementation requires development of a long-term governance structure as well as developing and adopting the regulations for identified programs and management actions. Regulations adopted by individual GSAs related to pumping limitations would need to be substantially identical to assure a consistent methodology for identifying those areas across the Paso Robles Subbasin. Although the GSP is not included as part of the proposed project, the specific GSP policies and monitoring program are discussed in more detail in the environmental impact analysis sections of this PEIR, as necessary.

GSP implementation by GSA authorities would occur in tandem with administration of the proposed planting ordinance by County land use authority. SGMA specifies that nothing in SGMA or in a GSP shall be interpreted as superseding county land use authority; however, GSAs have the express statutory authority to control groundwater extractions by regulating or limiting extractions from individual wells, subject to certain limitations and water rights considerations. Therefore, GSA management actions may limit the ability of groundwater pumpers to irrigate plantings allowed by the proposed planting ordinance. In addition, the project would likely regulate plantings in certain areas where water use is unlikely to be limited by the GSAs (only area-specific pumping limitations are contemplated in the GSP) and regulate plantings for which an adequate allocation exists under GSP regulations.

## 2.4 Project Location and Characteristics

### 2.4.1 Current Land Use Designation and Zoning

The PBLUMA, the area subject to the proposed planting ordinance, is within unincorporated San Luis Obispo County. The majority of the land in the PBLUMA is designated by the County's General Plan as Agriculture, Rural Lands, and Residential Rural. The PBLUMA includes the unincorporated communities of Shandon, San Miguel, Creston, and Whitley Gardens. Existing uses within the PBLUMA include agricultural uses, including seasonal grazing; residential, commercial, and industrial uses; and vacant, undeveloped land.

### 2.4.2 Surrounding Land Uses

The PBLUMA is bordered by Monterey County and agriculture uses to the north; grazing land to the east; agriculture uses, single-family residences, and the Los Padres National Forest to the south; and agriculture uses, single-family residences, Camp Roberts, the City of Paso Robles, and the City of Atascadero to the west.

### 2.4.3 Current Irrigated Crop Acreage

Table 2-1 shows the annual estimates of irrigated crop acreage within the PBLUMA between 2016 and 2020 (2021 data were not yet available at the time this Draft PEIR was circulated for public review). As shown, annual irrigated crop lands ranged between 37,630 and 38,835 acres during this four-year timeframe. Irrigated crop types in the PBLUMA include:

- **Alfalfa.** Alfalfa is a herbaceous legume and hay crop with high protein content.
- **Cannabidiol (CBD) Hemp.** CBD hemp is a field-grown crop. It can also be grown indoors, which would fall into the nursery crop type category. On May 5, 2020, the County adopted planning standards specific to industrial CBD hemp cultivation, restricting it to specific land use categories with minimum site sizes and specific setback requirements (County Land Use Ordinance Section 22.30.244). Outdoor hemp is only allowed in Agriculture and Rural Lands land use categories on

sites at least 400 acres and must be setback at least 2,000 feet from adjacent property lines, 1.0 mile from Urban Reserve Lines/Village Reserve Lines, 50 feet from riparian vegetation, and 100 feet from wetlands.

- **Citrus.** Includes avocados, grapefruits, lemons, oranges, olives, kiwis, and pomegranates. Olives are the most common citrus crops in the PBLUMA.
- **Deciduous.** Pistachios are the most common deciduous crops in the PBLUMA.
- **Nursery.** Nursery crops are grown for sale or for planting elsewhere and may include perennial or annual crops grown under cover or outdoors. Indoor cultivation of industrial CBD hemp falls within this crop type. The County hemp ordinance restricts indoor cultivation of industrial hemp to Agriculture, Rural Lands, and Rural Residential land use categories on sites at least 5.0 acres with 100 foot setbacks from off-site residences.
- **Pasture.** Irrigated pasture includes irrigated grasses or grass mixes, such as with clover, used for grazing livestock on site, not harvested for use as hay or silage. Typically, pasture is used for grazing horses in the PBLUMA.
- **Vegetable.** Vegetable crops grown in the PBLUMA include carrots.
- **Vineyard.** Vineyard crops include table and wine grapes. There are only a few table grape growers in the County; the majority of vineyards in the PBLUMA are for wine grape production.

**Table 2-1 Annual Estimates of Irrigated Crop Acreage within the PBLUMA**

CY	Annual Crop Estimates (acres)							Total
	Alfalfa	Citrus	Deciduous	Nursery	Pasture	Vegetable	Vineyard	
2016	1,359	396	469	57	619	1,691	34,244	<b>38,835</b>
2017	951	400	339	57	602	692	34,590	<b>37,630</b>
2018	1,238	404	538	48	475	871	35,089	<b>38,662</b>
2019	1,192	412	709	1	688	810	33,952	<b>37,764</b>
2020	922	430	1,002	1	829	952	33,504	<b>37,640</b>

Source: Based on annual irrigated crop reporting data provided by the County Public Works Department

## 2.4.4 Current Groundwater Extractions

As shown in Table 2-2, between 2017 and 2020, an average of 66,873 AFY has been extracted from groundwater wells within the PBLUMA. Of this total, 96 percent, or an average of 64,025 AFY, is used for agricultural purposes. Appendix B to this PEIR includes details regarding how baseline groundwater extractions within the PBLUMA were estimated for the proposed ordinance.

**Table 2-2 Baseline Groundwater Extractions within PBLUMA (2017-2020 Average per Year)**

Sector	Groundwater Extraction (AFY)
Agriculture	64,025
Non-Agriculture	2,852
<b>TOTAL</b>	<b>66,877</b>

## 2.5 Project Characteristics

### 2.5.1 Project Overview

Based on direction provided by the County Board of Supervisors, the County is proposing a new ordinance framework that would allow the County to continue exercising its land use authority to regulate planting of production agriculture irrigated from groundwater wells within the PBLUMA after the termination date of the existing agricultural offset requirements on January 31, 2023. The new ordinance would also allow an exemption for farms to plant irrigated crops that were not able to be planted under the agricultural offset requirements. The proposed ordinance would require a planting permit or exemption verification for new or expanded planting of crops irrigated from groundwater wells within the PBLUMA. It is noted that issuance of planting permits and exemptions allowed under the proposed ordinance would be considered ministerial and would not require discretionary actions. As such, when administering the planting ordinance, County staff could only apply objective criteria to planting permits.

- **Planting Permit.** New crop plantings that would be “water neutral” would be eligible for a ministerial planting permit. In this context, “water neutrality” refers to a balanced water demand inventory, where new crops are replacing previous crops (within the past six years) and do not result in an overall increase in estimated water demand from groundwater wells within the PBLUMA. Individual applicants would be required to provide the County with verifiable evidence that crops had been irrigated on site within the six years preceding their application date and estimates of annual water demand for removed crops and new crops, to be verified and approved by the County. Individual applicants would also need to indicate and verify the date they stopped irrigating the crops they wish to replace and the date they plan to start planting new crops. The planting start date would need to be within six years of the irrigation stop date. The planting permit would allow 18 months from the planting start date to finish planting and schedule a final site inspection with the County, with a 12-month extension granted if the County declares a local emergency due to drought conditions, up to two 12-month extensions allowed at the Planning Director’s discretion, and an additional 12-month extension allowed at the Planning Commission’s discretion if there are circumstances beyond the applicant’s control preventing planting completion. Environmental impacts of activities allowed by planting permits are accounted for in this PEIR, and no additional CEQA review would be necessary.
- **Exemption.** The proposed ordinance would exempt new or expanded crop plantings with an estimated total water demand of 25 AFY or less per site, including existing crops, with a site defined as contiguous parcels under common ownership upon the ordinance effective date. The property owner would be required to submit a planting plan and ownership verification for approval by the County prior to planting. Environmental impacts of exempt plantings are accounted for in this PEIR, and no additional CEQA review would be necessary.
- **Outstanding Agricultural Offset Clearances/Exemptions.** Under the proposed ordinance, persons with agricultural offset clearances/exemptions issued under the existing agricultural offset requirements would be issued a new planting permit subject to the timelines and extension requirements of the new ordinance. Persons with a 5-AFY exemption from the agricultural offset requirements would be able to submit an updated planting plan to increase their total estimated irrigation for crops on site to up to 25 AFY under the new ordinance exemption standard. As described above, the environmental impacts of exempt plantings are accounted for in this PEIR, and no additional CEQA review would be necessary.

The proposed ordinance would be in effect from January 31, 2023 to January 31, 2045, for a total of 22 years.

## 2.5.2 Proposed Project Activities

The proposed project components analyzed in this PEIR include the site development, planting, maintenance, and harvesting activities associated with the allowed new and expanded irrigated crops in the PBLUMA resulting from the proposed ordinance. A summary of these activity categories is provided below, based on typical practices for commercial-scale production. The proposed activities are discussed below in more detail.

- **Site Preparation/Development** activities may include groundwater well installation; agriculture pond/reservoir construction; vegetation removal and earthmoving and grading activities; ripping and rock removal associated with soil cultivation (if there is hardpan, etc.); installation and maintenance of drainage and erosion control features; trenching for irrigation pipelines; installation of fencing; establishment and maintenance of a cover crop; application of herbicides, fertilizers, and soil amendments; and tilling. Typical equipment used includes crawler tractors, excavators, and backhoes. Small-scale operations (less than 10 acres) for low-value crops (e.g., alfalfa, pasture) may not economically justify groundwater well installation, agriculture pond construction, or deep ripping, which all require expensive equipment and labor.
  - **Ripping** may be required for high-value crops with deep root systems for adequate drainage.
    - Small areas (five to six acres) of low-value crops with shallow root systems such as alfalfa and pasture typically would not justify ripping in terms of economic cost and benefit.
    - Seven to 11 acres of orchard (the amount that would be allowed by a 25-AFY exemption) may require ripping to provide adequate drainage for deep root systems, but would typically not be on a large enough scale to be cost-effective for commercial producers. Applicants with motives besides economic profit from the crop produced (e.g., aesthetic preferences or improved property values) may choose to pay the expense.
    - Twenty acres of wine grapes, a high-value crop, would typically justify ripping to ensure adequate draining for the deep perennial roots in terms of economic cost and benefit.
- **Planting** activities include planting seeds, starts/seedlings, or rootstocks by hand with contracted labor or with tractors. Vineyards require installation of a trellis system.
- **Maintenance** may include irrigation; frost-prevention (e.g., for vineyards); pruning; weeding; and applying pesticides, fertilizers, herbicides, fungicides, and soil amendments and may be done with contracted labor and/or agricultural equipment. Vehicles are used to transport material and workers. The intensity of maintenance activities required for crops is based on the number of tractor passes and labor per growing season needed for disease, insect, pest, weed, and nutrient management. Irrigation involves the use of gas, diesel, or electricity-powered pumps (or alternative fuel sources) to extract water from groundwater wells and convey through irrigation pipelines. Intensity of irrigation depends on crop type (see water duty factors in Table 2-4) and site configuration and elevation.
- **Harvest** may be completed by hand-picking with contracted labor (e.g., vegetables) or mechanical harvest equipment (e.g., pistachios) and transported off site for distribution,

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processing, and sale. Vehicles are used to transport produce and workers. Some commodities may be harvested multiple times during the growing season (e.g., alfalfa) or just once per growing season (e.g., pistachios, olives, wine grapes). Irrigated pasture is used for grazing and is not harvested.

The intensity of these activities varies by crop type, and is summarized in Table 2-3. Converting between crop types may have environmental impacts based on differences in the activities associated with each crop, which are assessed in Section 4, *Environmental Impact Analysis*.

**Table 2-3 Comparison of Typical Activities by Crop Type in the PBLUMA**

Crop Type	Acreage Allowed by 25-AFY Exemption	Crop Value	Typical Depth of Grading for Site Preparation	Planting Frequency	Maintenance Intensity	Harvest Frequency per Growing Season
Alfalfa	5.6	Low	Less than 2 feet Deep ripping unlikely for less than 10 acres because not cost-effective	2-5 years <sup>1</sup>	Low	Multiple
Pasture	5.2	Low	Same as Alfalfa	Perennial	Low	N/A, grazing only
Supplementally Irrigated Dryland Crop	(3)	Low	Same as Alfalfa	Annual	Low	Once
Vegetables	13	Low	Same as Alfalfa	Annual, may be scattered	High	Once, may be scattered
CBD Hemp	16.7	High	Same as Alfalfa	Annual	High	Once
Wine and table grape vineyards	20	High	3-4 feet Deep ripping, if needed for adequate drainage, would typically be cost-effective for a 20-acre vineyard	Perennial (20-30 years) (2)	High	Once
Orchards (citrus and deciduous)	7-11	High	3-4 feet Deep ripping, if needed for adequate drainage, would typically not be cost-effective for operations smaller than 20 acres unless justified to improve aesthetics or property values	Perennial (100+ years for pistachios and olives) (2)	High	Once for pistachios and olives
Nursery	10	Depends on crop	Less than 2 feet if annual; 3-4 feet if perennial; cost-effectiveness of ripping depends on crop	Depends on crop	Depends on crop	Once or multiple, depending on crop

<sup>1</sup> Source: University of California Cooperative Extension (UCCE) 1998

<sup>2</sup> If well-maintained.

<sup>3</sup> The applied water factor for supplementally irrigated dry cropland shall be based on the average annual water usage over the six-year period preceding the application date, as substantiated by applicant-provided information outlined in Section G of the draft planting ordinance (see EIR Appendix C).

The 25-AFY per site exemption would allow the planting of irrigated crops on sites that have been historically undeveloped, used for grazing or dry farming, or currently are cultivated with irrigated crops using less than 25 AFY of groundwater.

As detailed in Appendix B, as a reasonable impact scenario, the County has estimated that approximately 240 acres of previously uncultivated land would be affected by the proposed ordinance in the first year it is in effect, with an approximately 240-acre increase per year, for a total of 5,280 acres affected by January 31, 2045, a 13 percent increase from 2020 baseline irrigated crop acreage (37,640 acres). This would equate to an annual increase in groundwater use of approximately 450 AFY, for a total increase of 9,900 AFY by January 31, 2045. This increase in irrigated acreage is based on an estimated issuance of 25-AFY groundwater per site exemptions. Appendix B of this PEIR provides details regarding how the estimated acreage and groundwater usage per year was determined.

Although this is a Program EIR, Section 4, *Environmental Impact Analysis*, examines site-specific impacts, as well as cumulative program impacts, as appropriate based on relevant impact thresholds. The reasonable impact scenario for site-specific impacts is based on a 20-acre wine grape vineyard, the crop with the lowest water duty factor in the draft ordinance (1.25 AFY per acre) that would allow the most acreage that could be planted under a 25-AFY per site exemption. The reasonable assumption of a 240-acre annual increase in irrigated crop production in the PBLUMA allowed by the ordinance equates to 12 new 20-acre vineyards per year allowed by the ordinance under a 25-AFY per site exemption.

The County has estimated the following increases in project activities resulting from the estimated increase in planted irrigated crop acreage allowed by the proposed ordinance. See Appendix B for a detailed explanation of how these estimates were determined.

- **Site Preparation/Development**

- It is assumed 4 new irrigation groundwater wells involving operation of a well drilling rig would be constructed in the PBLUMA per year, for a total of 88 new wells drilled between January 31, 2023 and January 31, 2045.
- It is assumed 0.6 new approximately 0.9-acre agriculture pond/reservoir would be constructed in the PBLUMA per year, for a total increase of 13 new agriculture ponds/reservoirs between January 31, 2023 and January 31, 2045.
- It is assumed the disturbance footprint of site preparation activities (including vegetation removal, grading, and chemical applications) would be equal to the irrigated crop acreage allowed by the planting ordinance, estimated as 240 acres of annual increase for a total increase of 5,280 acres over 22 years, between January 31, 2023 and January 31, 2045.
- It is assumed the disturbance depth for site preparation activities would be less than 2 feet for alfalfa, pasture, vegetables, CBD hemp, supplementally irrigated dryland crops, and annual nursery crops and 3 to 4 feet for wine and table grapes vineyards, citrus and deciduous orchards, and perennial nursery crops.
- It is assumed the increase in irrigated acreage allowed by the ordinance, estimated as 240 acres per year increase, for a total increase of 5,280 acres between January 31, 2023 and January 31, 2045, would be surrounded by new fencing.

- **Maintenance, Planting, and Harvest**

- It is assumed 88 new groundwater well pumps would be operational in the PBLUMA by January 31, 2045.



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- It is assumed operation of one new booster pump per 25-AFY per site exemption, 12 new booster pumps annually, and 264 new booster pumps total would occur in the PBLUMA by January 31, 2045.
- It is assumed there would be an increase of 7,188 annual commute miles per 25-AFY per site exemption, as well as 1,897,632 total commute miles in the PBLUMA by January 31, 2045.
- It is assumed 14 tractor passes per year would be required for maintenance of planting allowed per 25-AFY exemption, for an annual increase of 168 tractor passes in the PBLUMA for maintenance, and a total increase of 3,696 tractor passes in the PBLUMA by January 31, 2045.

Section 5 of Appendix B, *Groundwater Use and Acreage Estimation*, provides a discussion of project assumptions for on-site accessory infrastructure included as part of the proposed project, including construction and operation of irrigation wells and associated pumps, agriculture ponds/reservoirs, irrigation pipelines, and agriculture access roads.

No agricultural accessory structures (e.g., barns, shops) or agricultural worker housing is included as part of the proposed ordinance. If agricultural operators propose any new agricultural worker housing, such structures would be required to undergo a separate CEQA compliance review.

It is important to note the proposed ordinance would only regulate new or expanded crop production irrigated from groundwater wells within the PBLUMA. Existing crop production irrigated from groundwater wells within the PBLUMA would not be affected by the proposed ordinance. The existing overdraft conditions in the Paso Robles Subbasin, which are projected to be 13,700 AFY in the GSP, will be addressed through management actions implemented by the GSAs. Such actions are separate from the proposed project and therefore are not subject to this PEIR.

### 2.5.3 Additional Assumptions for the Proposed Project

The environmental analysis of the proposed ordinance is based on the reasonable assumptions presented herein.

The proposed ordinance would only regulate new or expanded planting of production agriculture irrigated from groundwater wells within the PBLUMA. Existing crops in production when the proposed ordinance takes effect; non-commercial crops; and new plantings of dryland crops such as wheat, barley, and oats would not be subject to the proposed ordinance and are not included in the scope of this environmental review.

New or expanded plantings not authorized by a planting permit or within the 25-AFY exemption would not be allowed under the proposed ordinance, and therefore, are not analyzed as part of the proposed project in this PEIR.

The estimated water use for crop irrigation is based on crop-specific water duty factors (AFY per acre) as defined in the ordinance and shown in Table 2-4 and crop acreage. These factors are unchanged from those included in the current agricultural offset requirements. County staff reviewed these water duty factors with local advisors from the University of California Cooperative Extension (UCCE), who did not recommend any changes to account for projected effects from drought and extreme heat due to climate change, given the current level of uncertainty in available climate change projection data for the area.

**Table 2-4 Crop-Specific Water Duty Factors**

Crop Group	Primary Commodities	Water Duty Factor (AFY per Acre)	Acreage Allowed by 25-AFY Exemption
Pasture (Irrigated)	Irrigated grasses or grass mixes, such as with clover, used for grazing livestock on site; not harvested for use as hay or silage	4.8 (1)	5.2
Alfalfa	Alfalfa	4.5	5.6
Deciduous	Apples, apricots, berries, peaches, nectarines, plums, figs, pistachios, persimmons, pears, quinces	3.5	7.1
Table Grapes	Table grapes	3.0 (2)	8.3
Nursery	Christmas trees, miscellaneous nursery plants, flowers	2.5	10
Citrus	Avocados, grapefruits, lemons, oranges, olives, kiwis, pomegranates (non-deciduous)	2.3	10.9
Strawberries	Strawberries	2.3 (3)	10.9
Vegetables	Artichokes, beans, miscellaneous vegetables, mushrooms, onions, peas, peppers, tomatoes	1.9	13
CBD Hemp	Field-grown CBD hemp	1.5 (4)	16.7
Wine Grapes	Wine grapes	1.25	20
Supplementally Irrigated Dry Cropland*	Barley, wheat, oat, grain/forage hay, safflower	(5)	(5)

\*San Luis Obispo County General Plan Agriculture Element. Source: Table 3 of the Agricultural Water Offset Program, Paso Robles Groundwater Basin, October 2014.

1. The 4.8-AFY per acre water duty factor for pasture (irrigated) is based on irrigation throughout the dry season. Pasture irrigated for only a portion of the dry season shall be assigned a lower water duty factor approved by the joint committee described in Section G(2) of the draft planting ordinance (see EIR Appendix C).

2. Information obtained from UCCE, San Luis Obispo County Cooperative Extension, April 2021

3. Information obtained from Resource Conservation District (RCD) Program, UCCE, University of California, Davis (Strawberries 2011 data)

4. Information obtained from UCCE, San Luis Obispo County Cooperative Extension, April 2019

5. The applied water factor for supplementally irrigated dry cropland shall be based on the average annual water usage over the six-year period preceding the application date, as substantiated by applicant-provided information outlined in Section G of the draft planting ordinance (see EIR Appendix C).

It is assumed the new and expanded plantings allowed by the proposed ordinance would be predominantly in the rural agricultural areas of the PBLUMA rather than the urban and village areas based on the primary intended land use.

## 2.5.4 County Ordinance and General Plan Amendments

The proposed PBLUMA planting ordinance would include amendments to the County Health and Sanitation Ordinance (Title 8), the County Land Use Ordinance (Title 22), and the Agriculture and Conservation and Open Space Elements of the County General Plan to require planting permits for new production agriculture irrigated from groundwater wells within the PBLUMA from January 31, 2023 to January 31, 2045. The amendments are summarized as follows:

- **Title 8 Amendments.** Amendments to Chapter 8.40 – *Construction, Repair, Modification and Destruction of Wells* would require satisfying the provisions of the PBLUMA planting permitting requirements, rather than the existing agricultural offset requirements, before constructing, repairing, modifying, or destroying a well. No person would be issued a groundwater well

construction permit in the PBLUMA to irrigate new or expanded plantings unless the plantings were approved by the County Department of Planning & Building.

- **Title 22 Amendments.** The Title 22 amendments would rescind the existing agricultural offset requirements (Section 22.30.204), which terminate on January 31, 2023, in their entirety. The amendments would add the PBLUMA planting permit requirements as a new section (Section 22.30.205), including a map and definition of the PBLUMA, applicability explanation, procedures, application requirements, crop-specific water duty factors, and allowed time limits and extensions for planting permits. The amendments would update the allowable land uses and permit requirements section to include references to the new PBLUMA planting permit requirements rather than the existing agricultural requirements. Finally, the amendments would update the definition of pasture (irrigated) to clarify that it is not harvested for use as hay or silage, is only for grazing livestock on site, and would remove definitions only referenced in the existing agricultural offset requirements.
- **Agriculture Element Amendments.** The amendments would change references to the Paso Robles Groundwater Basin to the PBLUMA in the agricultural goal (AG1) to support county agricultural production by not requiring permits for agricultural practices and improvements that are currently exempt and allow an exception for the PBLUMA planting permit requirements instead of a Paso Robles Groundwater Basin groundwater offset program. The amendments would also remove the requirement that new agricultural water use be offset in the Paso Robles Groundwater Basin (excluding the Atascadero Sub-basin) from the water conservation agricultural policy (AGP10). Finally, the amendments would expand the agricultural water supplies policy (AGP11) to include that the County Department of Planning & Building should propose amendments based on studies to ensure new development, including new agricultural water use, does not adversely affect water supplies, watershed yields, or water quality to apply countywide instead of just to the Paso Robles Groundwater Basin.
- **Conservation and Open Space Element Amendments.** Water Resources Policy 1.14, to avoid a net increase in water use in groundwater basins certified at Level of Severity II or III for water supply, would be changed to instead *limit* a net increase in water use *except where the new increase is the result of actions to promote the agricultural use of the supply in a manner that is equitable and consistent with groundwater rights.*

## 2.6 Project Objectives

The proposed planting ordinance would take effect when the County's existing agricultural offset requirements expire and would remain in effect until January 31, 2045. Objectives that the proposed planting ordinance would help the County to meet include:

- Continue to exercise the County's land use authority to regulate the planting of production agriculture irrigated from groundwater wells within the PBLUMA with ministerial permits not subject to CEQA review.
- Require new crop plantings that are to be irrigated from groundwater wells within the PBLUMA to be "water neutral," meaning new crops replace crops that are estimated to have had the same water demand and have been fallowed/removed within a certain time frame.
- Allowance of an exemption for farms to plant irrigated crops that were not able to under the existing agricultural offset requirements.
- Conserve groundwater resources in the PBLUMA for use by production agriculture in a manner that is equitable and consistent with groundwater rights.

- Support and promote a healthy and competitive agricultural industry in the PBLUMA, whose products are recognized in national and international markets as being produced in San Luis Obispo County.
- Encourage and facilitate smaller production agriculture operations.

## 2.7 Required Approvals

The proposed project requires approval by the County of San Luis Obispo's Board of Supervisors.

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## 3 Environmental Setting

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This section provides a general overview of the environmental setting for the proposed planting ordinance. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

### 3.1 Regional Setting

San Luis Obispo County is located in the central coast region of California and is bounded by the Pacific Ocean to the west, Monterey County to the north, Kern County to the east, and Santa Barbara County to the south. Regionally, San Luis Obispo County is moderately urbanized, but remains as a generally low density, rural and agricultural area of California that has grown as a major tourist destination over the years. The County covers approximately 3,610 square miles and contains approximately 271,172 residents (California Department of Finance [DOF] 2021). The County is topographically diverse, with mountains, agricultural valleys, and distinct urban areas, all within close proximity to the Pacific Ocean. The Mediterranean climate of the region produces moderate average temperatures year-round, although extreme temperatures can be reached in the winter and summer, namely in the northern and eastern parts of the County. The warmest month of the year is September with an average maximum temperature of 77 degrees Fahrenheit, while the coldest month of the year is January with an average minimum temperature of 41.3 degrees Fahrenheit. Rainfall is concentrated in the winter months (Western Regional Climate Center 2016).

### 3.2 Project Area Setting

#### General Setting

The PBLUMA includes 313,661 acres located within unincorporated San Luis Obispo County, including the Shandon-Carrizo (North), El Pomar-Estrella, Salinas River, Las Pilitas, Los Padres (North), Adelaida, and Nacimiento Sub Areas of the North County Planning Area and the unincorporated communities of Shandon, San Miguel, Creston, and Whitley Gardens. The PBLUMA excludes, but encircles, the City of Paso Robles, and extends to the San Luis Obispo – Monterey County line at the north. Major roadways within the project area include U.S. Highway 101 in the northwestern portion of the PBLUMA, State Route 46 which bisects the northern portion of the PBLUMA, and State Route 41 which crosses the PBLUMA from the southwestern to the eastern portion. Figure 2-1 in Section 2, *Project Description*, shows the location of the project area within the surrounding region.

#### Land Use

The PBLUMA is an area within unincorporated San Luis Obispo County that is mostly designated by the County's General Plan as Agriculture, Rural Lands, and Residential Rural. Existing land uses in the area are predominantly rural and agricultural, including irrigated and non-irrigated crop production, cattle grazing, agricultural processing, and ranching activities, as well as vacant and undeveloped lots. The area also includes rural residential ranchettes, many of which include "hobby farms" consisting of small-scale crops and the keeping and grazing of farm animals. The PBLUMA includes the unincorporated communities of San Miguel and Shandon, which include a range of residential, commercial, and industrial uses, as well as the villages of Creston and Whitley Gardens.

## Geologic Setting

Topography of the PBLUMA varies greatly; the elevation along the Estrella River and State Route 46 is approximately 1,000 feet, and the highest surrounding hills reach approximately 2,400 feet. There are no County designated Geologic Study Areas within the PBLUMA. Faults in the region include the San Andreas Fault zone, the Rinconada Fault zone, the San Juan Fault zone, the La Panza Fault zone, and the San Simeon-Hosgri Fault Zone.

Areas of the PBLUMA vary from low to high risk for liquefaction, with areas of high liquefaction risk primarily along the Salinas River and tributaries. Additionally, areas of the PBLUMA most at-risk from landslides occur in the hillsides of the western Santa Lucia Range, northern Cholame Hills, and southern La Panza Range (County of San Luis Obispo 2021). Paleontological resources are known throughout San Luis Obispo County, including within the PBLUMA. The vast majority of geologic units within the PBLUMA have high potential to bear scientifically important paleontological resources.

## Natural and Cultural Resources

The PBLUMA contains numerous native and non-native habitat types. Some native habitat types include tree (oak woodlands, riparian woodlands), shrub (chaparrals, coastal scrubs), and herbaceous (grasslands, certain wetlands) habitat types. Non-native habitat types include non-native annual grassland, agriculture, and ornamental landscaped areas. The Salinas River and Estrella River are the only two major rivers in the PBLUMA; the Salinas River's headwaters occur in the western PBLUMA before the river extends northwards to Monterey Bay, and the Estrella River is a tributary of the Salinas River that occurs in the northern PBLUMA. Other perennial streams within the PBLUMA include the Huer Huero Creek, Cholame Creek, San Juan Creek, Dry Creek, and Shedd Canyon (Indian Creek).

Due to the PBLUMA's size and coverage of many habitat types, a diverse variety of bird, mammal, and fish species occupy the area. Habitat types include tree (oak woodlands, riparian woodlands), shrub (chaparrals, coastal scrubs), and herbaceous (grasslands, certain wetlands). Drainages within watersheds of the Salinas and Estrella Rivers provide habitat for sensitive species, such as steelhead (*Oncorhynchus mykiss irideus*). The PBLUMA also contains federal and/or state-designated special status species, including monarch butterfly (*Danaus plexippus*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), foothill yellow-legged frog (*Rana boylei*), California condor (*Gymnogyps californianus*), and bald eagle (*Haliaeetus leucocephalus*). A wildlife movement corridor occurs within the upper Salinas River watershed, riparian corridor, and valley floor bordered by the Diablo and Temblor Ranges to the east, and the Santa Lucia Range to the west. This movement corridor provides habitat for aquatic, migratory, and local terrestrial wildlife species.

The San Luis Obispo region was prehistorically occupied by the Chumash, who lived in settlements along the California Coast for over the past 10,000 years. San Luis Obispo County is located within the traditional territory of the Obispeño Chumash, which is culturally and linguistically distinct from other Chumashan groups. Archaeological resources from the Obispeño Chumash have been identified in San Luis Obispo County. The PBLUMA may also contain existing historical resources, including historical resources that have yet to be identified, such as buildings, structures, or cultivated landscapes that are over 45 years of age.

### 3.3 Cumulative Development

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

When evaluating cumulative impacts, CEQA allows the use of either a list of past, present, and probable future projects, including projects outside the control of the lead agency, or a summary of projections in an adopted planning document, or a combination of the two approaches. The cumulative analysis within this PEIR uses a projections-based approach (see *CEQA Guidelines* Section 15130[B][1]), as described below.

The cumulative impact analyses included in each of the environmental issue areas addressed in Section 4 of this PEIR examine impacts from increased agricultural production associated with implementation of the proposed planting ordinance, in addition to projected residential and non-residential development within the PBLUMA and greater San Luis Obispo County region, to address cumulative effects from growth. Baseline and buildout projections for non-residential and residential uses within the PBLUMA, based on the Shandon Community Plan, San Miguel Community Plan, and County data, are detailed in Table 3-1. The calculations of buildout projections are detailed in Section 4 in Appendix B of this PEIR.

For most issue areas, the PBLUMA is referred to in the analysis as the “cumulative impact analysis area.” However, for some topics where cumulative impacts are more localized (e.g., noise) or broader (e.g., greenhouse gas emissions), the cumulative impact area may be smaller or larger than the PBLUMA. If a different cumulative impact area other than the PBLUMA was used, it is noted under the “cumulative impact” section in the applicable subsection of Section 4.

Analysis of the cumulative effects of the planting ordinance combined with other projected development within the PBLUMA for each environmental issue area is presented in Sections 4.1 through 4.13.



**Table 3-1 Baseline (2021) and 2045 Buildout Projections for Residential and Non-Residential Uses in the PBLUMA**

Area	Residential Units <sup>1,2</sup>			Non-Residential <sup>3</sup>		
	Baseline	2045	Increase	Baseline	2045	Increase
San Miguel	1,031	1,344	313	84,100 sf	271,000 sf	186,900 sf
Shandon	380	1,437	1,057	271,940 sf	317,000 sf	99,060 sf
Rural PBLUMA	5,189	6,339	1,150	216 wineries and miscellaneous small commercial	261 wineries 3 event centers 3 bed & breakfasts 3 industrial buildings 3 commercial greenhouses and miscellaneous small commercial	45 wineries 3 event centers 3 bed & breakfasts 3 industrial buildings 3 commercial greenhouses
<b>Total</b>	<b>6,600</b>	<b>9,120</b>	<b>2,520<sup>4</sup></b>	<b>356,040 sf (urban) 216 wineries and miscellaneous small commercial</b>	<b>588,000 sf (urban) 261 wineries 3 event centers 3 bed &amp; breakfasts 3 industrial buildings 3 commercial greenhouses and miscellaneous small commercial</b>	<b>285,960 sf (urban) 45 wineries 3 event centers 3 bed &amp; breakfasts 3 industrial buildings 3 commercial greenhouses</b>

sf = square feet

<sup>1</sup> Includes single-family dwellings, mobile homes, secondary dwellings, accessory dwellings, and agricultural worker housing/farm support quarters.

<sup>2</sup> Baseline urban residential units based on address points with residential use as of November 21, 2021.

<sup>3</sup> Sources for baseline urban non-residential: County of San Luis Obispo 2012 and 2016; 2012 Alcohol and Beverage Control permitting data; and commercial construction permit data 2013-2021. Miscellaneous small commercial includes rural schools and restaurants served by private groundwater wells.

<sup>4</sup> [9,120 units – 6,600 units] = 2,520 units

## 4 Environmental Impact Analysis

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This section discusses the possible environmental effects of the proposed Paso Basin Land Use Management Area Planting Ordinance for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. A “significant effect” as defined by the *CEQA Guidelines* Section 15382:

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

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

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

Following each environmental impact discussion is a list of mitigation measures (if required and feasible) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. Mitigation feasibility<sup>1</sup> is limited by the ministerial permitting approval authorized by the

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<sup>1</sup> Pursuant to Public Resources Code 21061.1, feasible means “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technical factors.”

proposed planting ordinance, which is limited to the use of fixed standards or objective measurements and cannot require the exercise of subjective judgement by County staff. Mitigation measures that would require County staff to exercise subjective judgement would be infeasible and are therefore not included in this document. Mitigation Measures included in this document can be applied through the ministerial permit process and would not require County staff to exercise subjective judgement. The goal of the ordinance is to provide a ministerial streamlined permitting process to encourage and facilitate smaller agricultural endeavors that would otherwise not be able to compete against larger concerns. Imposing additional measures that are costly and out of proportion with the acreage of land under consideration for purposes of the ordinance would create an undue and disproportional burden on the smaller enterprises that is not required for existing or larger enterprises. Moreover, requiring a discretionary permitting process for agriculture would be inconsistent with the County's Agriculture Element of the County General Plan, which is the County's overarching policy document for land use in agricultural areas of the county. The preface to the Agriculture Element Policies Chapter states, "It is the intent to **not** require permits for agriculturally-related projects that are currently exempt, and to **keep** the required level of permit processing for non-exempt projects at the lowest possible level consistent with the protection of agricultural resources and sensitive habitats." [emphasis included in the original text]

The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed planting ordinance in conjunction with other planned and pending developments in the area listed in Section 3, *Environmental Setting*.

Section 15065 of the *CEQA Guidelines* also requires the following specific Mandatory Findings of Significance be addressed as part of the environmental review for the planting ordinance:

- The potential for the project to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory;
- Project impacts that are individually limited, but cumulatively considerable. ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects); and
- Environmental effects of the project which will cause substantial adverse effects on human beings, either directly or indirectly.

Section 4.3, *Biological Resources*, describes the planting ordinance's potential effects on plant and animal species populations, habitats, communities, and migratory patterns. Section 4.4, *Cultural Resources*, and Section 4.12, *Tribal Cultural Resources*, describes the ordinance's potential effects on important historical and prehistorical cultural and tribal cultural resources on the project site. Potential adverse environmental effects to human beings are discussed in Section 4.2, *Air Quality*; Section 4.6, *Geology and Soils*; Section 4.9, *Land Use and Planning*; Section 4.10, *Noise*; and Section 4.11, *Transportation*. Furthermore, as discussed above, each environmental analysis section of the PEIR concludes with a discussion of the proposed ordinance's contribution to cumulative effects.

The Executive Summary of this PEIR summarizes all impacts and mitigation measures that apply to the proposed planting ordinance.

## 4.1 Agriculture and Forestry Resources

This section evaluates the potential impacts associated with agricultural resources. This section focuses on potential impacts related to conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance (“Farmland”)<sup>1</sup> to non-agricultural use, as well as conflict with existing zoning for agricultural use or a Williamson Act contract. Impacts to forestry resources were determined to be less than significant in the Initial Study prepared for the proposed planting ordinance (see Appendix A and Section 4.14, *Effects Found Not to Be Significant*), and therefore, are not further analyzed in this section.

### 4.1.1 Setting

#### Statewide Agricultural Resources

In 2019, California’s 69,900 farms and ranches received \$50.1 billion for their products. California accounts for approximately 40 percent of all organic production in the United States. Leading crops include fruits, nuts, and vegetables, and 24.3 million acres of land were devoted to farming and ranching in 2019 (California Department of Food and Agriculture 2020).

#### Countywide Agricultural Resources

San Luis Obispo County and the California central coast region, where the PBLUMA is located, are important key agricultural centers within the state. Strawberries and wine grapes are the top two crops on a list of high-value specialty crops grown in the County (County of San Luis Obispo Department of Agriculture/Weights and Measures 2021). The County’s agricultural industry is a crucial part of the local economy, providing employment and income for those directly involved in agriculture. In 2017, the agriculture sector provided 13,393 jobs within San Luis Obispo County (Agricultural Impact Associates 2019).

As indicated in Table 4.1-1, agricultural production within San Luis Obispo County has risen over the last decade from approximately \$732 million in crop value in 2011 to \$979 million in crop value in 2020. Fruit and nut crops have increased the most in revenue during this period, from approximately \$367 million in 2011 to \$603 million in 2020. The top 10 crops providing revenue in the county include (in order): strawberries, wine grapes, avocados, cattle and calves, vegetable transplants, broccoli, cauliflower, head lettuce, cut flowers, and lemons (San Luis Obispo County Department of Agriculture/Weights and Measures 2021).

**Table 4.1-1 Agricultural Crop Value in San Luis Obispo County, 2011-2020**

Year	Animal	Field	Nursery	Fruit & Nut	Vegetable	Total
2011	\$71,479,000	\$22,929,000	\$96,454,000	\$366,570,000	\$174,981,000	<b>\$732,413,000</b>
2012	\$73,857,000	\$24,612,000	\$95,155,000	\$463,296,000	\$204,900,000	<b>\$861,820,000</b>
2013	\$100,865,000	\$16,365,000	\$97,651,000	\$468,355,000	\$237,896,000	<b>\$921,132,000</b>
2014	\$135,017,000	\$16,812,000	\$84,394,000	\$468,518,000	\$195,329,000	<b>\$900,070,000</b>
2015	\$70,659,000	\$15,600,000	\$99,511,000	\$428,344,000	\$214,059,000	<b>\$828,173,000</b>
2016	\$45,350,000	\$16,784,000	\$86,933,000	\$568,129,000	\$212,734,000	<b>\$929,930,000</b>
2017	\$47,909,000	\$16,679,000	\$82,802,000	\$566,592,000	\$210,716,000	<b>\$924,698,000</b>

<sup>1</sup> The *CEQA Guidelines* defines “Farmland” as “Prime Farmland, Unique Farmland, and Farmland of Statewide Importance.”

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Year	Animal	Field	Nursery	Fruit & Nut	Vegetable	Total
2018	\$48,596,000	\$18,777,000	\$81,190,000	\$656,609,000	\$230,327,000	<b>\$1,035,499,000</b>
2019	\$41,073,000	\$24,180,000	\$80,566,000	\$615,218,000	\$217,972,000	<b>\$979,009,000</b>
2020	\$46,509,000	\$20,217,000	\$75,883,000	\$603,283,000	\$232,783,000	<b>\$978,675,000</b>

Source: San Luis Obispo County Department of Agriculture/Weights and Measures 2021

### **PBLUMA Agricultural Resources**

The PBLUMA encompasses 313,661 acres across several subareas in the North County Planning Area of the County and includes the unincorporated communities of Shandon, San Miguel, Creston, and Whitley Gardens. Existing land uses within the PBLUMA include agricultural uses, including seasonal grazing; residential, commercial, and industrial uses; and vacant, undeveloped land.

The PBLUMA mostly falls within the boundaries of the Paso Robles Groundwater Subbasin, a groundwater resource designated by the California Department of Water Resources, although approximately 11,799 acres of the PBLUMA fall outside the Paso Robles Subbasin, in areas that are not within any California Department of Water Resources-designated basins. From 2017 through 2020, the average annual groundwater extraction in the Paso Robles Subbasin was 66,873 AFY (Appendix B), indicating that the sustainable yield is currently being exceeded. See Section 4.13, *Utilities and Service Systems*, for further discussion of available water resources to supply proposed uses.

The United States Department of Agriculture Natural Resources Conservation Service (NRCS) assesses the agricultural capacity of soils through its utilization of the Land Capability Classification System and the Storie Index. Capability Classes provide insight into the suitability of a soil for field crop uses based on factors that include texture, erosion, wetness, permeability, and fertility. The Storie Index is a soil rating based on soil properties that govern a soil’s potential for cultivated agriculture in California. The Storie Index assesses the productivity of a soil from the following four characteristics:

- **Factor A:** Degree of soil profile development
- **Factor B:** Texture of the surface layer
- **Factor C:** Slope
- **Factor X:** Manageable features, including drainage, micro relief, fertility, acidity, erosion, and salt content

Under the California Revised Storie Index (which is the currently used method of rating soils for land use and productivity in California), the four factors translate into soil grades: Grade 1 (excellent), Grade 2 (good), Grade 3 (fair), and Grade 4 (poor). In addition, the NRCS farmland classification identifies the location and extent of the soils that are best suited for food, feed, fiber, forage, and oilseed crops and identifies map units as “Prime Farmland, if irrigated,” “Farmland of Statewide Importance,” and “Not Prime Farmland.” There are 153 soil types in the PBLUMA, and the most common soils by acreage are summarized in Table 4.1-2.

**Table 4.1-2 Soil Composition of the PBLUMA**

Map Unit	Name	CA Revised Storie Index	Total Acres in PBLUMA	Percent of PBLUMA
179	Nacimiento-Los Osos Complex, 9-30% slopes	Grade 4 – Poor	45,280	14.4%
180	Nacimiento-Los Osos complex, 30-50% slopes	Grade 4 – Poor	28,279	9%
102	Arbuckle-Positas complex, 9-15% slopes	Grade 4 – Poor	18,870	6%
106	Arbuckle-San Ysidro complex, 2-9% slopes	Grade 3 – Fair	15,977	5.1%
114	Balcom-Nacimiento, moderately steep	Grade 4 – Poor	15,858	5%
113	Balcom-Calleguas complex, 50-75% slopes	Grade 4 – Poor	15,437	4.9%
152	Linne-Calodo complex, 9-30% slopes	Grade 4 – Poor	8,222	2.6%
100	Arbuckle fine sandy loam, 0-2% slopes	Grade 1 – Excellent	7,935	2.5%
115	Balcom-Nacimiento, steep	Grade 4 – Poor	7,840	2.5%

Source: NRCS 1983, 2019

*Agricultural Soils and Lands Classification*

Table SL-2 in the County’s General Plan Conservation and Open Space Element (2010a) classifies “important agricultural soils” within the County as Prime Farmland, Farmland of Statewide Importance, Other Productive Soils, and Highly Productive Rangeland Soils.

Within the Paso Robles Soil Survey Area,<sup>2</sup> the Conservation and Open Space Element identifies 63 soil types as “agriculturally important” soils in San Luis Obispo County, including Prime Farmland, Farmland of Statewide Importance, Other Productive Soils, and Highly Productive Rangeland Soils. Soils that are not considered agriculturally important were not discussed in the Conservation and Open Space Element.

Additionally, the County’s General Plan Agriculture Element (2010b) defines “prime agricultural lands or soils” for inland areas of the County as any of the following:

- Land with an NRCS land capability rating of Class I or Class II (all land to qualify for these ratings must be irrigated); or
- Other irrigated lands that have suitable soils, climate, and water supply which sustain irrigated crops valued according to one of the following criteria:
  1. Land planted in crops which have produced an annual gross value of \$1,000 or more per acre for three of the previous five years.
  2. Land planted in orchards, vineyards, or other perennial crops that would produce an annual average gross value of \$1,000 or more per acre if in full commercial bearing. Value is calculated by multiplying the average production per acre by the average value of the commodity from the previous five years as determined from the Annual Reports of the San Luis Obispo County Department of Agriculture and Measurement Standards.

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<sup>2</sup> The Paso Robles Soil Survey Area encompasses 687,000 acres (greater than the PBLUMA) in the northern half of San Luis Obispo County. The Monterey-San Luis Obispo County line forms the northern boundary of the Paso Robles Soil Survey Area, the Salinas River watershed and coastal ridge form the western boundary, the Temblor Range forms the eastern boundary, and the Los Padres Forest forms the southern boundary (Soil Conservation Service 1983).

*Farmland Mapping and Monitoring Program*

The California Department of Conservation (DOC) identifies the following land use categories (DOC 2019):

- **Prime Farmland:** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. The land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance:** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland:** Farmland of lesser quality soils used for the production of the State’s leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Farmland of Local Importance:** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- **Farmland of Local Potential:** Land designated farmland of “Local Potential” in the County is an area that has the potential for farming, which has Prime or Statewide (Important) farmland characteristics, but which is not cultivated.
- **Grazing Land:** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen’s Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.
- **Urban and Built-Up Land:** Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre site. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land:** Land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines; borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.
- **Water:** Perennial water bodies with an extent of at least 40 acres.

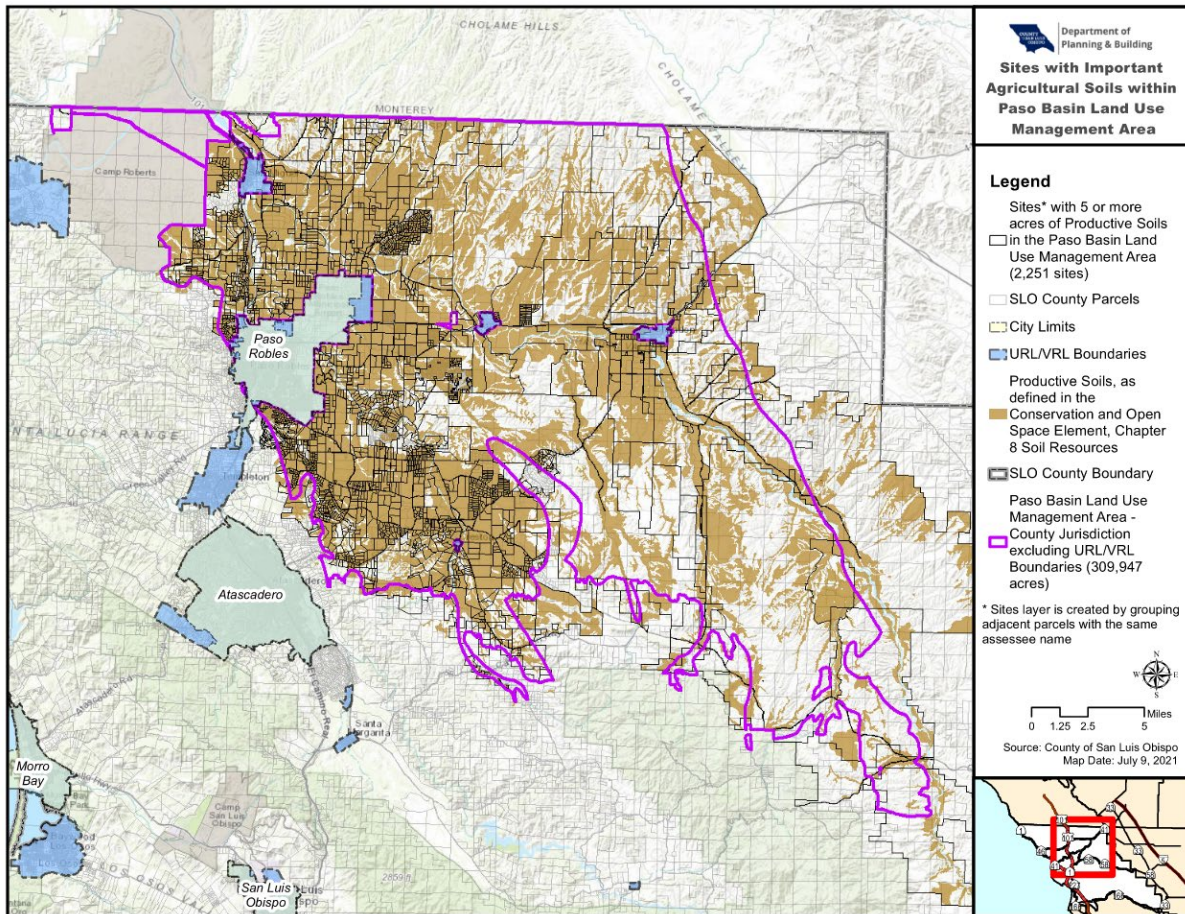
The number of potential individual planting permit sites with “important agricultural soils”<sup>3</sup> within the PBLUMA is estimated to be 2,251 sites (see Appendix B). See Figure 4.1-1 for important agricultural soils within the PBLUMA. Additionally, approximately 46,774 acres (15 percent) of the

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<sup>3</sup> “Important agricultural soils” in San Luis Obispo County are defined in the County’s General Plan Conservation and Open Space Element as consisting of Prime Farmland and Farmland of Statewide Importance, as well as Prime Agricultural Soils as defined in the Agriculture Element and the Land Use and Coastal Zone Land Use Ordinance are defined in the Agriculture Element, Other Productive Soils that meet the definition of Unique Farmland, and Highly Productive Rangeland Soils (County of San Luis Obispo Department of Planning and Building 2010).

PBLUMA subject to the proposed planting ordinance is classified as “Farmland” as defined by the *CEQA Guidelines* (DOC 2016).

**Figure 4.1-1 Sites With Important Agricultural Soils Within the PBLUMA**



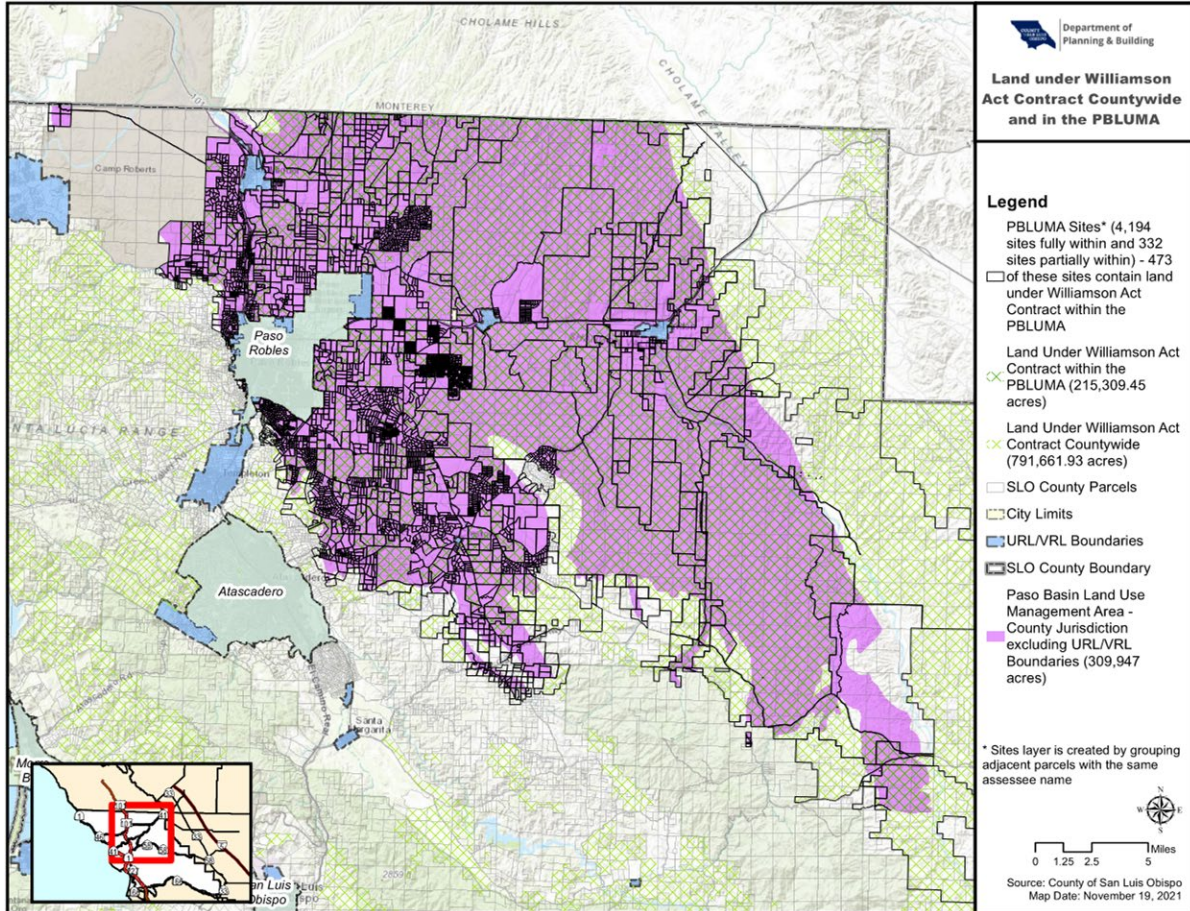
Additionally, 215,309 acres (70 percent) of the PBLUMA that is subject to the proposed planting ordinance are enrolled in Williamson Act land conservation contracts. Figure 4.1-2 shows the areas that are currently under Williamson Act contracts. However, it is too speculative to estimate the number of sites under Williamson Act contracts that have not maintained their qualifying irrigated agricultural use. Although soil classification, existing agricultural uses, site acreage, and current qualification standards are used to help determine contract compliance status, there are several other factors to consider that vary contract to contract. First, qualification standards have thoroughly changed over time since the County’s *Rules of Procedure to Implement the California Land Conservation Act of 1965* (County of San Luis Obispo 2019) was initially adopted in 1972. As such, properties that do not meet current qualification standards may still be considered compliant if they meet the qualification standards outlined in their original agreement. Second, the County had previously approved Williamson Act contracts based on the potential for agricultural use on site. Currently, the County approves contracts based on the verification of active, existing agricultural use. Third, the County’s *Rules of Procedure to Implement the California Land Conservation Act of 1965* allows multiple adjacent sites under separate ownership to combine their acreage to meet minimum acreage qualification requirements. As one contract could involve multiple landowners, it is too speculative to determine how many sites within the PBLUMA would be affected by the proposed ordinance at this time. Evaluation of particular sites and landowners



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would need to be conducted on a case-by-case basis. Fourth, the County stores Williamson Act contracts in scanned microfiche files. As such, the original qualifying agricultural use requirements for each contract are not summarized in a centralized, searchable database. Accordingly, County staff must examine existing individual Williamson Act contracts on a case-by-case basis to determine the original qualifying agricultural use and ownership configuration when the contract was established to determine contract compliance status.

**Figure 4.1-2 Williamson Act Contract Lands in the PBLUMA**



### 4.1.2 Regulatory Setting

#### Federal Regulations

The Farmland Protection Policy Act was created in response to the millions of acres of agricultural land being converted in the United States. Federal agencies develop and review the policies and procedures every two years. This act was created to minimize the unnecessary and irreversible conversion of farmland.

#### State Regulations

##### *Farmland Mapping and Monitoring Program*

The DOC Farmland Mapping and Monitoring Program (FMMP) compiles Important Farmland maps for each county within the State. Maps and statistics are produced biannually using a process that

integrates aerial photo interpretation, field mapping, a computerized mapping system, and public review. The FMMP Important Farmlands differ from the NRCS farmland classification because the NRCS farmland classification is based solely on soil quality, while the FMMP Important Farmland designations are based on both soil quality and current land use. See Section 4.1.1, *Setting*, for a description of the FMMP categories.

*Land Conservation Act (Williamson Act) Contracts*

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter contracts with private landowners for the purpose of restricting specific sites of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments that are based upon farming and open space uses, as opposed to full market value. The Williamson Act intends to incentivize landowners to maintain agricultural production on their property to encourage the preservation of the state’s agricultural lands and prevent their conversion to urban uses. The Act requires landowners to establish an agricultural preserve as a prerequisite to enter a land conservation contract.

**COUNTY OF SAN LUIS OBISPO WILLIAMSON ACT PROGRAM**

The County of San Luis Obispo operates a Williamson Act program and establishes agricultural preserves by landowner request. The County enters into land conservation contracts with property owners to restrict land use to agricultural and compatible uses for a minimum term of 20 years (or 10 years if within one mile of an urban area). The contract automatically renews itself each year for another 10-year period, unless a Notice of Non-Renewal is filed, or the contract is cancelled. State Government Code Section 51282 provides specific findings that must be made for the approval of contract cancellations.

The County’s *Rules of Procedure to Implement the California Land Conservation Act of 1965 (2019)* specify the minimum acreage of qualifying soils and agricultural use, and the minimum acreage under common ownership that is required for a property to qualify for and establish an agricultural preserve. If these requirements are met, the property owner may enter a land conservation contract based on agricultural use, consistent with State Law. Eligibility requirements differ for irrigated and non-irrigated agricultural uses. For irrigated crops, orchards and vineyards have separate eligibility standards from all other irrigated crop categories. Non-irrigated crops have separate eligibility standards for dry farming and grazing. A non-exhaustive summary of qualification requirements for irrigated and non-irrigated agricultural uses are described in Table 4.1-3.

**Table 4.1-3 Williamson Act Qualification Requirements for the County of San Luis Obispo**

Qualifying Soils and Agricultural Use	Minimum Acreage of Qualifying Soils and Agricultural Use	Minimum Acreage under Common Ownership
<b>Irrigated</b>		
Class 1 Soils with Irrigated Crops	10	20
Class 2 Soils with Irrigated Crops	10	40
Class 3, 4, 6, & 7 Soils with Irrigated Orchards or Vineyards	20	40
Class 3 & 4 Soils with Irrigated Crops other than Orchards or Vineyards	40	40

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Qualifying Soils and Agricultural Use	Minimum Acreage of Qualifying Soils and Agricultural Use	Minimum Acreage under Common Ownership
<b>Non-Irrigated</b>		
Class 3 & 4 Soils with Dry Farming	160	160
Class 6 & 7 Soils with Grazing	320	320

Note: Summary of general qualification requirements. See *Rules of Procedure* (County of San Luis Obispo 2019) for detailed standards. Does not include qualification requirements based on recreational or open space resources. Soil classifications based on NRCS data. Does not include allowance for mixed-use eligibility or adjacent owners jointly meeting minimum site acreage requirements. Pre-existing contracts may be based on previous rules.

In San Luis Obispo County, contracts for properties under a Williamson Act contract may not be renewed if the property does not maintain the required qualifying agricultural use. The County or the property owner may choose to not renew the contract. Property owners may also apply to amend the terms of their contracts if they meet current qualification standards.

### Local Regulations

#### *County of San Luis Obispo General Plan Conservation and Open Space Element*

The Conservation and Open Space Element is a tool to protect and preserve unique community resources in San Luis Obispo County. Conservation is the planned management, preservation, and wise utilization of natural resources and landscapes to ensure their availability in the future. The following Conservation and Open Space Element policies apply to the planting ordinance:

**Policy SL 3.1, Conserve Important Agricultural Soils.** Conserve the Important Agricultural Soils mapped in Figure SL-1 [see Figure 4.1-1] and listed in Table SL-2 [see Table 4.1-1]. Proposed conversion of agricultural lands to non-agricultural uses shall be evaluated against the applicable policies in this [Conservation and Open Space Element] and in the Agriculture Element, including policies such as Policies AGP18 and AGP24.

**Policy WR 1.7, Agricultural Operations.** Groundwater management strategies will give priority to agricultural operations. Protect agricultural water supplies from competition by incompatible development through land use controls.

#### *County of San Luis Obispo General Plan Agriculture Element*

The County’s Agriculture Element identifies goals, policies, and implementation measures and programs to: (1) promote and protect the County’s agricultural industry; (2) provide for continuity of sound and healthy agriculture in the County; and (3) maintain and protect agricultural lands from inappropriate conversion to non-agricultural uses. The following Agriculture Element goals apply to the proposed planting ordinance:

**AG1: Support County Agricultural Production.**

- a. Support and promote a healthy and competitive agricultural industry whose products are recognized in national and international markets as being produced in San Luis Obispo County.
- b. Facilitate agricultural production by allowing a broad range of uses and agricultural support services to be consistently and accessibly located in areas of prime agricultural activity.
- c. Support ongoing efforts by the agricultural community to develop new techniques and new practices.

- d. Develop agricultural permit processing procedures that are rapid and efficient. Do not require permits for agricultural practices and improvements that are currently exempt. Keep the required level of permit processing for non-exempt projects at the lowest possible level consistent with the protection of agricultural resources and sensitive habitats.

Goal AG-1d would be modified by the proposed planting ordinance to specify that permits are not required for agricultural practices and improvements, with the exception of ministerial permits to regulate production agriculture irrigated with groundwater wells within the PBLUMA. See Appendix C for the proposed General Plan revisions.

**AG2: Conserve Agricultural Resources.**

- a. Maintain the agricultural land base of the county by clearly defining and identifying productive agricultural lands for long-term protection.
- b. Conserve the soil and water that are the vital components necessary for a successful agricultural industry in this county.
  - Establish land-use policies in this element that support the needs of agriculture without impeding its long-term viability

**AG3: Protect Agricultural Lands.**

- Establish criteria in this element for agricultural land divisions that will promote the long-term viability of agriculture.
- Maintain and protect agricultural lands from inappropriate conversion to non-agricultural uses. Establish criteria in this element and corresponding changes in the Land Use Element and Land Use Ordinance for when it is appropriate to convert land from agricultural to non-agricultural designations.
- Maintain and strengthen the county's agricultural preserve program (Williamson Act) as an effective means for long-term agricultural land preservation.

The following Agriculture Element policies aim to implement the overarching agricultural goals mentioned above and are applicable to the proposed ordinance:

**AGP16: Agricultural Land Conservation Programs.**

- Encourage and support efforts by non-profit and other conservation organizations to protect agricultural lands and maintain agricultural production.
- Consider establishing a limited county program to acquire conservation easements or development rights from willing landowners. Such programs should encourage maximum flexibility for agricultural operations.

**AGP17: Agricultural Buffers.**

- Protect land designated Agriculture and other lands in production agriculture by using natural or man-made buffers where adjacent to nonagricultural uses in accordance with the agricultural buffer policies adopted by the Board of Supervisors (see Agriculture Element Appendix C: Agricultural Buffer Policies for definitions and buffer specifications and requirements).

**AGP18: Location of Improvements.**

- Locate new buildings, access roads, and structures so as to protect agricultural land.

**AGP24: Conversion of Agricultural Land**

- Discourage the conversion of agricultural lands to non-agricultural uses through the following actions:
  1. Work in cooperation with the incorporated cities, service districts, school districts, the County Department of Agriculture, the Agricultural Advisory Liaison Board, Farm Bureau, and affected community advisory groups to establish urban service and urban reserve lines and village reserve lines that will protect agricultural land and will stabilize agriculture at the urban fringe.
  2. Establish clear criteria in this plan and the Land Use Element for changing the designation of land from Agriculture to non-agricultural designations.
  3. Avoid land redesignation (rezoning) that would create new rural residential development outside the urban and village reserve lines.
  4. Avoid locating new public facilities outside urban and village reserve lines unless they serve a rural function or there is no feasible alternative location within the urban and village reserve lines.

*County Land Use Ordinance*

Title 22, Article 2, Section 22.06 of the County Land Use Ordinance allows crop production in all land use designations and identifies crop production as exempt from requiring a land use permit, except for expanded irrigated crops using water from the Paso Basin. Agricultural operations involving expanded irrigated crops that use groundwater from the PBLUMA would require an Agricultural Offset Clearance, pursuant to Section 22.30.204. The County Land Use Ordinance also includes minimum site size requirements intended to preserve agricultural properties.

### 4.1.3 Impact Analysis

#### **Significance Thresholds**

According to Appendix G of the *CEQA Guidelines*, impacts related to agriculture and forestry resources from the proposed planting ordinance would be significant if the project would:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (“Farmland”), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- b. Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]);
- d. Result in the loss of forest land or conversion of forest land to non-forest use; and/or
- e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

The Initial Study prepared for the proposed ordinance and circulated during the scoping period for the PEIR determined that impacts associated with Thresholds c and d regarding forestry resources would be less than significant. Additionally, the Initial Study determined that the planting ordinance would result in less than significant impacts under Threshold e as it relates to the conversion of forest land to non-forest use. These impacts are briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the impact analysis below discusses only Thresholds a, b, and e as each relates to agricultural resources.

## **Methodology**

The following impact assessment is based on data from local planning documents and the County-provided data, as shown in Appendix B of this PEIR, that the planting ordinance would result in approximately 240 acres per year through January 31, 2045 of new and expanded irrigated crops.

The location and existing characteristics of individual planting permit/exemption sites under the proposed ordinance are currently unknown but would be located in agricultural/rural areas with the PBLUMA.

## **Project Impacts and Mitigation Measures**

**Threshold a:** Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (“Farmland”), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

**Impact AG-1 THE PROPOSED PLANTING ORDINANCE WOULD RESULT IN AN INCREASE IN THE USE OF FARMLAND FOR AGRICULTURAL PURPOSES IN THE PBLUMA, AND WOULD NOT REQUIRE REVISIONS OR AMENDMENTS TO ZONING OR LAND USE DESIGNATIONS. THEREFORE, THE PROPOSED ORDINANCE WOULD NOT CONVERT FARMLAND TO NON-AGRICULTURAL USE, AND IMPACTS TO FARMLAND WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

According to the DOC, Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Unique Farmland (herein referred to as “Farmland”) occur within approximately 15 percent of the PBLUMA subject to the proposed planting ordinance (see Figure 4.1-1; DOC 2016). The proposed ordinance would require a planting permit or exemption verification for new or expanded planting of production agriculture irrigated from groundwater wells within the PBLUMA. New crop plantings that would be “water neutral” would be eligible for a ministerial planting permit, and new or expanded crop plantings with an estimated total water demand of 25 AFY or less per site would be exempt. Under the proposed ordinance, persons with agricultural offset clearances/ exemptions issued under the existing agricultural offset requirements that have not yet received final approval would be issued a new planting permit or exemption subject to the timelines and extension requirements of the new ordinance.

The proposed planting ordinance would regulate new and expanded irrigated crops within the PBLUMA; would result in an estimated increase in on-site accessory agricultural facilities such as groundwater well production, agricultural reservoirs, internal access roads, fencing, and irrigation lines; and would not require revisions or amendments to zoning or land use designations within the PBLUMA. The ordinance would result in an increase in the use of Farmland for agricultural purposes in the PBLUMA and would not convert existing agricultural uses to non-agricultural uses. Additionally, by irrigating land that is not currently irrigated, there is a potential for the proposed

planting ordinance to increase Prime Farmland in the PBLUMA because the definition of “Prime Farmland” requires the land to be irrigated.

As discussed in Impact UTIL-1 in Section 4.13, *Utilities and Service Systems*, crop production under the proposed ordinance would result in an increase in water demand within the PBLUMA and exacerbate overdraft conditions of the Paso Robles Subbasin. This increase in water use allowed for new and expanded irrigated crop operations may, in turn, reduce the amount of groundwater available for existing irrigated agricultural operations in certain areas of the PBLUMA and shift where irrigated agriculture occurs within the PBLUMA. The Paso Robles Subbasin is currently projected to have a 13,700 AFY groundwater storage deficit, assuming no increase in current agricultural groundwater extractions. The increased groundwater extractions allowed by the planting ordinance would increase the existing groundwater storage deficit in the Paso Robles Subbasin which may interfere with the ability of existing agricultural operations in the PBLUMA to continue production due to lack of groundwater availability. It is currently unknown whether the groundwater extraction necessary for implementation of the planting ordinance would result in some existing agricultural operations ceasing on existing agricultural properties or in some existing agricultural land being converted to other uses due to lack of available water supply. The reduction in available groundwater for existing irrigated agricultural operations could result in conversion of some existing agricultural land to non-irrigated crops, crops that require less water, or fallow land. Growers may also need to install deeper water wells to be able to use groundwater. However, drawdown of groundwater in the PBLUMA and/or installing deeper wells would not directly convert farmland to non-agricultural use, and the planting ordinance would not result in a net decrease in the total acreage of planted crops. Therefore, the proposed ordinance would not convert farmland to non-agricultural use, and impacts to Farmland would be less than significant.

### **Mitigation Measures**

Because impacts would be less than significant, no mitigation is required.

### **Significance After Mitigation**

Impacts related to the conversion of Farmland to non-agricultural use would be less than significant and no mitigation is required.

<b>Threshold b:</b> Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?
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**Impact AG-2 THE PROPOSED PLANTING ORDINANCE WOULD NOT REQUIRE REDESIGNATING EXISTING AGRICULTURE AREAS TO OTHER LAND USE CATEGORIES. ADDITIONALLY, THE ORDINANCE WOULD NOT AFFECT CONTRACT COMPLIANCE STATUS OF PROPERTIES UNDER A WILLIAMSON ACT CONTRACT. THEREFORE, THE PROPOSED ORDINANCE WOULD NOT CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE OR A WILLIAMSON ACT CONTRACT, AND IMPACTS WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

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As discussed under Impact AG-1, the proposed planting ordinance would not require revisions to land use category designations (which are equivalent to zoning designations) within the PBLUMA. The ordinance would increase agricultural use in the PBLUMA and would not conflict with existing zoning for agricultural use. Impacts related to conflict with existing agricultural use zoning designations would be less than significant.

The Williamson Act program is intended to preserve land in active agricultural production. The proposed planting ordinance would not apply to existing irrigated crops, dry farm crops, or grazing

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operations. Therefore, the proposed ordinance would not affect the contract compliance status of properties under a Williamson Act contract that have maintained their required qualifying agricultural use since they entered a contract (e.g., grazing, dry farm crops, or irrigated crops). As such, the proposed ordinance would not conflict with an existing Williamson Act contract.

Although the planting ordinance would not affect the ability of properties in the PBLUMA to qualify for new Williamson Act contracts with dry farming or grazing, the ordinance may affect the ability of some lands with irrigated crops in the PBLUMA to qualify for new Williamson Act contracts, as the ordinance would limit plantings of new or expanded irrigated crops. Pursuant to the County's *Rules of Procedure to Implement the California Land Conservation Act of 1965* (2019), the County requires 10 or 20 acres of irrigated crops per site, based on site size and soil configuration to qualify for a contract with an irrigated use. Planting permits under the planting ordinance would allow "water neutral" plantings on individual planting permit sites. The 25-AFY exemption under the planting ordinance could be used to plant up to 20 acres of wine grapes (1.25 AFY per acre), 16.7 acres of cannabidiol hemp (1.5 AFY per acre), 13 acres of vegetables (1.9 AFY per acre), 10.9 acres of citrus (2.3 AFY per acre), or 10 acres of soil-dependent nursery (2.5 AFY per acre) as qualifying crops. Therefore, applicants applying for exemptions under the proposed ordinance and anticipating to qualify for new Williamson Act contracts would be limited in the types of irrigated crops allowed so as not to exceed the 25-AFY limitation. However, these sites may not be able to qualify for a Williamson Act contract with an irrigated agricultural use at all under the existing agricultural offset ordinance. Nonetheless, with adherence to the planting ordinance and the Williamson Act (also known as the California Land Conservation Act), the proposed ordinance would not conflict with a Williamson contract.

In summary, the proposed planting ordinance would not conflict with existing zoning for agricultural use or a Williamson Act contract, and impacts would be less than significant.

### **Mitigation Measures**

Because impacts would be less than significant, no mitigation is required.

### **Significance After Mitigation**

Impacts associated with existing agricultural use zoning and Williamson Act contracts would be less than significant and no mitigation is required.

**Threshold e:** Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

**Impact AG-3 THE PROPOSED ORDINANCE WOULD NOT CONVERT FARMLAND TO NON-AGRICULTURAL USE OR CONVERT FOREST LAND TO NON-FOREST USE. IMPACTS TO FARMLAND AND FOREST LAND WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

As previously stated, the Initial Study determined that the planting ordinance would result in less than significant impacts under Threshold e as it relates to the conversion of forest land to non-forest use. See Section 4.14, *Effects Found Not to be Significant*, for a brief discussion of forestry resources. See also Appendix A for the Initial Study. Accordingly, this impact analysis only addresses Threshold e as it relates to agricultural resources.



The proposed ordinance would require a planting permit or exemption verification for new or expanded planting of crops irrigated from groundwater wells within the PBLUMA. New crop plantings that would be “water neutral” would be eligible for a ministerial planting permit, and new or expanded crop plantings with an estimated total water demand of 25 AFY or less per site would be exempt. The proposed ordinance would also allow for on-site accessory agricultural facilities such as groundwater well production, agricultural reservoirs, internal access roads, fencing, and irrigation lines. As discussed in Impact AG-1 above, impacts to water supply resulting from the planting ordinance may shift where irrigated crop production is located within the PBLUMA, but the proposed ordinance would not convert Farmland to non-agricultural use. In addition, by irrigating land that is not currently irrigated, there is a potential for the proposed planting ordinance to increase Prime Farmland in the PBLUMA because the definition of “Prime Farmland” requires the land to be irrigated. Therefore, impacts would be less than significant.

### **Mitigation Measures**

Because impacts would be less than significant, no mitigation is required.

### **Significance After Mitigation**

Impacts related to the conversion of Farmland to non-agricultural use would be less than significant and no mitigation is required.

#### **4.1.4 Cumulative Impacts**

Cumulative agricultural resources impacts would occur if projected residential and non-residential development within the PBLUMA, in combination with the proposed planting ordinance, would result in the conversion of Farmland to non-agricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. As discussed under Impacts AG-1 and AG-2, the proposed ordinance would not convert Farmland to non-agricultural use or conflict with existing agricultural zoning or a Williamson Act contract, and agricultural resources impacts would be less than significant. Cumulative development may require conversion of Farmland to non-agricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. In addition, future area-specific mandatory pumping reductions required by the Paso Robles Subbasin Groundwater Sustainability Plan (GSP) to off-set groundwater supply deficits, as well as exacerbated declining groundwater elevation levels from increased groundwater extractions, may contribute to the inability of existing agricultural operations in the PBLUMA to continue production due to the lack of water supply. However, without knowing the location and existing agricultural characteristics of individual cumulative development projects and extent of future groundwater pumping restrictions, it would be too speculative at this time to estimate if cumulative development would significantly affect agricultural resources. It is also currently unknown what avoidance, minimization, and/or mitigation measures could be included as part of the individual cumulative development projects to alleviate potential significant impacts to agricultural resources. Therefore, cumulative agricultural resources impacts could potentially be significant, although the proposed ordinance’s contribution to cumulative impacts would not be considerable.

## 4.2 Air Quality

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This section evaluates the potential impacts associated with air quality, focusing on potential impacts due to conflict with or obstruction of implementation of an air quality plan, a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment for a federal or State ambient air quality standard, and exposure of sensitive receptors to substantial pollutant concentrations. Impacts associated with other emissions (such as those leading to odors) were determined to be less than significant in the Initial Study prepared for the proposed planting ordinance (see Appendix A and Section 4.14, *Effects Found Not to Be Significant*), and therefore, are not further analyzed in this section.

### 4.2.1 Setting

#### **Climate**

The Paso Basin Land Use Management Area (PBLUMA) is located in the South Central Coast Air Basin (SCCAB), which includes San Luis Obispo, Santa Barbara, and Ventura counties. San Luis Obispo County constitutes a land area of approximately 3,316 square miles with varied topography and climate within the SCCAB. From a geographical and meteorological standpoint, the county can be divided into three general regions: the Coastal Plateau, the Upper Salinas River Valley, and the East County Plain. Air quality in each of these regions is characteristically different, although the physical features that divide them provide only limited barriers to the transport of pollutants between regions (County of San Luis Obispo 2008). The PBLUMA is located in the East County Plain region. The East County Plain region receives less precipitation and experiences a higher range of temperatures than coastal areas, with a mean high temperature of 93 degrees Fahrenheit (°F) in July and a mean low temperature of 32°F in December (Western Regional Climate Center 2016). Weather patterns are affected by the eastern Pacific High Pressure System that persists off the California coast for much of the year and diverts storms northward. Local and regional weather conditions, including wind speed and direction, atmospheric stability, air temperature, and the presence or absence of temperature inversions can contribute to the dispersion or concentration of air pollutants.

#### **Air Pollutants of Primary Concern**

The federal and state governments have been authorized by the federal and state Clean Air Acts (CAAs) to regulate the emission of airborne pollutants and have established ambient (outdoor) air quality standards for the protection of public health. The United States Environmental Protection Agency (U.S. EPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the State equivalent under the California Environmental Protection Agency. Local air quality management is provided by CARB through multi-county and county-level Air Pollution Control Districts (APCDs). CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins statewide. The PBLUMA is located within the jurisdiction of the San Luis Obispo County Air Pollution Control District (SLOAPCD).

Under the federal CAA, the U.S. EPA has established National Ambient Air Quality Standards (NAAQS), or limits, for six air pollutants known as criteria air pollutants. These criteria air pollutants,

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which are defined in more detail below, include ozone (O<sub>3</sub>), particulate matter (PM),<sup>1</sup> carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). The State of California, as allowed by the State CAA, has also set California Ambient Air Quality Standards (CAAQS) for certain pollutants, including PM and O<sub>3</sub>. Table 4.2-1 identifies the federal and State standards for each criteria air pollutant.

**Table 4.2-1 Current Federal and State Ambient Air Quality Standards**

Pollutant	Averaging Time	NAAQS	CAAQS
Ozone	1-Hour	–	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
PM <sub>10</sub>	24-Hour	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
	Annual	–	20 µg/m <sup>3</sup>
PM <sub>2.5</sub>	24-Hour	35 µg/m <sup>3</sup>	–
	Annual	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.180 ppm
Sulfur Dioxide	24-hour	–	0.04 ppm
	1-hour	0.075 ppm	0.25 ppm
	Annual	–	–
Lead	30-Day Average	–	1.5 µg/m <sup>3</sup>
	3-Month Average	0.15 µg/m <sup>3</sup>	–

NAAQS = National Ambient Air Quality Standards

CAAQS = California Ambient Air Quality Standards

ppm = parts per million

µg/m<sup>3</sup> = micrograms per cubic meter

Source: CARB 2016; U.S. EPA 2016

SLOAPCD monitors ambient air pollutant levels to determine if the County meets air quality standards. If the County does not meet these standards, SLOAPCD must develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the air basin is classified as being in “attainment” or “non-attainment.” There are currently 10 permanent ambient air monitoring stations in San Luis Obispo County. SLOAPCD operates nine and the remaining station is operated by CARB (SLOAPCD 2021). The air quality monitoring station located nearest to the PBLUMA is the Paso Robles – Santa Fe Avenue Monitoring Station, approximately one mile to the west of the PBLUMA boundary. The second closest station is the Atascadero – Lift Station #5 Monitoring Station, located approximately three miles southeast of the PBLUMA boundary.

Table 4.2-2 shows the number of days that each standard was exceeded 2018, 2019, and 2020. Data presented for O<sub>3</sub> and PM<sub>10</sub> are from the Paso Robles – Santa Fe Avenue Monitoring Station;

<sup>1</sup> “Particulate matter” includes PM<sub>10</sub> (particulate matter that measures no more than 10 microns in diameter) and PM<sub>2.5</sub> (particulate matter that measures no more than 2.5 microns in diameter).

however, the station does not monitor NO<sub>2</sub> or PM<sub>2.5</sub> emissions. Therefore, the emissions data for these pollutants were obtained from the Atascadero – Lift Station #5 Monitoring Station.

**Table 4.2-2 Exceedances of Federal and State Ambient Air Quality Standards at Closest Air Quality Monitoring Stations (2018-2020)**

Pollutant	2018	2019	2020
<b>8-Hour Ozone (ppm) – 8-Hour Average<sup>a</sup></b>	0.071	0.064	0.073
Number of days of State exceedances (>0.070 ppm)	2	0	3
Number of days of Federal exceedances (>0.070 ppm)	2	0	2
<b>Ozone (ppm) – Worst Hour<sup>a</sup></b>	0.087	0.077	0.092
Number of days of State exceedances (>0.09 ppm)	0	0	0
Number of days of Federal exceedances (>0.12 ppm)	0	0	0
<b>Nitrogen Dioxide (ppb) – Worst Hour<sup>b</sup></b>	38.0	34.0	33.0
Number of days of State exceedances (>0.18 ppm)	0	0	0
Number of days of Federal exceedances (>100 ppb)	0	0	0
<b>Particulate Matter &lt;10 microns (µg/m<sup>3</sup>) – Worst 24 Hours<sup>a</sup></b>	85.5	134.4	367.8
Number of samples of State exceedances (>50 µg/m <sup>3</sup> )	26	9	35
Number of samples of Federal exceedances (>150 µg/m <sup>3</sup> )	0	0	4
<b>Particulate Matter &lt;2.5 microns (µg/m<sup>3</sup>)– Worst 24 Hours<sup>b</sup></b>	34.1	17.3	242.1
Number of samples of Federal exceedances (>35 µg/m <sup>3</sup> )	0	0	11

<sup>a</sup> Data source: Paso Robles – Santa Fe Avenue Monitoring Station

<sup>b</sup> Data source: Atascadero – Lift Station #5 Monitoring Station

ppb = parts per billion

ppm = parts per million

µg/m<sup>3</sup> = micrograms per cubic meter

Source: CARB 2021

As shown in Table 4.2-2, the ozone concentrations exceeded 8-hour federal and State standards in 2018 and 2020. PM<sub>10</sub> concentrations exceeded State standards in all three observation years. The PM<sub>2.5</sub> concentration exceeded the federal standard in 2020. No exceedance of the federal or State standards for NO<sub>2</sub> has been recorded in the past three years.

The major local sources for PM<sub>10</sub> are agricultural operations, vehicle dust, grading, and dust produced by high winds. O<sub>3</sub> is a secondary pollutant that is not produced directly by a source, but rather is formed by a reaction between nitrogen oxides (NO<sub>x</sub>) and reactive organic gases (ROG) in the presence of sunlight. Reductions in O<sub>3</sub> concentrations are dependent on reducing the amount of these precursors. In San Luis Obispo County, the major sources of ROG are motor vehicles, organic solvents, the petroleum industry, and pesticides; and the major sources of NO<sub>x</sub> are motor vehicles, public utility power generation, and fuel combustion by various industrial sources (SLOAPCD 2001).

### Sensitive Receptors

CARB and the California Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65 years of age; children under 14 years of age; infants (including in utero in the third trimester of

pregnancy); and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005; OEHHA 2015). Some land uses considered more sensitive to air pollution than others due to the types of population groups or activities involved are referred to as “sensitive receptors.” Examples of sensitive receptors include residences, schools, hospitals, religious facilities, and daycare centers. The nearest sensitive receptors to areas of potential new or expanded crop planting are residential uses within the PBLUMA. In addition, schools and churches are located within the communities of Shandon, Creston, and San Miguel.

## 4.2.2 Regulatory Setting

### **Federal Regulations**

#### *Federal Clean Air Act*

Regulatory agencies, including the U.S. EPA, CARB, and SLOAPCD, develop rules, regulations, policies, and/or goals to comply with applicable legislation. Although U.S. EPA regulations may not be superseded, state and local regulations may be more stringent.

The Federal CAA required each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The Federal CAA Amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. The U.S. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the Federal CAA and its amendments and whether implementation will achieve air quality goals. If the U.S. EPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary air pollution sources in the air basin.

### **State Regulations**

#### *California Clean Air Act*

CARB is responsible for preparing and enforcing the federally required SIP to achieve and maintain the NAAQS, as well as the CAAQS, which were developed as part of the California CAA. The State standards for criteria pollutants are equivalent to or more stringent than the national standards and include other pollutants for which there are no national standards. CARB is also responsible for assigning air basin attainment and nonattainment designations in California. Air basins are designated as being in attainment if the levels of a criteria air pollutant meet the CAAQS for the pollutant and are designated as being in nonattainment if the concentration of a criteria air pollutant exceeds the CAAQS.

CARB is the oversight agency responsible for regulating statewide air quality, but implementation and administration of the CAAQS is delegated to several regional APCDs and air quality management districts. These districts have been created for specific air basins and have principal responsibility for developing plans to comply with the NAAQS and CAAQS; developing control measures for non-vehicular sources of air pollution necessary to achieve and maintain NAAQS and CAAQS; implementing permit programs established for the construction, modification, and operation of air

pollution sources; enforcing air pollution statutes and regulations governing non-vehicular sources; and developing employer-based trip reduction programs.

## **Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act**

With regards to toxic air contaminants (TACs), the Tanner Air Toxics Act (Assembly Bill [AB] 1807, Chapter 1047, Statutes of 1983) sets forth a formal procedure for CARB to designate substances and develop control measures. The Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588, Chapter 1252, Statutes of 1987) requires stationary sources to report the types and quantities of certain substances routinely released into the air.

## **Local Regulations**

### *Clean Air Plan*

In compliance with State regulatory requirements, SLOAPCD prepared the 2001 Clean Air Plan (2001 CAP), which serves as an overall plan for air quality improvement for the SCCAB. The 2001 CAP addresses the attainment and maintenance of federal and State ambient air quality standards within the SCCAB, as well as contains a comprehensive set of control measures and a regulatory framework designed to reduce criteria air pollutants and precursors from both stationary and mobile sources.

The SLOAPCD also inspects stationary sources to ensure they abide by permit requirements, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the Federal and State CAAs.

### *SLCOAPCD Guidelines*

In 2009, SLOAPCD adopted guidelines for assessment and mitigation of air quality impacts under CEQA. The *CEQA Air Quality Handbook*, which has since been updated (SLOAPCD 2012), is an advisory document that provides lead agencies, consultants, and project applicants with uniform procedures for addressing air quality issues in environmental documents. Additionally, the SLOAPCD prepared the *Clarification Memorandum for the San Luis Obispo County Air Pollution Control District's 2012 CEQA Air Quality Handbook* (SLOAPCD 2017).

## **4.2.3 Impact Analysis**

### **Significance Thresholds**

According to Appendix G of the *CEQA Guidelines*, the proposed planting ordinance would result in significant air quality impacts if the project would:

- a. Conflict with or obstruct implementation of the applicable air quality plan;
- b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard;
- c. Expose sensitive receptors to substantial pollutant concentrations; and/or
- d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

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The Initial Study prepared for the proposed planting ordinance and circulated during the scoping period for the PEIR determined that impacts associated with Threshold d would be less than significant. This impact is briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the below impact analysis discusses only Thresholds a through c.

The SLOAPCD's *CEQA Air Quality Handbook* provides numeric operational and short-term construction emissions thresholds for projects. These thresholds are presented in Table 4.2-3. With respect to the analysis, the planting ordinance, as a whole, is considered one project.

**Table 4.2-3 Thresholds of Significance for Air Pollutant Criteria**

<b>Pollutant</b>	<b>Construction Daily Threshold (pounds/day)</b>	<b>Operational Daily Threshold (pounds/day)</b>	<b>Operational Annual Threshold (tons/year)</b>
Ozone Precursors (ROG + NO <sub>x</sub> ) <sup>1</sup>	137 <sup>1</sup>	25	25
Diesel Particulate Matter (DPM) <sup>1</sup>	7 <sup>1</sup>	1.25	— <sup>3</sup>
Fugitive Particulate Matter (PM <sub>10</sub> ), Dust	— <sup>2</sup>	25	25
Carbon Monoxide (CO)	— <sup>2</sup>	550	— <sup>3</sup>

<sup>1</sup> Daily construction thresholds are used as exemption plantings on each site would occur over approximately 30 days.

<sup>2</sup> SLOAPCD does not have daily construction thresholds for fugitive dust or CO.

<sup>3</sup> SLOAPCD does not have annual operational thresholds for DPM or CO.

Source: SLOAPCD 2012

## Methodology

The air quality impact analysis is based on the most recent guidance from the SLOAPCD, including the *CEQA Air Quality Handbook* (SLOAPCD 2012) and the *Clarification Memorandum for the San Luis Obispo County Air Pollution Control District's 2012 CEQA Air Quality Handbook* (SLOAPCD 2017).

The emissions from agricultural activities facilitated by the proposed planting ordinance were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0. CalEEMod uses project-specific information, including land uses, acreages for different uses, and location, to estimate a project's construction and operational emissions.

The proposed planting ordinance would result in an increase in agricultural activity in the PBLUMA. To accurately provide a quantitative analysis of emissions associated with this increase, emissions were estimated at the project level, rather than a program level. Due to the modeling constraints of CalEEMod and the nature of the ordinance, program level analysis would be too speculative and produce inaccurate results. Therefore, impacts were estimated for construction and operation of a planting site for the reasonable impact scenario under the proposed planting ordinance's 25-AFY water use exemption. Using the anticipated number of individual planting exemptions that would be allowed over the duration of the planting ordinance (January 31, 2023 to January 31, 2045), emissions were extrapolated to determine the total impacts from activities facilitated by the proposed planting ordinance.

CalEEMod does not include land or equipment uses that are specific to agriculture. Therefore, the following assumptions were made based on information for a reasonable average individual planting exemption site (a 20-acre vineyard):

Of the potential crops that could be grown by individual planting exemption applicant, wine grapes use the least amount of irrigation water (1.25 AFY per acre). Therefore, up to 20 acres of wine

grapes would equate to the largest area that can be planted with irrigated crops, pursuant to the 25-AFY exemption under the planting ordinance.

Total emissions for an individual site were separated into construction and operational activities. Construction activities were assumed to be two phases: site preparation and well development. Operational activities were split into four phases: (1) annual site preparation and planting; (2) maintenance activities; (3) harvest activities; and (4) well operation.

#### Construction Phases:

- Initial site preparation would include vegetation removal, grading, ripping, and construction of accessory infrastructure such as fencing, roads, reservoirs, and pipelines. This activity is assumed to be temporary and short-term; thus, it is modeled and analyzed in terms of construction activity. Site preparation is reasonably assumed to occur over 20 days and require two crawler tractors, two excavators, and two tractors. This equipment list was determined to represent a reasonable impact scenario associated with the initial development of a 20-acre vineyard.
- It is assumed that 88 new irrigation groundwater wells would be constructed throughout the lifetime of the planting ordinance. This results in 4 wells being constructed annually. It is also assumed that up to 2 wells could be under construction concurrently. Because the soil type(s) are currently unknown where the wells would be situated or depth to which the wells would be constructed, modeling assumed that each well would require 2 weeks (10 days) for construction and could potentially require 24-hour construction activity at points during development.

#### Operational Phases:

- Annual site preparation and planting activities are based on information provided in Section 2, *Project Description*, and Appendix B. These activities are anticipated to occur over 20 days per year. Reasonably anticipated equipment for these activities would be one 95-horsepower (hp) tractor, which would require a total of 3 passes (3 days of operation) per year. Worker crews for planting would be on site for an additional 8 day (for a total of 11 days), and a foreperson would be on site an additional 9 days without other crew (for a total of 20 days).
- Maintenance activities are based on the information provided in Appendix B. Maintenance activities are anticipated to have a crew on site for 17 days and a foreperson on site for 29 days (17 concurrent with the crew) for pruning, irrigation, and canopy manipulation. These activities are anticipated to be conducted without the use of diesel equipment. Maintenance, including fungicide and herbicide applications, would occur over 9 days, requiring a crew, a foreperson, and one tractor per day.
- Harvesting activities are anticipated to occur over 29 days. As detailed in Appendix B, harvesting activities would require the use of two 95-hp tractors and one OXBO 6120 harvester for 3 days, a crew for a total of 11 days, and a foreperson for 29 days.
- Hauling of harvested produce would require 26 trips per year over 3 days.
- Well operation activities are only assessed for the 88 new wells that would be developed as a result of the proposed planting ordinance. Because the depth of the wells is unknown, each well is assumed to require a main pump to ensure water can be adequately drawn from the wells and distributed. Conservatively, well pumps are anticipated to be diesel operated. Pumps are assumed to be 7-hp and would operate up to 4 hours per day, 365 days per year.
- In addition to the well pumps for the 88 new wells, it is assumed that all 264 new and expanded agricultural sites would require the installation of a booster pump to ensure water can be



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adequately distributed. Conservatively, like the main well pumps, booster pumps are anticipated to be diesel operated. The booster pumps are assumed to be 7-hp and would operate up to 4 hours per day, 365 days per year.

- For construction and operational activities, crews would travel to the planting site in one vehicle and would commute 54 miles one-way (108 miles round-trip). The foreperson would individually commute 10 miles per one-way trip (20 miles round-trip). Haul trucks for harvesting would travel 108 miles per trip.

Changes from CalEEMod defaults:

- All construction and operational phases were modeled as construction activities due to the nature of the activities and the equipment used.
- Annual activities were assumed to operate 7 days per week instead of the default of 5 days per week, except as noted above.
- Default construction equipment for each phase was replaced with the equipment as outlined in the phase descriptions above.
- Usage hours for equipment during operational activities were increased to 12 hours per day to better capture the nature of farming activities.
- Hours for well development was increased to 20 hours per well to account for the potential for 24-hour construction activities during well development.
- Due to the rural nature of the PBLUMA and the prevalence for unpaved roads in remote rural areas and on farm sites, paved roads were reduced from 100 percent to 97 percent.

CalEEMod generates modeling results separately in terms of short-term construction impacts and long-term operational impacts. Construction activities (initial site preparation and well development) were modeled as construction phasing as is typical for construction activities using CalEEMod. Agricultural activities more closely resemble construction activities than the typical operational activities modeled in CalEEMod; therefore, operational emissions (annual site preparation, planting, maintenance, harvesting, and well pump operation) were modeled in CalEEMod as if they were construction phases.

The reasonable impact scenario of a 240-acre annual increase in irrigated crop production in the PBLUMA allowed by the proposed planting ordinance equates to 12 new 20-acre vineyards per year allowed by the ordinance under a 25-AFY of groundwater per site exemption (see Appendix B of the PEIR for a discussion of how the reasonable impact scenario was determined). Thus, for the purposes of this analysis, construction emissions from individual sites are multiplied by 12 to reach total emissions from initial site preparation and well construction. As a reasonable estimate of emissions, it is assumed that all 12 sites are developed at the same time. This scenario represents the emissions that would occur during the first year of the proposed planting ordinance, when 12 sites are anticipated to be constructed during the year.

Operational emissions are reported for one site, for an annual increase in emissions (i.e., the operation of 12 sites) and for the buildout scenario (i.e., all 264 sites). The operational analysis for the buildout year assumes 252 sites would be in operation and 12 sites (and 2 new wells) would be in construction concurrently. This buildout year represents the final year that the proposed planting ordinance would be in effect, where emissions have the potential to be the highest during any one year. Because construction emissions would exceed operational emissions for any given site, the scenario where 252 sites are in operation and 12 sites are under construction during the buildout

year would result in greater emissions than operation of all 264 sites. Therefore, once all 264 sites are in operation, the emissions would be anticipated to be lower than the operational emissions presented in this section.

By quantifying emissions from all activity under the proposed planting ordinance, it can be determined whether the total emissions from all agricultural activities resulting from the ordinance would conform with applicable plans and thresholds. If the agricultural activities facilitated by the proposed planting ordinance's total emissions are above significance thresholds set by SLOAPCD, impacts would be potentially significant.

## Impacts and Mitigation Measures

<b>Threshold a:</b> Would the project conflict with or obstruct implementation of the applicable air quality plan?
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**Impact AQ-1 THE PROPOSED PLANTING ORDINANCE WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE SLOAPCD 2001 CLEAN AIR PLAN. IMPACTS WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

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The proposed planting ordinance would be consistent with the 2001 CAP, which is the most recent clean air plan adopted for the County, if it would result in an increase in population that is equal to or less than the population estimates used in the *2050 Regional Growth Forecast for San Luis Obispo County* and if it is consistent with the transportation and land use strategies outlined in the CAP.

The proposed planting ordinance activities would include field preparation (e.g., grading and tilling) and crop planting, maintenance, and harvesting activities associated with the allowed new and expanded irrigated crops in the PBLUMA. Although new infrastructure, such as pipelines, wells, or on-site roadways would occur in the PBLUMA, such development would not result in new residences and therefore would not alter current population trends for the region. The proposed planting ordinance would increase the need for agricultural workers. It is assumed agricultural workers would carpool, per common practice, likely from outside the County (an estimated 54-mile one-way commute [which is the distance between the City of Paso Robles and the City of Avenal]; see Section 4.11, *Transportation*) and the foreperson would commute individually from within the PBLUMA (an estimated 10-mile one-way commute; see Appendix B). The transportation control measures included in the 2001 CAP are designed for implementation at the County and State levels and are not intended for implementation at the project level. State programs identified in the 2001 CAP include the Carl Moyer Memorial Air Quality Standards Attainment Program which provides grant funding for low emission engines and equipment to reduce NO<sub>x</sub> and PM<sub>10</sub> from heavy-duty engines. County programs include the SLOAPCD's Motor Vehicle Emissions Reduction (MOVER) program, which provides funding for transportation-related projects, Regional Ridesharing Program, Public Transit Systems, Transportation Management Associations (a public/private partnership to implement transportation demand management strategies to reduce traffic congestion), and System Improvements (improvements that reduce air impacts through synchronization of signals, intersection channelization, design of one-way streets and turn lanes, etc.). Therefore, while the proposed planting ordinance would result in a small increase in daily VMT (2.0 average daily VMT per employee; see Section 4.11, *Transportation*), the planting ordinance would not impede the transportation control measures and strategies as outlined in the CAP.

As such, the proposed planting ordinance would be consistent with the land use and transportation control measures and strategies outlined in the 2001 CAP. Therefore, the proposed planting

ordinance would be consistent with the most recently adopted clean air plan, and this impact would be less than significant.

### Mitigation Measures

Because the proposed ordinance would not conflict with or obstruct implementation of the 2001 CAP, impacts would be less than significant, and no mitigation is required.

### Significance After Mitigation

Impacts would be less than significant and no mitigation is required.

<b>Threshold b:</b>	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard?
<b>Threshold c:</b>	Would the project expose sensitive receptors to substantial pollutant concentrations?

**Impact AQ-2 CRITERIA POLLUTANTS GENERATED BY CONSTRUCTION AND OPERATION OF AGRICULTURAL ACTIVITIES FACILITATED BY THE PROPOSED PLANTING ORDINANCE WOULD EXCEED APPLICABLE SLOAPCD THRESHOLDS. IMPACTS WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

### Construction Emissions

The proposed planting ordinance would contribute to temporary construction air pollutant emissions over 30 days of the first year of site activity. Ozone precursors, NO<sub>x</sub>, and ROG, as well as DPM (diesel particulate matter; exhaust PM<sub>2.5</sub> and PM<sub>10</sub>) would be emitted by the operation of off-road diesel equipment, while fugitive dust (PM<sub>10</sub>) would also be emitted by activities that disturb the soil, such as grading, tilling, and excavation. In addition, emissions would occur from the worker commute trips. The maximum daily construction emissions are shown in Table 4.2-4. It is unknown when each site would be developed during the year. Therefore, the analysis conservatively assumes that all 12 sites (estimated number of new agricultural sites per year over the life of the planting ordinance) would be developed at the same time. Table 4.2-4 shows the anticipated range of daily construction emissions by identifying daily emissions for the development of one site and daily emissions from the development of 12 sites with equipment for each site operating on the same day.

**Table 4.2-4 Estimated Daily Construction Air Pollutant Emissions**

	Estimated Operational Emissions (Pounds per Day)		
	ROG + NO <sub>x</sub>	DPM	Dust
<b>One Site</b>			
Site Development	18	1	7
Well Development	6	<1	10
<b>Total – One Site</b>	<b>24</b>	<b>1</b>	<b>17</b>
<i>SLOAPCD Thresholds</i>	137	7	-
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>N/A</b>

	Estimated Operational Emissions (Pounds per Day)		
	ROG + NO <sub>x</sub>	DPM	Dust
<b>12 Sites</b>			
Site Development	216	8	82
Well Development	11	0	19
<b>Total – 12 Sites</b>	<b>228</b>	<b>9</b>	<b>101</b>
<i>SLOAPCD Thresholds</i>	<i>137</i>	<i>7</i>	<i>-</i>
<b>Threshold Exceeded?</b>	<b>Yes</b>	<b>Yes</b>	<b>N/A</b>

Notes: All calculations were made using CalEEMod Version 2020.4.0. See Appendix D for model results. Columns may not add exactly due to rounding.

As shown in Table 4.2-4, an individual site’s combined ROG and NO<sub>x</sub> emissions and DPM emissions would not exceed SLOAPCD thresholds. However, if all 12 sites were to be constructed at the same time, construction activities facilitated by the proposed planting ordinance would exceed SLOAPCD thresholds for ozone precursors (ROG + NO<sub>x</sub>) and DPM. Because emissions would exceed SLOAPCD thresholds, overall criteria pollutant impacts from the proposed planting ordinance would be potentially significant.

Emission generated by initial site preparation facilitated by the proposed planting ordinance have the potential to impact sensitive receptors located close to the construction sites. However, construction activities are anticipated to occur for approximately one month and the equipment use would be minimal (up to six pieces of equipment operating on site on any given day). In addition, sensitive receptors located near the planting sites would be anticipated to be limited to residential uses on the agricultural properties within the PBLUMA. As shown in Table 4.2-4, daily construction emissions for one site would be well below regulatory thresholds and therefore would not be anticipated to result in a significant impact to localized receptors. Additionally, OEHHA recommends not assessing cancer risk for projects lasting two months or less. This, coupled with the minimal amount of equipment, would not be anticipated to pose a health risk to nearby receptors. The agricultural sites planted under the proposed ordinance would be located throughout the PBLUMA area and not all in one area. The likelihood is low that all sites, or even several sites, in any given year would be developed in close proximity to the same local receptors such that the combination of emissions would exceed regulatory thresholds. Therefore, impacts to localized sensitive receptors would be less than significant.

### **Buildout Year Operational Emissions**

It is assumed that site operation would commence after construction activities are completed and would also occur during that first year. It is also assumed that the planting, maintenance, and harvesting activities would not occur on the same day. Therefore, maximum daily operational emissions report the greater emissions between those activities plus the operation of the new wells. For the operations emissions during the final year of the proposed planting ordinance, because construction activities are greater than operational activities, it was assumed that construction of 12 new sites would overlap with the greatest emissions phase from site operations (i.e., the greater emissions of the maintenance or harvesting of 252 sites) plus the operation of 84 pumps for the new wells and 260 new booster pumps (the operational estimate of 84 pumps and 260 booster pumps assume that 12 sites, including 12 booster pumps and 4 groundwater wells would be under construction). This presents a reasonable estimate of daily emissions of agricultural activities

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facilitated by the proposed planting ordinance during the buildout year, which represents the maximum daily emissions while the ordinance is in effect.

Ozone precursors (NO<sub>x</sub> and ROG), as well as DPM (exhaust PM<sub>2.5</sub> and PM<sub>10</sub>), would be emitted by the operation of off-road diesel equipment, while fugitive dust (PM<sub>10</sub>) would be emitted by activities that disturb the soil, such as vehicle movement on unpaved roads. In addition, emissions would occur from the worker commute trips and from transportation of agricultural goods. The maximum daily operational emissions are shown in Table 4.2-5 (pounds per day) and Table 4.2-6 (tons per year).

**Table 4.2-5 Estimated Daily Operational Air Pollutant Emissions during Buildout Year**

	Estimated Operational Emissions (Pounds per Day)			
	ROG + NO <sub>x</sub>	DPM	Dust	CO
<b>One Site</b>				
Site Preparation	3	0.1	16	4
Maintenance	3	0.1	6	4
Harvesting	16	0.5	48	12
Pump Operation	0.46	0.02	0.00	0.32
<b>Total – 1 Site</b>	<b>17</b>	<b>1</b>	<b>48</b>	<b>13</b>
<i>SLOAPCD Thresholds</i>	<i>25</i>	<i>1.25</i>	<i>25</i>	<i>550</i>
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
<b>264 Sites</b> (Buildout Year 2045 – reasonably assumes construction of 12 sites and 2 wells occur at the same time as the operation of the remaining 252 sites)				
Site Preparation (252 Sites)	636	28	4,120	887
Maintenance (252 Sites)	636	28	1,448	887
Harvesting (252 Sites)	4,138	122	12,063	3,073
Pump Operation (260 Pumps)	99	4	0	69
Site Development (12 Sites)	216	8.40	82	0
Well Construction (2 Wells)	11	0.33	19	0
<b>Total – 264 Sites</b>	<b>4,465</b>	<b>134</b>	<b>12,164</b>	<b>3,142</b>
<i>SLOAPCD Thresholds</i>	<i>25</i>	<i>1.25</i>	<i>25</i>	<i>550</i>
<b>Threshold Exceeded?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

Notes: All calculations were made using CalEEMod Version 2020.4.0. See Appendix D for model results. Emissions include the sum of agricultural operations (construction emissions in CalEEMod) and some construction emissions. Columns may not add exactly due to rounding.

**Table 4.2-6 Estimated Annual Operational Air Pollutant Emissions during Buildout Year**

	Estimated Operational Emissions (Tons per Year)			
	ROG + NO <sub>x</sub>	DPM	Dust	CO
<b>One Site</b>				
Site Preparation	0.00	0.0002	0.04	0.006
Maintenance	0.01	0.0005	0.07	0.018
Harvesting	0.02	0.0007	0.09	0.020
Well Operation	0.01	0.0003	0.00	0.005
<b>Total – 1 Site</b>	<b>0.05</b>	<b>0.0017</b>	<b>0.20</b>	<b>0.05</b>
<i>SLOAPCD Thresholds</i>	25	–	25	–
<b>Threshold Exceeded?</b>	<b>No</b>	<b>N/A</b>	<b>No</b>	<b>N/A</b>
<b>264 Sites (Buildout Year 2045 – conservatively assumes construction of 12 sites and 2 wells occur at the same time as the operation of the remaining 252 sites)</b>				
Site Preparation (252 Sites)	1	0.0	11	2
Maintenance (252 Sites)	3	0.1	18	5
Harvesting (252 Sites)	6	0.2	23	5
Pump Operation (260 Pumps)	1	0.06	0.00	1
Site Development (12 Sites)	2	0.08	1	2
Well Construction (4 Wells)	0.00	0.00	0.07	0.00
<b>Total – 264 Sites</b>	<b>13</b>	<b>0.45</b>	<b>41</b>	<b>12</b>
<i>SLOAPCD Thresholds</i>	25	–	25	–
<b>Threshold Exceeded?</b>	<b>No</b>	<b>N/A</b>	<b>Yes</b>	<b>N/A</b>
Notes: All calculations were made using CalEEMod Version 2020.4.0. See Appendix D for model results. Emissions include the sum of agricultural operations (construction emissions in CalEEMod) and some construction emissions. Columns may not add exactly due to rounding.				

As shown in Table 4.2-5 and Table 4.2-6, an individual site’s emissions would exceed SLOAPCD’s daily thresholds for dust; however, would not exceed daily thresholds for combined ROG + NO<sub>x</sub>, DPM, or CO or annual thresholds for combined ROG + NO<sub>x</sub>. The operation of all 252 sites combined with the construction of 12 sites on the same day during the buildout year would exceed all daily thresholds; however, would not exceed annual thresholds for the combined emissions of ROG + NO<sub>x</sub>. This is due to the limited number of operational days during the year. Although it is unlikely that all 264 sites would be active on the same day, the analysis conservatively assumes this as a possibility due to the unknown types of agriculture activities that would occur throughout the PBLUMA. Because emissions from all sites would exceed SLOAPCD thresholds, impacts related to overall criteria pollutants from the proposed planting ordinance would be potentially significant.

Operation of agricultural activities facilitated by the proposed planting ordinance has the potential to impact sensitive receptors located close to the development sites. Sensitive receptors located near the agricultural sites would be anticipated to be limited to residential uses on the agricultural properties within the PBLUMA. As shown in Table 4.2-5 and Table 4.2-6, daily and annual operational emissions for one site would be well below regulatory thresholds for ROG + NO<sub>x</sub>.

However, operational emissions for one site would exceed regulatory thresholds for daily dust emissions.

Additionally, OEHHA recommends not assessing cancer risk for projects lasting two months or less and agricultural activities throughout the year would be intermittent and totaling only 87 days of operation per year. This, coupled with the minimal amount of equipment use (one to three pieces, plus potentially diesel pump operations), would not be anticipated to pose as health risk to nearby receptors.

The sites planted under the proposed ordinance would be located throughout the PBLUMA area and not all in one area. The likelihood is low that all sites, or even several sites, in any given year would be developed in close proximity to the same local receptors such that the combination of emissions would exceed regulatory thresholds for ROG + NO<sub>x</sub>. However, because emissions for operation of one agricultural site would exceed regulatory thresholds for dust, impacts to localized sensitive receptors would be potentially significant.

### **Mitigation Measures**

The following mitigation measure is proposed to reduce impacts associated with criteria pollutant emissions from construction activities related to the planting ordinance.

#### **AQ-1 Construction Emissions Reductions**

Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following planting requirement in Section 22.30.205 of Title 22 of the San Luis Obispo County Code:

- On individual planting sites that have been uncultivated for 10 years or more preceding the date of application, the planting permit applicant and/or property owner shall maintain unpaved roads, driveways, and/or parking areas with a dust suppressant (consistent with the “Approved Dust Suppressant” section of SLOAPCD’s CEQA Handbook) such that fugitive dust emissions do not exceed SLOAPCD’s 20 percent opacity limit for greater than 3 minutes within any 60-minute period (SLOAPCD Rule 401) or prompt nuisance violations (SLOAPCD Rule 402). To improve the dust suppressant’s long-term efficacy, the planting permit applicant and/or property owner utilizing the planting ordinance shall also implement and maintain design standards to ensure vehicles that use unpaved roads are physically limited (e.g., speed bumps) to a posted speed limit of 15 mph or less.

### **Significance After Mitigation**

Mitigation Measure AQ-1 would help reduce impacts associated with criteria pollutants under the proposed ordinance by requiring the planting permit applicants and/or property owners to help suppress dust from use of unpaved roads, driveways, and parking areas. Additionally, with compliance with the regulatory frameworks discussed in Section 4.2.2, *Regulatory Setting*, including the Federal CAA, California CAA, and SLOAPCD’s 2001 Clean Air Plan and 2012 CEQA Air Quality Handbook, impacts associated with criteria pollutants from agricultural activities in the County would be reduced to the greatest extent feasible. There are no additional feasible mitigation measures available to reduce criteria pollutants impacts (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility). Therefore, criteria pollutants impacts are conservatively determined to remain significant and unavoidable.

**Table 4.2-7 Estimated Mitigated Daily Construction Air Pollutant Emissions**

	Estimated Operational Emissions (Pounds per Day)		
	ROG + NO <sub>x</sub>	DPM	Dust
<b>One Site</b>			
Site Development	18	0.7	4.0
Well Development	6	0.2	10
<b>Total – One Site</b>	<b>24</b>	<b>0.9</b>	<b>13.7</b>
<i>SLOAPCD Thresholds</i>	137	7	–
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>12 Sites</b>			
Site Development	216	8.4	48.4
Well Development	11	0.3	19.4
<b>Total – 12 Sites</b>	<b>228</b>	<b>8.7</b>	<b>67.8</b>
<i>SLOAPCD Thresholds</i>	137	7	–
<b>Threshold Exceeded?</b>	<b>Yes</b>	<b>Yes</b>	<b>N/A</b>

Notes: All calculations were made using CalEEMod Version 2020.4.0. See Appendix D for model results. Columns may not add exactly due to rounding.

#### 4.2.4 Cumulative Impacts

The CAP is a "...comprehensive planning document intended to provide guidance to the SLOAPCD, the County, and local agencies on how to attain and maintain the State standard for ozone. The Plan presents a detailed description of the sources and pollutants which impact the county, future air quality impacts to be expected under current growth trends, and an appropriate control strategy for reducing ozone precursor emissions, thereby improving air quality" (SLOAPCD 2012). Therefore, the emissions estimates presented in the CAP represent the cumulative emissions anticipated within the SLOAPCD jurisdiction based on growth within the County.

In San Luis Obispo County, impact thresholds have been established by SLOAPCD to assess a project's effect on the regional air quality. A project that does not exceed SLOAPCD thresholds and is consistent with the 2001 CAP is considered to result in a less-than-significant cumulative impact on air quality. Conversely, a project that exceeds the SLOAPCD significance thresholds or is found to be inconsistent with the CAP is considered to result in significant cumulative impacts. For the proposed planting ordinance, a cumulative air quality impact could occur as a result of operational activities associated with agriculture, including grading, tilling, off-road equipment use, and irrigation due to the exceedance of SLOAPCD thresholds. Therefore, emissions resulting from the proposed ordinance would be cumulatively considerable from a regional standpoint.

Consistent with the regional analysis, localized impacts would be cumulative considerable if emissions exceed SLOAPCD thresholds or the project would be inconsistent with the CAP. As demonstrated under Impact AQ-1 above, the proposed planting ordinance would be consistent with the CAP. However, as discussed under Impact AQ-2 above, daily construction and operational emissions associated with the proposed ordinance would be potentially significant. Although compliance with regulatory frameworks discussed in Section 4.2.2, *Regulatory Setting*, including the Federal CAA, California CAA, and SLOAPCD's 2001 Clean Air Plan and 2012 CEQA Air Quality Handbook, and implementation of Mitigation Measure AQ-1 would help reduce criteria pollutant emissions, there are no additional feasible mitigation measures available to reduce criteria



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pollutants impacts under the proposed ordinance. Therefore, the activities associated with the planting ordinance (e.g., grading, planting, maintenance, harvesting, etc.) may incrementally contribute to the cumulative air quality impacts associated with criteria pollutants.

Health risk from the proposed ordinance to nearby receptors is anticipated to be less than significant. The agricultural sites planted as a result of the proposed ordinance would be located throughout the PBLUMA area and not all in one area. The likelihood is low that all sites, or even several sites, being developed in any given year would be developed in close proximity to the same local receptors such that the combination of emissions would exceed regulatory thresholds. Therefore, impacts to localized sensitive receptors are not anticipated to be cumulatively considerable.

## 4.3 Biological Resources

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This section evaluates the potential impacts associated with biological resources, focusing on potential impacts related to sensitive plant and wildlife species, riparian habitats or other sensitive natural communities, State or federally protected wetlands, wildlife movement, and native wildlife nursery sites. Other biology-related impacts, including conflict with local policies or ordinances protecting biological resources and conflict with adopted habitat conservation plans, were determined to be less than significant in the Initial Study prepared for the proposed project (see Appendix A and Section 4.14, *Effects Found Not to Be Significant*), and therefore, are not further analyzed in this section.

### 4.3.1 Setting

This section is based on a literature and desktop review conducted by biologists at Rincon Consultants, Inc.

#### **Terrestrial Vegetation Communities**

The PBLUMA contains a wide diversity of tree (oak woodlands, riparian woodlands), shrub (chaparrals, coastal scrubs), and herbaceous (grasslands, certain wetlands) habitat types. Some habitat types, such as coast live oak woodland, tend to have similar species composition and structure in most areas; however, other habitats, such as other forest types, grasslands, and coastal scrubs, can exhibit differences in species composition and structure depending upon proximity to the coast, soil type, elevation, and aspect. Due to the programmatic level of the PEIR and large-scale nature of the PBLUMA, general descriptions of habitat types that occur within the PBLUMA are presented below, consistent with *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988). Where possible, example vegetation alliances consistent with *A Manual of California Vegetation, Online Edition* (Sawyer et al. 2022) are noted for each habitat type. It should be noted that these habitats are generalized and presented from a broad perspective, and that site-specific variation is likely present as well as the blending of two or more habitats.

#### **Valley Foothill Riparian**

This habitat type is associated with drainages, particularly those with low velocity flows, flood plains, and gentle topography such as the Salinas River within the PBLUMA. This habitat is generally comprised of a canopy tree layer dominated by cottonwoods (*Populus* spp.), sycamore (*Platanus racemosa*), and/or valley oak (*Quercus lobata*) and an understory shrub layer typically consisting of willows (*Salix* spp.) and/or mulefat (*Baccharis salicifolia*). Valley foothill riparian can correspond to multiple alliances as described by Sawyer et al. (2022) depending upon the species composition. These alliances can include, but are not limited to, *Platanus racemosa* Woodland Alliance, *Populus* sp. Alliances, as well as *Salix lasiolepis* and *Salix laevigata* Shrubland Alliances depending upon the dominant species.

#### **Blue Oak-Foothill Pine**

This habitat is typically diverse in structure both vertically and horizontally and is composed primarily of a mix of hardwoods, conifers, and shrubs. Within the PBLUMA, this habitat type tends to occur in higher elevation areas and/or on slopes particularly in the southeastern portion of the PBLUMA. Shrub distributions tend to be clumped, with interspersed patches of annual grassland.

Woodlands of this type generally tend to have small accumulations of dead and downed woody material, compared with other tree habitats in California. Blue oak (*Quercus douglasii*) and foothill pine (*Pinus sabiniana*) typically comprise the overstory of this habitat, with blue oak usually most abundant. Coast live oak (*Quercus agrifolia*) and valley oak can also occasionally be found in this habitat type. At lower elevations, blue oaks tend to compose most of the canopy, while at higher elevations foothill pines tend to comprise the canopy. The understory usually includes patches of shrubs in addition to the annual grasses and forbs. Shrub species that can be associated with this habitat type include various buckbrushes (*Ceanothus* spp.) and manzanitas (*Arctostaphylos* spp.). Other species found in this habitat type can include California coffeeberry (*Frangula californica*), poison oak (*Toxicodendron diversilobum*), and silver lupine (*Lupinus albifrons*). Blue oak-foothill pine habitat typically corresponds to the *Quercus douglasii* Woodland Alliance or *Pinus sabiniana* Woodland Alliance as described by Sawyer et al. (2022).

## **Oak Woodlands**

### *Valley Oak Woodland*

This habitat can range in structure from savanna-like to forest-like stands. The canopies tend to be partially closed with valley oak as the dominant tree species. Dense stands typically grow in valley soils along natural drainages and decrease with the transition from lowlands to uplands. Shrubs are also associated with this habitat in lowland areas, especially along drainages. Valley oak stands with little or no grazing tend to develop a partial shrub layer of bird-disseminated species, such as poison oak, toyon (*Heteromeles arbutifolia*), and California coffeeberry. Ground cover consists of a well-developed carpet of annual grasses and forbs such as wild oats (*Avena* spp.) and bromes (*Bromus* spp.). Valley oak woodland typically corresponds to the *Quercus lobata* Woodland Alliance as described by Sawyer et al. (2022).

### *Coastal Oak Woodland*

Coastal oak woodlands are common to mesic coastal foothills within the PBLUMA and occur in a mosaic closely associated with mixed chaparral, coastal scrub, and annual grasslands. In the PBLUMA, these woodlands are commonly dominated by coast live oak. At drier sites, other species such as blue oak and foothill pine may also be interspersed depending on elevation, aspect, and soil. The understory of dense stands tends to be composed of shade tolerant shrubs and herbaceous plant species such as California blackberry (*Rubus ursinus*), poison oak, miner's lettuce (*Claytonia perfoliata*), and toyon. In areas with more open canopies, the understory may be more dominated by grassland species such as bromes and wild oats. Coastal oak woodland typically corresponds to the *Quercus agrifolia* Alliance as described by Sawyer et al. (2022).

### *Blue Oak Woodland*

Generally, these woodlands have an overstory of scattered blue oaks, although the canopy can be nearly closed. Shrubs are often present but rarely extensive, often occurring on rock outcrops. Typical understory is composed of an extension of Annual Grassland vegetation. Blue oak is the dominant species, comprising 85 to 100 percent of the trees present. Common associates in the canopy are coast live oak or valley oak where deep soil has formed.

## Chamise Chaparral

Within the PBLUMA, chaparral habitat type is dominated by pure or nearly pure stands of chamise (*Adenostoma fasciculatum*). Mature chamise chaparral is single-layered, generally lacking well-developed herbaceous ground cover and overstory trees. Shrub canopies frequently overlap, producing a nearly impenetrable canopy of interwoven branches. Fire occurs regularly in chamise-redshank chaparral and influences habitat structure. Within the PBLUMA, chamise chaparral typically corresponds to the *Adenostoma fasciculatum* Shrubland Alliance as described by Sawyer et al. (2022).

## Coastal Scrub

This habitat type is typically dominated by shrub species with mesophytic leaves and shallow root systems. This habitat type can differ in composition depending upon proximity to the coastline. California sagebrush (*Artemisia californica*) tends to be common in all coastal scrub habitats with inclusions of black sage (*Salvia mellifera*) and California buckwheat (*Eriogonum fasciculatum*) which become more abundant in mesic areas. Coyotebrush (*Baccharis pilularis*) can also be a component of the dominant species within coastal scrub habitats. Coastal scrub can correspond to multiple alliances as described by Sawyer et al. (2022) depending upon the species composition. These alliances can include, but are not limited to, *Artemisia californica* Shrubland Alliance, *Baccharis pilularis* Shrubland Alliance, and the *Salvia mellifera* Shrubland Alliance.

## Mixed Chaparral

Mixed chaparral is a structurally homogeneous brushland type dominated by shrubs with thick, stiff, heavily cutinized evergreen leaves. Shrub height and crown cover vary with age since last burn, precipitation, aspect, and soil type. At maturity, cismontane mixed chaparral typically is a dense, nearly impenetrable thicket. On poor sites, serpentine soils or transmontane slopes, shrub cover may be considerably reduced and shrubs may be shorter. Leaf litter and standing dead material may accumulate in stands that have not burned for several decades. Mixed chaparral can correspond to multiple alliances as described by Sawyer et al. (2022) depending upon the species composition. These alliances can include, but are not limited to, *Ceanothus cuneatus* Shrubland Alliance and the *Arctostaphylos* sp. Shrubland Alliance.

## Annual Grasslands

This habitat type is composed primarily of non-native annual herbs and forbs and typically lacks shrub or tree cover. The physiognomy and species composition of annual grasslands is highly variable and also varies considerably on a temporal scale. Grazing is a common land use within this habitat type. Common grass species include wild oats, soft chess brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), and red brome (*Bromus madritensis*). Common forb species can include species of filaree (*Erodium* spp.) and bur clover (*Medicago polymorpha*). California poppy (*Eschscholzia californica*) can also be quite common in this habitat type. Annual grassland can correspond to multiple alliances as described by Sawyer et al. (2022) depending upon the species composition. These alliances can include, but are not limited to, *Avena (barbata, fatua)* semi-natural stands and *Bromus (diandrus, hordeaceus) – Brachypodium distachyon* semi-natural stands.

## **Cropland**

This habitat type is characterized by areas in active agriculture used to grow annual or perennial herbaceous crops and is an entirely human-made habitat. The structure of vegetation can vary in size, shape, and growing pattern. The dominant cropland use is row crops and can also include hay and grain. Subcategories of cropland habitat classifications include, but are not limited to, dryland grain crop, and irrigated row and field crop. Orchards and vineyards are classified separately (see below).

## **Orchard/Vineyard**

This habitat type is characterized by typically open, single-species tree- or woody vine-dominated habitats. Depending on the tree or vine type and pruning methods, they are usually low, bushy plants with an open understory to facilitate harvest. Trees such as citrus, avocados, and olives are evergreen and other common tree crops such as walnuts and stonefruits are deciduous. The understory is usually composed of low-growing grasses and other herbaceous plants, but may be managed to prevent understory growth totally or partially, such as along tree rows. Vineyards, comprised of grape vines, also share similar characteristics. Subcategories of orchard/vineyard habitat classifications include, but are not limited to, deciduous orchard and evergreen orchard. Within the PBLUMA, vineyards are more prevalent than orchards.

## **Urban**

This habitat type is also a completely human-made habitat comprising residential, commercial, and industrial developed areas. Plant species within urban habitats are typically comprised of ornamental plants and non-native invasive plant species with large, developed areas lacking vegetation. Within the PBLUMA, urban areas include the communities of Shandon, Creston, and San Miguel as well as other residential and other commercial/industrial areas that support agriculture within the rural parts of the PBLUMA.

## **Drainages and Wetlands**

### *Drainages*

The PBLUMA contains two major rivers: the Salinas River and the Estrella River. The Salinas River originates at the Santa Margarita Reservoir in San Luis Obispo County and extends northward to the Monterey Bay. The headwaters of the Salinas River occur in the western part of the PBLUMA. The Estrella River occurs in the northern part of the PBLUMA and is a tributary to the Salinas River. Several creeks and tributaries are associated with each of these watersheds, including, but not limited to, Cholame Creek, San Juan Creek, Huerhuero Creek, Dry Creek, and Shedd Canyon (Indian Creek). The drainages within these watersheds are of biological importance as they provide valuable foraging habitat, breeding habitat, and movement habitat for a wide variety of animal species, including sensitive species such as steelhead – south-central California coast district population segment (DPS) (*Oncorhynchus mykiss irideus*). Many of these drainages, most notably the Salinas River and its tributaries, are also federally designated critical habitat for steelhead. Additionally, extensive areas of vegetation within these river and creek systems are identified as possibly being connected through groundwater by plant species with roots that tap into groundwater (such plant species are referred to as “phreatophytes”). Phreatophytes that occur as dominant species within the riparian corridors of these drainages include arroyo willow, red willow, cottonwood species, and California sycamore. These plant species rely on groundwater during dry conditions. As discussed in

Section 4.8, *Hydrology and Water Quality*, recent work by Todd Groundwater (2022) for the Paso Robles Subbasin Groundwater Sustainability Agencies (GSAs) determined that the surface water in the Salinas River, including associated sub-flow in the Alluvial Aquifer,<sup>1</sup> are periodically interconnected during and for a period after the Salinas River is flowing as a result of seasonal rainfall events. It was further determined that there is no evidence the Salinas River surface flows or sub-flows are connected to the groundwater in the underlying Paso Robles Formation<sup>2</sup> and that pumping from the Paso Robles Formation is not, and will not in the future, deplete Salinas River surface flow or sub-flow. Todd Groundwater also determined that there is no evidence that surface water in the Huerhuero Creek or any other surface water tributaries are interconnected with the Alluvial Aquifer or Paso Robles Formation in the PBLUMA. Todd Groundwater identified two areas, one in the middle reach of the Estrella River and one in the upper San Juan Creek, which warrant additional investigation to determine if interconnectivity may potentially exist, at least during periods of wetter weather. There are very few wells within the Alluvial Aquifer, and production from those wells would have negligible effects on riparian habitat (Todd Groundwater 2022).

### *Wetlands and Aquatic Habitats*

Wetlands are regarded as important biological resources both because of their rarity and because they provide a variety of ecosystem services. Several types of wetlands exist in the PBLUMA, including freshwater marshes and vernal pools. In addition to vernal pools, wetlands mapped by the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) (USFWS 2021a) occur within the PBLUMA. A general description of each of the classifications used in the NWI is provided below. Todd Groundwater supplemental analysis conducted to address Paso Robles Subbasin Groundwater Sustainability Plan (GSP) deficiencies identified by the California Department of Water Resources indicates that mapped and isolated wetlands and vernal pools, which are not associated with the Salinas River or other creeks and streams, are not connected to the groundwater in the Paso Robles Subbasin and are supported exclusively by surface water runoff from rainfall (Todd Groundwater 2022).

### *Vernal Pools*

These seasonal wetlands are small depressions that fill with water during the winter, gradually drying during the spring and becoming completely dry in the summer. These pools are found in only a few places in the world outside California. Vernal pool vegetation is adapted to the cycle of brief inundation followed by seasonal drying. Vernal pools are characterized by herbaceous plants that may begin their growth as aquatic or semi-aquatic plants and transition to a dry land environment as the pool dries, while other species germinate in the mud as the pool begins to dry. Most vernal pool plants are annual herbs, many of which are endemic to vernal pools. Wildlife species supported by vernal pools include vernal pool fairy shrimp (*Branchinecta lynchi*).

### *Freshwater Emergent Wetlands*

Freshwater emergent wetlands include all non-tidal waters dominated by emergent herbaceous plant species, mosses, and/or lichens. The NWI also includes in this category wetlands that lack vegetation if they are less than 20 acres in size, do not have an active wave-formed or bedrock

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<sup>1</sup> The Alluvial Aquifer is discontinuous across the basin and occurs along Huerhuero Creek, the Salinas River, the Estrella River, and other smaller tributaries to these surface waters. See Section 4.8, *Hydrology and Water Quality*, for additional information regarding the Alluvial Aquifer.

<sup>2</sup> The Paso Robles Formation underlies most of the PBLUMA and is continuous across the basin except where offset occurs along fault zones. See Section 4.8, *Hydrology and Water Quality*, for additional information regarding the Paso Robles Formation.

shoreline feature, and have a low water depth less than 6.6 feet. Freshwater emergent wetlands are characterized by erect, rooted herbaceous hydrophytes. Dominant vegetation is generally perennial monocots. All emergent wetlands are inundated or saturated frequently enough that the roots of the vegetation prosper in an anaerobic environment. The wetlands may vary in size from small clumps to vast areas covering several square kilometers. The acreage of Freshwater Emergent Wetlands in California has decreased dramatically since the turn of the century due to drainage and conversion of land to other uses, primarily agriculture.

#### *Freshwater Forested/Shrub Wetlands*

These wetlands include non-tidal waters that are dominated by trees and shrubs, with emergent herbaceous plants, mosses, and/or lichens. The NWI also includes within this category wetlands that lack vegetation if they also exhibit the same criteria as described for freshwater emergent wetlands. Freshwater forested/shrub wetlands are generally dominated by woody vegetation such as shrubs and trees. This wetland category also can include riparian habitats.

#### *Freshwater Ponds*

Freshwater ponds include non-tidal waters, typically less than 20 acres in size and typically with vegetative cover along its edges such as trees, shrubs, emergent herbaceous plants, mosses, and/or lichens. Freshwater ponds can be human-made or natural and typically consist of an area of standing water with variable amounts of shoreline. These wetlands and deep-water habitats are dominated by plants that grow on or below the surface of the water. This wetland type is also categorized as lacustrine habitat which includes vernal pools; however, vernal pools are recognized as unique features and thus provided a separate description that was previously presented (Mayer and Laudenslayer 1988).

#### *Riverine*

Riverine habitats are stream systems that include all wetlands and deep-water habitats contained in natural or artificial channels that contain periodically or continuously flowing water. This system may also form a connecting link between two bodies of standing water. Substrates generally consist of rock, cobble, gravel, or sand. Features mapped as riverine wetlands in the NWI include drainages as previously described.

#### *Seeps and Springs*

Seeps and springs are natural groundwater discharge areas that are not mapped by the NWI, but occur within the PBLUMA based on the GSP (County of San Luis Obispo et al. 2019). Known seeps and springs tend to be located in the foothills of the Santa Lucia and Temblor mountain ranges and primarily occur within the PBLUMA in the vicinity of the communities of Whitely Gardens, Shandon, and Cholame. The seeps and springs discharge groundwater from shallow, and possibly perched aquifer units.

### **Sensitive Natural Communities**

The California Natural Diversity Database (CNDDDB) does not contain records of sensitive natural communities within the PBLUMA (CDFW 2022a). The Sensitive Natural Communities List in the CNDDDB is not currently maintained and no new information has been added in several years. As such, the CDFW maintains a *List of Vegetation Alliances and Associations* (CDFW 2022b). According

to the CDFW's Vegetation Program, Alliances with State ranks of S1 through S3 are considered to be imperiled, and thus, potentially of special concern.

This analysis is at a programmatic level, and therefore, vegetation mapping and analysis at the alliance and association level is not available and would need to be conducted at an individual site-specific level. That said, some sensitive vegetation alliances and associations are already known to occur within the PBLUMA as a subset of the habitats described above. For instance, some oak woodland alliances within the PBLUMA, notably *Quercus lobata* Woodland Alliance, which most resembles the valley oak woodland described above, are considered sensitive.

## **Special Status Plants and Animals**

For the purpose of this PEIR, special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by USFWS or National Marine Fisheries Service (NMFS) under the federal Endangered Species Act (FESA); those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA); and animals designated as "Species of Special Concern," "Fully Protected," or "Watch List" by the CDFW. Additionally, special status plants with California Rare Plant Rank (CRPR) of 1 through 4 were included. CDFW standards state that plants with a CRPR 1A, 1B, 2A, and 2B may meet definitions of rare or endangered under *CEQA Guidelines* Sections 15380(b) and (d). By California Native Plant Society (CNPS) standards, the plants of CRPR 1A, 1B, 2A, and 2B meet the definitions of Sections 2062 and 2067 (CESA) of the California Fish and Game Code (CFGC), and are eligible for state listing, and thus, should be considered under *CEQA Guidelines* Section 15380. Special status plants with CRPR 3 or 4 are not included in the analysis. According to CDFW:

In general, CRPR 3 plants (plants about which more information is needed) and CRPR 4 plants (plants of limited distribution) may not warrant consideration under [*CEQA Guidelines* Section] 15380. These plants may be included on special status plant lists such as those developed by counties where they would be addressed under [*CEQA Guidelines* Section] 15380. Factors such as regional rarity vs. statewide rarity should be considered in determining whether cumulative impacts to a CRPR 4 plant are significant even if individual project impacts are not.

Because of the programmatic nature of this PEIR and the duration in which the proposed ordinance would be implemented, CRPR 3 and 4 species were also included as "special status," considering the CDFW is currently collecting data and tracking these species, and therefore, there is potential for their status to be elevated in the future.

Plants with a CRPR are defined as:

- CRPR 1A = Plants presumed extinct in California;
- CRPR 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat);
- CRPR 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent occurrences threatened);
- CRPR 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (less than 20 percent of occurrences threatened or no current threats known);
- CRPR 2 = Rare, threatened or endangered in California, but more common elsewhere;
- CRPR 3 = Plants needing more information (most are species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA);



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- CRPR 4.1 = Plants of limited distribution (watch list), seriously endangered in California;
- CRPR 4.2 = Plants of limited distribution (watch list), fairly endangered in California (20 to 80 percent occurrences threatened); and
- CRPR 4.3 = Plants of limited distribution (watch list), not very endangered in California.

Species of Special Concern (SSC) is a category used by the CDFW for those species which are considered indicators of regional habitat changes or are considered to be potential future protected species. Animals recognized as SSC do not have any special legal status except that which may be afforded by the CFGC. The SSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands, and these species are considered sensitive as described under the *CEQA Guidelines Appendix G* questions.

Queries of the CNDDDB (CDFW 2022a) and CNPS *Inventory of Rare and Endangered Plants of California* (online edition, v9-01 1.0) (CNPS 2021) were conducted to obtain information regarding special status species that have been documented within the PBLUMA. In addition, the 23 California United States Geologic Survey (USGS) 7.5-minute topographic quadrangles the plan area occurs on for any additional special status species of regional significance in the vicinity (CDFW 2022a). Species with a potential to occur within the PBLUMA are listed in Appendix F. The CNDDDB and CNPS queries contain records of 127 special status species (101 plant species and 26 animal species) that have been observed within the PBLUMA. Since these species are known to occur in the PBLUMA, it is assumed that suitable habitat components for each of the species are present; however, due to the regional and programmatic nature of this PEIR, individual site-specific analysis is not presented. Steelhead is also known to occur within the Salinas River and its tributaries that are accessible to the species. The Salinas River within the PBLUMA is mapped as a watercourse where steelhead runs occur (Center for Ecosystem Management and Restoration 2008). Federally designated critical habitat for three species also occurs in the PBLUMA, including purple amole (*Chlorogalum purpureum*), steelhead, and vernal pool fairy shrimp. Two additional species documented in the vicinity of the PBLUMA are considered due to status or regional significance, including California red-legged frog (*Rana draytonii*), which are federally threatened, and bald eagle (*Haliaeetus leucocephalus*), which are state endangered and fully protected (CDFW 2022a).

### **Wildlife Movement Corridors**

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats within the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, although dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species,

habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time. Wildlife movement corridors can be both large and small scale.

The main wildlife movement corridor in the PBLUMA occurs within the upper Salinas River watershed, riparian corridor, and valley floor bordered by the Santa Lucia range to the west and Diablo and Temblor ranges to the east. This corridor provides habitat for steelhead and other aquatic species, as well as least Bell's vireo (*Vireo bellii pusillus*), Swainson's hawk (*Buteo swainsoni*), and other migratory bird species, and also provides a corridor for local wildlife movement of common species such as mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*).

### 4.3.2 Regulatory Setting

Federal, State, and local authorities, under a variety of statutes and guidelines, share regulatory authority over biological resources. The primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions, which in this instance is the County of San Luis Obispo. The CDFW is a trustee agency for biological resources throughout the State and also has direct jurisdiction under multiple sections of the CFGC, which includes, but is not limited to, resources protected by the State of California under the CESA. In addition, the Central Coast Regional Water Quality Control Board (RWQCB) is a responsible agency for waters of the State.

#### **Federal Regulations**

##### *Federal Endangered Species Act*

Under the FESA, authorization is required to "take" a listed species. "Take" is defined under the FESA Section 3 as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Under federal regulation (50 Code of Federal Regulations [CFR] Sections 17.3 and 222.102); "harm" is further defined to include habitat modification or degradation where it would be expected to result in death or injury to listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Critical habitat is a specific geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. FESA Section 7 outlines procedures for federal interagency cooperation to conserve federally listed species and designated critical habitat.

Section 7(a)(2) of the FESA and its implementing regulations require federal agencies to consult with the USFWS or NMFS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of critical habitat. For projects where federal action is not involved and take of a listed species may occur, the project proponent may seek to obtain an incidental take permit under FESA Section 10(a). Section 10(a) allows USFWS to permit the incidental take of listed species if such take is accompanied by an HCP that includes components to minimize and mitigate impacts associated with the take.

The USFWS and NMFS share responsibility and regulatory authority for implementing the FESA (7 United States Code [USC] Section 136, 16 USC Section 1531 et seq.).

### *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act (MBTA) authorizes the Secretary of the Interior to regulate the taking of migratory birds. The act provides that it is unlawful, except as permitted by regulations, “to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, [...] any migratory bird, or any part, nest, or egg of any such bird” (16 USC Section 703[a]). The Bald and Golden Eagle Protection Act (BGEPA) is the primary law protecting eagles, including individuals and their nests and eggs. The USFWS implements the MBTA (16 USC Section 703-711) and the BGEPA (16 USC Section 668). Under the BGEPA’s Eagle Permit Rule (50 CFR 22.26), the USFWS may issue permits to authorize limited, non-purposeful take of bald eagles and golden eagles.

### *Section 10 of the River and Harbors Act*

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the Secretary of the Army, acting through the United States Army Corps of Engineers (USACE), for the construction of any structure in or over any navigable water of the United States. Regulated activities include dredging or disposal of dredged materials, excavation, filling, re-channelization, and construction of any structure or any other modification of a navigable water of the United States.

### *Clean Water Act*

Under Section 404 of the Clean Water Act, the USACE, with United States Environmental Protection Agency (USEPA) oversight, has authority to regulate activities that result in discharge of dredged or fill material into wetlands or other “waters of the United States.” Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any discharge of dredged or fill material into jurisdictional wetlands or other jurisdictional “waters of the United States” would require a Section 404 permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetlands is met by compensatory mitigation; in general, the type and location options for compensatory mitigation should comply with the hierarchy established by the USACE/USEPA 2008 Mitigation Rule (in descending order): (1) mitigation banks; (2) in-lieu fee programs; and (3) permittee-responsible compensatory mitigation. Additionally, in accordance with Section 401 of the Clean Water Act, applicants applying for a Section 404 permit must obtain water quality certification from the appropriate RWQCB.

## **State Regulations**

### *California Endangered Species Act*

The CESA (CFG Section 2050 et seq.) prohibits take of State-listed threatened and endangered species without a CDFW incidental take permit. Take under the CESA is restricted to direct harm of a listed species and does not prohibit indirect harm by way of habitat modification.

Protection of fully protected species is described in CFG Sections 3511, 4700, 5050, and 5515. These statutes prohibit take or possession of fully protected species. Incidental take of fully protected species may be authorized under an approved Natural Community Conservation Plan (NCCP).

*California Fish and Game Code Sections 3503, 3503.5, and 3511*

CFGF Sections 3503, 3503.5, and 3511 describe unlawful take, possession, or destruction of birds, nests, and eggs. Fully protected birds (CFGF Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the CFGF protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

*Native Plant Protection Act*

The CDFW also has authority to administer the Native Plant Protection Act (NPPA; CFGF Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the CDFW at least 10 days in advance of changing the land use to allow for salvage of the plant(s).

*Section 1600 et seq. of the California Fish and Game Code*

Section 1600 et seq. of the CFGF prohibits, without prior notification to CDFW, the substantial diversion or obstruction of the natural flow of, or substantial change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. For such activities to occur, the CDFW must receive written notification regarding the activity in the manner prescribed by the CDFW and may require a lake or streambed alteration agreement. Lakes, ponds, perennial and intermittent streams, and associated riparian vegetation, when present, are subject to this regulation.

*Natural Community Conservation Planning Act*

The Natural Community Conservation Planning Act was established by the California Legislature, is directed by the CDFW, and is implemented by the State, as well as public and private partnerships as a means to protect habitat in California. The Natural Community Conservation Planning Act takes a regional approach to preserving habitat. An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Once an NCCP has been approved, the CDFW may provide take authorization for all covered species, including fully protected species (Section 2835 of the CFGF).

*Porter-Cologne Water Quality Control Act*

The State Water Resources Control Board (SWRCB) and each of nine local RWQCBs have jurisdiction over “waters of the State” pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to “isolated” waters of the State (Water Quality Order No. 2004-0004-DWQ, *Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction*). The local RWQCB, the Central Coast RWQCB, implements this general order for isolated waters not subject to federal jurisdiction, and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

## **Local Regulations**

### *County of San Luis Obispo General Plan*

General plans typically contain elements which address protection of biological resources. Typically, these elements consist of goals, policies, and actions that protect natural resources, such as environmentally sensitive habitats, special status species, native trees, creeks, wetlands, and riparian habitats.

The County's General Plan Conservation and Open Space Element outlines goals and policies that aim to preserve biodiversity, sustain healthy ecosystems, enhance degraded habitats, and protect the diverse landscapes throughout the County. Major goals include protecting special status species, protecting and enhancing native habitat, and preserving wetlands and aquatic habitats (including fisheries and marine resources). In addition to the County's General Plan, three community plans have been adopted within the PBLUMA, including the San Miguel Community Plan, Shandon Community Plan, and Creston Village Plan, which outline the land use policies specific to each community.

### *Oak Woodland Ordinance*

Additionally, the San Luis Obispo County Oak Woodland Ordinance took effect on May 11, 2017. The San Luis Obispo County Oak Woodland Ordinance protects coast live oak and other native trees from removal and other actions. Any coast live oak or other native trees proposed for removal associated with the project would require mitigation consistent with current County ordinances and policies. The ordinance applies only to the clear-cutting of oak woodland, which would consist of the removal of contiguous trees that occupy an area of one acre or more. Oak woodland is defined as a group of trees occupying an acre or more with a reasonably uniform composition that is dominated by one or more of the following species: blue oak, coast live oak, interior live oak (*Quercus wislizenii*), valley oak, and California black oak (*Quercus kelloggii*). The San Luis Obispo County Oak Woodland Ordinance does not apply for the removal of individual oak trees except for Heritage oaks (any individual oak species, defined as being 48 inches in diameter at breast height [dbh] or greater, and separated from all stands and oak woodlands by at least 500 feet). Further, the San Luis Obispo County Oak Woodland Ordinance does not apply to woodland thinning, tree trimming, or oak trees that are diseased, dead, or creating a hazardous condition.

### *County Grading Code*

Pursuant to Section 22.52.070 of the County Code, the following activities are exempt from obtaining a grading permit:

- Small agricultural projects involving 50 cubic yards or less of excavation for grading to create new fields, including vegetation removal and drainage improvements;
- Grading activities related to ongoing crop production on land that has been previously cultivated within the previous 10 years, including relocating roads within existing fields; and
- Installation of agricultural water supplies, not including reservoirs.

The following activities are required to submit an Agricultural Grading Form to the County prior to commencement of any grading activities and comply with the standards and practices contained in the NRCS Field Office Technical Guide (FOTG):

- New crop production on slopes up to 30 percent, including drainage improvements and vegetation removal, but not including construction of new agricultural roads; and
- Construction of small agricultural reservoirs with a capacity of one acre-foot of water or less.

Pursuant to Section 22.52 of the County Code, a grading permit from the County or Alternative Review by the NRCS or Resource Conservation District (RCD), both of which are subject to CEQA review, is required for agricultural activities not meeting the requirements for an exemption or Agricultural Grading Form, such as:

- Grading for new crop production on slopes over 30 percent;
- Construction of agricultural reservoirs with a capacity of more than one acre-foot; and
- Grading of new agricultural roads.

### 4.3.3 Impact Analysis

#### **Significance Thresholds**

Per Appendix G of the *CEQA Guidelines*, a project would result in a significant impact to biological resources if it would:

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

The Initial Study prepared for the proposed project and circulated during the scoping period for the PEIR determined that impacts associated with Thresholds e and f would be less than significant, and are briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the below impact analysis discusses only Thresholds a through d.

#### **Methodology**

Data used for this analysis include aerial photographs, topographic maps, and data on special status species and sensitive habitat obtained from the CDFW Biogeographic Information and Observation System (BIOS) (2022c) and CNDDDB (CDFW 2022a), the CNPS Online Inventory of Rare and

Endangered Plants of California (CNPS 2022), and accepted scientific texts to identify species. The USFWS NWI (20221a), USFWS Critical Habitat Mapper (2022b), and USFWS Information for Planning and Consultation (IPaC) (2022c) were also queried. Potential areas of disturbance associated with overdraft of groundwater and the conversion of natural communities to agricultural production within the PBLUMA were compared to the identified biological resource occurrences to determine whether a significant impact may occur.

### **Project Impacts and Mitigation Measures**

The following section presents a programmatic-level discussion of impacts to sensitive biological resources from implementation of the proposed planting ordinance. Due to the programmatic nature of the planting ordinance, a precise, project-level analysis of the specific impacts associated with additional crop plantings on individual sites within the PBLUMA would be too speculative to assess at this time. In general, implementation of the planting ordinance could result in potential impacts as described in this section.

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

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**Impact BIO-1      IMPLEMENTATION OF THE PLANTING ORDINANCE COULD POTENTIALLY RESULT IN SUBSTANTIAL ADVERSE IMPACTS ON SPECIAL STATUS PLANT AND ANIMAL SPECIES, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS. SUCH POTENTIAL IMPACTS WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

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For the purposes of this analysis, special status plant and animal species include those designations described under Section 4.3.1 above. As stated above, there are 127 special status species known to occur within the PBLUMA and two additional species documented in the vicinity of the PBLUMA. Seventeen of these species have been given high levels of protection by the federal government through listing under the FESA or by the State government through listing under the CESA or designation of Fully Protected status (animals only). The remaining special status species are protected through CEQA and/or local ordinances. Most of these special status species have very limited ranges within the PBLUMA and have specific habitat requirements. Many special status species also tend to be associated with sensitive habitats, such as riparian habitats, woodlands, and drainages.

Due to the programmatic nature of this PEIR, a precise, individual project-level analysis of the specific potential impacts from the planting ordinance would be too speculative. A large portion of the new and expanded areas of irrigated crop production allowed by the planting ordinance support current and/or historic ranching and agricultural operations, including crop cultivation, grazing, animal keeping, hobby farms, and associated activities that have denuded sites of vegetation, altered natural topography, and have already impacted special status plant and animal species on site, if present. Impacts from new and expanded irrigation crop production would also be seasonal, intermittent, reversible, and potentially temporary. However, there is potential for previously uncultivated or undisturbed sites to be affected by activities facilitated by the planting ordinance; therefore, it is reasonably assumed that all the special status species within the PBLUMA could be impacted by the planting ordinance. For example, conversion of grassland habitats in the northeastern portion of the PBLUMA has potential to impact the federally and State listed San

Joaquin kit fox, and removal of vernal pool complexes within the PBLUMA has potential to impact the federally listed vernal pool fairy shrimp.

The County has adopted policies and regulations to identify and minimize impacts to biological resources. The County of San Luis Obispo General Plan Conservation and Open Space Element's goals, policies, and implementation measures include protecting special status species, protecting and enhancing native habitat, and reducing impacts to biological resources. The details of the applicable goals, policies, and implementation measures are outlined in Section 4.3.2 above. These measures would help reduce, but not eliminate the potential for impacts to biological resources.

Direct impacts to special status species could include injury or mortality during plowing/discing to convert natural areas to agriculture fields as well as construction of accessory infrastructure. Potential impacts from habitat modification and loss could result in mortality or otherwise substantially alter foraging and breeding behaviors, resulting in injury to individual special status plants and/or animals. Potential indirect impacts could be caused by the spread of invasive, non-native species that out-compete native species and/or alter habitat towards a state that is unsuitable for special status species. Special status plant species identified in Appendix F require specific habitat and soil conditions. Habitats on the edges of agricultural areas or other areas of disturbance are more susceptible to intrusion by invasive weed species that are adapted and thrive under disturbance and would outcompete populations of special status plants if present. In addition, increased pesticide and herbicide use from new and increased irrigated crops could indirectly impact special status species habitats or special status species through direct exposure and effects to the food web. For instance, amphibian species such as California red-legged frog could be impacted by pesticides through direct exposure, either in aquatic or terrestrial settings. In addition, pesticides and herbicides have the potential to decrease available food resources to all life stages of the California red-legged frog through mortality of algal species as well as aquatic and terrestrial invertebrates. Along with these potential impacts, a conversion of land to agriculture use could result in increased activity by humans and domestic animals related to farmworkers' activities. Increased human and domestic animal (especially dogs and cats) presence can disrupt the normal behaviors of native animal species.

Converting current natural areas to irrigated crop fields, construction of accessory infrastructure, and associated projected groundwater extraction within the PBLUMA could result in substantial adverse impacts to special status species and their habitats. Therefore, impacts to special status species would be potentially significant.

### **Mitigation Measures**

With compliance with the regulatory frameworks discussed in Section 4.3.2, *Regulatory Setting*, and discussed under Impact BIO-1, including FESA and CESA, as well as implementation of Mitigation Measures UTIL-1 and UTIL-2 in Section 4.13, *Utilities and Service Systems* (Impact UTIL-2), direct and indirect impacts to special status species from agricultural activities in the County would be reduced to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts to special status species (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility).

### **Significance After Mitigation**

Since no feasible mitigation measures are available to reduce impacts to special status species, impacts would be significant and unavoidable.



**Threshold b:** Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

**Impact BIO-2 IMPLEMENTATION OF THE PLANTING ORDINANCE MAY RESULT IN SUBSTANTIAL ADVERSE DIRECT IMPACTS ON SENSITIVE HABITATS, INCLUDING RIPARIAN AND WETLAND HABITATS, IF SENSITIVE HABITATS ARE PRESENT ON PLANTING SITES. IF SENSITIVE HABITATS ARE DIRECTLY IMPACTED, SUCH IMPACTS WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

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New irrigated crop plantings within the PBLUMA that would be facilitated by the planting ordinance have the potential to impact sensitive habitats, including riparian areas and wetlands. Due to the programmatic nature of this analysis, the extent and severity of the impacts is currently unknown. Direct impacts could include removal of sensitive vegetation communities such as oak woodlands, wetlands, or riparian areas due to conversion of the land to agricultural use. Additionally, riparian habitats could be impacted through improvements necessary to facilitate access from one agricultural field to another such as the need for constructing drainage crossings. Converting natural areas to agricultural use within the PBLUMA, as well as groundwater extraction as a result of the proposed planting ordinance, could result in substantial adverse impacts to sensitive habitats, including federally and State protected wetlands and riparian areas. Therefore, direct impacts to sensitive habitats would be potentially significant.

### **Mitigation Measures**

The following mitigation measure is required to reduce impacts to riparian and wetland habitats from the planting ordinance.

#### *BIO-1 Riparian and Wetland Habitat Setback*

Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following planting requirement in Section 22.30.205 of Title 22 of the San Luis Obispo County Code:

- Proposed planting plans for planting permits and 25-AFY exemptions shall be required to include a setback of at least 50 feet from the proposed planting areas to the edge of riparian vegetation and wetland areas.

### **Significance After Mitigation**

Mitigation Measure BIO-1 would reduce impacts to riparian and wetland habitats under the proposed ordinance by requiring a setback of at least 50 feet from the proposed planning areas to the edge of riparian vegetation and wetland areas. Additionally, with compliance with the regulatory frameworks discussed in Section 4.3.2, *Regulatory Setting*, and discussed under Impact BIO-2, including the County's General Plan and Oak Woodland Ordinance as well as the Clean Water Act and California Fish and Game Code (which requires obtaining Section 404 permits, Section 401 water quality certifications, and/or Section 1602 Lake and Streambed Alteration Agreements, as applicable), direct impacts to sensitive habitats, including riparian areas and wetlands, from agricultural activities in the County would be reduced to the greatest extent feasible. However, significant impacts could still occur from construction of accessory infrastructure that are constructed in the vicinity of riparian areas and wetlands (such as agricultural drainage crossings). There are no additional feasible mitigation measures available to reduce impacts to sensitive

habitats. Therefore, impacts to sensitive natural communities, including riparian and wetland habitats, are determined to remain significant and unavoidable.

- Threshold b:** Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- Threshold c:** Would the project have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

**Impact BIO-3 THE PROPOSED PLANTING ORDINANCE COULD INDIRECTLY IMPACT WATER QUALITY WITHIN RIPARIAN AND WETLAND AREAS, IF IN PROXIMITY TO PLANTING SITES. HOWEVER, WITH COMPLIANCE WITH FEDERAL, STATE, AND COUNTY REGULATIONS FOR RIPARIAN AND WETLAND HABITATS, INDIRECT IMPACTS TO WATER QUALITY IN RIPARIAN AND WETLAND HABITATS WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

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Conversion to agricultural use could indirectly impact downstream water quality through erosion and sedimentation from exposed soils, as well as through introducing herbicides and pesticides, if planting sites are located within proximity of riparian and/or wetland areas. However, most of the new and expanded agricultural use facilitated by the proposed planting ordinance would be new crop types on previously farmed or disturbed land which would not substantially increase impermeable surfaces, and would therefore not substantially increase stormwater runoff. As detailed under Impact HYD-1 in Section 4.8, *Hydrology and Water Quality*, agricultural activities would be required to comply with existing regulations including the County Grading Code, Construction General Permit, and Agricultural Order, which include requirements for water quality monitoring and implementation of Best Management Practices to reduce downstream water quality impacts, as well as adhere to the Clean Water Act and the California Fish and Game Code. With such compliance, indirect impacts to water quality in riparian and wetland habitats would be less than significant.

### **Mitigation Measures**

Impacts would be less than significant, and no mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant without mitigation.

- Threshold d:** Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

**Impact BIO-4 IMPLEMENTATION OF THE PLANTING ORDINANCE MAY SUBSTANTIALLY INTERFERE WITH WILDLIFE MOVEMENT, INCLUDING FISH MIGRATION AND/OR IMPEDE THE USE OF A NATIVE WILDLIFE NURSERY. THIS IMPACT WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

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New irrigated crop plantings within the PBLUMA that would be facilitated by the planting ordinance have the potential to impact wildlife movement through removal of natural habitats and conversion of sensitive habitats to agricultural use. Conversion of natural vegetation communities to

agricultural use within PBLUMA would generally lessen the amount of available habitat that wildlife can utilize to move regionally. Although agriculture does not typically create a complete barrier to wildlife movement, it is less permeable to some animal species due to factors such as reductions in available cover or installation of fencing. Depending upon the amount of and configuration of actual agricultural conversion that would occur during the duration of the planting ordinance to January 31, 2045, fragmentation of habitats and isolation of regional wildlife populations could occur due to the ordinance. For instance, within the PBLUMA, the State Route 46 corridor is a part of the San Joaquin kit fox range that connects core and satellite populations specifically between the Central Valley and Camp Roberts/Salinas Valley. Increase in land conversion to agricultural use would further fragment linkages between core and satellite populations within the range of the San Joaquin kit fox due to lack of suitable habitat, presence of predators (red fox [*Vulpes vulpes*] and domestic dogs [*Canis familiaris*]), and inundation of dens during irrigation (USFWS 2010). In addition, new plantings would also increase human activity adjacent to areas where sensitive biological resources or wildlife could occur and have the potential to indirectly disrupt behavior of animals, which could, in turn, disrupt wildlife movement patterns. Increased noise and human presence during site preparation, crop production, and construction of accessory infrastructure would discourage wildlife use of surrounding natural habitat. Additionally, increased trash may attract predators to the project site and further discourage prey species from utilizing natural habitat in the area.

Based on the impacts from converting natural areas to agricultural use within the PBLUMA, the planting ordinance would result in substantial adverse impacts on wildlife movement within the PBLUMA. Such impacts would be significant.

### **Mitigation Measures**

With compliance with the regulatory frameworks discussed in Section 4.3.2, *Regulatory Setting*, including the County's General Plan, impacts to wildlife movement from agricultural activities in the County would be reduced to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts to wildlife movement (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility).

### **Significance After Mitigation**

Since no feasible mitigation measures are available to reduce impacts to wildlife movement, impacts would be significant and unavoidable.

#### **4.3.4 Cumulative Impacts**

Implementation of the proposed ordinance would result in significant regional impacts to aquatic and terrestrial special status species; riparian, wetland, and/or other sensitive natural communities; and wildlife movement through facilitating further groundwater depletion and the conversion of natural habitats to agricultural use. Significant impacts would occur for aquatic species, such as California red-legged frog and steelhead, through habitat loss and decreased migration corridors as a result of conversion of natural habitats. Mitigation Measure BIO-1 would reduce impacts to riparian and wetland habitats under the proposed ordinance by requiring a setback of at least 50 feet from the proposed plantings to the edge of riparian vegetation and wetland areas. However, significant impacts could still occur from construction of accessory infrastructure that are constructed in the vicinity of riparian areas and wetlands (such as agricultural drainage crossings).

There are no additional feasible mitigation measures available to reduce impacts to biological resources.

Cumulative residential and non-residential development pursuant to local and regional planning efforts within the PBLUMA would also result in impacts to these biological resources as well as contribute cumulatively to additional groundwater extraction. The Paso Robles Subbasin is currently in a state of critical overdraft, and groundwater demand exceeds the perennial yield with groundwater storage already declining. Cumulative impacts to special status species and their habitat; sensitive habitats, including riparian and wetland habitats; and wildlife movement would be significant. Considering this and the large scale of the PBLUMA, the contribution of the proposed ordinance to cumulative impacts would be cumulatively significant.

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## 4.4 Cultural Resources

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This section evaluates the potential impacts of the proposed ordinance associated with cultural resources. This section focuses on potential impacts related to archaeological resources, historical resources, and human remains. Cultural resources comprise districts, structures, buildings, sites, areas of traditional use, or objects with historical, architectural, cultural, archaeological, or scientific importance. These resources include archaeological resources (historic and prehistoric), architectural resources (built structures), and traditional cultural properties (properties important to Native American groups for ancestral, religious, spiritual, or traditional reasons). For a discussion of potential impacts to tribal cultural resources, see Section 4.12, *Tribal Cultural Resources*.

### 4.4.1 Setting

#### **Cultural Setting**

The San Luis Obispo region was prehistorically occupied by the Chumash. The Chumash were a diverse population living in settlements along the California coast from Estero Bay in the north to Malibu Creek in the south, and from Tejon Pass, Lake Casitas, and the Cuyama River inland to the islands of San Miguel, Santa Rosa, and Santa Cruz. Chumash society became increasingly complex over the past 10,000 years. The prehistory and history of the region are described below.

#### **Regional Prehistory**

The Central Coast has been defined as extending south of San Francisco Bay to the northern edge of the California Bight at Point Conception (Jones et al. 2007:125). Early attempts at regional cultural chronology divided prehistory into three periods. However, extensive archaeological studies utilizing modern methods conducted over the last century have resulted in development of more precise dating methods and refinements to the San Luis Obispo cultural sequences. Following the most recent chronology developed by Jones et al. (2007:137), the prehistoric cultural chronology for the Central Coast can generally be divided into six periods: Paleo-Indian (ca. 10,000–8000 Before Current Era [BCE]), Millingstone/Early Archaic (8000–3500 BCE), Early (3500–600 BCE), Middle (600 BCE–1000 Common Era [CE]), Middle-Late Transition (1000–1250 CE), and Late (1250 CE– Historic Contact [ca. CE 1769]).

#### *Paleo-Indian Period (ca. 10,000 – 8000 BCE)*

The Paleo-Indian Period represents the earliest human occupations in the region, which began approximately 12,000 years ago. The Paleo-Indian Period was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones et al. 2002) and on Pleistocene lake shores in eastern California (Moratto 1984:90–92). Faunal evidence from this period suggests that shellfish were highly exploited throughout the central California coast with the use of early watercraft (Jones et al. 2016; Lebow et al. 2016).

Although few Clovis-like or Folsom-like fluted points have been found in southern California (e.g., Erlandson et al. 1987), it is generally considered that the emphasis on hunting may have been greater during the Paleo-Indian period than in later periods.

Most of the earlier coastal sites are likely presently under water because it is estimated that 10,000 years ago, sea levels were 15 to 20 meters lower than today (Bickel 1978:7).

*Millingstone Period (8000 – 3500 BCE)*

The Millingstone Period, as defined by Wallace (1955, 1978), is characterized by an ecological adaptation to collecting suggested by the appearance and abundance of well-made milling implements. Millingstones occur in large numbers for the first time in the region's archaeological record and are more numerous near the end of this period. Aside from millingstones, typical artifacts during this period include crude core and cobble-core tools, flake tools, large side-notched projectile points, and pitted stones (Jones et al. 2007).

As testified by the toolkits and shell middens in coastal sites, people during this period practiced a mixed food procurement strategy. Subsistence patterns varied somewhat as groups became more adapted to their regional or local environments. Faunal remains identified at Millingstone sites include shellfish, fish, birds, and mammals, although large faunal assemblages are uncommon (Jones et al 2007).

Millingstone period sites have been identified in various settings, including rocky coasts, estuaries, and nearshore interior valleys, with marine shell assemblages suggesting that most groups maintained a connection to the coast (Jones et al. 2007).

*Early Period (3500 – 600 BCE)*

An extensive series of shoreline midden deposits within the Central Coast region have been dated to the Early Period, signifying an increase in occupation of the open coast (Jones and Waugh 1995, 1997; Jones et al. 2007). Sites dating to this period are marked by large lithic artifact assemblages that include Central Coast Stemmed Series and side-notched projectile points.

The material cultures recovered from Early Period sites within the Central Coast region provide evidence for continued exploitation of inland plant and coastal marine resources. Artifacts include milling slabs and handstones, as well as mortars and pestles, which were used for processing a variety of plant resources; bipointed bone gorge hooks, which were used for fishing; and a suite of *Olivella* spp.<sup>1</sup> beads, bone tools, and pendants made from talc schist.<sup>2</sup>

Shell beads and obsidian are hallmarks of the trade and exchange networks of the central and southern California coasts. The archaeological record indicates a substantial increase in the abundance of obsidian at Early Period sites in the Monterey Bay and San Luis Obispo areas (Jones and Waugh 1997:124–126). Obsidian trade continued to increase during the following Middle Period.

*Middle Period (600 BCE – 1000 CE)*

A pronounced trend toward greater adaptation to regional or local resources occurred during the Middle Period. For example, the remains of fish, land mammals, and sea mammals are increasingly abundant and diverse in archaeological deposits along the coast. Related chipped stone tools suitable for hunting were also more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Larger knives, a variety of flake scrapers, and drill-like implements are all common during this period. Projectile points include large side-notched, stemmed, and lanceolate or leaf-shaped forms. Bone tools, including awls, are more numerous than in the preceding period, and the use of asphaltum adhesive became common. Sites from this period show

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<sup>1</sup> *Olivella* spp. is a species of small sea snails.

<sup>2</sup> Talc schist is a type of metamorphic rock that displays schistosity, meaning the rock is composed of mineral grains easily seen with a low-power hand lens, oriented in such a way that the rock is easily split into thin flakes or plates.

a retention of stemmed points and the disappearance of the larger side-notched points (Jones and Klar 2007; Jones et al. 2007).

Complex maritime technology also proliferated during this period. Notable introductions included circular shell fishhooks (Jones and Klar 2007:466), compound bone fishhooks between 300 and 900 CE, and the wooden plank canoe (tomol or tomolo) by at least 400–700 CE (Arnold 1995; Jones and Klar 2007:466; King 1990:87–88; Rick et al. 2005). Hand-hewn plank canoes, sewn together with cordage and then sealed with asphaltum, were used extensively for travel and trade between the Channel Islands and the mainland; however, no evidence of their use north of Point Conception is known (Jones and Klar 2007: 461).

The introduction of shell fishhooks and plank canoes, subsequent modifications, and the increased use of other capture devices such as nets appear to have led to a substantial focus on fishing in most coastal areas. Large permanently occupied settlements, particularly in coastal areas, appear to have been the norm by the end of the period (Arnold 1995; Jones and Ferneau 2002).

#### *Middle-Late Transition Period (1000 – 1250 CE)*

The Middle-Late Transition Period is marked by relative instability and change, with major changes in diet, settlement patterns, and interregional exchange. Middle Period shell midden<sup>3</sup> sites found along the Central Coast were abandoned by the end of the Middle-Late Transition Period, resulting in the first occupation of most Transition Period and Late Period sites (Jones and Ferneau 2002:213, 219). Site CA-SLO-239 has been tentatively dated to the Middle-Late Transition Period and contains the only residential feature, a circular house floor, dating to this time period (Jones et al. 2007).

During the Middle-Late Transition Period within the Central Coast region, projectile points diagnostic of both the Middle and Late Periods occur (Jones and Ferneau 2002:217). The points include large, contracting-stemmed types typical of the Middle Period, as well as Late Period small, leaf-shaped points, likely reflecting the introduction of the bow and arrow.

#### *Late Period (1250 CE– Historic Contact)*

Late Period sites are marked by small, finely worked projectile points, such as Desert side-notched and Cottonwood points, as well as temporally diagnostic shell beads. The small projectile points are associated with bow and arrow technology and indicate influence from the Takic migration from the deserts into southern California. Although shell beads were typical of coastal sites, trade brought many of these maritime artifacts to inland locations, especially during the latter part of the Late Period (Jones et al. 2007).

Common artifacts identified at Late Period sites include bifacial bead drills, bedrock mortars, hopper mortars, lipped and cupped *Olivella* shell beads, and steatite<sup>4</sup> disk beads. The presence of beads and bead drills suggest that low-level bead production was widespread throughout the Central Coast region (Jones et al. 2007).

Unlike the large Middle Period shell middens, Late Period sites are more frequently single-component deposits (Joslin 2010). There are also more inland sites, with fewer and less visible sites along the Pacific shore during the Late Period. The settlement pattern and dietary reconstructions indicate a lesser reliance on marine resources than observed for the Middle and Middle-Late Transition periods, as well as an increased preference for deer and rabbit (Jones and Ferneau 2002;

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<sup>3</sup> A midden is a dump site for domestic waste associated with past human occupation.

<sup>4</sup> Steatite is more commonly referred to as “soapstone” or “green schist” is a type of is a type of metamorphic rock that is composed of mineral grains easily seen with a low-power hand lens, oriented in such a way that the rock is easily split into thin flakes or plates.



Jones et al. 2007). An increase in sites with bedrock mortars during the Late Period in the southern portions of the Central Coast region further suggests that nuts and seeds began to take on a more significant dietary role (Jones et al. 2007); although milling artifacts remains relatively low in the northern portions of the Central Coast region (Joslin 2010).

## **Ethnographic Setting**

San Luis Obispo County is located within the traditional territory of the Obispeño Chumash, named after their historic-period association with Mission San Luis Obispo (Ineseño Chumash 1913). The Obispeño Chumash are linguistically and culturally distinct from other Chumashan groups. The Chumash peoples spoke six closely related Chumashan languages that have been divided into three branches—Northern Chumash (consisting only of Obispeño), Central Chumash (consisting of Purisimeño, Ineseño, Barbareño, and Ventureño), and Island Chumash (Golla 2007:80). Chumash place names in the San Luis Obispo County vicinity include Pismu (Pismo Beach), Tematatimi (along Los Berros Creek), and Tilhini (near San Luis Obispo) (Applegate 1974).

Groups neighboring the Chumash included the Salinan to the north, the Southern Valley Yokuts and Tataviam to the east, and the Gabrielino (Tongva) to the south. The precise location of the boundary between the Chumashan-speaking Obispeño and their northern neighbors, the Hokan-speaking Salinan, is debatable (Milliken and Johnson 2005). However, Jones and Waugh (1995:8) note that “those boundaries may well have fluctuated through time in response to possible shifts in economic strategies and population movement.”

Only a general outline of the lifeways of the Obispeño Chumash is known because little ethnographic information is available. Bulbs, roots, and tubers were collected in the spring, and seeds were harvested in the fall. As for many native groups, the acorn was a dietary staple for the Obispeño Chumash. Archaeological research has demonstrated the presence of various shell beads, the most prominent being *Olivella*, at several Obispeño Chumash occupation sites, which were used from the early Holocene to post-European contact. The presence of chert<sup>5</sup> bead drills suggests the beads were acquired through manufacture rather than by trade (Wiggins 2016).

Obispeño Chumash had a complex socio-political structure based on a hierarchy that had increasingly uneven distribution of wealth. Villages would be led by a chief or *wot*, and larger villages or village clusters might have several *wots* and a regional chief. One chief, Buchon, is recorded as having power and influence enough to demand tribute until his death (Gamble et al. 2001; Jones et al. 2007:129).

The two main structures in Chumash villages were houses and sweat lodges. Houses were large (up to 55 feet in diameter), hemispherical, made with poles covered in grass or reeds, and had an opening in the top as a chimney for a central fire pit. In a village, the houses would be clustered together. Other structures included sacred enclosures, menstrual houses, windbreaks, storage and drying facilities, and dance areas. Sweat lodges were semi-subterranean, dome-shaped, and covered with earthen roofs (Gamble 1995). Each Obispeño Chumash village had a formal cemetery marked by tall painted poles and often a defined entrance area. Some burials included various religious objects, though this practice subsided with time (Gamble et al. 2001:191).

European contact, even before missionization, was detrimental to the population. High mortality rates left barely inhabited settlements, and the population of Chumash at Mission San Luis Obispo declined. Decimation of this kind substantially impacted traditional lifeways. Today, the Santa Ynez

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<sup>5</sup> Chert is a hard, opaque sedimentary rock commonly utilized for the manufacturing of stone tools.

Band of Chumash Indians is the only federally recognized Chumash Tribe, though many people of Chumash descent continue to live throughout their traditional territory.

## **History**

### *Regional History*

Post-Contact history for the state of California is generally divided into three periods: the Spanish Period (1769–1822), Mexican Period (1822–1848), and American Period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins in 1769 with the establishment of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, signals the beginning of the American Period when California became a territory of the United States.

### *Spanish Period (1769 – 1822)*

Spanish explorers made sailing expeditions along the coast of what was then known as Alta (upper) California between the mid-1500s and mid-1700s. In 1542, while in search of the legendary Northwest Passage, Juan Rodríguez Cabrillo recorded a visit to the Santa Barbara area. Sebastian Vizcaíno also conducted exploration of the coast in 1602 and named the Santa Barbara Channel when his ship entered the channel on the feast day of Saint Barbara (Kyle 2002). The Spanish crown laid claim to Alta California based on the surveys conducted by Cabrillo and Vizcaíno (Mathes 1994).

By the 18th century, Spain had developed a three-pronged approach to secure its hold on the territory and counter against other foreign explorers. The Spanish established military forts known as presidios, as well as missions and pueblos (towns) throughout Alta California. The 1769 overland expedition by Captain Gaspár de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. In 1769, land and sea parties from Baja California landed in San Diego and established the first Franciscan mission, known as San Diego de Alcalá, which was founded by Father Junipero Serra, who led the Spanish mission system journey. By the early 1820s, 21 missions, four presidios, and five *asistencias*<sup>6</sup> had been established along California's coast (Aiken 1983).

The mission and presidio relied on Chumash labor; eventually, the majority of the native population lived at the mission complex (Cole 1999). Construction of missions and associated presidios was a major emphasis during the Spanish Period in California to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns; just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles).

Spain began making land grants in 1784, typically to retiring soldiers, although the grantees were only permitted to inhabit and work the land. The land titles technically remained property of the Spanish king (Livingston 1914).

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<sup>6</sup> Asistencias were smaller sub-missions of Catholic missions established during the Spanish colonization of the Americas in the 16th through 19th centuries.

### *Mexican Period (1822 – 1848)*

Several factors, including the threat of foreign invasion, political dissatisfaction, and unrest among the Indigenous population, kept growth within Alta California to a minimum. After more than a decade of intermittent rebellion and warfare, New Spain won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and the establishment of many additional ranchos. Commonly, former soldiers and well-connected Mexican families were the recipients of these land grants, which now included the title to the land.

During the supremacy of the ranchos (1834–1848), landowners focused mainly on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

### *American Period (1848 – Present)*

The United States went to war with Mexico in 1846. The war ended in 1848 with the Treaty of Guadalupe Hidalgo, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as United States territories (Levinson and Sparrow 2005). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through the 1850s. The discovery of gold in the northern part of the state led to the Gold Rush beginning in 1848, and, with the influx of people seeking gold, cattle were no longer desired for their hides but as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom.

A severe drought in the 1860s decimated cattle herds and drastically affected rancheros' source of income. In addition, property boundaries that were loosely established during the Mexican era led to disputes with new incoming settlers, problems with squatters, and lawsuits. Rancheros often were encumbered by debt and the cost of legal fees to defend their property. As a result, much of the rancho lands were sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns (Dumke 1944).

### *Local History*

European settlement of the area began with the establishment of Mission San Miguel Arcangel in 1797. The mission was established in an area already populated by Native American groups and had 1,076 inhabitants in 1814. The Paso Robles Rancho in present day Paso Robles was granted to Pedro Narváez by the Mexican government in 1844. Narváez sold the land to Petronilo Ríos in 1845. In 1857 the entire Rancho Paso de Robles land grant was purchased by James and Daniel Blackburn (City of Paso Robles 2015). The landowners sold a portion of the land to other interested partners

and began gradually developing the land and the surrounding springs. In 1886, the coming of the Southern Pacific Railroad spurred further development of the town; records indicate that by the end of the year the town had over 523 residents and 100 buildings (City of Paso Robles 2015). The City of Paso Robles was established in 1889.

The soils and springs in the Paso Robles area attracted agriculture to the region. For a time, the area was well-known as the “Almond City” for the large number of almonds produced by local growers. Ranches in the Paso Robles area raised cattle and grew a variety of grains, fruits, and nuts. Wine grapes were introduced to the area early on by the padres of Mission San Miguel in 1797, but commercial winemaking in the Paso Robles area began in 1882. This industry quickly expanded due to the favorable climate and soil. Several vineyards flourished in the area in the 1920s and the region gained a reputation as a premier wine region (City of Paso Robles 2015).

The natural hot springs in the area became well known for providing therapeutic relief to those who lived in and around the mission (City of Paso Robles 2015). In 2003, a 6.5 magnitude earthquake struck on the outskirts of Paso Robles and caused serious damage to local infrastructure. Dormant underground springs became active and caused massive flooding.

Today, the Paso Robles area is a popular wine tourism destination with a growing population and expanding viticulture operations.

## 4.4.2 Regulatory Setting

Cultural resources, including built environment and archaeological resources, may be designated as historic by National, State, or local authorities. In order for a resource to qualify for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR) or as a locally significant resource, it must meet one or more identified criteria of significance. The resource must also retain sufficient historic integrity, which is defined in National Register Bulletin 15 as the “ability of a property to convey its significance” (National Park Service [NPS] 1990). An explanation of these designations follows.

### **Federal Regulations**

The proposed planting ordinance does not have a federal nexus and, therefore, reference to the National Historic Preservation Act of 1966 (NHPA) and other federal laws is provided here for informational purposes only. Projects that involve federal funding or permitting (i.e., have a federal nexus) must comply with the provisions of the NHPA, as amended (16 United States Code [U.S.C.] 470f). Cultural resources are considered during federal undertakings chiefly under Section 106 of the NHPA through one of its implementing regulations, 36 Code of Federal Regulations (CFR) 800 (Protection of Historic Properties), as well as the National Environmental Policy Act (NEPA). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of the NHPA.

#### *National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. §§ 470 et seq.)*

The NHPA is a federal law created to avoid unnecessary harm to historic properties. The NHPA includes regulations that apply specifically to federal land-holding agencies, but also includes regulations (Section 106) that pertain to all projects funded, permitted, or approved by any federal agency that have the potential to affect cultural resources. Provisions of the NHPA established the NRHP (maintained by the NPS), the Advisory Council on Historic Preservation, the State Historic Preservation Office (SHPO), and a federal grants-in-aid program.

### *National Register of Historic Places*

The NRHP was established by the NHPA as “an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment” (CFR 36 CFR 60.2). The NRHP recognizes properties that are significant at the national, State, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

- Criterion A:** It is associated with events that have made a significant contribution to the broad patterns of our history;
- Criterion B:** It is associated with the lives of persons who are significant in our past;
- Criterion C:** It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; and/or
- Criterion D:** It has yielded, or may be likely to yield, information important in prehistory or history.

### *Secretary of the Interior's Standards*

The Secretary of the Interior is responsible for establishing professional standards and providing guidance related to the preservation and protection of all cultural resources listed in or eligible for listing in the NRHP.

### *American Indian Religious Freedom Act of 1978 (42 U.S.C. §§ 1996 and 1996a)*

The American Indian Religious Freedom Act of 1978 and the Native American Graves and Repatriation Act of 1990 (25 U.S.C. §§ 3001 et seq.) establish that traditional religious practices and beliefs, sacred sites, and the use of sacred objects shall be protected and preserved.

## **State Regulations**

### *California Environmental Quality Act*

California Public Resources Code (PRC) Section 21084.1 requires lead agencies determine if a project could have a significant impact on historical or unique archaeological resources. As defined in PRC Section 21084.1, a historical resource is a resource listed in, or determined eligible for listing in, the CRHR; a resource included in a local register of historical resources or identified in a historical resources survey pursuant to PRC Section 5024.1(g); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. PRC Section 21084.1 also states resources meeting the above criteria are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates otherwise. Resources listed in the NRHP are automatically listed in the CRHR and are, therefore, historical resources under CEQA. Historical resources may include eligible built environment resources and archaeological resources of the precontact or historic periods.

*CEQA Guidelines* Section 15064.5(c) provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a “unique archaeological resource” as identified in PRC Section 21083.2. PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource does not qualify as a historical or unique archaeological resource, the impacts of a project on those resources will be less than significant and need not be considered further (*CEQA Guidelines* Section 15064.5[c][4]). *CEQA Guidelines* Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during the implementation of a project.

According to CEQA, an impact that results in a substantial adverse change in the significance of a historical resource is considered a significant impact on the environment. A substantial adverse change could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (*CEQA Guidelines* §15064.5[b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register (*CEQA Guidelines* §15064.5[b][2][A]).

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

Section 15126.4 of the *CEQA Guidelines* stipulates an EIR shall describe feasible measures to minimize significant adverse impacts. In addition to being fully enforceable, mitigation measures must be completed within a defined time period and be roughly proportional to the impacts of the project. Generally, a project which is found to comply with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (the Standards) is considered to be mitigated below a level of significance (*CEQA Guidelines* Section 15126.4[b][1]). For historical resources of an archaeological nature, lead agencies should also seek to avoid damaging effects where feasible. Preservation in place is the preferred manner to mitigate impacts to archaeological sites; however, data recovery through excavation may be the only option in certain instances (*CEQA Guidelines* Section 15126.4[b][3]).

### *California Register of Historical Resources*

The CRHR was established in 1992 and codified by PRC Sections 5024.1 and 4852. The CRHR is an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (PRC Section 5024.1[a]). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the

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history of California (PRC Section 5024.1[b]). Unlike the NRHP, however, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance (California Office of Historic Preservation 2006). Further, resources may still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (California Office of Historic Preservation 2006). Generally, the California Office of Historic Preservation recommends resources over 45 years of age be recorded and evaluated for historical resources eligibility (California Office of Historic Preservation 1995:2).

Properties are eligible for listing in the CRHR if they meet one of more of the following criteria:

- Criterion 1:** Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage
- Criterion 2:** Is associated with the lives of persons important to our past
- Criterion 3:** Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- Criterion 4:** Has yielded, or may be likely to yield, information important in prehistory or history

*California Health and Safety Code §7050.5*

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined if the remains are subject to the coroner’s authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification.

*California Public Resources Code §5097.98*

PRC Section 5097.98 states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code §7050.5, shall immediately notify those persons (i.e., the Most Likely Descendant or “MLD”) it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

**Local Regulations**

*County Grading Code*

Pursuant to Section 22.52.070 of the County Code, the following activities are exempt from obtaining a grading permit:

- Small agricultural projects involving 50 cubic yards or less of excavation for grading to create new fields, including vegetation removal and drainage improvements;

- Grading activities related to ongoing crop production on land that has been previously cultivated within the previous 10 years, including relocating roads within existing fields; and
- Installation of agricultural water supplies, not including reservoirs.

The following activities are required to submit an Agricultural Grading Form to the County prior to commencement of any grading activities and comply with the standards and practices contained in the NRCS Field Office Technical Guide (FOTG):

- New crop production on slopes up to 30 percent, including drainage improvements and vegetation removal, but not including construction of new agricultural roads; and
- Construction of small agricultural reservoirs with a capacity of one acre-foot of water or less.

Pursuant to Section 22.52 of the County Code, a grading permit from the County or Alternative Review by the NRCS or Resource Conservation District (RCD), both of which are subject to CEQA review, is required for agricultural activities not meeting the requirements for an exemption or Agricultural Grading Form, such as:

- Grading for new crop production on slopes over 30 percent;
- Construction of agricultural reservoirs with a capacity of more than one acre-foot; and
- Grading of new agricultural roads.

#### *22.10.040 - Archeological Resources*

Pursuant to Section 22.10.040 of the County Code, the following standards apply when archaeological resources are unearthed or discovered during any construction activities:

- A. Construction activities shall cease, and the Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.
- B. In the event archeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner shall be notified in addition to the Department so proper disposition may be accomplished.

#### *County of San Luis Obispo General Plan Conservation and Open Space Element*

The County of San Luis Obispo General Plan Conservation and Open Space Element includes the following goals, policies, and implementation measures as they pertain to the preservation of cultural and historical resources:

**Goal CR 1.** The County will have a strong, positive community image that honors our history and cultural diversity.

**Policy CR 1.1 Cultural Identity.** Establish and support programs that enhance the county's sense of community and identity, such as the collection of oral histories, cultural and genealogical research, and the acquisition of collections of historic artifacts, documents, and memorabilia relevant to the history of the county.

**Implementation Strategy CR 1.1.1 Curation.** Support existing museums or cultural centers and establishment of new ones to educate the public about the importance of local history, Native American resources, and archaeology, and to display artifacts, documents, and art relevant to the county's history and cultural diversity.



**Implementation Strategy CR 1.1.2 Curation Facility.** Work with stakeholders to locate, construct and maintain a storage, curation and research facility in a central location for cultural resource artifacts and documents from the County.

**Implementation Strategy CR 1.1.3 Diversified Funding.** Identify and pursue funding for existing and new curation facilities to ensure the continued curation of collections in perpetuity

**Goal CR 2.** The County will promote public awareness and support for the preservation of cultural resources in order to maintain the county's uniqueness and promote economic vitality.

**Policy CR 2.1 Community Participation.** The County will actively promote and support community participation in the preservation and enhancement of the county's culture and history.

**Implementation Strategy CR 2.1.1 Public Outreach.** Establish a program to publicize the County's efforts to protect historical and cultural resources at risk from development and its commitment to preserve its cultural heritage. The program may include public outreach and education through posters, signs, handouts, brochures, exhibits, videos, the County website, and workshops.

**Implementation Strategy CR 2.1.2 Outreach to Schools.** Support education programs through local historical societies, schools, and other groups that provide information to the community regarding the rich history of the county and the importance of preserving it for future generations to appreciate.

**Implementation Strategy CR 2.1.3 Unauthorized Collection.** Protect sensitive sites from vandalism and unauthorized collection of artifacts by educating staff, public officials, the public, and landowners about the importance of such sites.

**Implementation Strategy CR 2.1.4 Interpretative Signage.** Require the incorporation of monuments, plaques, signs, or artwork into public and private development projects in areas associated with history or cultural resources in order to identify and interpret the county's diverse history and cultural resources. Promote such interpretive signage in existing public and private sites.

**Implementation Strategy CR 2.1.5 Cultural Resources Advisory Committee.** Establish a Cultural Resources Advisory Committee to make recommendations to the Board of Supervisors and other decision-making bodies on ways to protect Native American, archaeological, historic, and other cultural resources. The Committee shall also:

- Assist in developing historic contexts of County history,
- Assist in surveying and identifying cultural resources,
- Recommend standards and procedures to designate cultural resources,
- Recommend historic sites to be included in the General Plan H designations or ordinances, and
- Review of applications for projects that involve alteration or demolition of recognized cultural resources.

**Policy CR 2.2 Acquisition.** The County encourages and supports acquisition by public agencies or historical or conservation organizations of the most important archaeological and cultural sites from willing sellers.

**Policy CR 2.3 “Living Resources”.** Preserve historic sites and buildings and recognize cultural and archaeological resources as “living resources” that are part of a continuing culture.

**Implementation Strategy CR 2.3.1 Stakeholder Outreach.** Support and facilitate ongoing discussions or forums about protecting and preserving cultural resources with Native American groups, historical and archaeological interest groups, cultural resource professionals, decision makers, and landowners.

**Implementation Strategy CR 2.3.2 Government-to-Government Consultation.** Establish a government-to-government consultation process with the Native American community and a consultation process with other stakeholders to identify potentially significant cultural resources in the county and to discuss issues relevant to the protection and preservation of cultural resources.

**Goal CR 3.** The county’s historical resources will be preserved and protected.

**Policy CR 3.1 Historic Preservation.** The County will provide for the identification, protection, enhancement, perpetuation, and use of features that reflect the County's historical, architectural, Native American, archaeological, cultural, and aesthetic heritage.

**Implementation Strategy CR 3.1.1 Historic Preservation Ordinance.** The County will develop a cultural resources preservation ordinance to:

- 1) more effectively preserve Native American cultural sites, archaeological resources, and protect and enhance historic buildings,
- 2) prevent demolition or substantial changes in outward appearance of historically designated buildings, unless it is necessary for public health and safety,
- 3) integrate historically accurate designs and features in historic residential and commercial structures,
- 4) promote restoration of historic buildings or sites using the greatest degree of authenticity practicable, consistent with the Secretary of the Interior’s Standards as appropriate, and
- 5) create the Cultural Resources Advisory Committee.

**Implementation Strategy CR 3.1.2 Historic Resources Inventory.** Develop a description of the broad patterns of human occupation or historic contexts of the area in order to provide a basis on which to judge the place and importance of potential cultural resources. Based on these contexts, develop and regularly update a comprehensive and systematic historic resources inventory, coordinating with other agencies and organizations, as necessary. The inventory will include sites, historic buildings, and structures, such as the Avila Schoolhouse, and historic documents within the county, and a map depicting their locations. It shall use the State of California, Department of Parks and Recreation "Building, Structure, and Object Record" or similar format. The inventory will include a map depicting the locations of the features (unless the locations are confidential).

**Implementation Strategy CR 3.1.3 National Register.** Work with recognized preservation organizations and interested individuals and landowners to determine

whether additional churches, schools, and other private and public structures deserve State or federal designation and protection as historic resources. Pursue formal listing of all eligible sites and properties in the National Register of Historic Places and California Register of Historical Resources, or as California Historic Landmarks.

**Implementation Strategy CR 3.1.4 Historic Listing Process.** Develop a process to protect newly identified historic sites, buildings, and structures in a timely manner as an alternative to including them in the Historic (H) combining designation. Examples are

- 1) adopt a Historic Preservation Ordinance that includes or references a list, to be updated periodically, of historic sites, buildings and structures, and
- 2) amend planning area/Land Use Ordinance standards to include such lists for each Planning Area.

**Policy CR 3.2 Historic Preservation Programs.** The County supports and encourages historic preservation activities. County agencies should cooperate and coordinate their activities with preservation activities.

**Implementation Strategy CR 3.2.1 Grants.** Support applications for grants and other sources of funding for historic preservation projects that are consistent with the County's General Plan.

**Implementation Strategy CR 3.2.2 Restoration Incentives.** Identify and provide incentives, as feasible, to private landowners, nonprofit organizations, and interested preservation groups to rehabilitate and restore historic buildings and structures and to encourage their continued use.

**Implementation Strategy CR 3.2.3 Tax Incentives.** Share information on federal and state tax incentive programs and nonprofit conservation programs for historic preservation with landowners and preservation groups.

**Implementation Strategy CR 3.2.4 Mills Act.** Consider participating in the Mills Act Tax Abatement Program starting with research or studies of costs and benefits. The Mills Act is an economic incentive program for the restoration and preservation of qualified historic buildings by private owners. Private owners who pledge to rehabilitate and maintain the historical and architectural character of their properties for at least a 10-year period receive substantial property tax savings under the act.

**Policy CR 3.3 Remodeling and Reconstruction.** Maintain and enhance the historic character of the county by establishing review procedures for the remodeling and reconstruction of buildings and other structures consistent with the Secretary of the Interior's Standards.

**Implementation Strategy CR 3.3.1 Restoration Assistance.** Provide property owners and developers with design assistance, including information on the restoration and adaptive reuse of historic buildings and structures. Use private and public resources to provide information on proper methods and techniques of restoration and rehabilitation, including sources of funding assistance.

**Implementation Strategy CR 3.3.2 Salvaged Materials.** Encourage the reuse of salvaged architecturally significant materials.

**Goal CR 4.** The county's known and potential Native American, archaeological, and paleontological resources will be preserved and protected.

**Policy CR 4.1 Non-development Activities.** Discourage or avoid non-development activities that could damage or destroy Native American and archaeological sites, including off-road vehicle use on or adjacent to known sites. Prohibit unauthorized collection of artifacts. (Also refer to Implementation Strategy CR 2.1.3.).

**Policy CR 4.2 Protection of Native American Cultural Sites.** Ensure protection of archaeological sites that are culturally significant to Native Americans, even if they have lost their scientific or archaeological integrity through previous disturbance. Protect sites that have religious or spiritual value, even if no artifacts are present. Protect sites that contain artifacts, which may have intrinsic value, even though their archaeological context has been disturbed.

**Implementation Strategy CR 4.2.1 Archaeological Sensitivity Mapping.** Identify significant archaeological and cultural sites and conduct sensitivity mapping in consultation with Native Americans and archaeological and conservation organizations to improve the County's ability to protect the resources. Map resources consistently in urban and rural areas of the county.

**Implementation Strategy CR 4.2.2 Archaeological Site Records.** Establish and maintain, but do not publicize archaeological site records. Site records may be released to limited individuals and groups with appropriate professional or tribal credentials.

**Policy CR 4.3 Cultural Resources and Open Space.** The County supports the concept of cultural landscapes and the protection and preservation of archaeological or historical resources as open space or parkland on public or private lands.

**Implementation Strategy CR 4.3.1 Cultural Landscapes.** The identification and interpretation of cultural resources should consider the larger landscape in order to address the relationships between archaeological sites, landscape features and the environment.

**Implementation Strategy CR 4.3.2 Cultural Landscapes: Open Space Easements.** In proposed land divisions and discretionary land use permits:

- 1) locate parcels and easements to optimize protection of cultural resources,
- 2) as necessary, clearly define allowable uses, prohibited activities, and open space maintenance responsibilities as a condition of approval, and
- 3) use open space easements to protect designated archaeological sites.

**Implementation Strategy CR 4.3.3 Cultural Landscapes: Management.** Manage public open space and parkland so that public use does not disturb or degrade archaeological or historical resources.

**Policy CR 4.4 Development Activities and Archaeological Sites.** Protect archaeological and culturally sensitive sites from the effects of development by avoiding disturbance where feasible. Avoid archaeological resources as the primary method of protection.

**Implementation Strategy CR 4.4.1 Native American Participation in Development**

**Review Process.** In areas likely to contain Native American and cultural resources, include Native Americans in tasks such as Phase I II, and III surveys, resource assessment, and impact mitigation. Consult with Native American representatives early in the development review process and in the design of appropriate mitigations. Enable their presence during archaeological excavation and construction in areas likely to contain cultural resources.

**Implementation Strategy CR 4.4.2 Cultural Resources Studies.** Require cultural resources studies (i.e., archaeological, and historical investigations) by a professional who meets the Secretary of the Interior’s Professional Qualifications Standards when development is proposed within an archaeologically or historically sensitive area. These studies will conform to the County’s approved guidelines.

**Policy CR 4.6 Resources-Based Sensitivity.** Protect archaeological resources near streams, springs and water sources, rock outcrops, and significant ridgetops, as these are often indicators of the presence of cultural resources

**Implementation Strategy CR 4.6.1 Resource-Based Surveys.**

- a. Require a preliminary site survey to determine the likelihood of resources with all development subject to a discretionary permit that is proposed within
  - 1) 100 feet of the bank of a creek or spring or
  - 2) 300 feet of a creek where the slope of that area is less than 10 percent.

Require that a professional archaeologist who meets the Secretary of the Interior’s Professional Qualifications for Archaeology conduct the preliminary survey. Recommendations made by the archaeologist may be applied as mitigation measures.

- b. As significant rock outcrops and ridge tops are identified, determine the distances within which or the circumstances under which proposed discretionary development would be subject to a preliminary site survey, based on site-specific conditions.

### 4.4.3 Impact Analysis

#### **Significance Thresholds**

Under CEQA, a project that may cause a substantial adverse change in the significance of a historical resource would also have a significant effect on the environment. According to Appendix G of the *CEQA Guidelines*, impacts related to cultural resources from the proposed project would be significant if the project would:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; and/or
- c. Disturb any human remains, including those interred outside of dedicated cemeteries.

## Methodology

Potential impacts to cultural resources were analyzed based on the review of the NRHP (NPS 2020) and the California Office of Historic Preservation Built Environment Resources Directory (California Office of Historic Preservation 2020), as well as local planning documents and processes, the planting ordinance details, and standard professional practice, to determine the level of cultural sensitivity of the PBLUMA. No known resources were identified as part of the NRHP and Built Environment Resources Directory review. Archaeology reports with findings have been prepared for at least 22 previous projects (e.g., water pipelines, commercial development, subdivisions) throughout the PBLUMA, mostly located in the proximity of creeks and streambeds. Approximately 35 percent of the PBLUMA is located within 300 feet of streams, based on the National Hydrography Dataset (110,375 acres of the total 313,661 acres).

The significance of a cultural resource and subsequently the significance of a potential impact to a cultural resource is determined by, among other things, consideration of whether that resource can increase our knowledge of the past. The determining factors are a cultural site's content and degree of preservation. A finding of archaeological significance follows the criteria established in the *CEQA Guidelines*.

*CEQA Guidelines* Section 15064.5, *Determining the Significance of Impacts to Archaeological and Historical Resources* states:

- (a) For purposes of this section, the term "historical resources" shall include the following:
  - (3) [...] Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the [CRHR] (PCR Section 5024.1, Title 14 CCR, Section 4852).
  - (4) The fact that a resource is not listed in, or determined to be eligible for listing in the [CRHR], not included in a local register of historical resources (pursuant to Section 5020.1[k] of the PCR), or identified in [a] historical resources survey (meeting the criteria in Section 5024.1[g] of the Public Resources Code) does not preclude a lead agency from determining that the resource may be [a] historical resource as defined in PCR Sections 5020.1(j) or 5024.1.
- (b) A project with an effect 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.

Historical resources are "significantly" affected if there is demolition, destruction, relocation, or alteration of the resource or its surroundings. Generally, impacts to historical resources can be mitigated to below a level of significance by following the Secretary of the Interior's *Guidelines for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (*CEQA Guidelines* Section 15064.6[b]). In some circumstances, documentation of a historical resource by way of historic narrative photographs or architectural drawings would not mitigate the impact of demolition below the level of significance (*CEQA Guidelines* Section 15126.4[b][2]). Preservation in place is the preferred form of mitigation for archaeological resources as it retains the relationship between artifact and context and may avoid conflicts with groups associated with the site (*CEQA Guidelines* Section 15126.4[b][3][A]).

Additionally, a "unique archaeological resource" is defined in PRC Section 21083.2(g) as:

...an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

If an archaeological resource does not meet either the definition of a “historic resource” or “unique archaeological resource,” potential impacts would not be significant, and thus, would not require mitigation (*CEQA Guidelines* Section 15064.5[e]). Where the significance of an archaeological site is unknown, it is presumed to be significant for the purposes of the PEIR investigation.

### **Project Impacts and Mitigation Measures**

**Threshold a:** Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

**Impact CUL-1 IMPLEMENTATION OF THE PROPOSED PLANTING ORDINANCE COULD RESULT IN POTENTIALLY SIGNIFICANT IMPACTS TO HISTORICAL RESOURCES EITHER DIRECTLY (VIA DEMOLITION OR ALTERATION) AND/OR INDIRECTLY (DAMAGE TO STRUCTURES DUE TO VIBRATIONS FROM USE OF HEAVY EQUIPMENT). IMPLEMENTATION OF EXISTING REGULATIONS WOULD REDUCE INDIRECT AND DIRECT IMPACTS TO HISTORICAL BUILDINGS TO LESS THAN SIGNIFICANT (CLASS III). HOWEVER, NO FEASIBLE MITIGATION MEASURES ARE AVAILABLE TO REDUCE DIRECT IMPACTS ON OTHER HISTORICAL RESOURCES AND IMPACTS WOULD REMAIN CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

Based on review of the NRHP and the California Office of Historic Preservation Built Environment Resources Directory, the PBLUMA area may contain existing historical resources, including historical resources that have yet to be identified. These may include agricultural properties with built environment resources such as buildings and structures, and cultivated landscape that are over 45 years of age. Older buildings in the PBLUMA are likely agriculturally related structures (e.g., old farmhouses, barns, etc.). Other historical archeological resources that may be present within the PBLUMA include agricultural-related infrastructure, such as water conveyance features, including canals or irrigation ditches.

Pursuant to Section 15064.5(b)(1) of the *CEQA Guidelines*, a substantial adverse change in the significance of a historical resource can occur through the demolition, destruction, relocation, or alteration of the resource or its immediate surroundings. Therefore, demolition, destruction, relocation, and/or alteration of historical resources or their immediate surroundings could result in a potentially significant impact.

Potential planting ordinance activities that may result from the proposed planting ordinance include field preparation, crop planting, irrigation, cultivation, and harvesting associated with new and expanded crop plantings. The planting ordinance could also result in construction and use of agricultural accessory infrastructure (e.g., access roads, drainage and water infrastructure). Implementation of the ordinance could introduce active agricultural activities in portions of the PBLUMA that are not currently used for agricultural purposes. However, the agricultural use would

be consistent with the rural and agricultural character of the PBLUMA. Therefore, establishing irrigated agriculture would not conflict with the historical context of historical buildings in the PBLUMA, which is primarily agricultural.

The proposed planting ordinance is not anticipated to result in direct impacts to historical buildings because new or expanded irrigated agriculture would occur in areas of current or past agricultural activities, or in undeveloped areas. It is not anticipated that any buildings would be demolished to establish irrigated agriculture.

Agricultural activities have a potential to indirectly impact historical resources (e.g., damage to structures due to vibrations from use of heavy equipment). As discussed in Section 4.10, *Noise*, past and current agricultural activities have contributed to vibration levels near existing on-site buildings, including historical buildings, within the agricultural areas of the PBLUMA. Therefore, it is assumed that existing on-site structures have already been exposed to vibration from previous or current agricultural activities on-site, and the proposed project would result in similar vibration levels. It is also assumed that expanded agricultural activities would occur on sites with no existing structures, because structures in the PBLUMA are typically located near active agricultural activities or within residential areas where expanded agriculture is not likely to occur. Therefore, vibration impacts to on-site structures, including historical structures, would be less than significant.

Because the planting ordinance would result in ground disturbance, implementation of the ordinance could directly disturb or damage other at-surface or below-ground historical resources (e.g., via demolition or alteration) in areas currently undisturbed by active agriculture. Such historical resources could include water conveyance infrastructure, including canals or irrigation ditches.

Increased groundwater extraction resulting from the proposed planting ordinance would not have the potential to result in impacts to historical resources, because groundwater extraction would not result in soil disturbance where cultural resources could be present. However, construction of new irrigation groundwater wells would potentially impact underlying cultural resources. The drill used to install wells pulverizes soil as it digs, making it impossible to determine whether cultural resources were present and destroyed by the drilling.

Grading for site preparation and construction of agriculture infrastructure (e.g., ponds/reservoirs, access roads, irrigation pipelines) could impact historical resources in areas not currently in active agriculture. In addition, buried historical resources could be impacted in areas with active agricultural activities if crops that require shallow excavation (e.g., alfalfa, vegetables, etc.) are replaced with crops that require deep ripping to provide for adequate drainage (e.g., for wine and table grapes, orchards, etc.).

The County has policies and regulations to identify, designate, and minimize impacts to historical resources. County of San Luis Obispo General Plan Conservation and Open Space Element's goals, policies, and implementation measures would encourage the identification and designation of, and reduction of impacts to, historical resources. The details of the specific goals, policies, and implementation measures are outlined in Section 4.4.2, *Regulatory Setting*, above.

In addition, grading activities that have a potential to result in impacts to historical resources are regulated under the County Grading Ordinance (Section 22.52 of the County Code). Pursuant to Section 22.52.070 of the County Code, many smaller agricultural grading activities with smaller areas of grading or grading in previously disturbed areas, such as small agricultural projects involving less than 50 cubic yards of excavation, grading for ongoing crop production, and/or installation of water supplies are exempt from obtaining a grading permit. New crop production on



slopes up to 30 percent and construction of agricultural reservoirs with less than 1 acre-foot of capacity must submit an Agricultural Grading Form to the County prior to commencement of grading activities. Grading for new crop production on slopes greater than 30 percent, construction of agricultural reservoirs with greater than 1 acre-foot of capacity, and grading for agricultural roads must obtain a grading permit from the County or Alternative Review by the NRCS or Resource Conservation District (RCD), all of which are subject to separate CEQA review. Impacts from agricultural grading from agricultural projects that are not required to obtain a grading permit were analyzed in *Final Grading and Stormwater Management General Plan Ordinance Revisions Environmental Impact Report* (Grading Ordinance FEIR; County of San Luis Obispo 2009).

Even with adherence to the existing regulations discussed above, grading activities and infrastructure construction in areas not currently disturbed by active agriculture have a potential to impact historical resources; therefore, the planting ordinance would result in potentially significant impacts to historical resources.

### **Mitigation Measures**

With compliance with the regulatory frameworks discussed in Section 4.4.2, *Regulatory Setting*, and discussed under Impact CUL-1, including the County Grading Ordinance, impacts to historical resources from agricultural activities in the County would be reduced to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts to historical resources (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility).

### **Significance After Mitigation**

Since no feasible mitigation measures are available to reduce impacts to historical resources, impacts would be significant and unavoidable.

<b>Threshold b:</b> Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
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**Impact CUL-2 IMPLEMENTATION OF THE PROPOSED PLANTING ORDINANCE COULD RESULT IN POTENTIALLY SIGNIFICANT IMPACTS TO ARCHAEOLOGICAL RESOURCES. THERE IS NO FEASIBLE MITIGATION TO REDUCE IMPACTS; THEREFORE, IMPACTS WOULD REMAIN CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

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Ground-disturbing activities, particularly in areas that have not been previously developed with urban uses, previously cultivated, or subject to a cultural resources investigation, or in areas where proposed tilling/grading depths may exceed the depths of previous disturbance, have the potential to impact previously undiscovered prehistoric and/or historic-period archaeological resources that may be present on or below the ground surface. Consequently, impacts to known and previously unknown subsurface cultural resources in previously uncultivated/undisturbed areas, in areas requiring deeper ripping/grading activities than what previously occurred, and/or within 100 feet of the bank of a creek or spring or 300 feet of a creek where the slope is less than 10 percent on sites that are not currently in active cultivation could potentially occur as a result of new and expanded plantings or construction of accessory infrastructure under the proposed ordinance. However, the County has adopted policies and regulations to identify, designate, and minimize potential impacts to archaeological resources. The County of San Luis Obispo General Plan Conservation and Open Space Element's goals, policies, and implementation measures encourage the identification, designation, and reduction of potential impacts to archaeological resources. The specific policies

and implementation measures are included in Section 4.4.2, *Regulatory Setting*, above. In addition, as detailed in Impact CUL-1, grading activities that have a potential to result in impacts to buried archeological resources are regulated under the County Grading Ordinance (Section 22.52 of the County Code). Moreover, Section 22.10.040 of the County Code requires construction activities to cease and the Department of Planning and Building to be notified in the event archaeological resources are unearthed during construction activities. Nonetheless, specific potential impacts to archaeological resources can only be determined on an individual planting permit/exemption basis because potential impacts are dependent upon both the individual resource and the characteristics of the proposed activity, including the location. Therefore, potential impacts to archaeological resources would be potentially significant.

### **Mitigation Measures**

With compliance with the regulatory frameworks discussed in Section 4.4.2, *Regulatory Setting*, including the County Grading Ordinance, impacts to archaeological resources from agricultural activities in the County would be reduced to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts to archeological resource (refer to Section 4.0, *Environmental Impact Analysis*, for further discussion of mitigation feasibility).

### **Significance After Mitigation**

Since no feasible mitigation measures are available to reduce impacts to archaeological resources, impacts would be significant and unavoidable.

**Threshold c:** Would the project disturb any human remains, including those interred outside of formal cemeteries?

**Impact CUL-3 GROUND-DISTURBING ACTIVITIES ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PLANTING ORDINANCE COULD RESULT IN DAMAGE TO OR DESTRUCTION OF HUMAN REMAINS, WHICH COULD POTENTIALLY BE CONSIDERED A SIGNIFICANT IMPACT. HOWEVER, WITH COMPLIANCE WITH EXISTING REGULATIONS, POTENTIAL IMPACTS TO HUMAN REMAINS WOULD BE LESS THAN SIGNIFICANT.**

Human burials, both inside and outside formal cemeteries, often occur in prehistoric archaeological contexts. Human remains could be present throughout the PBLUMA, including in undisturbed areas as well as previously disturbed areas. Therefore, ground-disturbing activities associated with the proposed planting ordinance could potentially disturb human remains, including Native American burials.

PRC Section 5097 and the California Health and Safety Code Sections 7050.5, 7051, and 7054 include specific provisions for treatment and protection of encountered human remains. Existing regulations address the illegality of interfering with human burial remains, and protects them from disturbance, vandalism, and destruction, and also establish procedures to be implemented if discovered human remains are considered to be Native American. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains, and instructs the NAHC to resolve any related disputes.

New and expanded agricultural activities associated with the proposed planting ordinance would be required to adhere to existing regulations regarding the treatment of human remains as prescribed in California Health and Safety Code Section 7050.5 and PRC Section 5097.8. In the event of an unanticipated discovery of human remains, the State of California Health and Safety Code Section 7050.5 requires that all ground-disturbing activities halt in the vicinity of the discovery and the

County Coroner be contacted immediately. The County Coroner would make a determination of origin and disposition of the human remains pursuant to PRC Section 5097.98. If the human remains are determined to be prehistoric, the coroner would notify the NAHC, which would determine and notify an MLD. The MLD would complete an inspection within 48 hours of being granted access to the site. The MLD would be responsible for the ultimate disposition of the remains, as required by PRC Section 5097.98. Recommendations by the MLD may include: (1) the nondestructive removal and analysis of human remains and items associated with Native American human remains; (2) preservation of Native American human remains and associated items in place; (3) relinquishment of Native American human remains and associated items to the descendants for treatment; or (4) other culturally appropriate treatment. It is reasonable to assume in the event that human remains were discovered, agricultural workers would contact the County Coroner, who would ensure compliance with the applicable regulations. With compliance to existing regulations prescribed in the State of California Health and Safety Code Section 7050.5 and PRC Section 5097.8, potential impacts to human remains would be less than significant.

### **Mitigation Measures**

With compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98, potential impacts to human remains would be less than significant. No mitigation measures are required.

### **Significance After Mitigation**

Impacts to human remains would be less than significant and no mitigation is required.

#### **4.4.4 Cumulative Impacts**

Cumulative residential and non-residential development, in combination with the proposed planting ordinance, would result in potential exposure of and permanent loss of cultural resources. The County would require mitigation measures, similar to those described above, for cumulative residential and non-residential development. Project-specific mitigation measures may include monitoring during ground-disturbing activities, as well as a Phase I Inventory, Phase II Testing and Evaluation, and/or Phase III Data Recovery, depending on the significance of cultural resources on the project sites. Cumulative development would also be subject to applicable federal and state laws, and local goals and policies. The proposed planting ordinance could incrementally contribute to the cumulative loss of cultural resources because individual projects would not be subject to CEQA review or any site-specific analysis of cultural resource impacts. Therefore, the activities associated with the planting ordinance (e.g., grading, planting, maintenance, etc. may result in ground disturbance that could incrementally contribute to the cumulative loss of culture resources. When combined with potential impacts of the other cumulative projects, cumulative impacts to cultural resources would be potentially significant, and the proposed ordinance's incremental contribution to this impact would be cumulatively considerable.

## 4.5 Energy

Public Resources Code Section 21100(b)(2) and Appendix F of the *CEQA Guidelines* require that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful or unnecessary consumption of energy. Therefore, this section focuses on potential impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. Impacts related to conflicting with or obstructing a State or local plan for renewable energy or energy efficiency were determined to be less than significant in the Initial Study prepared for the proposed project (see Appendix A and Section 4.14, *Effects Found Not to Be Significant*), and therefore, are not further analyzed in this section.

### 4.5.1 Setting

Fossil fuels are burned to create electricity, heat and cool buildings, and power vehicles. Transportation energy use is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes such as auto, carpool, and public transit; and miles traveled by these modes. Such energy use relates directly to environmental quality because it can adversely affect air quality and can generate greenhouse gas (GHG) emissions that contribute to climate change.

From an energy resources perspective, the PBLUMA lies within the service area of Pacific Gas & Electric Company (PG&E; electricity provider) and the service area of Southern California Gas Company (SoCalGas; natural gas provider).

Energy use is typically quantified using the British Thermal Units (BTU). The BTU is the amount of energy that is required to raise the temperature of one pound of water by 1-degree Fahrenheit. As points of reference, the approximate amount of energy contained in a cubic foot of natural gas, a kilowatt hour (kWh) of electricity, and a gallon of gasoline are 1,000 BTU, 3,400 BTU, and 123,000 BTU, respectively. Natural gas usage is expressed in U.S. therms with one U.S. therm equal to 100,000 Btu.

### Electricity

In 2020, California consumed 272,576 gigawatt-hours (GWh) of electricity, of which 33 percent were from renewable resources, such as wind, solar photovoltaic, geothermal, and biomass (California Energy Commission [CEC] 2021a). California’s estimated demand for 2030 is 279,218 GWh (CEC 2019), a growth of 7,236 kWh from 2020. As stated previously, electric supply within the PBLUMA is provided by PG&E. Table 4.5-1 shows the total electricity consumption for PG&E’s service area as well as consumption by sector. In 2020, PG&E provided approximately 28.8 percent of the total electricity usage in California.

**Table 4.5-1 Electricity Consumption in the PG&E Service Area in 2020 (GWh)**

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
6,637.6	26,246.8	3,948.6	9,814.3	1,747.6	29,833.5	290.4	78,518.8

Source: CEC 2021a

## Natural Gas

California consumed approximately 12,331 million U.S. therms (MMthm) of natural gas in 2020. As stated previously, natural gas within the PBLUMA is provided by SoCalGas. Table 4.5-2 shows the total natural gas consumption for SoCalGas’s service area as well as consumption by sector. In 2020, SoCalGas provided approximately 42.4 percent of the total natural gas usage in California.

**Table 4.5-2 Natural Gas Consumption in SoCalGas Service Area in 2020 (MMThm)**

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage
74.4	801.6	87.9	1,615.6	226.2	2,425.8	5,231.5

Source: CEC 2021b

## Petroleum

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes. In 2019, approximately 39 percent of the State’s energy consumption was used for transportation activities (U.S. EIA 2020). Though California’s population and economy are expected to continue growing through the year 2030, gasoline demand is projected to decline from roughly 15.6 billion gallons in 2017 to between 12.1 billion and 12.6 billion gallons in 2030 (a 19 percent to 22 percent reduction), in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles (CEC 2021c).

California is one of the top producers of petroleum in the nation with drilling operations occurring throughout the State but concentrated primarily in Kern and Los Angeles counties. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received at ports in the cities of Los Angeles, Long Beach, and the San Francisco Bay area (CEC 2021c). California requires all motorists to use California Reformulated Gasoline, which is sourced almost exclusively from in-state refineries. Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 15.4 billion gallons sold in 2019 (CEC 2021c). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.8 billion gallons sold in 2019 (CEC 2020).

### 4.5.2 Regulatory Setting

#### Federal Regulations

##### *Energy Independence and Security Act*

The Energy Independence and Security Act of 2007, enacted by Congress in 2007, is designed to improve vehicle fuel economy and help reduce the United States dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting climate change. Specifically, it does the following:

- Increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard, requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over current levels

- Reduces United States demand for oil by setting a national fuel economy standard of 35 miles per gallon (mpg) by 2020 – an increase in fuel economy standards of 40 percent

The Energy Independence and Security Act of 2007 also set energy efficiency standards for lighting (specifically light bulbs) and appliances. Development is also required to install photosensors and energy-efficient lighting fixtures consistent with the requirements of 42 USC Section 17001 et seq.

#### *Corporate Average Fuel Economy Standards*

The Energy Policy and Conservation Act in 1975 established the Corporate Average Fuel Economy Standards (CAFE) standards, which are Federal rules established by the National Highway Traffic Safety Administration (NHTSA) that set fuel economy standards for all new passenger cars and light trucks sold in the United States. The CAFE standards become more stringent each year, reaching an estimated 38.3 miles per gallon for the combined industry-wide fleet for model year 2020 (77 Federal Register 62624 et seq. [October 15, 2012], Table I-1). It is, however, illegal for individual municipalities to adopt more stringent fuel efficiency standards. The Clean Air Act (CAA) (42 United States Code [USC] Section 7543[a]) states that “no state or any political subdivision therefore shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part.” In August 2016, the United States Environmental Protection Agency (U.S. EPA) and NHTSA announced the adoption of the phase two programs related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi- trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower carbon dioxide (CO<sub>2</sub>) emissions by approximately 1.1 billion metric tons (MT) of CO<sub>2</sub> and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

The NHTSA and the U.S. EPA jointly published the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program” in September 2019 and issued the Final SAFE Rule (i.e. SAFE Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks) in April 2020. The SAFE Vehicle Rule relaxes federal CAFE vehicle standards and revokes California’s authority to set its own vehicle standards.

#### *Construction Equipment Fuel Efficiency Standard*

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

#### *Energy Star Program*

In 1992, U.S. EPA introduced Energy Star as a voluntary labeling program designed to identify and promote energy-efficient products. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling

systems. Under this program, appliances that meet specification for maximum energy use established under the program are certified to display the Energy Star label. In 1996, U.S. EPA joined with the Energy Department to expand the program, which now also includes qualifying commercial and industrial buildings, as well as homes.

## **State Regulations**

### *Assembly Bill 2076*

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), the CEC and the California Air Resources Board (CARB) prepared and adopted a joint-agency report, Reducing California's Petroleum Dependence, in 2003. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita vehicle miles traveled (VMT). One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 Integrated Energy Policy Reports, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

### *California Energy Plan*

The CEC is responsible for preparing the California Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The 2008 California Energy Plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs, as well as encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

### *Integrated Energy Policy Report*

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The CEC uses these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety. The most recent assessment, the 2018 Integrated Energy Policy Report, contains two volumes. Volume I highlights implementation of California's innovative policies and the role they have played in establishing a clean energy economy. Volume II, adopted February 20, 2019, provides more detail on several key energy policies, including decarbonizing buildings, increasing energy efficiency savings, and integrating more renewable energy into the electricity system.

### *Senate Bill 100*

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from

eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

### *Energy Action Plan*

In October 2005, the CEC and California Public Utilities Commission (CPUC) updated their energy policy vision by adding important dimensions to the policy areas included in the original Energy Action Plan (EAP), such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

### *Assembly Bill 1007*

AB 1007 (Chapter 371, Statutes of 2005) requires the CEC to prepare a plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other Federal, State, and local agencies. The State Alternative Fuels Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The State Alternative Fuels Plan assesses various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a substantial degradation of public health and environmental quality.

### *Executive Order S-06-06*

Executive Order (EO) S-06-06, April 25, 2006, establishes targets for the use and production of biofuels and biopower, and directs State agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. EO S-06-06 establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for the State to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the State can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste.
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications.
- Create jobs and stimulate economic development, especially in rural regions of the State.
- Reduce fire danger, improve air and water quality, and reduce waste.

### *California Code of Regulations, Title 24*

The California Code of Regulations (CCR), Title 24, is referred to as the California Building Code, or CBC. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, handicap



accessibility, and so on. The CBC's energy efficiency and green building standards are outlined below.

### **PART 6 (BUILDING ENERGY EFFICIENCY STANDARDS)**

The CCR, Title 24, Part 6 is the Building Energy Efficiency Standards. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. The Building Energy Efficiency Standards is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. New construction and major renovations must demonstrate their compliance with the current Building Energy Efficiency Standards through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC.

The 2019 standards took effect on January 1, 2020, and focus on four key areas: (1) smart residential photovoltaic systems; (2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); (3) residential and nonresidential ventilation requirements; and (4) and nonresidential lighting requirements (CEC 2019a). Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards, and single-family homes will be 7 percent more energy efficient (CEC 2019a). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2019a).

### **PART 11 (CALGREEN)**

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

The mandatory standards require:

- 20 percent reduction in indoor water use relative to specified baseline levels;<sup>1</sup>
- 65 percent construction/demolition waste diverted from landfills;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards;
- Dedicated circuitry to facilitate installation of electric vehicle charging stations in newly constructed attached garages for single-family and duplex dwellings; and
- Installation of electric vehicle charging stations for at least three percent of the parking spaces for all new multi-family developments with 17 or more units.

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<sup>1</sup> Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

### *California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)*

The “California Global Warming Solutions Act of 2006” (AB 32) outlines California’s major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 million metric tons (MMT) of CO<sub>2</sub>e, which was achieved in 2016. On September 8, 2016, the governor signed SB 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target and includes GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2017).

## **Local Regulations**

### *General Plan Conservation and Open Space Element*

The Conservation and Open Space Element of the County’s General Plan includes a wide range of goals for a many environmental issues, including the following goals to transition the County’s energy profile toward renewable sources:

- The County will have an environmentally sustainable supply of energy for all county residents.
- Energy consumption at County facilities will be reduced by 20 percent from 2006 levels by 2020.
- Energy efficiency and conservation will be promoted in both new and existing development.
- Green building practices will be integrated into all development.
- Waste reduction, reuse, and recycling will achieve as close to zero waste as possible.
- The use of renewable energy resources will be increased.
- Design, siting, and operation of non-renewable energy facilities will be environmentally appropriate.

Each of these goals is further developed into policies and implementation strategies, as detailed in the Conservation and Open Space Element.

### *EnergyWise Plan*

In 2011, the County adopted the EnergyWise Plan, which was developed to be consistent with Section 15183.5 of the *CEQA Guidelines*. The plan identifies policies and actions, which build upon the goals and policies of the Conservation and Open Space Element of the County General Plan to reduce local GHG emissions.

Agriculture-specific actions identified in the EnergyWise Plan include reducing VMT associated with commuting by agricultural workers, reducing fuel consumption of off-road agricultural equipment, and encouraging local food programs.

### 4.5.3 Impact Analysis

#### **Significance Thresholds**

Per Appendix G of the *CEQA Guidelines*, a project would result in a significant impact to energy if it would:

- a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; and/or
- b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

The Initial Study prepared for the proposed project and circulated during the scoping period for the PEIR determined that impacts associated with Threshold b would be less than significant. This impact is briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the impact analysis below discusses only Threshold a.

#### **Methodology**

The proposed planting ordinance would result in an increase in agricultural activity in the PBLUMA. To accurately provide a quantitative analysis of energy consumption associated with this increase, consumption was estimated at the project level and then extrapolated to a program level. Otherwise, due to the nature of the ordinance, program-level analysis would be too speculative and produce inaccurate results. Consumption was estimated for construction and operation of an individual planting permit site for the reasonable impact scenario under the planting ordinance. As detailed in Section 2.5.2 in Section 2, *Project Description*, the reasonable impact scenario for site-specific energy impacts is based on a 20-acre wine grape vineyard. Using the anticipated number of individual planting permit sites over the duration of the planting ordinance (264 total sites), consumption was extrapolated to determine the total impacts from all activity under the program.

As discussed in Section 4.2, *Air Quality*, the conservative analysis assumed that all new pumps would operate using diesel generators as electricity use does not provide direct air quality emissions. However, with respect to energy, both diesel and electricity consumption are considered separately based on supply of each resource. Therefore, as a conservative estimate of energy consumption, pump operations are considered in both the electrical and diesel consumption estimates.

County-provided information, CalEEMod outputs for the air pollutant and GHG emissions modeling (see Appendix D), and the vehicle miles traveled (VMT) calculations (see Section 4.11, *Transportation*) were used to estimate energy consumption associated with the proposed planting ordinance.

#### *Electricity and Natural Gas*

Agricultural operations would use electricity from PG&E, solar, or propane. Propane would be trucked to the agricultural properties. Solar use would not result in electrical consumption from PG&E. As detailed in the Project Description (see Section 2), it is assumed that 88 new irrigation groundwater wells would be constructed throughout the lifetime of the proposed planting ordinance and that each new well would require operation of a well pump and a booster pump. This would result in approximately 4 new wells being developed per year. Because the depth of the wells is unknown, each well was assumed to require a booster pump to ensure water can be adequately drawn from the wells and distributed. It is assumed that the sites not requiring new wells would require the installation and operation of a booster pump. In total, 264 new booster pumps would be

installed as a result of the proposed planting ordinance. New well pumps and all booster pumps are assumed to be 7-hp and to operate 4 hours per day, 365 days per year.

Agricultural operations do not typically use natural gas. Therefore, natural gas consumption is not discussed further in this analysis.

### *Petroleum*

Diesel fuel would be consumed during construction and operation from the use of on-site equipment during site preparation, well development, and operational agricultural activities. Total consumption for an individual planting permit site (i.e., 20-acre wine grape vineyard) was separated into construction and operational activities. As detailed below, construction activities were assumed to be two phases: site preparation and well development. Operational activities were split into three phases: maintenance activities, harvest activities, and well operation. Consistent with the air quality and GHG analysis, which assumed diesel operated generators to operate the pumps, diesel consumption for the pumps is included in the petroleum energy analysis.

- Construction Phases:
  - Initial site preparation would include vegetation removal, grading, ripping, and construction of accessory infrastructure such as fencing, roads, reservoirs, groundwater wells, and pipelines. This activity is assumed to be temporary and short-term; thus, it is modeled and analyzed in terms of construction activity. Site preparation is reasonably assumed to occur over 20 days and require two crawler tractors, two excavators, and two tractors. This equipment list was determined to represent a reasonable impact scenario associated with the initial development of a 20-acre site.
  - It is assumed that 88 new irrigation groundwater wells would be constructed throughout the lifetime of the planting ordinance. This results in 4 wells being constructed annually. Because the soil type(s) are currently unknown where the wells would be situated or depth to which the wells would be developed, modeling assumed that each well would require 2 weeks (10 days) for construction and could potentially require 24-hour construction activity at points during development.
- Operational Phases:
  - Annual site preparation and planting activities are based on information provided in Section 2, *Project Description*, and Appendix B of the PEIR. These activities are anticipated to occur over 20 days per year. Anticipated equipment for these activities would, at most, be one 95-horsepower (hp) tractor, which would require a total of 3 passes (3 days of operation) per year. Worker crews for planting would be on site for an additional 8 day (for a total of 11 days), and a foreperson would be on site an additional 9 days without other crew (for a total of 20 days).
  - Maintenance activities are based on the information provided in Appendix B. Maintenance activities are anticipated to have a crew on site for 17 days and a foreperson on site for 29 days (17 concurrent with the crew) for pruning, irrigation, and canopy manipulation. These activities are anticipated to be conducted without the use of diesel equipment. Maintenance, including fungicide and herbicide applications, would occur over 9 days, requiring a crew, a foreperson, and one tractor per day.
  - Harvesting activities are anticipated to occur over 29 days. As detailed in Appendix B, harvesting activities would require the use of two 95-hp tractors and one OXBO 6120 harvester for 3 days, a crew for a total of 11 days, and a foreperson for 29 days.

**Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance**

- Hauling of harvested produce would require 26 trips per year over 3 days.
- Well operation activities are only assessed for the 88 new wells that would be developed as a result of the proposed planting ordinance. Because the depth of the wells is unknown, each well is assumed to require a main pump to ensure water can be adequately drawn from the wells and distributed. Conservatively, well pumps are anticipated to be diesel operated. Pumps are assumed to be 7-hp and would operate up to 4 hours per day, 365 days per year.
- In addition to the well pumps for the 88 new wells, it is assumed that all 264 new and expanded agricultural sites would require the installation of a booster pump to ensure water can be adequately distributed. Conservatively, like the main well pumps, booster pumps are anticipated to be diesel operated. The booster pumps are assumed to be 7-hp and would operate up to 4 hours per day, 365 days per year.

As detailed in the Section 4.2, *Air Quality*, the following changes from the CalEEMod defaults were used to model petroleum fuel consumption.

- All construction and operational phases were modeled as construction activities due to the nature of the activities and the equipment used.
- Annual activities were assumed to operate 7 days per week instead of the default of 5 days per week, except as noted above.
- Default construction equipment for each phase was replaced with the equipment as outlined in the phase descriptions above.
- Usage hours for equipment during operational activities were increased to 12 hours per day to better capture the nature of farming activities.
- Usage hours for well development was increased to 20 hours per well to account for the potential for 24-hour construction activities during well development.

**Impacts and Mitigation Measures**

**Threshold a:** Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

**Impact E-1      AGRICULTURAL ACTIVITIES FACILITATED BY THE PROPOSED PLANTING ORDINANCE WOULD NOT RESULT IN WASTEFUL OR UNNECESSARY ENERGY CONSUMPTION. THIS IMPACT WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

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**Construction Energy Demand**

As stated previously, construction activities could include site preparation and construction of accessory infrastructure, including well development. Construction activities do not typically result in the consumption of large quantities of electricity and would not result in electrical consumption greater than a typical operation day for agricultural activities. Therefore, construction on an individual planting permit site allowed by the proposed ordinance is anticipated to only contribute to regional energy demand of petroleum. Construction activities for a typical site allowed by the proposed ordinance would result in consumption of approximately 193 gallons of gasoline and 4,401 gallons of diesel fuel. With the construction on 12 planting sites per year as allowed by the 25-AFY water use exemption, annual consumption for construction activities would be approximately

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2,321 gallons of gasoline and 43,462 gallons of diesel fuel. Given the State's 2019 consumption of 15.4 billion gallons of gasoline and 1.8 billion gallons of diesel fuel, consumption of fuel resulting from construction activities facilitated by the proposed ordinance would represent less than 0.0002 percent of the State's annual consumption of gasoline and less than 0.01 percent of the State's annual consumption of diesel fuel. It is also reasonable to assume that construction activities would be conducted in a manner to avoid wasteful, inefficient, and unnecessary fuel consumption to reduce construction costs. Therefore, construction activities would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. Impacts would be less than significant.

## **Operational Energy Demand**

Operation of agricultural activities facilitated by the proposed ordinance would contribute to regional energy demand by consuming electricity, gasoline and diesel fuels. Electricity or diesel could be used for the operation of the well pumps, therefore the consumption of energy from the use of both diesel and electricity are assessed. Gasoline and diesel consumption would be associated with vehicle trips generated by worker commute trips to and from a planting site, as well as operation of off-road equipment and agricultural machinery.

The analysis estimates operational energy consumption for an individual planting site allowed by a 25-AFY water use exemption (i.e., a 20-acre wine grape vineyard) in addition to total annual consumption for a reasonable impact scenario of operations at 264 total sites at buildout on January 31, 2045. Fuel consumption for an individual agricultural operation's equipment would total approximately 1,811 gallons of diesel and 300 gallons of gasoline over the course of one year. At full buildout in 2045, a total of 264 new agricultural sites would be in operation. This buildout would result in the consumption of approximately 399,791 gallons of diesel fuel and 79,297 gallons of gasoline annually as of January 31, 2045. This buildout consumption would represent approximately 0.02 percent of the total State's annual diesel consumption of 1.8 billion gallons and approximately 0.001 percent of the total State's annual gasoline consumption of 15.4 billion gallons.

Assuming the use of PG&E's grid for the operation of the 88 new well pumps and 264 new booster pumps, at buildout on January 31, 2045, total well operation would consume 2.7 GWh annually, with each of the pumps consuming 0.008 GWh annually. Given PG&E's annual sales of 78,502 GWh, the energy consumption from well operation would result in approximately 0.003 percent of PG&E's annual sales. However, given the Renewables Portfolio Standard Program's goal of 100 percent renewable energy generation by 2045, at buildout, all the energy consumed by operation of these wells would be from renewable sources.

Operation of diesel-powered equipment is necessary for agricultural processes that provide food for the general population. In the interest of time and cost, such equipment would not be operated any more than is necessary to maintain and harvest crops, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by operation of a planting site under the proposed ordinance. Additionally, as the State moves towards reducing overall GHG emissions through the implementation of electric vehicles, diesel and gas fuel consumption would reduce and electrical demand through renewable sources would increase in accordance with State goals to reduce wasteful energy consumption.

Therefore, operation activities would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. Impacts would be less than significant.

## Mitigation Measures

Because energy impacts would be less than significant, no mitigation is required.

## Significance After Mitigation

Energy impacts would be less than significant and no mitigation is required.

### 4.5.4 Cumulative Impacts

The proposed planting ordinance would result in new and expanded crop plantings that would involve the use of energy during agricultural construction and operations. New residential and non-residential development within the PBLUMA area, as detailed within Section 3, *Environmental Setting*, of this PEIR, would also include the consumption of energy in the form of electricity and petroleum fuels. Energy consumption by the new residential and non-residential development within the PBLUMA area would consume energy for building operation, heating and cooling, water and wastewater transport and treatment, solid waste transport, and transportation to and from the development sites.

New agricultural activities facilitated by the proposed planting ordinance would receive electricity provided by PG&E. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, irrigation systems, light-duty vehicles, and machinery. The estimated electrical consumption for agricultural activities facilitated by the proposed planting ordinance would be approximately 2.7 GWh annually, which represents less than a 0.001 percent of California's demand growth (7,236 GWh) estimated between 2020 and 2030. Additionally, agricultural activities facilitated by the proposed planting ordinance as well as other cumulative projects within the PBLUMA area would be required to reduce energy consumption as applicable with mandatory regulations including CAL Green Code, and State energy standards under Title 24. As such the proposed planting ordinance's contribution to cumulative impacts due to wasteful, inefficient, and unnecessary consumption of energy related to electricity would not be cumulatively considerable.

Agricultural activities facilitated by the proposed planting ordinance would also consume energy related to transportation (i.e., gasoline and diesel fuel consumption for worker commutes, transportation of goods, maintenance, and harvesting), and irrigation. Buildout of agricultural activities facilitated by the proposed planting ordinance and cumulative projects would be expected to increase overall VMT; however, the effect on transportation fuel demand would be reduced by future improvements to vehicle fuel economy pursuant to federal and State regulations. By 2026, vehicles are required to achieve 54.5 mpg (based on USEPA measurements), which is a 54 percent increase from the 35.5 mpg standard in the 2012–2016 standards. Cumulative development projects would need to demonstrate consistency with these goals and incorporate project features or mitigation measures required under CEQA to reduce energy consumption, which would also ensure cumulative development projects contribute to transportation energy efficiency. At full buildout on January 31, 2045, agricultural activities facilitated by the proposed planting ordinance would result in the consumption of approximately 399,791 gallons of diesel fuel and 79,297 gallons of gasoline annually, which would represent a maximum of approximately 0.02 percent of the total State's diesel consumption and approximately 0.001 percent of the total State's gasoline consumption. As such, the proposed planting ordinance's contribution to cumulative impacts due to wasteful, inefficient, and unnecessary consumption of energy related to diesel and gasoline fuels would not be cumulatively considerable.

## 4.6 Geology and Soils

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This section evaluates the program's potential impacts associated with geology and soils, including paleontological resources. This section focuses on potential impacts related to strong seismic ground shaking; seismic-related ground failure, including liquefaction; landslides; and unique paleontological resources or unique geologic features. Other geologic/soils-related impacts, including fault rupture, soil erosion or loss of topsoil, unstable soils, expansive soils, and septic tanks or alternative wastewater disposal systems, were determined to be less than significant in the Initial Study prepared for the proposed planting ordinance (see Appendix A and Section 4.14, *Effects Found Not to Be Significant*), and therefore, are not further analyzed in this section.

### 4.6.1 Setting

#### **Regional Geologic Conditions**

##### *Geologic Setting*

The Paso Basin Land Use Management Area (PBLUMA) covered by the planting ordinance is within the Coast Ranges Geomorphic Province, one of eleven geomorphic provinces<sup>1</sup> in California. The Coast Ranges are characterized by northwest-trending mountain ranges, with the Pacific Ocean to the west and elongated hills and valleys to the east. The Coast Ranges Geomorphic Province encompasses the western coast of California, from the Oregon border to the Santa Ynez River in Santa Barbara County (California Geologic Survey 2002). Rocks within the Coast Ranges geomorphic province are primarily from the Jurassic or Cretaceous Periods, although some rocks are pre-Jurassic, Paleocene, or recent (County of San Luis Obispo 2008).

During the Mesozoic Era<sup>2</sup> and part of the Cenozoic Era,<sup>3</sup> the area of the present-day Coast Ranges was submerged by marine water, resulting in the accumulation of marine and non-marine shale and sandstone on basement rock. These deposits were later overlaid by continental shelf marine sedimentary rocks during the Paleocene Epoch<sup>4</sup> to Pliocene Epoch,<sup>5</sup> and during the Late Miocene Epoch<sup>6</sup> to Late Pliocene Epoch, a mountain-building episode occurred in the vicinity of the present-day Coast Ranges, resulting in their uplift above sea level. Subsequently, from the Late Pliocene to Pleistocene Epochs, extensive deposits of terrestrial material were deposited in the Coast Ranges (Norris and Webb 1990).

The Paso Robles Subbasin ranges in elevation from approximately 600 feet above mean sea level in the northwest, where the Salinas River exits the Paso Robles Subbasin, to approximately 2,000 feet above mean sea level in the southeastern portion of the Paso Robles Subbasin. The Rinconada fault system and sediments of the Santa Lucia Range define the western boundary of the Paso Robles Subbasin; the San Andreas Fault and sediments of the Temblor Range define the eastern boundary; and the sediments of the La Panza Range define the southern boundary. The northern boundary of the Paso Robles Subbasin is not geomorphically defined; the county line between San Luis Obispo

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<sup>1</sup> A geomorphic province is a naturally defined geologic region with distinct landforms due to geology, topographic relief, and climate (California Geologic Survey 2002).

<sup>2</sup> The Mesozoic Era ranged from 252 to 66 million years ago.

<sup>3</sup> The Cenozoic Era ranged from 66 million years ago to today.

<sup>4</sup> The Paleocene Epoch of the Cenozoic Era ranged from 66 to 56 million years ago.

<sup>5</sup> The Pliocene Epoch of the Cenozoic Era ranged from 5 to 2.5 million years ago.

<sup>6</sup> The Miocene Epoch of the Cenozoic Era ranged from 25 to 5 million years ago.



County and Monterey County delineates the northern boundary, although water-bearing sediments found within the Paso Robles Subbasin continue northwards into the Salinas River Upper Valley Subbasin in Monterey County (County of San Luis Obispo et al. 2020).

### *Geologic Units*

Main water-bearing geologic units within the Paso Robles Subbasin are Quaternary alluvium<sup>7</sup> as well as the Tertiary-age Paso Robles Formation (County of San Luis Obispo et al. 2020). In addition to these units, older geologic formations with lower well yields or lower water quality underly the Paso Robles Subbasin; these units generally include Tertiary-age<sup>8</sup> or older consolidated sedimentary beds, Cretaceous-age<sup>9</sup> metamorphic rocks, and granite rocks.

### *Quaternary Alluvium*

Alluvium (Qal) is present underneath the floodplains of rivers and streams that flow through the Paso Robles Subbasin. Alluvial deposits have high permeability that can exceed 1,000 gallons per minute and are generally coarser than the Paso Robles Formation (County of San Luis Obispo et al. 2020).

### *Paso Robles Formation*

The Paso Robles Formation (QTp) constitutes the largest volume of sediments in the Paso Robles Subbasin, with sedimentary layers that can range from 2,000 to 3,000 feet thick. The Paso Robles Formation developed from erosion of adjacent mountain ranges; sediment size grows finer towards the center of the Paso Robles Subbasin, suggesting that sediment comes from eastern or western sources. The Paso Robles Formation is a Plio-Pleistocene,<sup>10</sup> non-marine unit that is composed of thin layers of sand and gravel interbedded with thicker layers of silt and clay. The Paso Robles Formation is typically unconsolidated, and the sand and gravel beds within the formation have a high percentage of Monterey shale and lower permeability compared to the alluvial unit (Groundwater Sustainable Agencies 2020). The distribution of the Paso Robles Formation suggests that it once covered most of the southern Salinas Valley area (Dibblee 1974).

### *Older Geologic Formations*

The Pancho Rico Formation (Tp), a Pliocene-age marine deposit, is mostly found in the northern portion of the Paso Robles Subbasin. The Pancho Rico Formation primarily consists of fine-grained sediments that yield low water quantity. The Santa Margarita Formation (Tsm), a Miocene-age marine deposit, is found beneath most of the Paso Robles Subbasin. The Santa Margarita Formation consists of relatively permeable, fine-grained sandstone and siltstone; however, highly mineralized waters result in poor water quality that restricts agricultural uses. The Monterey Formation (Tm), a Miocene-age deposit, consists of interbedded shale, sandstone, siltstone, and diatomite with low water yields. The Vaqueros Formation (Tv), an Oligocene-age marine deposit, is common in the western and southern portions of the Subbasin and consists of highly cemented sandstone (County of San Luis Obispo et al. 2020). The geologic history of the Paso Robles Subbasin, from marine submersion to mountain uplift, provides an explanation for why several of the dominant geologic units within the Subbasin have marine origins.

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<sup>7</sup> Alluvium is a deposit of clay, sand, gravel, and silt left by flowing streams.

<sup>8</sup> The Cretaceous Period of the Mesozoic Era ranged from 145 to 66 million years ago.

<sup>9</sup> The Tertiary Period of the Cenozoic Era ranged from 66 to 2.6 million years ago.

<sup>10</sup> Plio-Pleistocene is comprised of both the Pliocene and Pleistocene Epochs

Within the Subbasin, water-bearing units are underlain by non-water-bearing Tertiary and Cretaceous Period metamorphic and granite rock (United States Geological Service [USGS] 2001). Metamorphic rock units include the Franciscan Formation, which consists of outcrops of shale, chert, metavolcanics, graywacke, and blue schist; the Toro Formation (Kt), which consists of consolidated claystone and shale; and the Atascadero Formation (Ka), which consists of consolidated sandstone beds. The granitic rock unit (Kgr) occurs in the area northwest of the City of Paso Robles, and consists of decomposed granite that may contain limited groundwater (County of San Luis Obispo et al. 2020).

### *Soils*

The United States Department of Agriculture, Natural Resource Conservation Service's (NRCS) Web Soil Survey was used to identify soil types within the Paso Robles Subbasin area. The following units occur within the Paso Robles Subbasin; soil unit details are provided by the NRCS (NRCS 1983):

- **Mocho-Capay-Camarillo**, which consists of very deep, nearly level to moderately sloping, poorly drained to well drained clay loams, silty clays, and silty clay loams
- **Pico-San Emigdio-Sorrento**, which consists of very deep, nearly level to moderately sloping, well drained fine sandy loams, and clay loams
- **Still-Elder-Metz**, which consists of very deep, nearly level to moderately sloping, well drained and somewhat excessively drained clay loams, loams, and sandy loams
- **Arbuckle-Positas-San Ysidro**, which consists of very deep, nearly level to hilly, moderately well drained and well drained fine sandy loams, coarse sandy loams, and loams
- **Chanac-Cammata**, which consists of very deep, gently rolling to very steep, well drained loams; some are shallow to a hardpan
- **Lockwood-Concepcion**, which consists of very deep, nearly level to rolling, moderately well drained and well drained shaly loams and sandy loams
- **Nacimiento-Ayar**, which consists of moderately deep and deep, strongly sloping to steep, well drained silty clay loams and silty clays
- **Nacimiento-Los Osos-Balcom**, which consists of moderately deep, strongly sloping to very steep, well drained silty clay loams, clay loams, and loams
- **Linne-Calodo**, which consists of shallow and moderately deep, strongly sloping to very steep, well drained shaly clay loams and clay loams
- **Cleneba-Vista-Andregg**, which consists of shallow and moderately deep, strongly sloping to very steep, well drained and excessively drained coarse sandy loams
- **Dibble-Gaviota-Shimmon**, which consists of shallow and moderately deep, strongly sloping to very steep, well drained clay loams, sandy loams, and loams
- **Los Osos-Lompico-Lodo**, which consists of shallow and moderately deep, moderately steep to very steep, well drained and somewhat excessively drained clay loams, loams, and gravelly clay loams
- **Henneke-Rock outcrop**, which consists of shallow, moderately steep to very steep, somewhat excessively drained very cobbly clay loams, and Rock outcrop
- **Ayar-Millsholm-Nacimiento**, which consists of shallow to deep, strongly sloping to very steep, well drained silty clays, clay loams, and silty clay loams

- **San Andreas-Arnold-Santa Lucia**, which consists of moderately deep and deep, moderately steep to very steep, well drained and somewhat excessively drained sandy loams, loamy sands, and shaly clay loams

## **Geologic Hazards**

### *Major Faults*

Most faults within the Coast Ranges geomorphic province trend north-northwest. Faults are considered to be "active" if they display evidence of movement within Holocene time (i.e., within the last 11,000 years), and "potentially active" if they display evidence of movement within Quaternary time (i.e., the last 1.6 million years). The California Department of Conservation's Fault Activity Map (2015) and USGS's U.S. Quaternary Faults Map (2021) were used to identify faults within the PBLUMA. Faults in the region include the San Andreas Fault zone, the Rinconada Fault zone, the San Juan Fault zone, the La Panza Fault zone, and the San Simeon-Hosgri Fault Zone.

### **SAN ANDREAS FAULT**

The eastern boundary of the PBLUMA is located one to twelve miles from the Cholame-Carrizo section of the San Andreas Fault, which runs northwest through San Luis Obispo County east of Shandon. The San Andreas Fault is designated as an Alquist-Priolo Earthquake Fault Zone<sup>11</sup> by the California Department of Conservation pursuant to the Alquist-Priolo Fault Hazards Act (described further in Section 4.6.2, *Regulatory Setting*) (County of San Luis Obispo 1999). The San Andreas Fault is an active fault that is moderately constrained and has a slip rate<sup>12</sup> of more than five millimeters per year. The most recent rupture event associated with the Cholame-Carrizo section of the San Andreas Fault is the 1857 Fort Tejon earthquake (USGS 2001). The estimated maximum moment magnitude for the San Andreas Fault is 8.25 Mw<sup>13</sup> (County of San Luis Obispo 1999). The San Andreas Fault presents a severe seismic risk to San Luis Obispo County, and is generally considered the most likely source for strong ground motion in the county (County of San Luis Obispo 1999).

### **RINCONADA FAULT**

The Rinconada section of the Rinconada Fault Zone runs northwest through San Luis Obispo County, under the City of Paso Robles and west of San Miguel. The Rinconada fault zone is well constrained and has a slip rate of 0.2-1.0 millimeters per year. There are no recent rupture events associated with this fault (USGS 2001). The Rinconada Fault presents a moderate fault rupture hazard and is potentially active (County of San Luis Obispo 1999).

### **SAN JUAN FAULT**

The San Juan fault zone runs north-northwest through San Luis Obispo County, along the PBLUMA's eastern boundary by Shandon. The San Juan Fault is a potentially active fault with a slip rate of 0.75-2.50 millimeters per year (County of San Luis Obispo 1999). The estimated maximum moment magnitude for the San Juan Fault is 7.0 Mw (County of San Luis Obispo 1999). There are no recent rupture events associated with this fault (USGS 2001).

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<sup>11</sup> Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults. For purposes of the Alquist-Priolo Act, an active fault is one that has ruptured within the last 11,000 years.

<sup>12</sup> Slip rate refers to the rate at which two faults are moving relative to one another.

<sup>13</sup> Mw = moment magnitude; a quantitative measure of an earthquake's magnitude (or relative size).

### **LA PANZA FAULT**

The La Panza fault occurs along the western base of the La Panza Range (County of San Luis Obispo 1999). The northern tip of the La Panza fault reaches the southern boundary of the PBLUMA, south of Creston. The fault is potentially active; however, there are no recent rupture events associated with this fault (County of San Luis Obispo 1999; USGS 2001).

### **SAN SIMEON-HOSGRI FAULT**

The San Simeon-Hosgri fault system generally consists of two fault zones: the Hosgri fault zone represented by a series of faults that are mapped off of the San Luis Obispo County coast; and the San Simeon fault zone, which appears to be associated with the Hosgri, and comes onshore near the pier at San Simeon Point (County of San Luis Obispo 1999). Although not within the PBLUMA, this active fault has the potential to cause major seismic shaking. In 2003, this fault caused an earthquake of magnitude 6.6 which caused major damage within Paso Robles.

#### *Seismic Hazards*

The county is located in a geologically complex and seismically active region. Seismic, or earthquake-related, hazards have the potential to result in substantial public safety risks and widespread property damage (County of San Luis Obispo 1999). Two of the direct effects of an earthquake include the rupture of the ground surface along the trend or location of a fault, and ground shaking resulting from fault movement. Other geologic hazards that may occur in response to an earthquake include liquefaction, seismic settlement, lateral spreading, or landslides. Each of these hazards is described below.

### **FAULT RUPTURE**

Fault rupture refers to displacement of the ground surface along a fault, and generally occurs during earthquakes of approximately magnitude 5.0 or greater. Fault rupture can endanger life and property if structures or lifeline facilities are constructed on, or cross over, a fault. Fault rupture tends to occur along or near previous ruptures that define the fault zone. As discussed previously, within the PBLUMA, the San Andreas Fault is designated as an Alquist-Priolo Fault Earthquake Zone, which indicates it is an active fault with a potential for fault rupture.

### **GROUNDSHAKING**

Groundshaking refers to the motion of the earth that occurs in response to regional and local earthquakes. The velocity and acceleration of groundshaking movements are dependent upon the distance to the fault, the magnitude of the earthquake, and the type of material (e.g., bedrock, soil) through which shock waves must travel. Groundshaking can endanger life or property through the damage or collapse of structures or lifeline facilities (County of San Luis Obispo 1999). As described above, there are four known faults within the PBLUMA; an earthquake of sufficient size along any of these faults could induce seismic groundshaking in the PBLUMA. The San Andreas fault and the San Simeon-Hosgri fault are the most likely active faults to produce ground shaking in the PBLUMA (County of San Luis Obispo 1999).

### **LIQUEFACTION, SEISMIC SETTLEMENT, AND LATERAL SPREADING**

Liquefaction is a temporary but substantial loss of strength in saturated soil (e.g., granular solids, including sand, silt, or gravel) usually resulting from groundshaking during an earthquake (County of San Luis Obispo 1999). In cohesionless, granular materials with low relative density (loose to

medium dense sands, for example) the vibration that occurs as a result of an earthquake can disturb the particle framework, leading to increased compaction of the material and reduction of pore space between the soil particles. If the sediment is saturated, water occupying the pore spaces resists this compaction and exerts pore pressure that reduces the contact stress between the sediment grains. With continued shaking, transfer of intergranular stress to pore water can generate pore pressures great enough to cause the sediment to lose its strength and change from a solid state to a liquefied state. This mechanical transformation, termed liquefaction, can cause various kinds of ground failure at or near the ground surface. This process typically occurs at depths less than 50 feet below the ground surface. Liquefaction can occur at deeper intervals, given the right conditions; however, ground manifestations of deeper occurrences of liquefaction have been found to be relatively minor. Earthquakes with larger magnitudes and longer durations are more likely to have a greater potential for liquefaction.

Seismic settlement is the reduction of volume in a saturated or unsaturated soil mass due to groundshaking during a seismic event. Seismic settlement may occur simultaneously or independent of liquefaction. Lateral spreading is a form of slope instability associated with the loss of strength following liquefaction, and involves the lateral movement of a liquified soil layer (and overlaying layers).

As indicated in the *Safety Element Technical Background Report* of the County's General Plan (County of San Luis Obispo 1999), areas most likely to be vulnerable to liquefaction, seismic settlement, or lateral spreading are underlain by younger alluvium where groundwater and granular sediments are present. Within the PBLUMA, areas of moderate and high liquefaction potential occur along stream channel deposits, primarily along the Salinas River and its tributaries (County of San Luis Obispo 2021).

### **SLOPE INSTABILITY AND LANDSLIDES**

Landslides result when the driving forces that act upon a slope are greater than the slope's natural resisting forces. Landslides may be induced by natural processes (i.e., erosion or groundshaking), grading, or the addition of water or structures to a slope. Areas susceptible to landslides are usually characterized by steep slopes in areas with weak soil or bedrock units. Slope stability may be influenced by slope steepness and height, type of materials, material strength, groundwater level, or degree of seismic shaking (County of San Luis Obispo 1999). Landslides can result in damage to property through building distress or collapse during sudden or gradual slope movement.

In San Luis Obispo County, the Paso Robles, Franciscan, Toro, and Monterey formations are commonly associated with slope stability problems (County of San Luis Obispo 1999). Within the PBLUMA, areas that have high landslide risk occur in the hillsides within the vicinity of the Santa Lucia Range to the west, the Cholame Hills to the north, and the La Panza Range to the south (County of San Luis Obispo 2021).

### **Paleontological Resources and Sensitivity**

Paleontological resources (fossils) are the remains and/or traces of prehistoric life. Fossils are typically preserved in layered sedimentary rocks and the distribution of fossils is a result of the sedimentary history of the geologic units within which they occur. Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. Although it is not possible to determine whether a fossil will occur in any specific location, it is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore evaluate the

potential for impacts to those resources and provide mitigation for paleontological resources if they do occur during construction.

Paleontological sensitivity refers to the potential for a geologic unit to produce important paleontological resources. Sensitivity is determined by rock type, history of the geologic unit in producing important paleontological resources, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey.

The discovery of a vertebrate fossil locality is of greater importance than that of an invertebrate fossil locality, especially if it contains a microvertebrate assemblage. The recognition of new vertebrate fossil locations could provide novel information on the geographical range of the taxa, their radiometric age, evolutionary relationships, paleoenvironment, and other scientific research questions. Vertebrate fossils are almost always important because they are rarer than invertebrates or plants. Thus, geological units having the potential to contain vertebrate fossils are considered the most sensitive.

In its *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources* (Society of Vertebrate Paleontology [SVP] 2010), the SVP offers guidelines to categorize paleontological sensitivity of geologic units within a project area. The SVP (2010) describes sedimentary rock units as having a high, low, undetermined, or no potential for containing important nonrenewable paleontological resources. This criterion is based on rock units within which vertebrates or important invertebrate fossils have been determined by previous studies to be present or likely to be present. Important paleontological resources are fossils or assemblages of fossils, which are unique, unusual, rare, or uncommon in a diagnostic, stratigraphic, taxonomic, or regional sense. The following sections discuss the paleontological sensitivity of units according to SVP (2010) categories:

#### *High Potential (Sensitivity)*

Rock units from which important vertebrate fossils, important invertebrate fossils, or important suites of plant fossils have been recovered are considered to have a high potential for containing important non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain important nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or important vertebrate fossils or for yielding a few important fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than recent, including deposits associated with nests or middens, and areas that may contain new vertebrate deposits, traces, or trackways are also classified as important. Full-time monitoring is typically recommended during any project-related ground disturbance in geologic units with high sensitivity.

#### *Low Potential (Sensitivity)*

Sedimentary rock units that are potentially fossiliferous, but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomy (processes affecting an organism following death, burial, and removal from the ground), phylogeny (evolutionary relationships among organisms), and habitat ecology, are considered to have low potential. Reports in the paleontological literature or field surveys by a qualified

vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding important fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations.

#### *Undetermined Potential (Sensitivity)*

Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.

#### *No Potential*

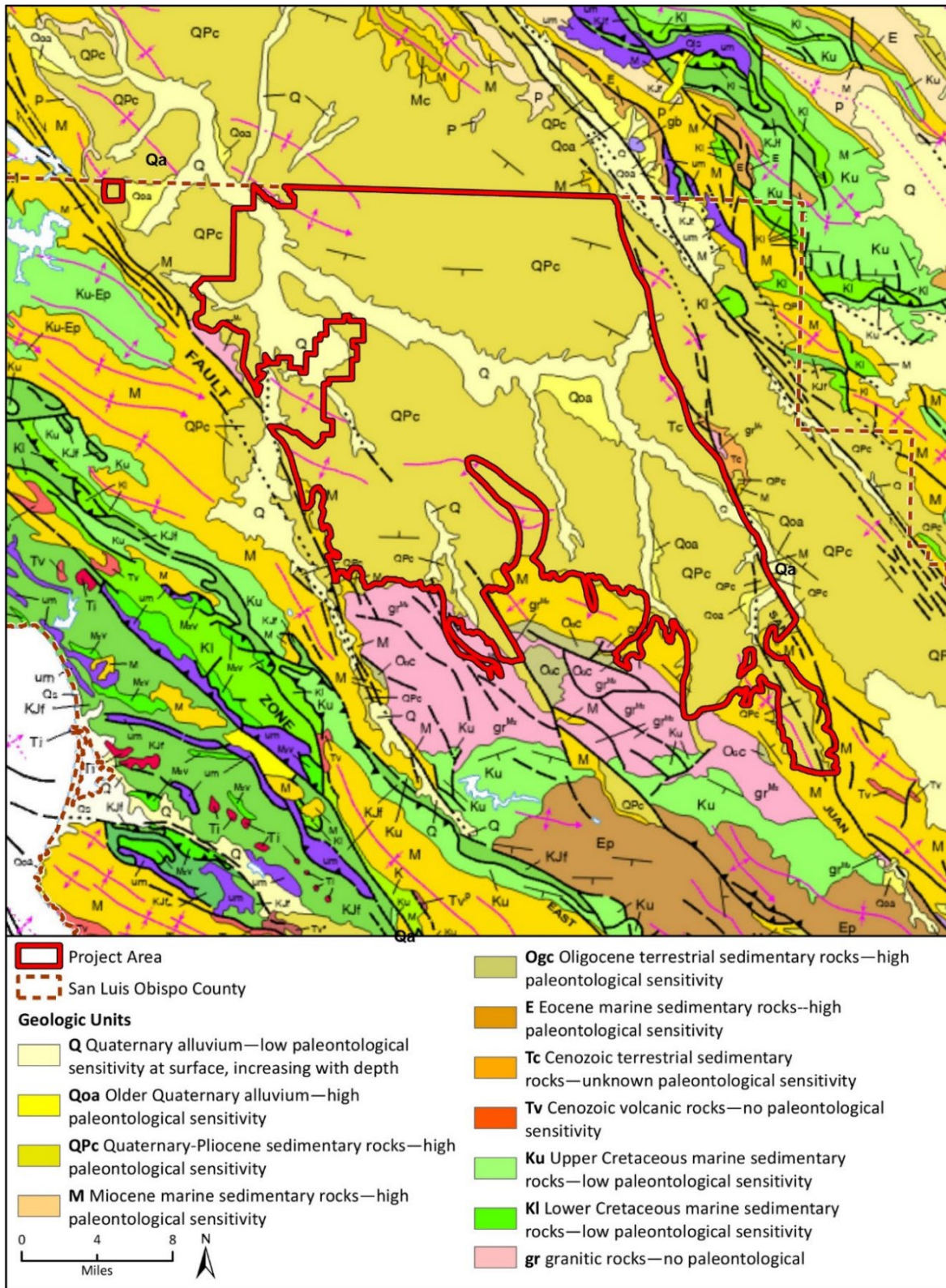
Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing important paleontological resources. For geologic units with no sensitivity, a paleontological monitor is not required.

### **PBLUMA Paleontological Resources**

Paleontological resources are known throughout San Luis Obispo County, including from units found in the PBLUMA (Paleobiology Database [PBDB] 2021; University of California Museum of Paleontology [UCMP] 2021). Using these historical records and the productivity of similar units elsewhere in California, the paleontological sensitivity of each these units is discussed below. Units mapped in Figure 4.6-1 that are not found within the PBLUMA (i.e., P, Tc, Tv, Ti, Ep, Ku-Ep, Ku, Kl, KJf, um, and gb) are not discussed below.

- **Q—Quaternary alluvium:** Areas mapped as Q consist of Pleistocene to Holocene alluvial sediments including valley floors, stream channels experiencing active deposition (e.g., Estrella River, San Juan Creek), and Quaternary land slide deposits. These sediments generally consist of sand and gravel (Dibblee and Minch 2004a, 2004b, 2004c, 2004d, 2006). Sediments of Holocene age are too young to preserve important paleontological resources. These sediments are assigned a **low paleontological sensitivity**.
- **Qoa—Older Quaternary alluvium:** Sediments within areas mapped as Qoa are similar to those mapped as Q, but they are known to be Pleistocene in age. Pleistocene alluvial deposits have produced vertebrate fossils throughout California (Jefferson 2010). Within San Luis Obispo County, Pleistocene alluvial sediments have produced mammoth (*Mammuthus*), mastodon (*Mammut*), bison (*Bison*), and horse (*Equus*) fossils (PBDB 2021; UCMP 2021). Qoa is assigned a **high paleontological sensitivity**.
- **QPc—Quaternary and Pliocene rocks:** The areas shown as QPc in Figure 4.6-1 pertain to the Paso Robles Formation (Dibblee and Minch 2004a, 2004b, 2004c, 2004d). Several fossil localities are found in the Paso Robles Formation in San Luis Obispo County (PBDB 2021; UCMP 2021). These fossils include walrus (*Pliopedia pacifica*), horse (*Equus*), and invertebrates (mollusks, crustaceans, and brachiopods). QPc is assigned a **high paleontological sensitivity**.

**Figure 4.6-1 Geologic Units and Paleontological Sensitivity in the San Luis Obispo County**





- **M—Miocene marine rocks:** Regions mapped as M consist of two named units: the Monterey Formation and the Vaqueros Formation (Dibblee and Minch 2004a, 2004b, 2004c, 2004d, 2006). The Monterey Formation bears several vertebrate fossil localities in San Luis Obispo County which have produced marine mammal (*Desmostylia*, *Odontoceti*) and invertebrate (crustacean) fossils (PBDB 2021; UCMP 2021). The Vaqueros Formation produces only few marine mammal-bearing fossil localities. These units have produced fossils within this region in the past, but only in isolated, scattered places. Therefore, they are assigned a **low paleontological sensitivity**.
- **OgC—Oligocene sedimentary rocks:** Small exposures of OgC may occur in the southern part of the PBLUMA, which correspond to the Simmler Formation (Dibblee and Minch 2004d). A single invertebrate locality is known from this unit, outside the PBLUMA in southern San Luis Obispo County (PBDB 2021; UCMP 2021). The large clasts of the Simmler Formation suggest a depositional setting not particularly conducive to fossilization, so these rocks have a **low paleontological sensitivity**.
- **gr—granitic rocks:** The granitic rocks mapped in the PBLUMA are primarily Cretaceous in age and are light gray and medium grained (Dibblee and Minch 2004c, 2004d, 2006). Granitic rocks are formed by the cooling of magma below the Earth’s surface. According to Dibblee and Minch (2006), limited exposures of metamorphic rocks such as marble (white, medium- to coarse-grained) and gneiss (thin laminae alternating between dark gray and white) may occur in areas mapped as “gr” in Figure 4.6-1. Due to the nature of their origin, these rocks cannot preserve fossils. Therefore, these units have **no paleontological potential**.

## 4.6.2 Regulatory Setting

### Federal Regulations

There are no federal regulations applicable to geology and soils.

### State Regulations

#### *Alquist-Priolo Earthquake Fault Zoning Act*

The Alquist-Priolo Earthquake Fault Zoning Act was passed into law in 1971 following the destructive San Fernando earthquake. The Alquist-Priolo Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Alquist-Priolo Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep.

#### *California Public Resources Code*

Section 5097.5 of the Public Resources Code states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological, or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

Here “public lands” means those owned by, or under the jurisdiction of, the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public

agencies are required to comply with Public Resources Code Section 5097.5 for their own activities, including construction and maintenance, and for permit actions (e.g., encroachment permits) undertaken by others.

## **Local Regulations**

### *County Grading Code*

Pursuant to Section 22.52.070 of the County Code, the following activities are exempt from obtaining a grading permit:

- Small agricultural projects involving 50 cubic yards or less of excavation for grading to create new fields, including vegetation removal and drainage improvements;
- Grading activities related to ongoing crop production on land that has been previously cultivated within the previous 10 years, including relocating roads within existing fields; and
- Installation of agricultural water supplies, not including reservoirs.

The following activities are required to submit an Agricultural Grading Form to the County prior to commencement of any grading activities and comply with the standards and practices contained in the NRCS Field Office Technical Guide (FOTG):

- New crop production on slopes up to 30 percent, including drainage improvements and vegetation removal, but not including construction of new agricultural roads; and
- Construction of small agricultural reservoirs with a capacity of one acre-foot of water or less.

Pursuant to Section 22.52 of the County Code, a grading permit from the County or Alternative Review by the NRCS or Resource Conservation District (RCD), both of which are subject to CEQA review, is required for agricultural activities not meeting the requirements for an exemption or Agricultural Grading Form, such as:

- Grading for new crop production on slopes over 30 percent;
- Construction of agricultural reservoirs with a capacity of more than one acre-foot; and
- Grading of new agricultural roads.

### *County General Plan Safety Element*

Policies and standards in the County's General Plan Safety Element that are applicable to the proposed planting ordinance are listed below.

- **Policy S-17 Fault Information.** Information on faults and geologic hazards in the County should continue to be updated. The County will enforce the General Plan and applicable building codes that require developments, structures, and public facilities to address geologic and seismic hazards through the preparation and approval of geotechnical and geologic reports. Appointment of a County Geologist will improve implementation of the goals, policies, programs, and standards of this Element by assuring more objective review and consistent enforcement of hazard mitigation measures county-wide than is possible under the present system of project review.
- **Policy S-18 Fault Rupture Hazards.** Locate new development away from active and potentially active faults to reduce damage from fault rupture. Fault studies may need to include mapping and exploration beyond project limits to provide a relatively accurate assessment of a fault's

activity. The County will enforce applicable regulations of the Alquist-Priolo Earthquake Fault Zoning Act pertaining to fault zones to avoid development on active faults.

- **Policy S-20 Liquefaction and Seismic Settlement.** The County will require design professionals to evaluate the potential for liquefaction or seismic settlement to impact structures in accordance with the currently adopted Uniform Building Code.

#### *County General Plan Conservation and Open Space Element*

Policies and standards in the County's General Plan Conservation and Open Space Element related to paleontological resources are listed below.

- **Policy CR 4.5 Paleontological Resources.** Protect paleontological resources from the effects of development by avoiding disturbance where feasible.
  - *Implementation Strategy CR 4.5.1 Paleontological Studies.* Require a paleontological resource assessment and mitigation plan to 1) identify the extent and potential significance of the resources that may exist within the proposed development and 2) provide mitigation measures to reduce potential impacts when existing information indicates that a site proposed for development may contain biological, paleontological, or other scientific resources.
  - *Implementation Strategy CR 4.5.2 Paleontological Monitoring.* Require a paleontologist and/or registered geologist to monitor site-grading activities when paleontological resources are known or likely to occur. The monitor will have the authority to halt grading to determine the appropriate protection or mitigation measures. Measures may include collection of paleontological resources, curation of any resources collected with an appropriate repository, and documentation with the County.

### 4.6.3 Impact Analysis

#### **Significance Thresholds**

##### *CEQA Thresholds*

Per Appendix G of the *CEQA Guidelines*, a project would result in a significant impact to geology and/or soils if it would:

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42);
  - ii. Strong seismic ground shaking;
  - iii. Seismic-related ground failure, including liquefaction; and/or
  - iv. Landslides;
- b. Result in substantial soil erosion or the loss of topsoil;
- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;

- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water; and/or
- f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The Initial Study prepared for the proposed ordinance and circulated during the scoping period for the PEIR determined that impacts associated with Thresholds a(i), b, c, d, and e would be less than significant. These impacts are briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the impact analysis below discusses only Thresholds a(ii), a(iii), a(iv), and f.

#### *Paleontological Resource Thresholds*

The SVP defines a “significant paleontological resource” in the context of environmental review as follows:

Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are typically to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) (SVP 2010).

The loss of paleontological resources meeting the criteria outlined above (i.e., important or “significant” paleontological resource) would be considered a significant impact under CEQA.

### **Methodology**

The following impact assessment is based on data from the California Geologic Survey, local planning documents, and the County-provided analysis (see Appendix B) that the Planting Ordinance will result in approximately 240 acres of land entering into new irrigated agricultural use annually through January 31, 2045. Regarding paleontological resources, the sensitivity of each unit affected by ground-disturbing activities in the PBLUMA was determined by reviewing the primary literature and locality searches of the University of California Museum of Paleontology (UCMP 2021) and Paleobiology Database (PBDB 2021).

The specific sites that may expand irrigation and crop production as part of the planting ordinance are presently unknown but would occur in agricultural areas with the PBLUMA boundaries. Site-specific conditions may vary greatly within the PBLUMA and due diligence in regard to geologic hazards and paleontological resources may be necessary to address hazards and resources encountered at individual sites.

## Project Impacts and Mitigation Measures

<b>Threshold a(ii):</b>	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?
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**Impact GEO-1** THE PROPOSED ORDINANCE WOULD APPLY TO A REGION WITH A HISTORY OF SEISMIC ACTIVITY WITH THE POTENTIAL TO EXPERIENCE SEISMIC SHAKING. HOWEVER, AGRICULTURAL CROP PRODUCTION PERMITTED BY THE PLANTING ORDINANCE AND CONSTRUCTION OF ACCESSORY INFRASTRUCTURE WOULD NOT EXACERBATE RISK OF SEISMIC ACTIVITY. THEREFORE, IMPACTS WOULD BE CLASS III, LESS THAN SIGNIFICANT.

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Like all of California, the PBLUMA is subject to strong ground shaking. The San Andreas Fault and San Simeon-Hosgri fault are the most likely source of potential seismic activity or groundshaking within the PBLUMA (County of San Luis Obispo 1999), although other fault systems, such as the Rinconada Fault to the west, La Panza Fault to the south, and San Juan Fault to the east may induce seismic groundshaking. The proposed planting ordinance would expand crop production, and the new or expanded agricultural activities are not anticipated to exacerbate the risk of seismic-related hazards occurring. Given that the planting ordinance is not anticipated to result in construction of accessory structures or buildings, there would be no exacerbation of risk of seismic hazards associated with these types of structures or buildings. Accessory infrastructure constructed as a result of the agricultural ordinance could include groundwater wells, agriculture ponds/reservoirs, drainage and erosion control features, irrigation pipelines, and fencing. Construction of these facilities are anticipated to comply with current design standards and would not exacerbate the potential for strong seismic shaking to occur. The proposed ordinance would have a less than significant impact with regards to seismic groundshaking.

### Mitigation Measures

The proposed ordinance would have a less than significant impact with regards to seismic groundshaking, and no mitigation measures are required.

### Significance After Mitigation

Impacts related to seismic groundshaking would be less than significant without mitigation.

<b>Threshold a(iii):</b>	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?
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**Impact GEO-2** THE PROPOSED ORDINANCE WOULD BE ESTABLISHED IN A REGION CONTAINING AREAS KNOWN TO HAVE MODERATE AND HIGH LIQUEFACTION POTENTIAL. AGRICULTURAL CROP PRODUCTION PERMITTED BY THE PLANTING ORDINANCE COULD INCREASE IRRIGATION WHICH COULD EXACERBATE RISK OF LIQUEFACTION OR OTHER GROUND FAILURE. HOWEVER, WITH IMPLEMENTATION OF AGRICULTURAL BEST MANAGEMENT PRACTICES THAT LIMIT OVERIRRIGATION, IMPACTS WOULD BE REDUCED LESS THAN SIGNIFICANT (CLASS III).

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Areas within the PBLUMA that are most likely to be vulnerable to liquefaction primarily occur along the Salinas River and its tributaries (County of San Luis Obispo 2021), where younger alluvium containing groundwater and granular sediments underlies stream channel deposits. Increased

irrigation would occur as a result of the new or expanded agricultural crop production allowed under the proposed ordinance. Given that liquefaction occurs in areas with saturated soils, increased irrigation within areas with high liquefaction potential has a potential to increase risk of seismically induced liquefaction, as well as risk of lateral spreading which can occur subsequent to liquefaction. If liquefaction were to occur, it could pose a risk to on-site workers or accessory infrastructure. However, as detailed in Section 4.13, *Utilities and Service Systems*, there are standard Best Management Practices implemented by agricultural operations in the PBLUMA to ensure water efficiency, prevent wasteful irrigation practices, and limit overirrigation. Within implementation of agricultural Best Management Practices, impacts of the new and expanded irrigation related to liquefaction would be less than significant.

### **Mitigation Measures**

Impacts related to liquefaction would be less than significant and no mitigation is required.

### **Significance After Mitigation**

Impacts related to liquefaction would be less than significant without mitigation.

<b>Threshold a(iv):</b> Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?
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**Impact GEO-3 THE PBLUMA IS LOCATED IN A REGION WITH MAPPED LANDSLIDES AND LANDFORMS PRONE TO LANDSLIDE. HOWEVER, AGRICULTURAL OPERATIONS ON STEEPER SLOPES WOULD BE REQUIRED TO OBTAIN A GRADING PERMIT AND COMPLY WITH COUNTY GRADING REQUIREMENTS. COMPLIANCE WITH COUNTY GRADING REQUIREMENTS WOULD ENSURE THAT IMPACTS WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

Within the PBLUMA, areas that have high landslide risk occur in the hillsides within the vicinity of the Santa Lucia Range to the west, the Cholame Hills to the north, and the La Panza Range to the south (County of San Luis Obispo 2021). Additionally, the Paso Robles, Franciscan, Toro, and Monterey formations—all of which are found within the PBLUMA—are commonly associated with slope stability problems (County of San Luis Obispo 1999). Grading and overirrigation of upslope agricultural land may contribute to slope instability.

Chapter 22.52 of the San Luis Obispo County Code requires a grading permit for earthmoving activities, with the overarching intent to preserve slope stability. As part of the County's Agricultural Exemption Application Process, agricultural grading on slopes greater than 30 percent would not qualify for a grading permit exemption and would be subject to further County review and compliance with County grading standards. As part of the grading permit process, the County would review grading plans to ensure compliance with grading standards and incorporation of additional structural safety features as needed to reduce landslide risk. The grading review process and compliance with County grading standards would ensure risk of landslides on agricultural operations located on steep slopes would be less than significant.

### **Mitigation Measures**

The proposed ordinance would have a less than significant impact with regards to landslides and no mitigation measures would be required.

## Significance After Mitigation

Impacts related to landslides would be less than significant without mitigation.

**Threshold f:** Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**IMPACT GEO-4 THE PBLUMA IS LOCATED IN AN AREA WITH KNOWN PALEONTOLOGICAL RESOURCES. IMPLEMENTATION OF THE PROPOSED ORDINANCE HAS THE POTENTIAL TO IMPACT PALEONTOLOGICAL RESOURCES THROUGH GROUND-DISTURBING ACTIVITIES. IMPACTS TO PALEONTOLOGICAL RESOURCES WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

As shown in Figure 4.6-1, the vast majority of the geologic units within the PBLUMA are Quaternary alluvium, older Quaternary alluvium, and Pliocene rocks, which have a high potential to bear scientifically important paleontological resources. Direct impacts to paleontological resources occur when ground-disturbing activities, such as grading, excavation, or trenching, cut into the geologic deposits within which fossils are buried and physically damage the fossils. Since fossils are the remains of prehistoric animal and plant life, they are considered nonrenewable. Ground-disturbing activities, particularly in areas that have not been previously disturbed or cultivated or where proposed ground disturbance depths may exceed the depths of previous ground disturbances, have the potential to impact paleontological resources that may be present at or below the ground surface.

As outlined in Section 2.5.2, *Proposed Project Activities*, the activities resulting from the ordinance with the potential to impact paleontological resources include the construction of irrigation groundwater wells (estimated 88 new wells by January 31, 2045), construction of agriculture ponds/reservoirs (estimated 12 new ponds by January 31, 2045), construction of new agricultural infrastructure (such as agricultural access roads and water conveyance pipelines), grading for site preparation on previously uncultivated land (estimated 5,280 acres by January 31, 2045), and grading for site preparation at lower depths than previous grading activities. Each of these activities are discussed further below.

Increased groundwater extraction resulting from the proposed planting ordinance would not have the potential to result in impacts to paleontological resources, because groundwater extraction would not result in soil disturbance where tribal cultural resources could be present. However, construction of new irrigation groundwater wells would potentially impact underlying paleontological resources. The drill used to install wells pulverizes soil as it digs, making it impossible to determine whether paleontological resources were present and destroyed by the drilling.

Construction of agriculture infrastructure (e.g., ponds/reservoirs, access roads, irrigation pipelines) could impact paleontological resources if excavation exceeds a depth of 4 feet in previously undisturbed soil. In addition, grading for site preparation at depths greater than 4 feet could impact underlying paleontological resources. Typical grading depths for site preparation would not exceed 4 feet (refer to Table 2-3 in Section 2, *Project Description*). However, paleontological resources could be impacted when deeper ripping/grading activities are required to provide for adequate drainage (e.g., for wine and table grapes, orchards, etc.) because excavation depth for ripping would exceed 4 feet. As such, significant impacts to paleontological impacts could occur in previously uncultivated/undisturbed areas that would be planted with crops requiring deep ripping, such as grapes or orchards. In addition, paleontological resources could be significantly affected in areas with active or past agricultural activities if crops that require shallow excavation (e.g., alfalfa,

vegetables, etc.) are replaced with crops that require deep ripping to provide for adequate drainage (e.g., for wine and table grapes, orchards, etc.).

The County has adopted policies and regulations to identify, designate, and minimize impacts to paleontological resources. As discussed in the County of San Luis Obispo General Plan's Conservation and Open Space Element, paleontological resource goals, policies, and implementation measures encourage the identification and designation of, and reduction of impacts to, paleontological resources.

In addition, grading activities that have a potential to result in impacts to paleontological resources are regulated under the County Grading Ordinance (Section 22.52 of the County Code). Pursuant to Section 22.52.070 of the County Code, many smaller agricultural grading activities with smaller areas of grading or grading in previously disturbed areas, such as small agricultural projects involving less than 50 cubic yards of excavation, grading for ongoing crop production, and/or installation of water supplies are exempt from obtaining a grading permit. New crop production on slopes up to 30 percent and construction of agricultural reservoirs with less than 1 acre-foot of capacity must submit an Agricultural Grading Form to the County prior to commencement of grading activities. Grading for new crop production on slopes greater than 30 percent, construction of agricultural reservoirs with greater than 1 acre-foot of capacity, and grading for agricultural roads must obtain a grading permit from the County or Alternative Review by the NRCS or Resource Conservation District (RCD), all of which are subject to separate CEQA review. Impacts from agricultural grading from agricultural projects that are not required to obtain a grading permit were analyzed in *Final Grading and Stormwater Management General Plan Ordinance Revisions Environmental Impact Report* (Grading Ordinance FEIR; County of San Luis Obispo 2009). The proposed planting ordinance may facilitate additional grading for agricultural production beyond that analyzed in the Grading Ordinance FEIR because additional water supplies would be available for irrigation. Because grading activities at depths exceeding 4 feet have a potential to encounter paleontological resources, impacts to paleontological resources would be potentially significant.

### **Mitigation Measures**

With compliance with the regulatory frameworks discussed in Section 4.6.2, *Regulatory Setting*, and discussed under Impact GEO-4, including the County Grading Ordinance, impacts to paleontological resources from agricultural activities in the County would be reduced to the greatest extent feasible. There are no additional feasible mitigation measures available (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility).

### **Significance After Mitigation**

Since no feasible mitigation measures are available to reduce impacts to paleontological resource, these impacts would be significant and unavoidable.

## **4.6.4 Cumulative Impacts**

Typically, geology and soils impacts are specific to a particular planting permit/exemption site and there is little, if any, cumulative relationship between the development of a proposed project and development within a larger cumulative area. In general, only adjacent projects would result in cumulative impacts related to geology and soils. In addition, new development in the County is required to undergo a site-specific analysis of the geologic and soil conditions, as applicable. The analysis would provide recommendations to prepare the site for development to reduce risk related to geologic hazards. In addition, agricultural activities resulting from implementation of the planting



**Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance**

ordinance would not exacerbate seismic-related hazards. Agricultural activities on steep slopes would be subject to County review and the grading permit process which would ensure measures are incorporated to reduce geologic hazards. Because restrictions on development would be applied in the event that geologic or soil conditions pose a risk to safety, it is anticipated that cumulative impacts related to geology and soils would be less than significant and the proposed ordinance's contribution to such impacts would not be cumulatively considerable.

Ground disturbing activities from new or expanded agricultural activities resulting from the ordinance, combined with cumulative development projects, could incrementally result in exposure of paleontological resources in the PBLUMA. New non-agricultural development projects in the county are required to undergo a project-specific analysis of potential impacts to paleontological resources, as applicable. The analysis would provide site-specific recommendations for projects to avoid or minimize, to the extent feasible, impacts to paleontological resources. Agricultural grading is subject to the County grading ordinance and other local laws, regulations, and policies regarding paleontological resources. However, as discussed previously, it is not feasible for the County to require mitigation measures for agricultural activities facilitated by the planting ordinance that may result in impacts to paleontological resources. When considered together, cumulative impacts of the cumulative development projects and the proposed planting ordinance would be significant and unavoidable. As the proposed planting ordinance would result in significant unavoidable impacts to paleontological resources, the projects contribution to cumulative impacts to paleontological resources would be cumulatively considerable.

## 4.7 Greenhouse Gas Emissions

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This section evaluates the potential impacts associated with greenhouse gas (GHG) emissions, focusing on potential impacts related to the generation of GHG emissions and conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

### 4.7.1 Setting

#### **Climate Change and Greenhouse Gases**

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record that indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed a high degree of confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-20th century (IPCC 2014a).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases or GHGs. The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are usually by-products of fossil fuel combustion, and CH<sub>4</sub> results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases and SF<sub>6</sub> (United States Environmental Protection Agency [U.S. EPA] 2020).

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO<sub>2</sub>) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO<sub>2</sub>e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global

warming effect is 30 times greater than CO<sub>2</sub> on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).<sup>1</sup>

The accumulation of GHGs in the atmosphere regulates Earth's temperature. Without the natural heat-trapping effect of GHGs, Earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2021). However, since 1750, estimated concentrations of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O in the atmosphere have increased by 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity (Forster et al. 2007). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

## **Greenhouse Gas Emissions Inventory**

### *Global Emissions Inventory*

Worldwide anthropogenic emissions of GHGs were approximately 49,000 million metric tons (MMT) CO<sub>2</sub>e in 2010 (IPCC 2014a). Carbon dioxide emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, CO<sub>2</sub> was the most abundant, accounting for over 75 percent of total 2010 emissions. Methane emissions accounted for 16 percent of the 2010 total, while N<sub>2</sub>O and fluorinated gases accounted for 6 percent and 2 percent, respectively (IPCC 2014a).

### *United States Emissions Inventory*

Total United States (U.S.) GHG emissions were 6,676.6 MMT CO<sub>2</sub>e in 2018. Emissions increased by 2.9 percent from 2017 to 2018, and since 1990, total U.S. emissions have increased by an average annual rate of 0.13 percent for a total increase of 3.7 percent between 1990 and 2018. The increase from 2017 to 2018 was primarily driven by increased fossil fuel combustion because of multiple factors, including increased energy usage from greater heating and cooling needs due to a colder winter and hotter summer in 2018 as compared to 2017. In 2018, the transportation and industrial end-use sectors accounted for 36 percent and 26 percent, respectively, of nationwide GHG emissions while the residential and commercial end-use sectors accounted for 20 percent and 17 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors (U.S. EPA 2020).

### *California Emissions Inventory*

Based on the California Air Resource Board's (CARB) California Greenhouse Gas Inventory for 2000-2019, California produced 418.2 MMT CO<sub>2</sub>e in 2019. The major source of GHG emissions in California is the transportation sector, which comprises 40 percent of the State's total GHG emissions. The industrial sector is the second largest source, comprising 21 percent of the State's GHG emissions while electric power accounts for approximately 14 percent (CARB 2021). The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions

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<sup>1</sup> The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

fell below 431 MMT CO<sub>2</sub>e (CARB 2021). The annual 2030 statewide target emissions level is 260 MMT CO<sub>2</sub>e (CARB 2017).

### *Local Emissions Inventory*

According to a 2013 GHG emissions inventory, the County of San Luis Obispo generated a total of 1,776,511 metric tons (MT) of annual CO<sub>2</sub>e emissions. Transportation GHG emissions were the largest contributor at approximately 80 percent of the total GHG emissions or 1,412,580 MT CO<sub>2</sub>e. The second largest sector was non-residential energy (natural gas and electricity), which generated approximately 182,728 MT CO<sub>2</sub>e or 10 percent of the total (County of San Luis Obispo 2016).

## **Potential Effects of Climate Change**

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past four decades has been warmer than all the previous decades in the instrumental record, and the decade from 2011 through 2020 has been the warmest. The observed global mean surface temperature for the decade from 2011 to 2020 was approximately 1.09°C (0.95°C to 1.20°C) higher than the global mean surface temperature over the period from 1850 to 1900 (IPCC2021). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature obtained from station observations jointly indicate that Land-Surface Air Temperature and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past three decades (IPCC 2014a, 2018, and 2021).

Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the State and regionally specific climate change case studies (State of California 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. Below is a summary of some of the potential effects that could be experienced in California because of climate change.

### *Air Quality*

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (State of California 2018). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the State has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen.

Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the State. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains could tend to temporarily clear the air of particulate pollution, which would effectively reduce the number of large wildfires and thereby ameliorate the pollution associated with them (California Natural Resources Agency [CNRA] 2009).

### *Agriculture*

California has an over \$50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2020). Higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen and thereby affect their quality (California Climate Change Center 2006).

### *Water Supply*

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and western U.S., including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western U.S., including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and southern California coasts (State of California 2018). The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack (State of California 2018). Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

### *Ecosystems and Wildlife*

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions as a result of higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

## 4.7.2 Regulatory Setting

### Federal Regulations

#### *Federal Clean Air Act*

The U.S. Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the U.S. EPA has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

### State Regulations

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. There are numerous regulations aimed at reducing the State's GHG emissions. These initiatives are summarized below.<sup>2</sup>

#### *California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)*

The California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT CO<sub>2</sub>e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

CARB approved the 2013 Scoping Plan update in May 2014. The update defined CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction

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<sup>2</sup> For more information on the Senate Bills, Assembly Bills, Executive Orders, building codes, and reports discussed in this subsection, please go to the following websites: <https://www.energy.ca.gov/data-reports/reports/californias-fourth-climate-change-assessment>, [www.arb.ca.gov/cc/cc.htm](http://www.arb.ca.gov/cc/cc.htm), and <https://www.dgs.ca.gov/BSC/Codes>.

goals defined in the original Scoping Plan. It also evaluated how to align the State's longer term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (see below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of 6 MT CO<sub>2</sub>e by 2030 and 2 MT CO<sub>2</sub>e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the State (CARB 2017).

#### *Senate Bill 97*

SB 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the CNRA adopted amendments to the *CEQA Guidelines* for consistency in the analysis and mitigation of greenhouse gas emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

#### *Senate Bill 1383*

Adopted in September 2016, SB 1383 (Lara, Chapter 395, Statutes of 2016) requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery, in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

#### *Senate Bill 100*

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

### *Executive Order B-55-18*

On September 10, 2018, the governor issued Executive Order (EO) B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

### *California Integrated Waste Management Act (Assembly Bill 341)*

The California Integrated Waste Management Act of 1989, as modified by AB 341 in 2011, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995 through source reduction, recycling, and composting activities; and (2) diversion of 50 percent of all solid waste on and after January 1, 2000.

### *Executive Order N-79-20*

On September 23, 2020, Governor Newsom issued EO N-79-20, which established the following new statewide goals:

- All new passenger cars and trucks sold in-state to be zero-emission by 2035;
- All medium- and heavy-duty vehicles in the State to be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks;<sup>3</sup> and
- All off-road vehicles and equipment to be zero-emission by 2035 where feasible.

EO N-79-20 directs CARB, the Governor's Office of Business and Economic Development, the California Energy Commission, the California Department of Transportation, and other State agencies to take steps toward drafting regulations and strategies and leveraging agency resources toward achieving these goals.

### *Executive Order N-82-20*

In October 2020, the California Governor issued EO N-82-20, which charged the CNRA, in consultation with other State agencies, to develop a Natural and Working Lands Climate Smart Strategy to advance the State's carbon neutrality goal and build climate resilience.

In October 2021, a Draft Natural and Working Lands Climate Smart Strategy was released for public comment that identifies cropland (defined as lands with annual or perennial crops and fallow land, such as perennial orchards and irrigated annual crops) as one of eight identified natural and working landscapes. The strategy document identifies carbon farming techniques, such as organic soil amendments, nutrient management, and conservation tillage, as an opportunity to sequester carbon in soil with co-benefits of increasing soil water retention, climate resiliency, and biodiversity (CNRA 2021).

### *Carbon Sequestration Registry for Natural and Working Lands Act (Senate Bill 27)*

On September 23, 2021, the California Governor signed into law SB 27, which requires the CNRA to establish carbon sequestration goals for natural and working lands by July 2023, create a registry of projects for public and private investment, and track the carbon benefits of each project. Projects in

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<sup>3</sup> "Drayage trucks" are on-road, diesel-fueled, heavy-duty trucks that transport containers and bulk to and from the ports and intermodal railyards as well as to many other locations.



the registry would not be able to generate compliance offsets under the State’s cap-and-trade program.

## **Local Regulations**

### *San Luis Obispo County Air Pollution Control District GHG Thresholds*

In March 2012, the San Luis Obispo County Air Pollution Control District (SLOAPCD) adopted CEQA thresholds for GHG emissions consistent with AB 32 in its CEQA Air Quality Handbook (2012 Handbook; SLOAPCD 2012). The document identifies three potential thresholds that a lead agency may use to evaluate the level of significance of GHG emissions impacts. These are listed in “Methodology” below.

### *County EnergyWise Plan*

In November 2011, the County of San Luis Obispo adopted its County EnergyWise Plan (Climate Action Plan) for reducing GHG emissions. The EnergyWise Plan is a strategic document, prepared pursuant to the Conservation and Open Space Element of the County General Plan. The EnergyWise Plan outlines the County’s approach to achieving its GHG reduction target of 15 percent below baseline levels by 2020, consistent with AB 32. The EnergyWise Plan 2016 Update provides information regarding the County’s progress toward that goal, stating that overall GHG emissions from both government operations and community-wide sources decreased by seven percent between 2006 and 2013 (County of San Luis Obispo 2016). The EnergyWise Plan also identifies goals and GHG reduction measures specific to the agricultural sector, including resource conservation, crop management, livestock management, and carbon sequestration.

## **4.7.3 Impact Analysis**

### **Significance Thresholds**

According to Appendix G of the *CEQA Guidelines*, impacts related to GHG emissions from the proposed project would be significant if the project would:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan).

In March 2012, SLOAPCD adopted CEQA thresholds for GHG emissions to achieve goals outlined in the County’s EnergyWise Plan. Three thresholds were recommended to be used to evaluate the level of significance of GHG emissions impacts for residential and commercial projects, including (1) qualified GHG reduction strategies; (2) bright-line threshold; and (3) efficiency threshold. However, in January 2021, SLOAPCD updated its guidance on GHG evaluations in CEQA, rescinding the recommended bright-line and efficiency thresholds. The SLOAPCD’s bright-line threshold of 1,150 MT CO<sub>2</sub>e per year and the efficiency threshold of 4.9 MT CO<sub>2</sub>e per year per service population were based on a gap analysis and were used in CEQA evaluations for projects to demonstrate their consistency with the State’s 2020 GHG emission reduction goal from AB 32 and CARB’s 2008 Scoping

Plan. In 2015, the California Supreme Court issued an opinion in the *Center for Biological Diversity v. California Department of Fish and Wildlife (Newhall Ranch)* which determined that AB 32-based thresholds derived from a gap analysis are invalid for projects with a planning horizon beyond 2020 (SLOAPCD 2021).

In lieu of applicable thresholds, the County has developed an interim approach for project-level GHG analysis. Since SB 32 requires the State to reduce GHG levels by 40 percent below 1990 levels by the year 2030, the application of interim SB 32-based working thresholds that are 40 percent below the 1,150 MT CO<sub>2</sub>e per year bright-line threshold ( $1,150 \times 0.6 = 690$  MT CO<sub>2</sub>e) and 40 percent below the 4.9 MT CO<sub>2</sub>e per year per service population threshold ( $4.9 \times 0.6 = 2.94$  MT CO<sub>2</sub>e) would be expected to produce comparable GHG reductions “in the spirit of” the targets established by SB 32. Therefore, for the purpose of evaluating the significance of GHG emissions for a project after 2020, emissions estimated to be less than 690 MT CO<sub>2</sub>e per year or 2.94 MT CO<sub>2</sub>e per year per service population are considered de minimus (too minor to merit consideration) and would result in a less-than-significant impact that is less than cumulatively considerable and consistent with State and local GHG reduction goals.

## **Methodology**

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project’s contribution towards an impact would be cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines* Section 15064[h][1]). Therefore, GHG emissions and climate change impacts detailed in Section 4.7.3.c, below, are cumulative in nature.

Quantification of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions were estimated to identify the magnitude of potential project effects. The analysis focuses on CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions because these comprise 98.9 percent of all GHG emissions by volume (IPCC 2007) and are the GHG emissions that the proposed planting ordinance would emit in the largest quantities. Emissions of these GHGs are converted into their equivalent weight in CO<sub>2</sub> (CO<sub>2</sub>e). Minimal amounts of other main GHGs (such as chlorofluorocarbons [CFCs]) would be emitted, but these other GHG emissions would not substantially add to the calculated CO<sub>2</sub>e. Calculations are based on the methodologies discussed in the California Air Pollution Control Officers Association’s CEQA and Climate Change white paper (California Air Pollution Control Officers Association 2008) and include the use of the California Climate Action Registry’s General Reporting Protocol (version 3.1; January 2009).

The GHG emissions for agricultural activities facilitated by the proposed planting ordinance were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0. CalEEMod uses project-specific information, including the land uses, acreages for different uses, and location. (see Appendix D for calculations). The proposed planting ordinance would result in an increase in agricultural activity in the PBLUMA. To accurately provide a quantitative analysis of emissions associated with this increase, emissions were estimated at the project level, rather than a program level. Due to the modeling constraints of CalEEMod and the nature of the ordinance, program level analysis would be too speculative and produce inaccurate results. Therefore, impacts were estimated for construction and operation of a reasonable individual project impact scenario under the planting ordinance. Using the anticipated number of individual projects over the duration of the

planting ordinance, emissions were extrapolated to determine the total impacts from all activity under the program.

Impacts were estimated for construction and operation of a reasonable individual project under the planting ordinance. Using the anticipated number of individual projects over the duration of the planting ordinance, emissions were extrapolated to determine the total impacts from all activity under the program. Construction GHG emissions are associated with the operation of construction equipment used to grade the site and construct accessory infrastructure, as well as worker trips to and from the site. Operational GHG emissions are associated predominantly with the operation of agricultural equipment during the maintenance and harvesting activities of the site as well as the operation of the new wells, worker trips, and haul trips to haul crops from the site.

CalEEMod does not include land or equipment uses that are specific to agriculture. Therefore, the following assumptions were made based on information for an average individual project as provided by the County:

- Of the potential crops that could be grown by individual planting applicants, wine grapes use the least amount of irrigation water (1.25 AFY per acre). Therefore, up to 20 acres of wine grapes would equate to the largest area that can be planted with irrigated crops, pursuant to the 25-AFY exemption under the planting ordinance.
  - Total emissions for a reasonable individual site were separated into construction and operational activities. Construction activities were assumed to be two phases: initial site preparation and well development. Operational activities were split into four phases: (1) annual site preparation and planting; (2) maintenance activities; (3) harvest activities; and (4) well operation. Construction Phases:
    - Initial site preparation would include vegetation removal, grading, ripping, and construction of accessory infrastructure such as fencing, roads, reservoirs, and pipelines. This activity is assumed to be temporary and short-term; thus, it is modeled and analyzed in terms of construction activity. Site preparation is reasonably assumed to occur over 20 days and require two crawler tractors, two excavators, and two tractors. This equipment list was determined to represent a reasonable impact scenario associated with the initial development of a 20-acre vineyard.
    - It is assumed that 88 new irrigation groundwater wells would be constructed throughout the lifetime of the planting ordinance. This results in 4 wells being constructed annually. It is also assumed that up to 2 wells could be under construction concurrently. Because the soil type(s) are currently unknown where the wells would be situated or depth to which the wells would be constructed, modeling assumed that each well would require 2 weeks (10 days) for construction and could potentially require 24-hour construction activity at points during development.
  - Operational Phases:
    - Annual site preparation and planting activities are based on information provided in Section 2, *Project Description*, and Appendix B. These activities are anticipated to occur over 20 days per year. Reasonably anticipated equipment for these activities would be one 95-horsepower (hp) tractor, which would require a total of 3 passes (3 days of operation) per year. Worker crews for planting would be on site for an additional 8 day (for a total of 11 days), and a foreperson would be on site an additional 9 days without other crew (for a total of 20 days).

- Maintenance activities are based on the information provided in Appendix B. Maintenance activities are anticipated to have a crew on site for 17 days and a foreperson on site for 29 days (17 concurrent with the crew) for pruning, irrigation, and canopy manipulation. These activities are anticipated to be conducted without the use of diesel equipment. Maintenance, including fungicide and herbicide applications, would occur over 9 days, requiring a crew, a foreperson, and one tractor per day.
  - Harvesting activities are anticipated to occur over 29 days. As detailed in Appendix B, harvesting activities would require the use of two 95-hp tractors and one OXBO 6120 harvester for 3 days, a crew for a total of 11 days, and a foreperson for 29 days.
  - Hauling of harvested produce would require 26 trips per year over 3 days.
  - Well operation activities are only assessed for the 88 new wells that would be developed as a result of the proposed planting ordinance. Because the depth of the wells is unknown, each well is assumed to require a main pump to ensure water can be adequately drawn from the wells and distributed. Conservatively, well pumps are anticipated to be diesel operated. Pumps are assumed to be 7-hp and would operate up to 4 hours per day, 365 days per year.
  - In addition to the well pumps for the 88 new wells, it is assumed that all 264 new and expanded agricultural sites would require the installation of a booster pump to ensure water can be adequately distributed. Conservatively, like the main well pumps, booster pumps are anticipated to be diesel operated. The booster pumps are assumed to be 7-hp and would operate up to 4 hours per day, 365 days per year.
- For construction and operational activities, crews would travel to the planting site in one vehicle and would commute 54 miles one-way (108 miles round-trip). The foreperson would individually commute 10 miles per one-way trip (20 miles round-trip). Haul trucks for harvesting would travel 108 miles per trip.
  - Changes from CalEEMod defaults:
    - All construction and operational phases were modeled as construction activities due to the nature of the activities and the equipment used.
    - Annual activities were assumed to operate 7 days per week instead of the default of 5 days per week, except as noted above.
    - Default construction equipment for each phase was replaced with the equipment as outlined in the phase descriptions above.
    - Usage hours for equipment during operational activities were increased to 12 hours per day to better capture the nature of farming activities.
    - Hours for well development was increased to 20 hours per well to account for the potential for 24-hour construction activities during well development.
    - Due to the rural nature of the PBLUMA and the prevalence for unpaved roads in remote rural areas and on farm sites, paved roads were reduced from 100 percent to 97 percent.

CalEEMod generates modeling results separately in terms of short-term construction impacts and long-term operational impacts; however, construction activities in this scenario resemble activities associated with agricultural operations. Therefore, as previously discussed, CalEEMod's construction output represents individual site-level emissions from site preparation, maintenance, and harvest phases, as well as program-level emissions from well construction.

To determine the GHG emissions resulting from the proposed planting ordinance, emissions were estimated for the construction and operation of an individual vineyard site, and then multiplied by the total number of new agricultural sites anticipated to result from the ordinance. The reasonable impact scenario of a 240-acre annual increase in irrigated crop production in the PBLUMA allowed by the ordinance equates to 12 new 20-acre vineyards per year allowed by the ordinance under a 25-AFY of groundwater per site exemption. Thus, for the purposes of this analysis, construction emissions from individual sites are multiplied by 12 to reach total emissions from site preparation activities. As a reasonable estimate of emissions, it is assumed that all 12 sites would be developed at the same time. Construction emissions for each site were then multiplied by the number of sites (264 for site development and 88 for well development), summed and then divided by 30 years to amortize over the average life of a project (SLOAPCD 2012). Construction emissions for a project are temporary and last only a short amount of time when considering the lifetime of a project. However, while these emissions are temporary, they are part of the project's overall lifetime emissions.

When the annual operational emissions of a project is considered, in a typical year a project would emit a certain number of metric tons of CO<sub>2</sub>e (for ease of explanation, this analysis assumes 100 MT). Therefore, over the lifetime of a project (which based on SLOAPCD's guidance is 30 years), a project would emit 3,000 MT CO<sub>2</sub>e. However, this does not account for emissions generated during construction. Considering GHG emissions are cumulative by nature, construction time frames are not static (i.e., each project's construction timeframe varies depending on the nature of the project), and construction emissions in one year can exceed a typical operational year for that project, a consistent and reasonable way of accounting for construction emissions of a project is to amortize the emissions over the 30-year life of a project. As the construction period is not considered part of the "project lifetime," construction emissions are finite, and construction emissions are part of a project's total contribution to GHG emissions, total construction emissions are spread evenly over the total expected life of a project (i.e., amortized), consistent with how operational emissions are analyzed. Therefore, when the amortized construction emissions are added to the typical annual operational emissions, they result in an average annual project emissions over a project's lifetime.

Operational emissions are reported for one planting site, for 12 planting sites, and for the buildout scenario (i.e., all 264 sites). Operational emissions for one site were multiplied by the total number of sites (264 sites for annual site preparation, planting, maintenance, harvesting, and booster pump operation, as well as operation of 88 new wells) to determine the total annual emissions from the proposed ordinance as anticipated on January 31, 2045 at buildout. If the total emissions across all individual sites resulting from the proposed planting ordinance exceeds the interim threshold of 690 MT CO<sub>2</sub>e per year, the proposed ordinance would result in a significant and unavoidable impact.

It is reasonably assumed that new and expanded plantings allowed under the proposed ordinance would follow conventional agricultural practices (e.g., fertilizer application, tilling). However, these plantings would have the opportunity to sequester carbon in soil by incorporating carbon farming techniques. The California Department of Food and Agriculture's Healthy Soils Program, which provides carbon farming grants to growers using cap-and-trade funds, uses COMET Planner, developed in partnership with the United States Department of Agriculture Natural Resource Conservation Service, as a tool to estimate soil carbon sequestration and GHG reductions associated with agricultural conservation practices for cropland management, such as reducing tillage, incorporating cover crops and hedgerows, and applying compost and mulch (California Department of Food and Agriculture 2021; United States Department of Agriculture Natural Resources

Conservation Service 2021, 2022). The COMET Planner was used for this analysis because it is utilized by the California Department of Food and Agriculture.

## Impacts and Mitigation Measures

**Threshold a:** Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**Impact GHG-1 THE PROPOSED PLANTING ORDINANCE WOULD GENERATE GHG EMISSIONS IN EXCESS OF THE SIGNIFICANCE THRESHOLDS SUCH THAT IT WOULD RESULT IN SIGNIFICANT EFFECTS ON THE ENVIRONMENT. THIS IMPACT WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

Agricultural activities would involve the use of off-road vehicles, irrigation pumps, and other machinery that emit GHGs. Agricultural activities under the proposed ordinance would include field preparation (e.g., grading and tilling) and crop planting, maintenance, and harvesting activities associated with new and expanded irrigated crops in the PBLUMA. Construction and operation of accessory infrastructure is also considered in this analysis.

GHG emissions generated by construction activities were estimated in CalEEMod, and results are shown in Table 4.7-1. Construction emissions are amortized over 30 years and included as part of the operational emissions to determine significance. See “Methodology” above for a full explanation of amortized emissions. Amortized construction and quantified operational emissions are shown in Table 4.7-2.

**Table 4.7-1 Annual Construction GHG Emissions**

Emission Source	Annual Emissions (MT CO <sub>2</sub> e)		
	One Site	12 Sites (1 year)	264 Sites (Buildout)
Site Development	29	351	7,727
Well Development	11	44	975
Annual Emissions	40	396	8,702
<b>Amortized Construction Emissions</b>	<b>1</b>	<b>13</b>	<b>290</b>

Note: Columns may not add up correctly due to rounding.  
 See Appendix D for calculations and for GHG emission factor assumptions.

**Table 4.7-2 Annual Operational and Total GHG Emissions**

Emission Source	Annual Emissions (MT CO <sub>2</sub> e)		
	One Site	12 Sites (1 year)	264 Sites (Buildout)
Annual Site Preparation and Planting	1	13	281
Maintenance	3	34	751
Harvesting	7	84	1,849
Pump Operation	9	102	1,853
<b>Total</b>	<b>19</b>	<b>233</b>	<b>4,734</b>
Total Amortized Construction	1	13	290
<b>Annual Program Total</b>	<b>21</b>	<b>246</b>	<b>5,024</b>
<i>Project-specific Threshold</i>	—	—	690
<b>Exceeds Threshold?</b>	<b>—</b>	<b>—</b>	<b>Yes</b>

Note: Columns may not add up correctly due to rounding.  
 See Appendix D for calculations and for GHG emission factor assumptions.

As shown in Table 4.7-2, the estimated annual GHG emissions would be approximately 21 MT CO<sub>2</sub>e for the reasonable individual site allowed by a 25-AFY groundwater use exemption (a 20-acre vineyard) and 5,024 MT CO<sub>2</sub>e for the anticipated annual emissions at buildout. Agricultural activities, specifically crop planting, have the potential to sequester atmospheric carbon, and thus, contribute to a reduction in GHG emissions. Therefore, it can be assumed that actual emissions would be lower than the estimates shown in Table 4.7-2. However, the ability of different crops to sequester carbon is highly variable, and the types and quantities of crops that could be planted under the proposed ordinance is currently unknown, meaning any quantification of sequestration would be speculative. Given these limitations, it would be reasonable to assume that the amount of carbon sequestered would not be sufficient to reduce operational emissions below the project-specific threshold of 690 MT CO<sub>2</sub>e. Therefore, GHG emissions impacts from the increased agricultural activities facilitated by the proposed planting ordinance would be potentially significant.

### Mitigation Measures

The following mitigation measure is required to reduce GHG emissions impacts from the planting ordinance.

#### GHG-1 Carbon Sequestration

Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following planting requirement in Section 22.30.205 of Title 22 of the San Luis Obispo County Code:

- The applicants of 25-AFY exemptions shall include conservation practices (e.g., cover cropping, composting) to sequester carbon and/or reduce GHG emissions by at least 0.15 MT CO<sub>2</sub>e per acre of planting area (1:1 offset) as estimated by COMET-Planner according to the CDFA Healthy Soils Program guidelines, to be implemented prior to final planting.

## Significance After Mitigation

Mitigation Measure GHG-1 would reduce GHG emissions impacts under the proposed ordinance by requiring agricultural operators to sequester carbon and/or reduce GHG emissions. Additionally, with compliance with the regulatory frameworks discussed in Section 4.7.2, *Regulatory Setting*, including applicable State ABs, SBs, and EOs, and the County EnergyWise Plan, impacts associated with GHG emissions from agricultural activities in the County would be reduced to the greatest extent feasible.; however, GHG emissions may still exceed thresholds. There are no additional feasible mitigation measures available to reduce impacts associated with GHG emissions (refer to Section 4.0, *Environmental Impact Analysis*, for further discussion of mitigation feasibility). Therefore, impacts to GHG emissions are determined to remain significant and unavoidable.

**Threshold b:** Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

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**Impact GHG-2 THE PROPOSED PLANTING ORDINANCE WOULD BE POTENTIALLY INCONSISTENT WITH APPLICABLE PROGRAMS AND MEASURES IN THE COUNTY'S ENERGYWISE PLAN, DESIGNED TO REDUCE GHG EMISSIONS. THEREFORE, THIS IMPACT WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

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The County of San Luis Obispo's EnergyWise Plan includes 39 GHG emissions reduction measures related to energy conservation, renewable energy, solid waste, land use and transportation, water conservation, and agriculture. These GHG reduction measures are primarily actions to be undertaken by the County, including the following that may be applicable to agricultural activities:

- a. Developing energy conservation campaigns and new financing programs for energy efficiency;
- b. Incentivizing new development to exceed minimum California Green Building Code (CalGreen) energy efficiency requirements;
- c. Developing new large-scale renewable energy facilities, and developing a strategy to encourage commercial- and other small-scale renewable energy installations;
- d. Providing expanded resources and opportunities for recycling, implementing a composting program;
- e. Supporting the voluntary installation of energy-efficient irrigation systems and other energy conservation devices;
- f. Exploring conservation and stewardship programs and specialty crop research initiatives to fund GHG reduction programs;
- g. Implementing a voluntary fermentation and manure management program;
- h. Working with SLOAPCD and agriculturalists to identify practical and feasible options for fuel-efficient agricultural equipment;
- i. Reducing emissions from transport of agriculture-related products within the county through the encouragement of local food programs;
- j. Supporting rideshare programs for agricultural worker transit, shuttles, and ride matching; and/or
- k. Identify opportunities for terrestrial and aquatic sequestration in the county, including but not limited to County lands, reclaimed mining lands, agricultural lands, and other areas as appropriate.



The GHG reduction measures included in the EnergyWise Plan (County of San Luis Obispo 2016) do not include policies or implementation measures that would be implemented directly by individual planting applicants and property owners utilizing the proposed ordinance. Additionally, the proposed planting ordinance would not include land use changes or other components that would conflict with the implementation of the EnergyWise Plan.

The County develops policies to reduce GHG emissions within the County to comply with the State regulations to reduce GHG emissions in accordance with AB 32, SB 32, SB 1383, SB 100, EO B-55-18, EO N-79-20, EO N-82-20, and SB 27. The majority of the regulations and policies to reduce GHG emissions are at city, county, regional, and State levels and do not specifically address project-level emissions reductions. Regardless, new and expanded agricultural activities facilitated by the proposed planting ordinance would be required to comply with existing State regulations to help the State achieve its GHG reduction goals. Mitigation Measure GHG-1 above would require agricultural operators of 25-AFY exemptions to sequester carbon and/or reduce GHG emissions. While agricultural activities facilitated by the planting ordinance would reduce GHG emissions to the greatest extent feasible, GHG emissions may exceed thresholds as discussed under Impact GHG-1. Therefore, the proposed ordinance may potentially conflict with the ability for the County, region, and State to meet their applicable GHG reduction goals. As the proposed planting ordinance may potentially conflict with plans, policies, and/or regulations adopted to reduce GHG emissions, the planting ordinance would result in potentially significant impacts.

### **Mitigation Measures**

Refer to Mitigation Measure GHG-1 under Impact GHG-1, above.

### **Significance After Mitigation**

Mitigation Measure GHG-1 would reduce GHG emissions impacts under the proposed ordinance by requiring agricultural operators to sequester carbon and/or reduce GHG emissions. Additionally, with compliance with the regulatory frameworks discussed in Section 4.7.2, *Regulatory Setting*, including applicable State ABs, SBs, and EOs, and the County EnergyWise Plan, impacts associated with GHG emissions from agricultural activities in the County would be reduced to the greatest extent feasible.; however, GHG emissions may still exceed thresholds and may therefore be potentially inconsistent with plans, policies, or regulations adopted to reduce GHG emissions. There are no additional feasible mitigation measures available to reduce impacts associated with GHG emissions (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility). Therefore, impacts related to consistency with plans, policies, or regulations adopted to reduce GHG emissions are determined to remain significant and unavoidable.

### **4.7.4 Cumulative Impacts**

The geographic scope for related projects considered in the cumulative impact analysis for GHG emissions is global because impacts of climate change are experienced on a global scale regardless of the location of GHG emissions sources. Therefore, GHG emissions and climate change are, by definition, cumulative impacts. As discussed under “Potential Effects of Climate Change” in Section 4.7.1, *Setting*, above, the adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project’s contribution towards an impact is cumulatively considerable.

As discussed under Impact GHG-1, the proposed planting ordinance would result in GHG emissions that exceed significance thresholds. As GHG emissions are inherently a cumulative impact issue, the proposed ordinance would therefore result in cumulatively considerable impacts to GHG emissions.

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## 4.8 Hydrology and Water Quality

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This section discusses potential impacts to surface and groundwater quality, basin hydrology, and water supply management associated with new and expanded agriculture facilitated by the planting ordinance. This section focuses on potential impacts related to violation of water quality standards or waste discharge requirements, groundwater supplies and recharge, and conflict with or obstruction of implementation of a water quality control plan or sustainable groundwater management plan. Other hydrology and water quality-related impacts, including erosion and alternations of existing drainage patterns and release of pollutants from inundation, were determined to be less than significant in the Initial Study prepared for the proposed planting ordinance (see Appendix A and Section 4.14, *Effects Found Not to Be Significant*), and therefore, are not further analyzed in this section.

### 4.8.1 Setting

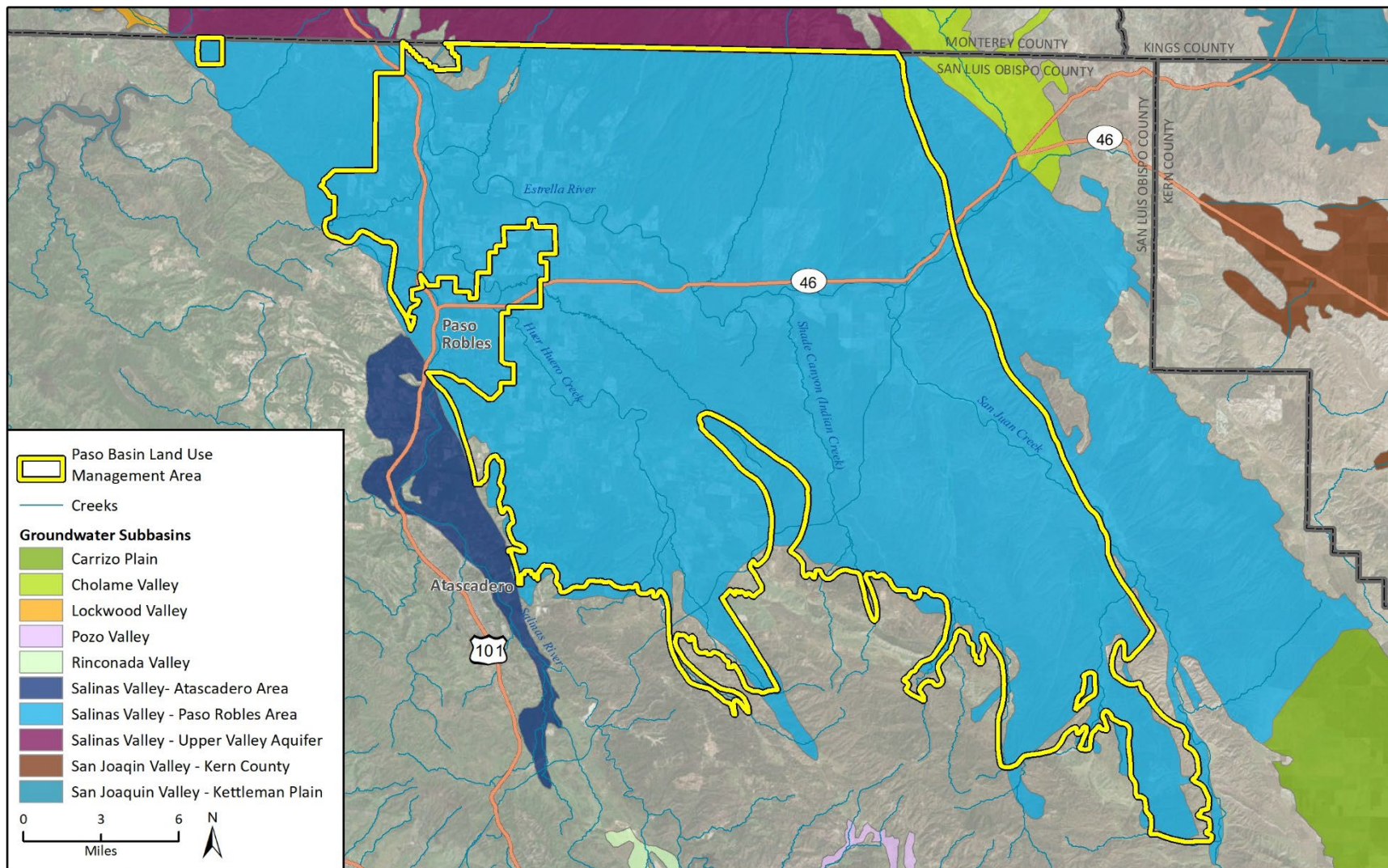
#### **Groundwater Resources**

The Paso Basin Land Use Management Area (PBLUMA) includes 313,661 acres in northeastern San Luis Obispo County, the majority of which fall within the Paso Robles Subbasin of the Salinas Valley Basin, as defined by the California Department of Water Resources (DWR). The Paso Robles Subbasin is bordered by the Salinas Valley-Upper Valley Aquifer Subbasin to the north, the Salinas Valley-Atascadero Subbasin to the west, the Cholame Valley Basin to the northeast, and the Carrizo Plain Basin to the southeast (Figure 4.8-1). Approximately 11,799 acres of the PBLUMA fall outside of the Paso Robles Subbasin, in areas that are not within any DWR-designated basins (Figure 4.8-1). The entire PBLUMA area lies within the jurisdiction of the Central Coast Regional Water Quality Control Board (CCRWQCB).

Groundwater beneath the PBLUMA is contained within two primary aquifers: the Alluvial Aquifer and the Paso Robles Formation. The Alluvial Aquifer is generally composed of saturated coarse-grained sediments. The Alluvial Aquifer is discontinuous across the basin and occurs along Huerhuero Creek, the Salinas River, the Estrella River, and other smaller tributaries to these surface waters. This aquifer is approximately 100 feet thick on average and is highly permeable. Groundwater levels within the Alluvial Aquifer in 2017 ranged from about 1,400 feet above mean sea level (amsl) in the southeastern portion of the PBLUMA to approximately 600 feet amsl near San Miguel. The Paso Robles Formation underlies most of the PBLUMA and consists of generally thin, discontinuous sand and gravel zones separated vertically by relatively thick zones of silts and clay (Fugro West, Inc. and Cleath and Associates 2002). The Paso Robles Formation is continuous across the basin except where offset occurs along fault zones. In the Paso Robles Formation, groundwater levels in 2017 ranged from about 1,250 feet amsl in the southeast portion of the aquifer to about 500 feet amsl east of the City of Paso Robles.

The municipal sector uses groundwater primarily from the Paso Robles Formation, whereas the agricultural sector uses groundwater from both the Alluvial Aquifer and the Paso Robles Formation. Groundwater levels within the Paso Robles Formation decreased substantially between 1997 and 2017, in many areas by 60 to 80 feet (County of San Luis Obispo et al. 2020). A similar decline in groundwater storage has also occurred during the past decade.

**Figure 4.8-1 Groundwater Basins within the PBLUMA**



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 Additional data provided by USGS, 2021 and DWR, 2019.

Fig X Hydrologic Features\_

The Paso Robles Subbasin is one of 21 groundwater basins in the state that have been designated as critically overdrafted by DWR. Overdraft in the Paso Robles Subbasin is estimated to be 13,700 acre-feet per year (AFY) (County of San Luis Obispo et al. 2020). This means that, on average, annual groundwater extractions exceed new supplies by 13,700 AFY. Approximately 90 percent of groundwater extractions in the Paso Robles Subbasin are estimated to be used for the agriculture sector (GSI Water Solutions, Inc. 2021), the majority of which (97 percent) is located within the PBLUMA (see Appendix B, Figure 5). Within the PBLUMA, an average of 66,877 AFY was extracted from groundwater wells between 2017 and 2020 (see Table 2-2 in Section 2, *Project Description*). Of the total groundwater extracted, 96 percent, or an average of 64,025 AFY, was used for agricultural purposes (County of San Luis Obispo et al. 2020).

Modeling conducted for the development of the Groundwater Sustainability Plan (GSP) for the Paso Robles Subbasin, as well as data from groundwater monitoring wells collected throughout the County, indicate that from 2012 to 2016, approximately 50,000 acre-feet (AF) of groundwater storage was lost in the Alluvial Aquifer. The loss of groundwater from storage during the drought represents an extreme condition which is not indicative of long-term storage trends in the Alluvial Aquifer. In the Paso Robles Formation Aquifer, approximately 646,000 AF were removed from storage between 1981 and 2016 (County of San Luis Obispo et al. 2020). These declines are likely due to both increased pumping for agricultural irrigation and extended drought conditions limiting recharge (County of San Luis Obispo et al. 2020).

## **Surface Water Resources**

The PBLUMA includes portions of the following watersheds: Paso Robles Creek-Salinas River Watershed, Estrella River Watershed, Nacimiento River Watershed, Indian Valley-Salinas River Watershed, Cholame Creek Watershed, Huerhuero Creek, the Upper San Juan Creek Watershed, and the Lower San Juan Creek Watershed (Figure 4.8-2).

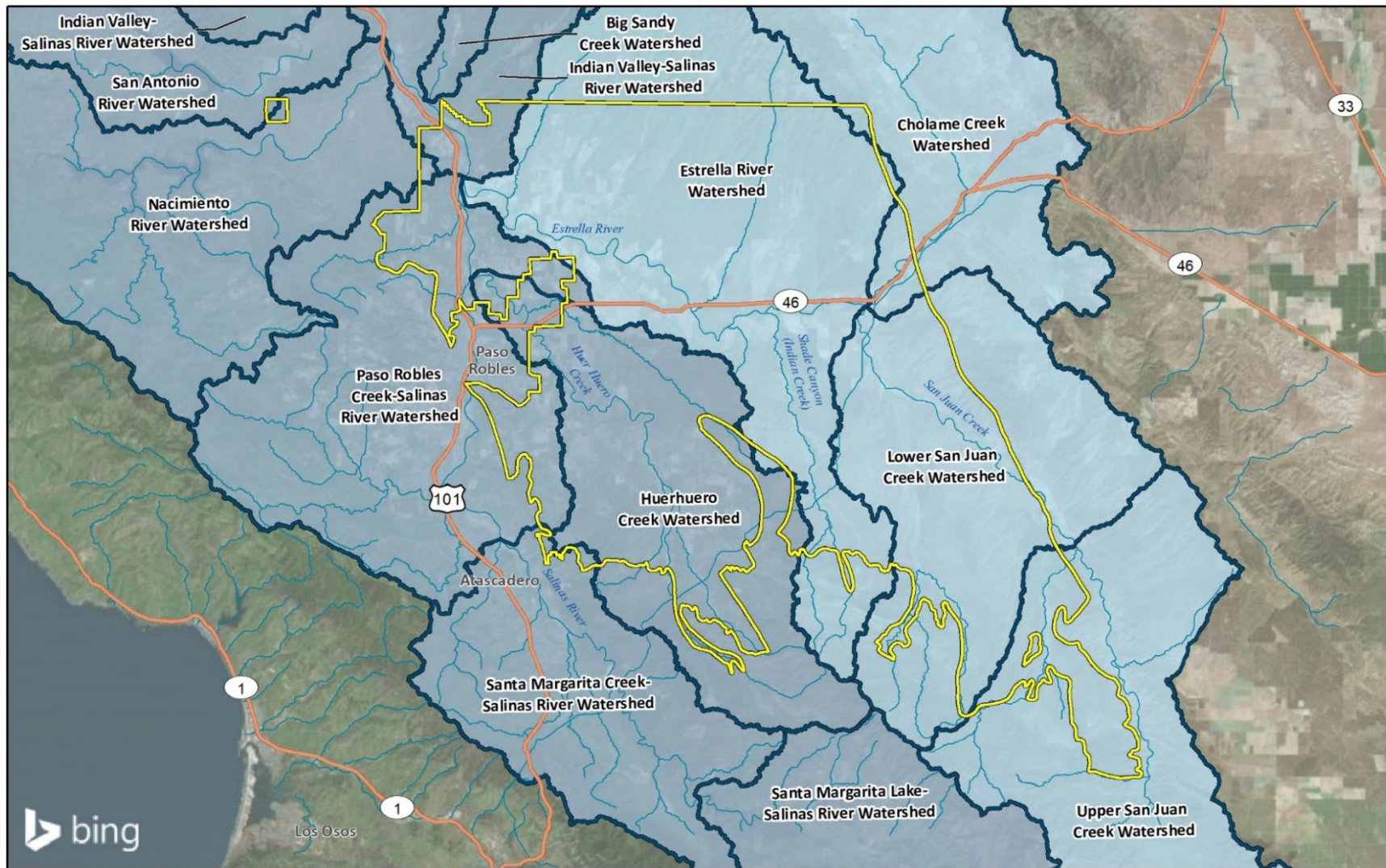
Perennial streams within the PBLUMA include the Salinas River, Estrella River, Cholame Creek, Huerhuero Creek, San Juan Creek, Dry Creek, and Shedd Canyon (Indian Creek). There are no reservoirs or natural lakes within the PLBUMA. However, there are two reservoirs located just outside of the PBLUMA. Santa Margarita Lake, formed by the Salinas Dam, is located just south of the Paso Robles Subbasin. Nacimiento Reservoir, located just outside the Paso Robles Subbasin to the northwest, discharges to the Nacimiento River that crosses the northwest corner of the Paso Robles Subbasin.

## **Hydraulic Connectivity**

The extent of interaction between interconnected surface waters and between surface waters and groundwater throughout the Paso Robles Subbasin is not fully understood. Increased monitoring and data collection are a key element of the initial stages of GSP implementation as described under Section 4.8.2, *Regulatory Setting*, below.

Recent work by Todd Groundwater to address GSP deficiencies, including characterization of the surface water-groundwater interface in the Paso Robles Subbasin, does not confirm interconnectivity between groundwater in the Paso Robles Formation and surface water. The supplemental analyses determined that the surface water in the Salinas River, including associated sub-flow in the Alluvial Aquifer, is periodically interconnected during and for a period after times when the Salinas River is flowing as a result of seasonal rainfall events. It was further determined that there is no evidence that the Salinas River surface flows or sub-flow is connected to the groundwater in the underlying Paso Robles Formation and that pumping from the Paso Robles

Figure 4.8-2 Watersheds within the PBLUMA



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Additional data provided by USGS, 2021.

Fig. X Watersheds

Formation is not, and will not in the future, deplete Salinas River surface flow or sub-flow. Todd Groundwater also determined that there is no evidence that surface water in the Huerhuero Creek, or any other surface water tributaries, are interconnected with the Alluvial or Paso Robles Formation Aquifers in the Basin. Todd Groundwater did identify two areas – one in the middle reach of the Estrella River and one in the upper San Juan Creek – that warrant additional investigation to determine if interconnectivity may potentially exist, at least during periods of wetter weather (Todd Groundwater 2022).

## **Beneficial Uses**

The Water Quality Control Plan for the Central Coastal Basin (Basin Plan) defines beneficial uses and outlines how the quality of surface water and groundwater in the Central Coast Region should be managed to provide the highest water quality reasonably possible.

Present and potential beneficial uses of surface water within the PBLUMA include: municipal and domestic supply; agricultural supply; industrial process supply; groundwater recharge; water contact recreation; non-contact water recreation; commercial and sport fishing; warm freshwater habitat; cold water habitat; wildlife habitat; rare, threatened or endangered species; migration of aquatic organisms; and spawning, reproduction, and/or early development. Present and potential beneficial uses of groundwater within the PBLUMA include agricultural supply, municipal and domestic water supply, and industrial use (CCRWQCB 2019).

## **Surface Water Quality**

When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the Clean Water Act (CWA) requires identifying and listing that water body as impaired (CCRWQCB et al. 2019, see Section 4.8.2, *Regulatory Setting*, below for an explanation of the 303(d) list). Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, nonpoint, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a “factor of safety” included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body.

Within the PBLUMA, the Salinas River and Estrella River are both included on the 303(d) list of impaired water bodies. The Estrella River was most recently assessed in 2018 and was listed as impaired for the following uses: agricultural supply, municipal and domestic supply, water recreation, and warm freshwater habitat. Identified impairments include fecal coliform, pH, turbidity, toxicity, sodium, chloride, and boron. A TMDL for boron has been developed in the Estrella River (CCRWQCB et al. 2019).

The Salinas River was most recently assessed in 2018 and was listed as impaired for the following uses: agricultural supply, cold freshwater habitat, warm freshwater habitat, commercial and sport fishing, municipal and domestic supply, water recreation, and wildlife habitat. Identified impairments include: chloride, nitrate, pH, sodium, benthic macroinvertebrate bioassessments, chlorpyrifos, dichlorodiphenyltrichloroethane (DDT), diazinon, toxicity, turbidity, toxaphene, chlordane, dichlorodiphenyldichloroethylene (DDE), dieldrin, polychlorinated biphenyls (PCBs), enterococcus, *Escherichia coli* (E.coli), fecal coliform, and total dissolved solids (TDS). No TMDLs have been established for the Upper Salinas River, but TMDLs for many impairments have been developed for the Lower Salinas River, which exists downstream of the PBLUMA. Other streams and



creeks within the PBLUMA may also have similar water quality impairments, but those waters have not been assessed or listed on the 303(d) list (CCRWQCB et al. 2019). Other pollutants of concern throughout the PBLUMA include ammonia, nitrate/nitrite, chlorophyll-a (algal blooms), and dissolved oxygen levels (CCRWQCB 2018a).

## **Groundwater Quality**

The most common historical drinking water quality exceedances within the Paso Robles Subbasin are TDS and nitrate (Fugro West, Inc. and Cleath and Associates 2002, CCRWQCB et al. 2019). Slight to moderate suitability restrictions of groundwater for agricultural irrigation uses within the Paso Robles Subbasin have been identified for sodium, chloride, or boron toxicity in these studies. Potential sources of groundwater quality degradation identified within the Paso Robles Subbasin include irrigation runoff and agricultural inputs such as fertilizer, septic systems, and inadequate or impaired infrastructure such as leaking wastewater pipes or ponds. Groundwater quality within the Paso Robles Basin (and the PBLUMA) is monitored under several different programs and by different agencies as described below:

- Municipal and community water purveyors must collect water quality samples on a routine basis for compliance monitoring and reporting to the California Division of Drinking Water.
- The United States Geological Survey (USGS) collects water quality data on a routine basis under the Groundwater Ambient Monitoring and Assessment (GAMA) program. These data are stored in the State's GAMA/Geotracker system.
- The State Water Resources Control Board's 2009 Recycled Water Policy required the development of Salt Nutrient Management Plans for groundwater basins in California. This plan was developed in 2015 for the Paso Robles Subbasin.
- There are multiple sites that are monitoring groundwater quality as part of investigation or compliance monitoring programs through the CCRWQCB. The primary program utilized by the CCRWQCB to regulate and monitor discharges from agricultural operations throughout the Region is the Agricultural Order, discussed further below, which requires regular monitoring and reporting from commercial growers.

Some groundwater quality issues exist within the PBLUMA, as discussed above, but groundwater within the Paso Robles Subbasin is generally suitable for drinking and agricultural uses (Fugro West, Inc. and Cleath and Associates 2002, County of San Luis Obispo et al. 2020). A primary issue of concern from agricultural operations within the Basin is nitrate contamination from fertilizer application and runoff from farms. As discussed in detail in below in Section 4.8.2, *Regulatory Setting*, the Agricultural Order is designed to minimize nitrate pollution from agricultural operations.

### **4.8.2 Regulatory Setting**

This section provides an overview of the various federal, state, and local regulations that apply to the proposed planting ordinance and PBLUMA. Water regulations only deemed relevant to the proposed ordinance are included in this discussion.

## **Federal Regulations**

### *Clean Water Act*

The Federal Clean Water Act (CWA), enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States. The CWA established the basic structure for regulating discharges of pollutants into the waters of the United States. The CWA gave the United States Environmental Protection Agency (USEPA) authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various contaminants in surface water, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the CWA is administered by the USEPA and the United States Army Corps of Engineers (USACE). At the State and Regional levels in California, the CWA is administered and enforced by the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs). The CCRWQCB is the CWA enforcement agency for San Luis Obispo County.

### *Clean Water Act Section 303(d)*

Under Section 303(d) of the CWA, States are required to develop and update a list of water bodies under their jurisdiction that continue to fail to meet water quality standards even after minimum levels of pollution control have been enforced. These are referred to as '303(d) impaired' bodies. Jurisdictions must establish priority rankings for 303(d) impaired water bodies and develop action plans to improve water quality to minimum standards. The plans may include the development of TMDLs for pollutants impairing the water bodies to bring the impaired bodies within quality objective standards.

### *Clean Water Act Section 401*

Under Section 401 of the CWA, the RWQCBs have regulatory authority over actions in waters of the United States and/or the State of California through the issuance of water quality certifications, which are issued in conjunction with any federal permit (e.g., dredge-and-fill permits issued by the USACE under Section 404 of the CWA, described below). Refer to Section 4.3.2.b. in Section 4.3, *Biological Resources*, for a more detailed discussion on Section 401 of the CWA.

### *Clean Water Act Section 402*

Section 402 of the CWA established the National Pollutant Discharge Elimination System (NPDES) Regulations for stormwater and other pollutant discharges. Section 402 of the CWA regulates point-source discharges to surface waters and requires that all construction sites on an acre or greater of land, as well as municipal, industrial, and commercial facilities discharging wastewater or stormwater directly from a point source (e.g., pipe, ditch, or channel) into waters of the United States must obtain permission under an NPDES permit. Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams, and wetlands. All NPDES permits are written to ensure that the surface water receiving discharges will achieve specified water quality standards.

### *Clean Water Act Section 404*

Under Section 404 of the Clean Water Act, proposed discharges of dredged or fill material into waters of the United States require USACE authorization. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing

aquatic resources. Refer to Section 4.3.2.a. in Section 4.3, *Biological Resources*, for a more detailed discussion on Section 404 of the CWA.

## **State Regulations**

### *Porter-Cologne Act*

The Porter-Cologne Water Quality Control Act of 1969, also known as the California Water Code, requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect State waters. These criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. Basin Plans protect designated beneficial uses of State waters through the issuance of Waste Discharge Requirements and through the development of TMDLs. Anyone proposing to discharge waste that could affect the quality of the waters of the State must make a report of the waste discharge to the RWQCB or SWRCB as appropriate, in compliance with the Porter-Cologne Act.

### *Sustainable Groundwater Management Act*

In September 2014, Governor Brown signed legislation requiring that California's critical groundwater resources be sustainably managed by local agencies. The Sustainable Groundwater Management Act (SGMA) gives local agencies the power to sustainably manage groundwater, provides for the creation of regional Groundwater Sustainability Agencies (GSAs) and requires GSPs to be developed for medium- and high-priority groundwater basins, with plans immediately being developed for basins deemed in 'critical overdraft' (DWR 2020).

As discussed in detail under Section 2.3.3, *Existing Groundwater Conditions*, the Paso Robles Subbasin is designated by DWR as a high priority basin and a critically overdrafted basin and was required to develop and implement a GSP. The Paso Robles Subbasin GSP was published on November 13, 2019, and formally adopted by the four GSAs within the Paso Robles Subbasin area before the January 31, 2020 deadline required by SGMA.

### *DWR Bulletins 74 and 90*

DWR Bulletin 74-81 and 74-90 (required pursuant to California Water Code Sections 13800 – 13806) sets the minimum statewide standards for construction, alteration, maintenance, and destruction of wells within the State with the purpose of protecting groundwater quality. Local jurisdictions have the authority to adopt standards which meet or exceed the Bulletin 74-81 and 74-90 standards. DWR is currently in the process of revising the standards, which were last updated in 1991.

### *Construction General Permit*

The *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*, Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ (Construction General Permit), adopted by the SWRCB, regulates construction and land disturbance activities that includes clearing, grading, and excavation resulting in soil disturbance of at least one acre of total land area. The Construction General Permit authorizes the discharge of stormwater to surface waters from construction and land disturbance activities. The Construction General Permit requires that all developers of land where construction and land disturbance activities will occur over more than 1 acre do the following:

- Complete a Risk Assessment to determine pollution prevention requirements pursuant to the three risk levels established in the General Permit;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States;
- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) that specifies BMPs that will reduce pollution in stormwater discharges to the Best Available Technology/Economically Achievable/Best Conventional Pollutant Control Technology standards;
- Perform inspections and maintenance of all BMPs; and
- Conduct stormwater sampling, if required based on risk level.

To obtain coverage under the Construction General Permit, an applicant must electronically file all permit registration documents with the SWRCB prior to the start of construction. Permit registration documents must include a:

- Notice of Intent (NOI),
- Risk Assessment,
- Site map,
- SWPPP,
- Annual fee, and
- Signed certification statement.

Typical BMPs contained in SWPPPs are designed to minimize erosion during construction, stabilize disturbed areas, control sediment, and control pollutants from construction materials. The SWPPP must also include a discussion of the program to inspect and maintain all BMPs.

#### *Executive Order N-7-22*

On March 28, 2022, the Governor enacted an executive order to be in effect during states of emergency due to drought conditions that requires that before jurisdictions may permit the construction of new non-domestic groundwater wells, they must determine that extraction of groundwater from the proposed well is not likely to interfere with the production and functioning of existing nearby wells and not likely to cause subsidence that would adversely impact or damage nearby infrastructure. For wells within a medium or high-priority SGMA basin, well permitting jurisdictions must also ask the appropriate GSA to verify that groundwater extraction by the proposed well would not be inconsistent with any GSP management programs and would not decrease the likelihood of achieving a GSP sustainability goal. These requirements do not apply to permits for wells that will provide less than two (2) acre-feet per year of groundwater for individual domestic users or that will exclusively provide groundwater to public water supply systems as defined in Health and Safety Code Section 116275.

In accordance with the Executive Order, the San Luis Obispo County Health Agency – Environmental Health Services (EHS) has established a procedure to require water well construction permit applications for a non-exempt new or altered groundwater well to include a report signed by a California licensed Professional Geologist with a Certified Hydrogeologist specialty certification that concludes both that extraction of groundwater from the well (1) “is not likely to interfere with the production and functioning of existing nearby wells” and (2) “is not likely to cause subsidence that would adversely impact or damage nearby infrastructure.”

Additionally, EHS will not issue a water well construction permit for a non-exempt new groundwater well or alteration of an existing groundwater well located within the Salinas Valley-Paso Robles Area Subbasin, within the San Luis Obispo Valley Basin or within the Cuyama Valley Basin as identified by the Department of Water Resources without first obtaining from the relevant GSA verification regarding consistency with GSP sustainability goals.

Due to the recent enactment of this Executive Order, it is too speculative to discuss how or whether the GSAs will be able to make the required GSP consistency findings for new wells subject to the Executive Order.

## **Local Regulations**

### *San Luis Obispo County Integrated Regional Water Management Plan*

The San Luis Obispo County Integrated Regional Water Management Plan (IRWMP) was originally developed and adopted by the San Luis Obispo County Flood Control and Water Conservation District (SLOCFCWCD) in 2005. The 2019 IRWMP provides a comprehensive water resources management approach to manage the region's water resources. The IRWMP focuses on strategies that would improve sustainability of current or future water needs and plans for near-term water management. The IRWMP is updated on a regular cycle, typically every five years (SLOCFCWCD 2020).

### *Water Quality Control Plan*

The CCRWQCB has adopted a Basin Plan for their region of responsibility that delineates water resource area boundaries based on hydrological features. For the purposes of achieving and maintaining water quality protection, specific beneficial uses have been identified for each of the surface waters and groundwater management zones described in the Basin Plan. Once beneficial uses are designated, appropriate water quality objectives are established, and programs that maintain or enhance water quality are implemented to ensure the protection of beneficial uses.

The Basin Plan also established implementation programs to achieve water quality objectives to protect beneficial uses and require monitoring to evaluate the effectiveness of the programs. These objectives must comply with the State antidegradation policy (SWRCB Resolution No. 68-16), which is designed to maintain high-quality waters while allowing some flexibility if beneficial uses are not unreasonably affected.

The Basin Plan sets the TMDL limit for boron in the Estrella River; TMDLs for nitrogen, ammonia, and orthophosphates in the Lower Salinas River; and other water quality objectives within the Paso Robles Subbasin (CCRWQCB et al. 2019 and CCRWQCB 2018a, 2018b).

### *Central Coast Regional Water Quality Control Board's Irrigated Lands Program*

The CCRWQCB regulates irrigated agricultural discharges to protect surface and groundwater under Order No. R3-2021-0040, *General Waste Discharge Requirements for Discharges from Irrigated Lands* (also known as the Agricultural Order), most recently updated April 15, 2021. The Agricultural Order applies to owners and operators of irrigated land used for commercial crop production. It focuses primarily on the control of nitrates, pesticides, and other agricultural pollution and discharge to both groundwater and surface waters. It also mandates monitoring and reporting of groundwater and surface water quality trends. The Program requires dischargers to create, implement, and regularly update a Farm Water Quality Management Plan (Farm Plan) which

includes sections for irrigation and nutrient management, pesticide management, and water quality education. Requirements imposed upon growers and dischargers are tiered based on the overall risk the dischargers' operations present to water quality.

The 2021 Agricultural Order incorporated several programs and requirements which are still being 'phased-in' for dischargers and growers, including compliance reporting and groundwater protection requirements. These requirements are being phased in by geographic area and level of current water body impairment; all dischargers within the CCRWQCB will be required to comply with all aspects of the updated Agricultural Order by March 2028, though some must comply as early as January 1, 2022. The terms of the Agricultural Order would apply to new or extended crop plantings for production agriculture facilitated by the proposed planting ordinance as long as the crops were sold (or intended to be sold), the operator has a pesticide use permit, or tax forms for farming are filed.

#### *Paso Robles Subbasin Groundwater Sustainability Plan (GSP)*

The four GSAs responsible for developing a GSP for the Paso Robles Subbasin (City of Paso Robles GSA, Paso Basin – County of San Luis Obispo GSA, San Miguel Community Services District GSA, and Shandon – San Juan Water District GSA) developed a Memorandum of Agreement for GSP Development and Implementation and submitted the Paso Robles Subbasin GSP to DWR on November 13, 2019; DWR's response is detailed in *Initial Review By Department of Water Resources* immediately below. In November and December 2019, the four GSAs each adopted the Paso Robles Subbasin GSP, after an unanimously approved recommendation by the Paso Basin Cooperative Committee.<sup>1</sup> As discussed below, the GSP has not been approved by DWR.

#### *Sustainable Management Criteria*

A primary component of the GSP is the establishment of Sustainable Management Criteria (SMCs), which includes significant and unreasonable conditions, minimum thresholds, measurable objectives, and undesirable results determined for applicable SGMA sustainability indicators in the Paso Robles Subbasin, which include chronic lowering of groundwater levels, reduction in groundwater storage, degraded water quality, land subsidence, and depletion of interconnected surface water. As the extent of interaction between surface waters and groundwater is currently not fully understood in the Paso Robles Subbasin, SMCs have not been established for the depletion of interconnected surface water indicator, which has led to DWR not accepting the current form of the GSP (see below). In general, the objectives of the GSP are set to 'no long-term change' in total groundwater storage, groundwater elevation levels, or land surface elevations due to subsidence within the Paso Robles Subbasin, and the numeric SMCs are designed to quantify achievement of those goals.

#### *Projects and Management Actions*

Basin-wide management actions include monitoring and outreach, promoting best management practices for water use, promoting stormwater capture and recharge, and promoting voluntary fallowing of irrigated land. Area specific management actions may involve mandatory limitations on pumping in certain areas. The GSAs will establish a regulatory program to identify and enforce required pumping limitation as necessary to arrest persistent groundwater elevation declines in

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<sup>1</sup> The Paso Basin Cooperative Committee is composed of one member and one alternate member from each of the GSAs for the Paso Robles Groundwater Basin (County of San Luis Obispo, Shandon San Juan Water District, City of Paso Robles, and San Miguel Community Services District).

specific areas. The amount of mandatory pumping limitations is uncertain and will depend on the effectiveness and timeliness of voluntary actions by pumpers to limit pumping as well as the extent of the specific areas identified for mandatory limitations.

The GSP also identifies potential management actions to increase the water supply, including the San Miguel Community Services District recycled water project, the City of Paso Robles' blended water pipeline to deliver recycled water from the City's wastewater treatment plant and available water from the Nacimiento Reservoir to agricultural users east of Paso Robles, stormwater recharge projects, and a possible expansion of the Salinas Dam/Santa Margarita Reservoir to increase releases to the Salinas River. These initiatives are discussed in more detail in Section 4.13.1, *Setting*, of Section 4.13, *Utilities and Service Systems*.

### *Monitoring Requirements*

The GSP outlines current and future monitoring requirements and capabilities throughout the Paso Robles Subbasin and envisions use of the CCRWQCB Agricultural Order's monitoring locations and requirements as a tool for groundwater monitoring by the GSAs, as well as outlining a plan for increased monitoring requirements from small extractors in the future and the implementation of a fee schedule for monitoring services and the creation of regional monitoring co-operatives to ease individual monitoring burdens on small users under potential future regulatory structures.

### *Initial Review by Department of Water Resources*

On June 3, 2021 the DWR provided its initial review and evaluation of the submitted GSP. The DWR did not approve the Paso Robles Subbasin GSP, and instead listed a set of deficiencies with the plan as submitted along with a set of recommendations for addressing them. This review began a process of consultations with the GSAs to begin addressing the issues prior to DWR's issuance of a final determination. Issues that the DWR found with the GSP in general include:

- A lack of justification and explanation of the selected SMCs, especially the minimum thresholds and undesirable results;
- A lack of explanation of the effects of the selected SMCs on the interests of users of groundwater;
- A lack of justification for not developing SMCs for depletions of interconnected surface waters; and
- Inconsistent and conflicting depictions of the connections between surface and groundwaters in the Basin.

The DWR issued its final determination regarding the completeness of the GSP on January 21, 2022, and notified the GSAs that the GSP was determined to be incomplete. The GSAs have 180 days from that date to address any remaining deficiencies (i.e., until July 2022). Currently, DWR and the GSAs are in consultations to address the issues prior to final determination by DWR.

### *Implementation*

The Paso Robles Subbasin GSAs are in the process of applying for a DWR non-competitive grant for GSP implementation. There is \$7.6 million available for the Paso Robles Subbasin to be awarded in Summer 2022 with a three-year spending timeline. GSP implementation activities that may be funded by the DWR grant include development and implementation of a basin-wide well verification and registration program, an expanded basin monitoring program, the initial phases of the San

Miguel Community Services District and City of Paso Robles recycled water distribution (purple pipe) systems, and several technical studies to support moving additional projects and management actions forward, all contingent upon adoption by the GSAs.

### *San Luis Obispo County General Plan*

The San Luis Obispo County General Plan includes several goals and policies related to water use management and water quality. Two major sections dealing with these issues are the Agriculture and Conservation and Open Space Elements, along with the Inland Area - North County Area Plan. Language within the proposed planting ordinance would alter some of these goals and policies.

#### **AGRICULTURE ELEMENT**

The Agriculture Element contains several goals related to water resources that would apply within the PBLUMA area and to the proposed planting ordinance, including one that would be modified by the proposed ordinance, including:

**Goal AG-1d: Support County Agricultural Production.** Develop agricultural permit processing requirements that are rapid and efficient. Do not require permits for agricultural practices and improvements that are currently exempt. Keep the required level of permit processing for non-exempt projects at the lowest possible level consistent with the protection of agricultural resources and sensitive habitats.

**Goal AG-2b: Conserve Agricultural Resources.** Conserve the soil and water that are vital components necessary for a successful agricultural industry in this county.

Goal AG-1d would be modified by the proposed planting ordinance to specify that permits are not required for agricultural practices and improvements, with the exception of ministerial permits to regulate production agriculture irrigated with groundwater wells within the PBLUMA. See Appendix C for the proposed General Plan revisions.

#### **CONSERVATION AND OPEN SPACE ELEMENT**

The Conservation and Open Space Element contains several goals and policies related to water resources that would apply within the PBLUMA area, including:

##### **Goal WR 1: The County will have a reliable and secure regional water supply**

**Policy WR 1.1:** Protect Water Supplies. Continue to coordinate with water suppliers and managers to identify water management strategies to protect existing and secure new water supplies

**Policy WR 1.2:** Conserve Water Resources. Water conservation is acknowledged to be the primary method to serve the county's increasing population. Water conservation programs should be implemented countywide before more expensive and environmentally costly forms of new water are secured

**Policy WR 1.7:** Agricultural Operations. Groundwater management strategies will give priority to agricultural operations. Protect agricultural water supplies from competition by incompatible development through land use controls

**Policy WR 1.14:** Avoid Net Increase in Water Use. Avoid a net increase in non-agricultural water use in groundwater basins that are recommended or certified as Level of Severity II or III for water supply. Place limitations on further land divisions in



these areas until plans are in place and funded to ensure that the safe yield will not be exceeded

**Goal WR 2: The County will collaboratively manage groundwater resources to ensure sustainable supplies for all beneficial uses**

**Policy WR 2.2:** Groundwater Basin Reporting Programs. Support monitoring and reporting programs for groundwater basins in the region

**Policy WR 2.3:** Well Permits. Require all well permits to be consistent with the adopted groundwater management plans

Policy WR-1.14 would be modified by the proposed planting ordinance to specify that the avoidance of net increases in water use in groundwater basins that are certified at Level of Severity II or III for water supply are not applicable to net increases that are the result of actions to promote the agricultural use of the supply in a manner that is equitable and consistent with groundwater rights. See Appendix C for the proposed General Plan revisions.

*San Luis Obispo County Code*

**AGRICULTURAL OFFSET ORDINANCE (SECTION 22.30.204)**

The County Land Use Ordinance, Title 22, Section 22.30.204 (the 'Agricultural Offset Ordinance') was adopted on October 27, 2015 in response to declining groundwater levels in the Paso Robles Subbasin. The ordinance requires new and expanded irrigated production agriculture within the PBLUMA to use the same amount of groundwater or less than previously irrigated (within the past five years) and removed crops so as not to allow an increase in groundwater demand basin-wide, with a 5-AFY exemption for sites without previous irrigated crops outside of an "area of severe decline" where groundwater well monitoring indicates persistent decline in groundwater elevation levels.

See Section 2.3.4 for a more detailed explanation of the Agricultural Offset Ordinance, which expires on August 31, 2022. The County Board of Supervisors is scheduled to hold a hearing on July 12, 2022 to consider extending the existing Agricultural Offset Requirements to January 31, 2023 to coincide with the anticipated effective date of the proposed planting ordinance, assuming it is adopted by the Board of Supervisors in December 2022. The Agricultural Offset Ordinance would be replaced by the proposed planting ordinance as detailed in Section 2.5, *Project Characteristics*. Also see Appendix C for the proposed ordinance revisions.

**PASO ROBLES GROUNDWATER BASIN PLANNING AREA STANDARDS (SECTION 22.94.025)**

The County Land Use Ordinance, Title 22, Section 22.94.025 (the 'Paso Robles Groundwater Basin Planning Area Standards'), adopted September 25, 2012, prohibits General Plan amendments that would result in a net increase in water use for non-agricultural purposes and all land divisions except for public use or conservation purposes until the Paso Basin water supply is certified as Level of Severity I. The standards also require new discretionary non-agricultural development using groundwater to offset water use at a 2:1 ratio.

**COUNTY WELL CONSTRUCTION ORDINANCE (CHAPTER 8.40)**

Chapter 8.40 of the County Code (the 'Well Construction Ordinance') sets the standards for construction, modification, use, and destruction of both domestic and commercial groundwater

extraction wells within the County. With regards to construction of new wells, the ordinance specifies compliance with the Agricultural Offset Ordinance as a condition of permit issuance; therefore, the Well Construction Ordinance reinforces the Agricultural Offset Ordinance by ensuring that the physical source of groundwater extraction complies with the offset requirements.

Section 8.40.030 of the Well Construction Ordinance would be slightly modified under the proposed planting ordinance to require compliance with the new planting ordinance rather than the Agricultural Offset Ordinance as a condition of permit issuance for new well construction or modification. See Appendix C for the proposed ordinance revisions.

### **GROUNDWATER EXPORT ORDINANCE (CHAPTER 8.95)**

Chapter 8.95 of the County Code states that no person shall export groundwater underlying San Luis Obispo County without first obtaining a permit. An export permit shall only be approved if the County Director of Public Works finds that a proposed export would not cause or contribute to significant harmful impacts to groundwater resources within the County or on the groundwater basin. Any proposed exports shall not result in chronic lowering of groundwater levels or adversely affect the long-term ability for groundwater storage. Approved permits are valid until a year has passed since permit issuance.

Furthermore, the County Director of Public Works is required to incorporate a monitoring and/or reporting program for each export permit. County Code Section 8.95.080 states that the monitoring and/or reporting program should be of an appropriate size and extent to ensure that the permitted export of groundwater would not cause detrimental impacts on groundwater wells, levels, or associated vegetation and wildlife.

### **COUNTY GRADING ORDINANCE (CHAPTER 22.52)**

Chapter 22.52 of the County Code (the 'Grading Ordinance') establishes standards for grading, excavation, and earthwork. The Grading Ordinance requires implementing best management practices (BMPs) to minimize erosion and soil loss.

Pursuant to Section 22.52.070 of the ordinance, the following agricultural activities are exempt from obtaining a grading permit:

- Small agricultural projects involving 50 cubic yards or less of excavation for grading to create new fields, including vegetation removal and drainage improvements;
- Grading activities related to ongoing crop production on land that has been previously cultivated within the previous ten years, including relocating roads within existing fields; and
- Installation of agricultural water supplies, not including reservoirs.

The following activities are required to submit an Agriculture Grading Form to the County prior to commencement of any grading activities and comply with the standards and practices contained in the USDA Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG):

- New crop production on slopes up to 30 percent, including drainage improvements and vegetation removal, not including construction of new agricultural roads; and
- Construction of small agricultural reservoirs with a capacity of one acre-foot of water or less.

A grading permit from the County or Alternative Review by the NRCS or Resource Conservation District (RCD), both of which are subject to CEQA review, is required for agricultural activities not meeting the requirements for an exemption or Agricultural Grading Form, such as:

- Grading for new crop production on slopes over 30 percent;
- Construction of agricultural reservoirs with a capacity of over one acre-foot; and
- Grading of new agricultural roads.

Agricultural grading that qualifies for an exemption is still required to implement BMPs to reduce erosion and sedimentation associated with the grading activities.

### 4.8.3 Impact Analysis

#### **Significance Thresholds**

Per Appendix G of the *CEQA Guidelines*, a project would result in a significant impact to hydrology and/or water quality if it would:

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- c. 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 substantial erosion or siltation on- or off-site;
  - (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
  - (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; and/or
  - (iv) Impede or redirect flood flows;
- d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; and/or
- e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The Initial Study prepared for the proposed planting ordinance and circulated during the scoping period for the PEIR determined that impacts associated with Thresholds c(i) through c(iv) and d would be less than significant. These impacts are briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the impact analysis below discusses only Thresholds a, b, and e.

#### **Methodology**

Analysis of potential impacts from the proposed planting ordinance is based on the project assumptions, reasonable use scenarios, and estimates described in Section 2.5.2, *Proposed Project Activities*. As detailed in Section 2.5.2, the proposed planting ordinance is projected to result in an

increase of an additional 5,280 acres of currently underutilized agricultural land and an increase of up to 9,900 AFY in groundwater extractions by 2045. Appendix B provides details regarding the methodology for how the estimated acreage and groundwater usage per year were determined.

In order to determine if there is a possibility of impacts throughout this analysis, the effects of fully implementing the estimated changes in agricultural use by the ordinance's planning horizon of 2045 are considered. The magnitude of the change from the current baseline conditions is the basis for determination of levels of significance of potential impacts. Water quality, groundwater supply, and groundwater management information was reviewed, and the potential effects of the proposed planting ordinance were considered taking into account existing regulations that are applicable to agricultural operations in the PBLUMA.

## Project Impacts and Mitigation Measures

<b>Threshold a:</b> Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
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Impacts related to violation of water quality standards or waste discharge requirements from agricultural point source discharges are discussed below under Impact HYD-1. Impacts related to overall degradation of surface or groundwater are discussed below under Impact HYD-2.

**Impact HYD-1 THE PROPOSED PLANTING ORDINANCE WOULD INCREASE THE AMOUNT OF AGRICULTURAL ACREAGE IN IRRIGATED CULTIVATION WITHIN THE PBLUMA. CONSTRUCTION OF ACCESSORY INFRASTRUCTURE, GRADING AND SITE PREPARATION, AND OPERATION OF THE NEW AND EXPANDED AGRICULTURE FACILITATED BY THE PROPOSED PLANTING ORDINANCE WOULD BE REQUIRED TO COMPLY WITH EXISTING WATER QUALITY REGULATIONS TO ENSURE THAT POINT SOURCE DISCHARGES DO NOT VIOLATE WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS SET FORTH IN THE COUNTY CODE, CONSTRUCTION GENERAL PERMIT, AND THE AGRICULTURAL ORDER, OR DEGRADE SURFACE WATER QUALITY. AGRICULTURAL ACTIVITIES ENCOURAGED BY THE PROPOSED PLANTING ORDINANCE WOULD THEREFORE NOT VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS, AND WOULD NOT DEGRADE SURFACE WATER QUALITY. IMPACTS WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

As discussed under Section 4.8.2, *Regulatory Setting*, above, water quality regulations fall under a variety of interwoven federal, state, and local systems. In general, working authority to regulate water quality lies with the RWQCBs. The CCRWQCB's Basin Plan defines the water quality objectives throughout the entire Central Coast Region, including defining beneficial uses, identifying 303(d) impaired bodies and corresponding TMDLs, and identifying authorities for additional management actions and regulations. Constituents of concern identified within the Basin Plan for the Paso Robles Subbasin for groundwater quality include boron, gross alpha radiation, nitrate, sulfate, chloride, and TDS, while surface water concerns include pH, salinity, nitrate, pesticides, and others. In particular, nitrate pollution is an issue of concern due to the use of nitrogen-containing agricultural fertilizers exacerbating existing natural nitrate concentrations throughout the surface and groundwaters of the Basin, and agricultural runoff is a major source of the various pesticides that are of concern in the County's surface and groundwater (CCRWQCB et al. 2019). The various waste discharge requirements in the NPDES permits, such as the Construction General Permit and Agricultural Order, which regulate construction and agricultural activities in the PBLUMA include water quality standards with which point source discharges are required to comply.

## **Construction**

Grading for site preparation and construction of accessory infrastructure has the potential to increase erosion and sedimentation. In addition, chemicals, liquid products, and petroleum products (e.g., paints, solvents, and fuels) may be spilled or leaked. In addition, construction of groundwater wells has the potential to introduce pollutants to groundwater. There are several existing regulations for these types of activities to ensure that surface and groundwater are protected.

Chapter 22.52 of the San Luis Obispo County Code requires a grading permit for earthmoving activities, with the overarching intent to reduce erosion and sedimentation. However, pursuant to Section 22.52.070 of the County Code, many smaller agricultural grading activities with a lower potential to result in significant erosion impacts, such as small agricultural projects involving less than 50 cubic yards of excavation, grading for ongoing crop production, and installation of water supplies are exempt from obtaining a grading permit. New crop production on slopes up to 30 percent and construction of agricultural reservoirs with less than one acre-foot of capacity must submit an Agricultural Grading Form to the County prior to commencement of grading activities and implement BMPs to reduce the potential for erosion and sedimentation. Grading for new crop production on slopes greater than 30 percent, construction of agricultural reservoirs with greater than one acre-foot of capacity, and grading for agricultural roads must obtain a County grading permit and implement BMPs to reduce the potential for erosion and sedimentation.

In addition, any grading or construction activities that exceed one acre would be required to obtain coverage under the Construction General Permit. The Construction General Permit requires preparation and implementation of a SWPPP to control the discharge of pollutants, including sediment, into local surface water drainages. The SWPPP would specify the BMPs and storm water monitoring required to ensure stormwater runoff does not exceed water quality standards specified in the Construction General Permit. BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site, and Good Housekeeping BMPs to prevent spills, leaks, and off-site discharge of construction debris and waste.

The County grading review process, compliance with County grading standards, and compliance with the Construction General Permit would ensure that agricultural grading and construction activities with the greatest potential to result in water quality would implement BMPs to reduce impacts.

In addition, pursuant to County Code Chapter 8.40, a County Water Well Construction Permit would be required for construction of groundwater wells. Groundwater wells would be required to be installed by a licensed well driller and would be required to be constructed in accordance with the requirements of DWR Bulletins 74-81 and 74-90, which include standards to ensure that the construction of the well would not result in deterioration of groundwater quality.

Finally, as discussed in more detail in Section 4.3, *Biological Resources*, agricultural operations encouraged by the proposed planting ordinance that would directly impact jurisdictional waters would require a Section 404 permit from USACE, a Section 1602 permit from CDFW, and/or a Section 401 permit from the CCRWQCB. These permits would specify additional BMPs to be implemented to protect water quality and ensure compliance with all waste discharge requirements in order to ensure the water quality standards set by the CCRWQCB on the waste discharge requirements are not exceeded. Compliance with existing regulations, which require implementation of BMPs, would ensure that grading for site preparation and construction of accessory infrastructure would not violate water quality standards or waste discharge requirements and would not degrade surface water quality. Impacts would be less than significant.

## Operation

Operation of the new and expanded agricultural uses would be required to comply with the waste discharge requirements contained within the Agricultural Order. The Agricultural Order regulates all discharges from commercial agricultural operations, including point source discharges to surface waters and discharge or infiltration from detention ponds and drainage basins. The Agricultural Order sets out standards for pollutant control, including nitrate and sediment control, and mandates reporting and monitoring requirements and development of a Farm Plan that demonstrates compliance with water quality standards. The Agricultural Order requires dischargers to create, implement, and regularly update a Farm Plan and implement irrigation and nutrient management, pesticide management, sediment and erosion management, and water quality education. The Agricultural Order also requires monitoring and reporting of groundwater and surface water quality to ensure point source discharges from agriculture do not exceed the water quality standards specified in the Agricultural Order. Compliance with the Agricultural Order would ensure that operation of the new or expanded agriculture would not violate water quality standards or waste discharge requirements and would not degrade surface water quality. Impacts would be less than significant.

## Mitigation Measures

Impacts would be less than significant and no mitigation measures are required.

## Significance After Mitigation

Impact would be less than significant and no mitigation is required.

**Impact HYD-2 THE PROPOSED PLANTING ORDINANCE IS PROJECTED TO INCREASE THE AMOUNT OF AGRICULTURAL ACREAGE IN USE FOR IRRIGATED CROP PRODUCTION WITHIN THE PBLUMA, WHICH WOULD RESULT IN CORRESPONDING INCREASES IN FERTILIZER USE, RUNOFF AND DISCHARGE, AND FARM WASTE. WHILE INDIVIDUAL DISCHARGES WILL BE REQUIRED TO COMPLY WITH WATER QUALITY REGULATIONS AND WATER QUALITY STANDARDS, THE COMBINATION OF DECREASING WATER LEVELS AND INCREASING POLLUTANT AMOUNTS THROUGHOUT THE PBLUMA MAY DEGRADE GROUNDWATER QUALITY. THESE IMPACTS WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

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The proposed planting ordinance is likely to encourage the use of agricultural land which is currently underutilized due to the agricultural offset restrictions of the existing Agricultural Offset Ordinance and the 'areas of severe decline' exception detailed in Section 22.30.204. Specifically, this means that with the proposed planting ordinance small agricultural operations would be permitted the use of up to 25 AFY of groundwater for irrigation, without any restriction based on location within the PBLUMA. As described in Appendix B to this PEIR, the proposed planting ordinance is anticipated to increase irrigated agricultural cultivation by 5,280 acres and groundwater extraction by 9,900 AFY by 2045.

The proposed planting ordinance would increase agricultural operations and groundwater extraction within the PBLUMA, which, when combined, could potentially impact groundwater quality within the PBLUMA. Such impacts would occur from increased pollutant concentrations from the expanded agricultural activities and decreased groundwater levels (which concentrates pollutants present in groundwater), which can combine to degrade surface water and groundwater as detailed below. Refer to Impact HYD-3 for a detailed discussion of groundwater level declines that could occur as a result of the proposed planting ordinance.

**Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance**

Only crop plantings that would be “water neutral” would be eligible for a ministerial planting permit under the proposed ordinance. In this context, “water neutrality” refers to a balanced water demand inventory, where new crops are replacing previous crops and do not result in an overall increase in estimated water demand from groundwater wells within the PBLUMA. Such changes would occur on agricultural operations with existing Farm Plans under the Agricultural Order and would not be expected to decrease groundwater levels or increase pollutant concentrations, and would therefore not substantially degrade water quality. However, agricultural users that are exempt from acquiring a planting permit (those using less than 25 AFY for irrigation) would be exempt from water neutrality requirements, and increased groundwater pumping combined with increased pollutants from the expanded agricultural operations for these exempt users could have impacts on groundwater quality within the PBLUMA, as described below.

Individual agricultural sites would have to comply with the water quality standards specified in the Construction General Permit and Agricultural Order to ensure that point source discharges specified in the permits are not exceeded. While planting permit applicants would be required to comply with existing regulations, including the Construction General Permit and Agricultural Order, and create and implement SWPPPs and Farm Plans, the overall effect of increased agricultural plantings would be an increase in pollutants of concern (such as construction-related pollutants, pesticides, and fertilizers) being used within the PBLUMA. The requirements of the Construction General Permit and Agricultural Order, as discussed above, would serve to reduce the impacts from point source discharges from individual operations at a localized level, but would not (and cannot) eliminate discharge of pollutants entirely. The CCRWQCB has identified multiple issues with groundwater quality within the Basin, including toxicity and nitrate levels, that the Agricultural Order is designed to regulate. With increased agricultural operations, total volume of pesticides and fertilizers being applied to crops as fertilizer would increase, and thus the amount of pesticides and nitrates entering the Basin’s groundwater supply through infiltration to groundwater would increase. Increased nutrient and pesticide discharge groundwater is expressly stated as a major concern in Section 1A(4) and throughout the Background and Purpose section of the Agricultural Order (CCRWQCB 2018a).

As amounts of nitrate, pesticides, and other agricultural contaminants increase within the Basin, groundwater extraction by new agricultural users exempt from permitting requirements would also increase. Together, the potential increase in fertilizer and pesticide transportation to the groundwater combined with decreased groundwater levels from increased groundwater extraction could increase pollutant concentrations. The combination of increased pollutants and increased extraction would have impacts through both the lowering of groundwater levels (with corresponding increases in the existing concentrations of constituents of concern) and the drawing down of shallow, agriculturally-contaminated groundwater into deeper aquifers through the creation of localized depressions as the deeper water is pumped. Studies have consistently found links between groundwater depletion and degradation of groundwater quality; a 2021 study conducted in the Central Valley found groundwater degradation to occur at higher rates with increasing extraction, and determined this linked degradation accelerates further during drought (Levy et al. 2021).

Due to the following factors, it is difficult to determine the potential impacts of the proposed ordinance on groundwater quality within the PBLUMA:

- Inability to predict with any certainty the increases of potential pesticide and fertilizer use;
- Lack of scientific evidence of connection between groundwater extraction and quality degradation; and

- Inability to accurately predict the changes in groundwater levels that would occur because of the proposed planting ordinance.

Nonetheless, it can be reasonably expected that impacts to groundwater quality would occur, and the scale of the impacts would in general be linked to the scale of agricultural uses allowed under the proposed 25-AFY exemptions. Therefore, implementation of the proposed planting ordinance is anticipated to result in impacts to groundwater quality throughout the PBLUMA, and such impacts would be significant.

Although degradation of groundwater quality would potentially occur, impacts related to surface water quality would be less than significant as detailed in Impact HYD-1. Recent work by Todd Groundwater to address GSP deficiencies includes characterization of the surface water-groundwater interface in the Paso Robles Subbasin. Based on the Todd Groundwater Study, there is no evidence that surface water is connected to the Paso Robles Formation Aquifer. Therefore, there is no evidence that degradation of groundwater quality resulting from the planting ordinance would degrade surface water quality.

### **Mitigation Measures**

Refer to Mitigation Measures UTIL-1 and UTIL-2 in Section 4.13, *Utilities and Service Systems* (Impact UTIL-2).

### **Significance After Mitigation**

With compliance with the regulatory frameworks discussed in the *Regulatory Setting* and discussed under Impact HYD-1, especially the relevant NPDES permits such as the Agricultural Order, impacts to groundwater quality in the County would be reduced to the greatest amount feasible. Mitigation Measures UTIL-1 and UTIL-2, which require well metering and groundwater usage reporting and preparation of a hydrology report to demonstrate that groundwater levels at nearby wells would not be affected, would reduce impacts related to groundwater supplies and groundwater levels. However, the planting ordinance would allow up to 25 AFY of groundwater extraction per site which would result in decline of groundwater levels and could significantly affect groundwater quality. There is no additional feasible mitigation available beyond the requirements of the existing regulations, and UTIL-1 and UTIL-2, to reduce impacts to groundwater quality from declining groundwater levels (refer to the mitigation measure section of Impact UTIL-2 in Section 4.13, *Utilities and Service Systems*, for a full discussion of proposed mitigation and infeasibility of additional mitigation). Impacts to groundwater quality would remain significant and unavoidable.



**Threshold b:** Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impacts related to decrease of groundwater supplies are discussed below under Impact HYD-3. Impacts related to interference with groundwater recharge are discussed below under Impact HYD 4.

**Impact HYD-3 IMPLEMENTATION OF THE PROPOSED PLANTING ORDINANCE WOULD INCREASE THE AMOUNT OF ACREAGE UTILIZED FOR IRRIGATED AGRICULTURE WITHIN THE PBLUMA AND WOULD INCREASE THE AMOUNT OF GROUNDWATER EXTRACTED FROM THE PASO ROBLES SUBBASIN, WHICH IS CURRENTLY IN SEVERE OVERDRAFT. SUCH WITHDRAWALS WOULD BE REQUIRED TO COMPLY WITH FUTURE MANAGEMENT ACTIONS DEVELOPED UNDER THE GSP. HOWEVER, AT THIS TIME, THERE ARE NO SUCH ACTIONS AVAILABLE THAT COULD REDUCE THE POTENTIAL OF WITHDRAWALS TO FURTHER EXACERBATE THE OVERDRAFT OF THE PASO ROBLES SUBBASIN. THE INCREASED GROUNDWATER EXTRACTION WOULD DECREASE GROUNDWATER SUPPLIES SUCH THAT SUSTAINABLE GROUNDWATER MANAGEMENT OF THE BASIN WOULD BE IMPEDED, AND THESE IMPACTS WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

The proposed planting ordinance would allow an increase in groundwater extraction and increase in use of agricultural land which is currently underutilized due to the restrictions of the existing Agricultural Offset Ordinance. The potential impacts of this increase in agricultural production and groundwater extraction to groundwater supplies and sustainable management of the Paso Robles Subbasin are discussed below.

As previously discussed, the PBLUMA overlies most of the Paso Robles Subbasin, which is designated as critically overdrafted by DWR and for which a GSP was developed in 2019. The GSP sets out a goal of achieving ‘no net change’ in groundwater storage, which will require a combination of management actions, such as increased water supply, groundwater recharge, voluntary conservation, and potentially mandatory pumping reductions in specific areas (County of San Luis Obispo et al. 2020). As discussed in more detail in Section 4.13, *Utilities and Service Systems*, current groundwater extraction exceeds available groundwater storage, which is resulting in overdraft of the Paso Robles Subbasin.

The proposed planting ordinance would require a planting permit for new and expanded planting of crops irrigated from groundwater wells within the PBLUMA. Agricultural plantings that receive planting permits must demonstrate that such plantings are “water neutral” and would not contribute to overdraft of the Paso Robles Subbasin.

However, new or expanded irrigated crop plantings with a groundwater demand of 25 AFY or less would be exempt from the planting permit. These exemptions would increase groundwater annual extraction by approximately 450 AFY, for a total increase of 9,900 AFY by 2045 (see estimates in Appendix B). Further, the proposed planting ordinance would allow exempt groundwater extractions in the “area of severe decline,” defined in the Agricultural Offset Ordinance where groundwater well monitoring data shows persistent historic decline in groundwater elevation levels. The increase in groundwater extraction resulting from the planting ordinance would exacerbate the decline in groundwater elevation levels and could negatively affect the productivity of groundwater wells near new and expanded irrigated plantings. If groundwater levels were to decline to a level below the depth of nearby wells, the wells could no longer be used to extract groundwater, which would disrupt water supply to the affected properties.

As discussed in greater detail in Impact UTIL-2 in Section 4.13, *Utilities and Service Systems*, agricultural operations in the PBLUMA implement water conservation measures to ensure the efficient use of groundwater supplies. Even with implementation of water conservation practices, the proposed ordinance would increase groundwater extraction in the PBLUMA. The water efficiency measures that would be implemented by planting permit applicants would not reduce the maximum water use allowed per site. This increase in groundwater extraction of 450 AFY each year (total increase of 9,900 AFY by 2045) would exacerbate the decline in groundwater storage in the Paso Robles Subbasin, which could negatively affect the available groundwater supplies in the Paso Robles Subbasin, which could impede sustainable water management in the PBLUMA.

The primary tool provided to GSAs in groundwater management areas by SGMA is the ability to set mandatory pumping limitations. Currently, the Paso Robles Subbasin GSAs have no such limitations in place. The GSP envisions a period of data collection and research occurring over the next several years prior to initiating any regulation of pumping limits. This means that there is no current regulatory structure in place to prevent the severe overdraft condition from worsening under implementation of the proposed planting ordinance. As discussed in Section 4.8.2, *Regulatory Setting*, above, DWR has not yet accepted the GSP and is currently in consultation with the GSAs to address deficiencies prior to the July 2022 deadline for submittal of a revised GSP that meets the DWR requirements for a determination of completeness. Regardless, the decrease in groundwater supplies resulting from proposed planting ordinance could impede the future sustainable groundwater management within the PBLUMA. Impacts would be potentially significant.

### **Mitigation Measures**

Refer to Mitigation Measures UTIL-1 and UTIL-2 in Section 4.13, *Utilities and Service Systems* (Impact UTIL-2).

### **Significance After Mitigation**

Mitigation Measure UTIL-1, which requires well metering and groundwater usage reporting, would help ensure that the increased groundwater pumping allowed by the planting ordinance is consistent with agricultural BMPs for irrigation efficiency. This mitigation measure would be consistent with the project objective to conserve groundwater resources in the PBLUMA for use by production agriculture in a manner that is equitable and consistent with groundwater rights. Mitigation Measure UTIL-2, which requires preparation of a hydrology report to demonstrate that groundwater levels at nearby wells would not be affected by proposed new plantings, would reduce localized impacts to groundwater levels. Regardless, the planting ordinance would allow up to 25 AFY of groundwater extraction per site, which would further increase water extraction from a currently overdrafted subbasin. There is no additional feasible mitigation available beyond UTIL-1 and UTIL-2 to reduce impacts to water supply and sustainable groundwater management from declining groundwater levels (refer to the Mitigation Measure section of Impact UTIL-2 in Section 4.13, *Utilities and Service Systems*, for a full discussion of proposed mitigation and infeasibility of additional mitigation). As a result, impacts to available groundwater supply and sustainable groundwater management in the Paso Robles Subbasin would remain significant and unavoidable.

**Impact HYD-4 THE PROPOSED PLANTING ORDINANCE WOULD NOT SUBSTANTIALLY INCREASE IMPERVIOUS SURFACES OR OBSTRUCT NATURAL OR ARTIFICIAL GROUNDWATER PERCOLATION OR RECHARGE. THEREFORE, THE PROPOSED PLANTING ORDINANCE WOULD NOT INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE. IMPACTS WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

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Increases in impervious surface area increase stormwater runoff, which in turn decreases the amount of stormwater that can infiltrate into the groundwater table. Agricultural development facilitated by the planting ordinance would not increase the amount of impervious surface area within the proposed PBLUMA area such that percolation and recharge of groundwater from natural sources such as rainfall would be impeded. As detailed in Appendix B, the proposed planting ordinance would not facilitate construction of large impervious buildings, such as worker housing or accessory structures, such as greenhouses or nurseries. Most of the new and expanded agricultural use facilitated by the proposed planting ordinance would be new crop types on previously farmed or disturbed land which would not substantially increase impermeable surfaces. The majority of the agricultural infrastructure that would be facilitated by the planting ordinance, such as groundwater wells, plumps, irrigation pipelines, and agriculture ponds/reservoirs would result in minimal to no increase in impervious surface areas. Construction of agricultural roads could compact soils and reduce infiltration. However, the area of any agricultural roads would be minimal compared to the overall size of the agricultural property since they are typically only located along the perimeter of the cultivated areas. In addition, construction of agricultural roads would have to comply with the Agricultural Order, which requires drainage improvements to manage on-site stormwater runoff, as well as management of stormwater runoff from agricultural fields with more than 22,500 square feet (0.5 acre) of impermeable surfaces, to reduce stormwater runoff from impervious areas. Many of the BMPs to manage stormwater runoff, such as swales or basins, also increase infiltration. As a result, any impermeable surface that is created would be small, localized to each operation, and would not obstruct rainfall infiltration, only potentially relocate it over a small area of permeable agricultural land. Therefore, the proposed planting ordinance would not substantially impede groundwater recharge and impacts would be less than significant.

### **Mitigation Measures**

Impacts would be less than significant and no mitigation measures are required.

### **Significance After Mitigation**

Impacts related to groundwater recharge would be less than significant without mitigation.

**Threshold e: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

Impacts related to conflict with or obstruction of a water quality control plan is discussed below under Impact HYD-5. Impacts related to conflict with or obstruction of a sustainable groundwater management plan is discussed below under Impact HYD-6.

**Impact HYD-5 THE PROPOSED PLANTING ORDINANCE IS PROJECTED TO INCREASE THE AMOUNT OF IRRIGATED AGRICULTURAL ACREAGE IN USE AND GROUNDWATER EXTRACTION WITHIN THE PBLUMA, WITH CORRESPONDING INCREASES IN FERTILIZER USE, RUNOFF AND DISCHARGE, AND DECREASED GROUNDWATER LEVELS WHICH, WHEN COMBINED, MAY ADVERSELY AFFECT GROUNDWATER QUALITY. IMPACTS TO GROUNDWATER QUALITY WITHIN THE BASIN WOULD BE POTENTIALLY INCONSISTENT WITH THE GOALS REDUCING WATER QUALITY POLLUTION, ACHIEVING WATER QUALITY OBJECTIVES, AND MAINTAINING BENEFICIAL USES IDENTIFIED IN THE BASIN PLAN, AND SUCH IMPACTS WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

As discussed under Impact HYD-2, above, the proposed planting ordinance would have significant impacts to overall groundwater quality throughout the PBLUMA from a combination of increased agricultural pollutants and decreased groundwater levels. The expanded agricultural activities facilitated by the proposed planting ordinance would result in an overall increase in agricultural pollutant concentrations within the PBLUMA, especially nitrates and pesticides. Such increases would be potentially inconsistent with the goals of the Basin Plan to reduce water quality pollution, achieve water quality objectives, and maintain beneficial uses. All agricultural activities facilitated by the proposed planting ordinance would be required to comply with the Agricultural Order, which regulates agricultural-related water pollutants and includes a tiered plan for reducing agricultural-related pollutants over time for the next several decades. The Agricultural Order does not prevent or prohibit fertilizer and pesticide use and, although agricultural activities on individual planting sites would not be expected to dramatically increase water quality pollutants in a localized area, the overall water quality impact of approximately 5,280 acres of new agricultural activities combined with decreased groundwater levels from up to 9,990 AFY throughout the Paso Robles Subbasin by 2045 would be anticipated to be significant and unavoidable. The degradation of groundwater quality resulting from the expanded agriculture and groundwater extraction could delay achievement of the water quality objectives identified in the Basin Plan and compromise the beneficial uses of water resources within the Paso Robles Subbasin. Thus, impacts related to conflict with or obstruct implementation of a water quality control plan would be potentially significant.

### **Mitigation Measures**

Refer to Mitigation Measures UTIL-1 and UTIL-2 in Section 4.13, *Utilities and Service Systems* (Impact UTIL-2).

### **Significance After Mitigation**

The existing Agricultural Order would serve to limit the impacts of individual agricultural operations facilitated by the proposed planting ordinance to the goals of the Basin Plan, including serving as regulatory control over the amount of fertilizers and pesticides being utilized and agricultural pollutants potentially discharged or infiltrating into surface and groundwater within the PBLUMA. With compliance with the existing regulations, including the Agricultural Order, impacts to groundwater quality in the County would be reduced to the greatest amount feasible. Mitigation Measures UTIL-1 and UTIL-2, which require well metering and groundwater usage reporting and preparation of a hydrology report to demonstrate that groundwater levels at nearby wells would

not be affected, would reduce impact related to groundwater supplies and groundwater levels. However, the planting ordinance would allow up to 25 AFY of groundwater extraction per site which would result in decline of groundwater levels, which could significantly affect groundwater quality. There is no additional feasible mitigation available beyond the requirements of the existing regulations, and UTIL-1 and UTIL-2, to reduce impacts to groundwater quality from declining groundwater levels (refer to the mitigation measure section of Impact UTIL-2 in Section 4.13, *Utilities and Service Systems*, for a full discussion of proposed mitigation and infeasibility of additional mitigation). Impacts would remain significant and unavoidable.

**Impact HYD-6 FUTURE COMPLIANCE WITH MANAGEMENT ACTIONS UNDER THE GSP ARE EXPLICITLY INCLUDED IN THE ORDINANCE AND GENERAL PLAN LANGUAGE AS PART OF THE PROPOSED PLANTING ORDINANCE; THUS, THE PROPOSED PLANTING ORDINANCE WOULD NOT OBSTRUCT IMPLEMENTATION OF THE GSP OR ANY OTHER SUSTAINABLE GROUNDWATER MANAGEMENT PLANS. HOWEVER, THE INCREASED GROUNDWATER EXTRACTION ALLOWED BY THE PROPOSED PLANTING ORDINANCE WOULD BE POTENTIALLY INCONSISTENT WITH THE GSP'S GOALS AND WATER BALANCE PROJECTIONS AND WOULD INCREASE THE BURDEN ON GSP MANAGEMENT ACTIONS. IMPACTS WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

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Although approved by the GSAs, the Paso Robles Subbasin GSP has not been approved by DWR. Because there are no approved GSPs for the Paso Robles Subbasin, the proposed planting ordinance would not conflict with or obstruct implementation of an approved GSP. Therefore, this section analyzes project consistency with the January 31, 2020 GSP which was approved by the GSAs but not approved by DWR.

The Paso Robles Subbasin GSP includes a set of proposed future management actions that will serve to bring the overdrafted basin into a sustainable condition. One of the primary tools that SGMA provides to GSAs for groundwater management is the ability to set and enforce mandatory limits on groundwater extraction, and although there are currently no such limitations in place, the GSP explicitly envisions an eventual regulatory scheme to do so.

The GSP sets out a framework for eventual stability in groundwater levels that begins with data collection and implementation of increased monitoring requirements to gain a better understanding of groundwater behavior and influences in the Paso Robles Subbasin, followed by basin-wide and area-specific management actions.

Section 22.30.205(K) of the proposed planting ordinance specifies that the planting ordinance does not preclude or supersede regulatory authorities over groundwater usage or give growers applying for a planting permit or exemption any water rights or ability to pump outside of any applicable regulatory scheme. Therefore, the ability of the GSAs to impose monitoring requirements on extractors who are exempt from the planting permit requirements under the proposed planting ordinance, and to utilize those monitoring results to set withdrawal limitations as part of area-specific pumping reduction actions implemented under SGMA in the future is not diminished by the proposed ordinance. Further, virtually all agriculture established using the 25 AFY exemption would still be required to comply with the Agricultural Order's requirements for groundwater monitoring and reporting, including the requirement for irrigation application and discharge reporting, and the GSP envisions utilizing that monitoring data as part of its overall monitoring program. Therefore, if the GSAs elect to implement mandatory groundwater pumping restrictions, information on water use by agriculture facilitated by the planting ordinance will likely be available for the GSAs to use in promulgating those regulations. In addition, agriculture in the PBLUMA would be required to comply with any groundwater pumping restrictions enacted as part of the GSP.

As discussed in greater detail in Impact UTIL-2 in Section 4.13, *Utilities and Service Systems*, the agricultural operations in the PBLUMA generally implement several water conservation and efficient irrigation practices to ensure the efficient use of groundwater supplies. These standard practices are consistent with the GSP's goal of encouraging pumpers to implement best management practices for effective and efficient groundwater use. It can be reasonably assumed that agricultural activities facilitated as part of the planting ordinance would continue to implement best management practices as encouraged by the GSP.

As nothing within the proposed planting ordinance would serve to impede eventual management actions undertaken by the GSAs under the framework of the GSP once it is given final approval by DWR, there would be no impact to such actions as a result of the planting ordinance. Agricultural production facilitated by the planting ordinance would not be exempt from future management actions undertaken by the GSAs and thus would not conflict with any such actions. Therefore, the proposed planting ordinance would not obstruct the eventual implementation of the GSP.

Although the planting ordinance would not obstruct implementation of the GSP, the increased groundwater extraction resulting from the proposed ordinance would be potentially inconsistent with the GSP's primary goal to achieve 'no net change' in groundwater storage with the groundwater modeling assumptions used in the GSP for purposes of calculating a water budget and increase the burden on GSP management actions. The increased groundwater extraction that would be allowed by the planting ordinance would increase the amount of groundwater storage deficit the GSP programs have to offset, either through increased supply or pumping reductions. The GSP potential management actions to increase water supply would not be sufficient to address the projected groundwater storage deficit based on the 2020 GSP modeling that assumed no net increase in agricultural water use for purposes of calculating a water budget. Because no net increase in agricultural water use was assumed, area-specific pumping reduction mandates would be required to achieve basin sustainability. Therefore, the planting ordinance would likely increase the cutbacks required for existing users (i.e., mostly agricultural operations in the PBLUMA) in the GSP area-specific pumping reduction program. Finally, the GSP groundwater projections used for water balance calculations do not account for the groundwater extractions that would result from implementation of the planting ordinance. SGMA requires a groundwater model update for the GSP every five years. The next update is scheduled for 2025 and could account for increased groundwater extractions within the PBLUMA. Impacts related to inconsistency with the GSP would be potentially significant.

### **Mitigation Measures**

Refer to Mitigation Measures UTIL-1 and UTIL-2 in Section 4.13, *Utilities and Service Systems* (Impact UTIL-2).

### **Significance After Mitigation**

As discussed under Impact HYD-3, above, Mitigation Measures UTIL-1 and UTIL-2 require well metering, groundwater usage reporting, and preparation of a hydrology report to demonstrate that groundwater levels at nearby wells would not be affected. These mitigation measures would reduce impacts related to groundwater supplies. Even with these mitigation measures, the planting ordinance would allow up to 25 AFY of groundwater extraction per site which would further increase water extraction from a currently overdrafted subbasin which would be potentially inconsistent with the sustainable groundwater management goals of the GSP. In addition, the GSP modeling used for water balance calculations may need to be updated to account for the increased

groundwater extraction resulting from the planting ordinance. There is no additional feasible mitigation to reduce impacts related to potential inconsistencies with the GSP. Therefore, impacts would remain significant and unavoidable.

#### 4.8.4 Cumulative Impacts

Increased groundwater extractions resulting from the planting ordinance, when combined with groundwater extractions for future cumulative development, have the potential to result in significant cumulative impacts to groundwater storage and groundwater quality.

County projections of planned buildout through January 31, 2045 show further population growth as detailed in Table 3-1 in Section 3.3, *Cumulative Development*. As summarized in Table 4.13-1 in Section 4.13, *Utilities and Service Systems*, the planned population growth is anticipated to result in an additional 1,686 AFY of non-agricultural groundwater extraction by 2045; this groundwater use combined with the 9,900 AF increase in agricultural extraction resulting from the planting ordinance would increase total groundwater use by 12,036 AFY. However, future area-specific mandatory pumping reductions would be required by the GSP to off-set groundwater supply deficits and exacerbated declining groundwater elevation levels from increased groundwater extractions. Such pumping restrictions may contribute to the inability of cumulative projects, including agricultural operations, in the PBLUMA to be implemented due to the lack of water supply. However, the GSP pumping restrictions would help to reduce overdraft of the Basin within the PBLUMA. Nonetheless, the cumulative groundwater extraction would further exacerbate the existing overdraft and water quality degradation within the PBLUMA, and cumulative impacts related to hydrology and water quality would be significant. Given that the agricultural operations allowed by the proposed planting ordinance would account for 86 percent of the total increase in groundwater extraction, the proposed planting ordinance would result in a cumulatively considerable contribution to significant cumulative impacts related to degradation of groundwater quality, decreased groundwater supplies, and potential inconsistencies with a groundwater management plan.

Future cumulative development would be required to comply with existing regulations governing water quality, including the County grading standards, Construction General Permit, and Phase II Municipal Separate Storm Sewer System (MS4) Program, which require implementation of BMPs during construction and operation to reduce pollutants of concern in stormwater runoff. Expanded agriculture facilitated by the proposed planting ordinance would also comply with existing regulations governing water quality, including the County grading standards, Construction General Permit, and Agricultural Order, and would implement of BMPs during construction and operation to reduce pollutants of concern in stormwater runoff. Compliance with existing regulatory requirements and implementation of BMPs would ensure that cumulative impacts to surface water quality would be less than significant.

Cumulative impacts that could reasonably be projected to occur with implementation of the proposed planting ordinance would also include effects on the neighboring Salinas Valley-Upper Valley Aquifer which is connected hydrologically to the Paso Robles Subbasin. Although the Salinas Valley-Upper Valley Aquifer has a lower priority of 'Medium' under SGMA it is also in overdraft and the separation between the two basins is primarily political and not hydrological (DWR 2003, 2019). It is currently unknown how the two basins' states of overdraft could affect each other, but potential increases in overdraft or decreases in groundwater quality in either basin could be reasonably expected to have some level of impacts across the county line used as a 'border' between them, including impacts to water quality, water quality control plans, and sustainable groundwater management plans in effect in the Salinas Valley Upper Valley Aquifer from ground

water contamination created by the proposed planting ordinance, and such cumulative impacts to groundwater quality would be significant and unavoidable.



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## 4.9 Land Use and Planning

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This section evaluates the potential impacts associated with land use and planning, focusing on potential impacts related to conflict with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Impacts associated with physically dividing an established community were determined to be less than significant in the Initial Study prepared for the proposed project (see Appendix A and Section 4.14, *Effects Found Not to Be Significant*), and therefore, are not further analyzed in this section.

### 4.9.1 Setting

#### **Regional Land Use**

The PBLUMA is located within the County of San Luis Obispo, which occupies 3,160 square miles of both urban and rural land uses. Regionally, the County is moderately urbanized, but remains a generally low density, rural and agricultural area of California that has grown as a major tourist destination over the years. The County is topographically diverse, with mountains, agricultural valleys, and distinct urban areas, such as the cities of Paso Robles and San Luis Obispo.

#### **Project Site Setting**

The PBLUMA encompasses 313,661 acres located within unincorporated San Luis Obispo County, including the Shandon-Carrizo (North), El Pomar-Estrella, Salinas River, Las Pilitas, Los Padres (North), Adelaida, and Nacimiento Sub Areas of the North County Planning Area and the unincorporated communities of Shandon, San Miguel, Creston, and Whitley Gardens. The PBLUMA excludes, but encircles, the City of Paso Robles.

The PBLUMA is bordered by Monterey County and agricultural land uses to the north; grazing land to the east; agricultural uses, single-family residences, and the Los Padres National Forest to the south, and agricultural uses, single-family residences, Camp Roberts, the City of Paso Robles, and the City of Atascadero to the west.

The County's General Plan mostly designates area within the PBLUMA as Agriculture, Rural Lands, and Residential Rural. Existing land uses in the PBLUMA include agricultural, residential, industrial, and commercial uses, as well as vacant, undeveloped land.

### 4.9.2 Regulatory Setting

#### **State Regulations**

##### *California Government Code*

Government Code Section 65300 requires that each county and city in the State of California adopt a comprehensive, long-term general plan for the physical development of the adopting agency. The general plan should comprise integrated, compatible statements of policies for the adopting agency. According to Government Code Section 65302, the general plan shall designate the proposed general distribution, location, and extent of land uses such as housing, business, industry, open space, agriculture, recreation, and natural resources.

## **Local Regulations**

### *County of San Luis Obispo General Plan*

The San Luis Obispo County General Plan illustrates public policy for future land use on both public and private lands within the County. Created pursuant to California Government Code Section 65300, the County's General Plan provides the foundation upon which all land use decisions are based. The General Plan includes seven required elements: Land Use, Open Space, Circulation, Conservation, Safety, Noise, and Housing (County of San Luis Obispo 2018). Elements that are applicable to the proposed ordinance are described below.

- The Conservation and Open Space Element seeks to protect important natural resources while balancing needs of both natural and built environments. This element promotes efforts to reduce environmental damage, support environmental restoration, ensure long-term economic, social, and environmental health, and preserve natural ecosystems.
- The Safety Element seeks to protect the community from risks associated with geologic hazards, earthquakes, fires, floods, or other natural disasters.
- The Noise Element identifies and evaluates major sources of noise within San Luis Obispo County and defines measures that new development must consider to reduce noise levels to thresholds that are not harmful or disruptive.
- The Land Use and Circulation Element is broken into Inland Land Use, which is applicable for areas within the PBLUMA, and Coastal Zone Land Use. This element designates the general distribution and intensity of land uses for housing, commerce, industry, open space, public facilities, and other types of both public and private uses. The Land Use and Circulation Element consists of the Framework for Planning, Area Plans, Community/Village Plans, and Official Maps.

In addition to these required elements, the County has adopted five optional elements: Agriculture, Economic, Parks and Recreation, Offshore Energy, and Master Water and Sewer Plan (County of San Luis Obispo 2018). Optional elements that are applicable to the proposed ordinance are described below.

- The Agriculture Element establishes strategies for protecting productive agriculture in San Luis Obispo County, and identifies areas of productive farms, ranches and soils.
- The Economic Element sets priorities for the type and location of desirable economic development and identifies strategies for retaining existing businesses as well as attracting new ones that offer employment.

In addition, the following area plan and community plans are part of the General Plan Land Use Element and are applicable to the PBLUMA.

### *North County Area Plan*

The North County Planning Area encompasses most of northern and northwestern San Luis Obispo County, bounded by the Coastal Zone to the west and Kern County to the east. The North County Area Plan consolidates the former Adelaida, El Pomar-Estrella, Las Pilitas, Nacimiento, and Salinas River planning areas, as well as northern portions of the Los Padres and Shandon-Carrizo planning areas. Agriculture has traditionally been the principal industry and foundation of the rural lifestyle within the North County Planning Area (County of San Luis Obispo 2014). This plan contains regional policies and programs for land use that affect both urban and rural areas.

### *Shandon Community Plan*

The Shandon Community Plan (2012) intends to guide development over the next 25 years within the unincorporated community of Shandon, located in the eastern area of the PBLUMA. The Shandon Community Plan seeks to balance a growing population with preservation of agricultural and natural resources and contains policies that steer development and land use within the community.

### *San Miguel Community Plan*

The San Miguel Community Plan (2016) intends to guide development through the year 2035 within the unincorporated community of San Miguel, located in the north of the PBLUMA. The San Miguel Community Plan includes achievable goals, policies that serve as guiding principles, and implementation programs that serve as recommended actions to meet overarching goals.

### *Creston Village Plan*

The Creston Village Plan (2003) guides land use and transportation within the unincorporated village of Creston, located in the El Pomar-Estrella sub-area of the North County Planning Area, in the south of the PBLUMA. The Creston Village Plan is consistent with the County's General Plan and provides information regarding land use, population, resource availability, and environmental characteristics. Additionally, the Creston Village Plan aims to help implement goals within the overarching North County Area Plan. According to the Creston Village Plan, there are no established land use programs in Creston, and the North County Area Plan should be used when discussing regional and areawide land use programs that might affect Creston.

## 4.9.3 Impact Analysis

### **Significance Thresholds**

Per Appendix G of the *CEQA Guidelines*, a project would result in a significant impact to land use and/or planning if it would:

- a. Physically divide an established community; and/or
- b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The Initial Study prepared for the proposed project and circulated during the scoping period for the PEIR determined that impacts associated with Threshold a would be less than significant. These impacts are briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the impact analysis below discusses only Threshold b.

### **Methodology**

The following impact assessment is based on information from local planning documents, including the County's General Plan, as well as a consistency analysis of the proposed planting ordinance with the County's General Plan, the North County Area Plan, San Miguel Community Plan, and Shandon Community Plan (Appendix G). Consistency analyses of the proposed planting ordinance with other types of plans can be found in Section 4.2, *Air Quality*; Section 4.5, *Energy*; Section 4.7, *Greenhouse Gases*; Section 4.8, *Hydrology and Water Quality*; and Section 4.11, *Transportation*.

## Project Impacts and Mitigation Measures

**Threshold b:** Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**Impact LU-1** THE PROPOSED PLANTING ORDINANCE WOULD BE CONSISTENT WITH MOST APPLICABLE GOALS AND POLICIES OF THE COUNTY GENERAL PLAN (INCLUDING THE AREA PLANS AND COMMUNITY PLANS) AND WOULD BE CONSISTENT WITH THE GENERAL PLAN AS A WHOLE. HOWEVER, BECAUSE OF POTENTIAL INCONSISTENCIES WITH SOME OF THE GENERAL PLAN GOALS AND POLICIES, THIS IMPACT WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.

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The County of San Luis Obispo's General Plan is the main tool the County uses when evaluating land use proposals; land use decisions in the County are governed by the General Plan and must be consistent with the objectives and direction of the County's General Plan. In addition to the General Plan, the North County Area Plan sets goals and policies for the northern and northwestern San Luis Obispo County. The San Miguel Community Plan and Shandon Community Plan set goals and policies for respective communities within the PBLUMA. There are no specific goals and policies in the Creston Village Plan. Appendix G describes the proposed planting ordinance's preliminary consistency with applicable policies of the General Plan, including the area plan and community plans, related to avoiding or mitigating environmental effects.

As part of the project, Goal AG 1 and Policies AGP 10, AGP 11, and WR 1.14 would be amended by the County to ensure the proposed planting ordinance is consistent with all applicable community or General Plan goals and policies (see the specific General Plan revisions in Appendix C). Goal AG 1 would be amended to allow ministerial permits to regulate production agriculture irrigated with groundwater wells within the PBLUMA, as the County previously did not require permits for exempt practices except for groundwater offset programs. Policy AGP 10 would be amended to remove part of the policy that requires new agricultural water use to be offset, as the 25 AFY per site water use exemption in the proposed ordinance does not require offsets. Policy AGP 11 would be amended to encourage Planning & Building to amend policies to protect water resources countywide, not just in the Paso Basin, considering SGMA management actions. Policy WR 1.14 would be amended to limit, rather than avoid, a net increase in water use, except when the net increase is the result of actions to promote equitable agricultural use of water supply. Following amendments of AG 1, AGP 10, AGP 11, and WR 1.14, the proposed ordinance would not conflict with these policies of the General Plan.

Land use impacts are assessed based on the physical effects related to land use compatibility (e.g., air quality, noise, aesthetics) and consistency with adopted plans, policies, and regulations. It should be noted that the consistency analysis in Appendix G is intended to guide policy interpretation, but is not intended to replace or supplant the County decision-making process. The final determination of consistency will be made by the County Board of Supervisors when they act on the proposed planting ordinance. The General Plan, area plan, and community plan consistency determination is based on the proposed planting ordinance's overall consistency with these plans, rather than strict adherence to every single principle and policy of each element.

The proposed planting ordinance would regulate new and expanded irrigated crops within the PBLUMA. As detailed in Appendix G, the proposed planting ordinance is potentially consistent with most goals and policies found in the County General Plan and would be consistent with the General Plan as a whole. However, the proposed planting ordinance is also potentially inconsistent with some of the goals and policies, specifically those found in the Conservation and Open Space

Element, Land Use Element, and Agricultural Element pertaining to air quality, greenhouse gas emissions, sensitive biological resources, sensitive ecological habitats, wildlife corridors, historic resources, cultural and tribal cultural resources, paleontological resources, and groundwater management and supply. The physical impacts on the environment associated with implementation of the proposed planting ordinance are detailed throughout Section 4 of this Environmental Impact Report. The County acknowledges the importance and breadth of these potential inconsistencies by finding them to be significant and unavoidable impacts.

### **Mitigation Measures**

Mitigation Measures AQ-1 in Section 4.2, *Air Quality*; BIO-1 in Section 4.3, *Biological Resources*; GHG-1 in Section 4.7, *Greenhouse Gas Emissions*, and UTIL-1 and UTIL-2 in Section 4.13, *Utilities and Service Systems* would reduce environmental impacts resulting the proposed planting ordinance to the extent feasible. No additional mitigation measures are available.

### **Significance After Mitigation**

Implementation of mitigation measures identified in Sections 4.1 through 4.13 would reduce impacts to the extent feasible; however, the proposed project would continue to result in significant and unavoidable impacts to air quality, groundwater, biological resources, greenhouse gas emissions, cultural, tribal cultural, and paleontological resources. The County acknowledges the importance and breadth of the potential inconsistencies associated with the proposed planting ordinance by finding them to be significant and unavoidable impacts.

#### **4.9.4 Cumulative Impacts**

Cumulative land use impacts would occur if projected residential and non-residential development within the PBLUMA, in combination with the proposed planting ordinance, would conflict with plans, policies, or regulations adopted for the purpose of mitigating environmental effects. Cumulative development may conflict with existing land use plans, policies, or regulations. However, without knowing the location and existing project site characteristics of individual cumulative projects—and which specific land use documents might pertain to the individual project—it would be too speculative at this time to estimate if cumulative development would significantly impact land use and planning. It is also currently unknown what avoidance, minimization, and/or mitigation measures could be included as part of individual cumulative development projects to reduce potential significant impacts to land use and planning. Therefore, cumulative land use impacts could be potentially significant. As discussed under Impact LU-1, the proposed planting ordinance would be potentially consistent with most of the applicable General Plan goals and policies, but would be potentially inconsistent with some goals and policies due to potentially significant and unavoidable impacts to environmental resources. Due to the potential inconsistencies, the proposed ordinance would incrementally contribute to significant cumulative impacts related to potential conflict with land use plans.

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## 4.10 Noise

This section evaluates the potential impacts associated with groundborne noise and vibration. Other noise-related impacts, including increases in ambient noise levels and exposure of people to excessive noise in the vicinity of an airport, were determined to be less than significant in the Initial Study prepared for the proposed ordinance (see Appendix A and Section 4.14, *Effects Found Not to Be Significant*), and therefore, are not further analyzed in this section.

### 4.10.1 Setting

#### Overview of Vibration

##### *Groundborne Noise and Vibration*

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in./sec.). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (California Department of Transportation [Caltrans] 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 4.10-1.

**Table 4.10-1 AASHTO Maximum Vibration Levels for Preventing Damage**

Type of Situation	Limiting Velocity (in./sec. PPV)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020

in./sec. = inches per second; PPV = peak particle velocity

Note: AASHTO standards apply to both transient and steady-state vibration.



Based on AASHTO recommendations, limiting vibration levels to below 0.2 in./sec. PPV at residential structures would prevent structural damage regardless of building construction type. These limits are applicable regardless of the frequency of the source. However, as shown in Table 4.10-2 and Table 4.10-3, potential human annoyance associated with vibration typically differs if it is generated by a steady-state<sup>1</sup> or a transient<sup>2</sup> vibration source. As shown in Table 4.10-3, the vibration level threshold at which transient vibration sources (such as construction equipment) are considered to be distinctly perceptible is 0.25 in./sec. PPV.

**Table 4.10-2 Human Response to Steady State Vibration**

PPV (in./sec.)	Human Response
3.6 (at 2 Hz)–0.4 (at 20 Hz)	Very disturbing
0.7 (at 2 Hz)–0.17 (at 20 Hz)	Disturbing
0.10	Strongly perceptible
0.035	Distinctly perceptible
0.012	Slightly perceptible

Source: Caltrans 2020

in./sec. = inches per second; PPV = peak particle velocity

**Table 4.10-3 Human Response to Transient Vibration**

PPV (in./sec.)	Human Response
2.0	Severe
0.9	Strongly perceptible
0.25	Distinctly perceptible
0.04	Barely perceptible

Source: Caltrans 2020

in./sec. = inches per second; PPV = peak particle velocity

## Project Noise Setting

### *Sensitive Receivers*

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The County of San Luis Obispo General Plan Noise Element identifies noise-sensitive land uses as residential development except temporary dwellings, schools (preschool to secondary, college and university, and specialized education and training), health care services (e.g., hospitals, clinics, etc.), nursing and personal care, churches, public assembly and entertainment, libraries and museums, hotels and motels, bed and breakfast facilities, outdoor sports and recreation, and offices (County of San Luis Obispo 1992). The nearest noise-sensitive receivers to areas of potential new or expanded crop planting are residential uses within the Paso Basin Land Use Management Area (PBLUMA). In addition, schools, churches, parks, libraries, and offices are located within the communities of Shandon, Creston, and San Miguel. Additionally, sensitive

<sup>1</sup> “Steady-state” vibrations result from continuous, high-energy activities, such as vibratory pile driving or vibratory roller compaction of soil.

<sup>2</sup> “Transient” sources create a single, isolated vibration event, such as blasting or drop balls.

vibration receivers would include historical resources<sup>3</sup> in the PBLUMA as noted in Table 4.10-1 (Caltrans 2020).

## 4.10.2 Regulatory Setting

### Federal and State Regulations

There are no federal or state regulations related to groundborne noise and vibration.

### Local Regulations

#### *County of San Luis Obispo*

The County of San Luis Obispo Code Section 22.10.170 sets the following vibration standards:

- a) **Vibration standards.** Any land use conducted in or within one-half mile of an urban or village reserve line shall be operated to not produce detrimental earth-borne vibrations perceptible at the points of determination identified in the following Table 4.10-4.
- b) **Exception to standards.** The vibration standards of this Section do not apply to:
  1. Vibrations from construction, the demolition of structures, surface mining activities or geological exploration between 7:00 a.m. and 9:00 p.m.
  2. Vibrations from moving sources such as trucks and railroads.

**Table 4.10-4 Vibration Points of Determination**

Land Use Category in Which Vibration Source is Located	Point of Determination
Residential, Office & Professional, Recreation, Commercial	At or beyond any lot line of the lot containing the use
Industrial	At or beyond the boundary of the industrial category

Source: County of San Luis Obispo Municipal Code Section 22.10.170

The County Land Use Ordinance (Section 22.10.140) requires a minimum 25-30 feet setback from property lines for the construction of structures on sites one acre or larger.

The County Land Use Ordinance (Section 8.40.062) requires new water wells to be located at least ten feet from property lines, one hundred feet from septic systems, and an adequate distance from structures to allow access.

## 4.10.3 Impact Analysis

### Significance Thresholds

#### *CEQA Thresholds*

Per Appendix G of the *CEQA Guidelines*, a project would result in a significant impact to noise if it would:

- a. Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

<sup>3</sup> "Historical resources" refers to buildings and structures over 45 years of age.

- b. Result in generation of excessive groundborne vibration or groundborne noise levels; and/or
- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

The Initial Study prepared for the proposed planting ordinance and circulated during the scoping period for the PEIR determined that impacts associated with Thresholds a and c would be less than significant. These issues are also briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the below impact analysis discusses only Threshold b.

As detailed in Section 4.14, *Effects Found Not to be Significant*, agricultural activities associated with the plantings allowed by the proposed ordinance and construction of accessory infrastructure would be exempt from County noise standards. Regardless, noise associated with agricultural activities is expected and would be consistent with the surrounding noise levels, as these activities would occur in a primarily agricultural area. Noise associated with site grading and preparation and construction of accessory infrastructures would be temporary and would cease once the site is ready for agricultural operations to commence. Additionally, noise associated with agricultural operations would typically be seasonal and sporadic. These activities would not occur in the vicinity of the communities on Shandon, Creston, and San Miguel, where the non-agricultural land uses with sensitive receivers are located. For these reasons, although impacts related to groundborne noise and vibration may occur, impacts related to increases in ambient noise levels would be less than significant and are not discussed in this section.

#### *Groundborne Noise and Vibration Thresholds*

The Caltrans *Transportation and Construction Vibration Guidance Manual* (2020) was used to evaluate potential vibration impacts related to both potential building damage and human annoyance. Based on the Caltrans criteria, groundborne vibration impacts would be significant if vibration levels exceed 0.2 in./sec. PPV for residential structures, which are the limits where minor cosmetic, i.e., non-structural, damage may occur to these buildings. In addition, based on Caltrans criteria, vibration would be barely perceptible if vibration levels exceed 0.04 in./sec. PPV and distinctly perceptible if vibration levels exceed 0.25 in./sec. PPV for transient sources (see Table 4.10-3). For purposes of this analysis, the significance threshold for human perception is 0.25 in./sec. PPV for distinctly perceptible vibration because agricultural operations are intermittent and seasonal. Additionally, Section 22.10.170 of the San Luis Obispo County Code establishes perceptible limits at or beyond any boundary line of residential, office and professional, recreation, commercial, and industrial use. Finally, based on the AASHTO standards, vibration impacts to historical resources would cause damage at vibration levels exceeding 0.1 in./sec. PPV. Therefore, groundborne vibration would be significant if it exceeded any of these standards.

## **Methodology**

Construction of agricultural infrastructure to support new and expanded agriculture may require substantial vibration sources; however, location, timing, construction phases, and mix of construction equipment are unknown at this time. Of the potential construction equipment, a large bulldozer is anticipated to create the greatest vibration levels during construction of accessory infrastructure. Additionally, a well drilling rig is anticipated for constructing 88 new groundwater irrigation wells in

the PBLUMA by 2045. Neither blasting nor pile driving are anticipated to be required for construction of infrastructure.

Agricultural operations would include substantial vibration sources during activities such as field preparation (e.g., grading and tilling) and crop planting, irrigation, cultivation, and harvest. Thus, operational activities have potential to generate groundborne vibration affecting nearby receivers, especially during field preparation of the planting permit/exemption site. The greatest vibratory source during construction and operation would be large agricultural equipment. A large bulldozer was used as a proxy for large agricultural equipment for the purpose of this analysis as bulldozers create similar vibration levels during operational activities. A well drilling rig (e.g., caisson drilling or similar) would be used to construct 88 new groundwater irrigation wells by 2045. Because the well drilling rig would produce similar vibration levels as a large bulldozer, the vibration impacts associated with well drilling was based on use of a large bulldozer. Neither blasting nor pile driving are anticipated to be required for new or expanded crop plantings.

Regarding potential off-site vibration impacts, the County Land Use Ordinance (Section 22.10.140) requires a minimum 25- to 30-foot setback from property lines for the construction of structures on sites one acre or larger. Therefore, it is assumed that agricultural equipment used for new and expanded crops pursuant to the proposed planting ordinance would be operated at least 25 feet from structures on adjacent properties. The impact analysis also considers structures on the same property as agricultural operations, which could occur closer than 25 feet to on-site structures.

Vibration estimates are based on vibration levels reported by Caltrans and the Federal Transit Authority (FTA) (Caltrans 2020; FTA 2018). Table 4.10-5 shows typical vibration levels for various pieces of equipment used in the assessment of vibration at a reference distance of 25 feet (FTA 2018).

**Table 4.10-5 Equipment Vibration Levels**

Equipment	PPV at 25 feet (in./sec)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

Source: FTA 2018

in./sec. = inches per second; PPV = peak particle velocity

## Project Impacts and Mitigation Measures

**Threshold b:** Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

**Impact NOI-1 USE OF HEAVY EQUIPMENT FOR CONSTRUCTION OF ACCESSORY INFRASTRUCTURE AND FIELD PREPARATION AND GRADING ACTIVITIES FOR INDIVIDUAL PLANTINGS UNDER THE PROPOSED PLANTING ORDINANCE WOULD NOT RESULT IN GROUNDBORNE NOISE AND VIBRATION IN THE VICINITY OF SENSITIVE RECEIVERS THAT HAVE NOT ALREADY BEEN IMPACTED BY SIMILAR AGRICULTURAL ACTIVITY. GROUNDBORNE NOISE AND VIBRATION IMPACTS WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

Due to their location in the more developed communities of Shandon, Creston, and San Miguel, schools, churches, parks, libraries, and offices are not located in close proximity to agricultural uses.

Therefore, construction and operational activities are not anticipated to occur in the vicinity of these sensitive receivers.

However, construction and operational equipment may operate near on- and off-site sensitive vibration receivers such as residential uses in the PBLUMA; which could generate groundborne noise and vibration at these sensitive receiver structures. As stated in Section 4.10.3 under *Methodology*, the greatest anticipated source of vibration during construction of accessory infrastructure would be from a large bulldozer. The greatest anticipated source of vibration during operational farming activities would be from large agricultural equipment, which would be used during field preparation and grading activities. A large bulldozer was used as a proxy for large agricultural equipment and caisson drilling for the purpose of this analysis as bulldozers create similar vibration levels.

The County Land Use Ordinance (Section 22.10.140) requires a minimum 25- to 30-foot setback from property lines for the construction of structures on sites one acre or larger. Therefore, agricultural grading and cultivation activities would occur a minimum of 25 feet away from on- and off-site sensitive vibration receivers. It is also assumed that construction of accessory infrastructure resulting from the proposed ordinance would occur within the same footprint of the planting area allowed by the ordinance. A bulldozer would create vibration levels of approximately 0.089 in./sec. PPV at 25 feet (Caltrans 2020), which is less than the groundborne vibration impact thresholds of 0.25 in./sec. PPV for distinct human perception, 0.2 in./sec. PPV for residential structure damage, and 0.1 in./sec. PPV for historical resource damage. Therefore, vibration impacts to on- and off-site sensitive vibration receivers would be less than significant.

Additionally, historic and current agricultural activities have contributed to vibration levels near existing on-site sensitive vibration receivers and buildings within the agricultural areas of the PBLUMA. Therefore, it is assumed that existing on-site sensitive receivers and structures have already been exposed to vibration from previous or current agricultural activities on-site, and the proposed project would result in similar vibration levels. It is also assumed that expanded agricultural activities would occur on sites with no existing structures, because structures in the PBLUMA are typically located near active agricultural activities or within residential areas where expanded agriculture is not likely to occur. Therefore, vibration impacts to on-site sensitive receivers and structures would be less than significant.

### **Mitigation Measures**

Because noise impacts would be less than significant, no mitigation is required.

### **Significance After Mitigation**

Noise impacts would be less than significant and no mitigation is required.

## **4.10.4 Cumulative Impacts**

Cumulative groundborne noise and vibration impacts would occur if groundborne noise and vibration from the new and expanded agricultural activities associated with the proposed ordinance were to combine with groundborne noise and vibration from construction activities associated with the projected residential and non-residential development within the PBLUMA. As discussed under *Overview of Groundborne Vibration*, vibration generated by human activities, is localized and rapidly attenuates with distance, affecting only receptors closest to vibration generating activities. Additionally, construction of cumulative projects and the agricultural activities from the new and

expanded agricultural operations resulting from the proposed ordinance are not anticipated occur in close proximity to each other and not expected to occur simultaneously. Therefore, vibration from the new and expanded agricultural activities have a low potential to combine with construction-related groundborne noise and vibration from individual construction projects to create cumulative impacts. For these reasons, cumulative groundborne noise and vibration impacts would be less than significant. Therefore, the proposed ordinance would not contribute to significant cumulative groundborne noise and vibration impacts.

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## 4.11 Transportation

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This section evaluates the potential impacts associated with transportation, focusing on potential impacts related to vehicle miles traveled (VMT). Other transportation-related impacts, including conflict with a program plan, ordinance, or policy addressing the circulation system; increase in traffic hazards; and inadequate emergency access were determined to be less than significant in the Initial Study prepared for the proposed project (see Appendix A and Section 4.14, *Effects Found Not to Be Significant*), and therefore, are not further analyzed in this section.

### 4.11.1 Setting

The proposed planting ordinance would be limited to the unincorporated portions of San Luis Obispo County within the PBLUMA. The project area is generally characterized by large ranchlands and vineyards with extensive rural development (San Luis Obispo Council of Governments [SLOCOG] 2019a).

San Luis Obispo County provides various travel options, including by automobiles, as well as by alternative transportation such as bicycle and pedestrian facilities within the PBLUMA. Given the rural setting of the project area, formal pedestrian and bicycle facilities are limited. The PBLUMA is regionally accessible via U.S. Highway 101, State Route (SR) 46, SR 41, and SR 58. Local access to the project area is provided by a system composed of collector and local streets. No transit services or stops are located in the PBLUMA.

The baseline (existing [2020]) regional (within unincorporated San Luis Obispo County) VMT per employee per day is 30.2 (County of San Luis Obispo 2021).

### 4.11.2 Regulatory Setting

This section identifies State, regional, and local transportation, regulations and policy documents relevant to the project.

#### **Federal Regulations**

There are no federal regulations applicable to transportation.

#### **State Regulations**

##### *California Environmental Quality Act*

CEQA generally requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of proposed projects, and to reduce those environmental impacts to the extent feasible. The version of the *CEQA Guidelines* adopted on December 28, 2018 includes updates related to analyzing transportation impacts pursuant to Senate Bill (SB) 743 (see below). *CEQA Guidelines* Section 15064.3 describes specific considerations for determining a project's transportation impacts. Generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. The criteria used to analyze transportation impacts are included in Section 4.11.3, *Impact Analysis*.



### *Senate Bill 743*

On September 27, 2013, Senate Bill (SB) 743 was passed into law and started a process that changed transportation impact analysis as part of CEQA compliance. SB 743 changed the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (see Public Resource Code, Section 21099[b][2]). The California Governor’s Office of Planning and Research (OPR) identified VMT as the most appropriate metric to determine the significance of transportation impacts in a manner that promotes the reduction of greenhouse gas (GHG) emissions, the development of multimodal transportation networks, and a diversity of land uses (OPR 2018). To help lead agencies with SB 743 implementation, OPR produced the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018). More information on the determination of the significance of impacts is included below in Section 4.11.3, *Impact Analysis*.

### *Assembly Bill 32, Senate Bill 32, and Senate Bill 375*

The “California Global Warming Solutions Act of 2006,” Assembly Bill (AB) 32, outlines California’s major legislative initiative for reducing greenhouse gas (GHG) emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020, a reduction of approximately 15 percent below emissions expected under a “business as usual” scenario.

On September 8, 2016, the California Governor signed SB 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged).

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the State’s ability to reach AB 32 goals by directing the California Air Resources Board (CARB) to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO’s RTP. Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as “transit priority projects”) can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035 (CARB 2021). The SLOCOG was assigned targets of a 3 percent reduction in per capita GHG emissions from passenger vehicles by 2020 and a 11 percent reduction in per capita GHG emissions from passenger vehicles by 2035. In the SLOCOG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements. On June 5, 2019, SLOCOG adopted its 2019 RTP which meets the requirements of SB 375 (SLOCOG 2019a).

## **Local Regulations**

### *2019 Regional Transportation Plan and Sustainable Communities Strategy*

On June 5, 2019, SLOCOG formally adopted the 2019 RTP for the San Luis Obispo region. The RTP includes the Sustainable Communities Strategy (SCS), which identifies how to accommodate the region’s new and expected growth. The 2019 RTP builds upon the progress made during implementation of the 2014 RTP/SCS and includes seven goals focused on preserving the transportation system; improving intermodal mobility and accessibility; supporting a vibrant

economy; improving public safety and security; fostering livable, healthy communities and promoting social equity; practicing environmental stewardship; and practicing financial stewardship. The RTP's SCS supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning. The SCS identifies a forecasted development pattern for the region, which is informed by the inventory of existing land use throughout the region, along with the identification of sites where future development can be located while still reducing VMT and GHG emissions. The SCS helps guide planning through analysis and recommendations for residential growth, employment centers, and transportation investments throughout the region. The SCS's action strategies (Reduce Vehicle Trips & VMT Nos. 20 through 23) include reducing vehicle trips and VMT by:

- Supporting expanded transit service and increased frequency of transit service within and between communities to reduce vehicle trips and vehicle miles of travel;
- Supporting local jurisdictions' efforts to improve active transportation infrastructure to replace some short vehicle trips with bike and walk trips;
- Supporting the addition of peak-hour express transit trips to reduce vehicle congestion on major highways, and other primary transportation corridors; and
- Encouraging/supporting farm worker housing projects (SLOCOG 2019a).

#### *Draft County VMT Thresholds Study*

The County's 2021 VMT Thresholds Study has not yet been adopted by the County Board of Supervisors. However, the employee VMT threshold developed by the County is the same as the threshold included in OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018; see "Significance Thresholds" under Section 4.11.3 for the VMT threshold used for the proposed ordinance). Additionally, the 2021 VMT Thresholds Study provides the baseline unincorporated San Luis Obispo County VMT per employee per day of 30.2 (County of San Luis Obispo 2021).

#### *County of San Luis Obispo General Plan*

The County's General Plan was originally adopted in September 1980 and continues to be amended as necessary. The County's Framework for Planning (Inland) Circulation Element in the General Plan contains goals and objectives pertaining to transportation planning issues at a regional level.

#### *County Bikeways Plan*

The County of San Luis Obispo and several cities within the county developed bicycle transportation plans in accordance with the California Bicycle Transportation Act (Streets and Highways Code Section 980-894.2). The County Bikeways Plan discusses bikeway routes, accessory facilities such as bike parking, coordination with other modes of transportation, promotional and educational programs, and potential funding sources for these facilities and programs. The 2016 County Bikeways Plan shows existing and planned bikeways in the PBLUMA, which are concentrated in and around the communities of San Miguel, Shandon, and Templeton (County of San Luis Obispo and San Luis Obispo Bicycle Advisory Committee 2016).

### 4.11.3 Impact Analysis

#### Significance Thresholds

Per Appendix G of the *CEQA Guidelines*, a project would result in a significant impact to transportation if it would:

- a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and/or
- d. Result in inadequate emergency access.

Expanding on Threshold b, OPR's 2018 Technical Advisory does not include guidance for transportation thresholds related to VMT generated by agriculture projects. However, based on the recommended thresholds in the Technical Advisory, the proposed planting ordinance would conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b) if it would result in regional VMT per employee that exceeds a level of 15 percent below existing regional VMT per employee (OPR 2018).

The Initial Study prepared for the proposed project and circulated during the scoping period for the PEIR determined that impacts associated with Thresholds a, c, and d would be less than significant. These impacts are briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the impact analysis below discusses only Threshold b.

#### Methodology

The County of San Luis Obispo has prepared a draft VMT Thresholds Study (2021) based on SB 743; however, because the thresholds have not been formally adopted by the County, it currently relies on the OPR's December 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018).

OPR's December 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA* suggests that lead agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing. However, the proposed planting ordinance cannot be screened out because it is not a small project (which generates 110 vehicle trips per day or less) or an affordable housing project, and the individual planting projects would not all be within 0.5 mile of an existing major transit stop or an existing stop along a high quality transit corridor.<sup>1</sup> Additionally, the proposed ordinance does not fall into any of the project categories presented in the OPR Technical Advisory, as the planting ordinance is not considered a residential, office, retail, or mixed-use project; a land use plan (e.g., general plan, community, or specific plan); or a transportation project (e.g., addition of new lanes or roadways/highways). Further, the OPR Technical Advisory states that "significance thresholds may be best determined on a case-by-case basis" for rural projects outside metropolitan planning areas. Because the County has not developed its own VMT thresholds for use in this PEIR, the County is depending on the OPR Technical Advisory for VMT significance thresholds. The proposed planting ordinance is most closely related to an "office project" in that it would generate employment but would not typically generate substantial retail trips. The OPR Technical

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<sup>1</sup> For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (Public Resources Code Section 21155).

Advisory threshold of significance for office projects is whether the project would generate regional VMT per employee exceeding a level of 15 percent below existing regional VMT per employee and therefore conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b) (OPR 2018). The County's VMT Thresholds Study states the existing (2020) regional (unincorporated San Luis Obispo County) VMT per employee per day is 30.2, and 15 percent below the existing regional VMT per employee per day is 25.7 (County of San Luis Obispo 2021).

## Project Impacts and Mitigation Measures

**Threshold b:** Would the project conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b)?

**Impact TRA-1** THE PROPOSED PLANTING ORDINANCE WOULD GENERATE VMT RELATED TO WORKER COMMUTE TRIPS AND HAULING TRIPS. THE DAILY VMT THAT WOULD BE GENERATED BY THE ORDINANCE WOULD BE BELOW THE SIGNIFICANCE THRESHOLD FOR VMT. THEREFORE, THE PLANTING ORDINANCE WOULD NOT CONFLICT OR BE INCONSISTENT WITH **CEQA GUIDELINES SECTION 15064.3, SUBDIVISION (B), AND IMPACTS WOULD BE CLASS III, LESS THAN SIGNIFICANT.**

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The following reasonable operational assumptions were made based on a 20-acre vineyard, which reflects a conservative, reasonable impact scenario for an individual agricultural operation that may use the 25-AFY water use exemption under the proposed planting ordinance:

- Nine workers per day for 22 to 58 days per year would be needed per 20-acre vineyard for site preparation, planting, and harvesting activities. Of these nine workers per site, eight worker (i.e., the crew workers) would commute to a site in the same vehicle (carpool) for a total of 22 days per year. The one remaining worker (i.e., the foreperson) would commute alone for 58 days per year.
  - It is assumed that the crew workers' carpool would average approximately 54 miles one-way (108 miles round-trip) per day for 22 days per year, which is the distance between the City of Paso Robles and the City of Avenal. This equates to 2,376 crew worker commute miles per year per planting site (108 miles per day x 22 days per year per site = 2,376 miles per year per site).
  - It is also assumed that the foreperson would commute an average of approximately 10 miles one-way (20 miles round-trip) per day for 58 days per year. This equates to 1,160 foreperson commute miles per year per planting site (20 miles per day x 58 days per year per site = 1,160 miles per year per site).
- In addition to planting and harvesting activities, nine workers would be required for pruning, irrigation, canopy manipulation, etc. for an 26 additional days per year. For these additional activities, eight crew workers would carpool and one foreperson would commute alone.
  - It is assumed that the crew workers' carpool would average approximately 54 miles one-way (108 miles round-trip) per day for 26 days per year, which is the distance between the City of Paso Robles and the City of Avenal. This equates to 2,808 crew worker commute miles per year per planting site (108 miles per day x 26 days per year per site = 2,808 miles per year per site).
  - It is also assumed that the foreperson would commute an average of approximately 10 miles one-way (20 miles round-trip) per day for 26 days per year. This equates to 560

foreperson commute miles per year per planting site (20 miles per day x 26 days per year per site = 520 miles per year per site).

- An average of three haul trips were conservatively assumed per year per planting site. One truck would be used to haul equipment/supplies and harvested crops per trip. Each haul trip would average approximately 54 miles one-way (108 miles round-trip), which is the distance between the City of Paso Robles and the City of Avenal. One employee would be used to drive the truck. This equates to 2,808 haul trip miles per year per planting site (108 miles per haul trip x 3 haul trips per year per site = 324 miles per year per site).

Based on these assumptions, approximately 6,864 worker commute miles and 324 haul trip miles per year (round-trip) per planting site would occur, for a total of 7,188 miles per year per site. When divided by the total number of employees per site (eight crew workers, one foreperson, and one haul-truck driver, for 10 total employees), the average annual VMT per employee would be 719 (7,188 miles per year ÷ 10 employees = 719 average annual VMT per employee), and the average daily VMT per worker would be 2.0 (719 average annual VMT per employee ÷ 365 days per year = 2.0 average daily VMT per employee).

The planting ordinance would allow an estimated increase in overall irrigated crop production in the PBLUMA of 240 acres annually for a total increase of 5,280 acres by January 31, 2045. A 240-acre annual increase equates to 12 new 20-acre vineyards per year allowed by the ordinance under a 25-AFY or groundwater per site exemption. Although the total mileage for the planting ordinance, as a whole, would increase annually until January 31, 2045 as more sites are planted, because each planting site would require its own 10 workers. Therefore, the average daily VMT of 2.0 per employee would be maintained throughout the duration of the planting ordinance through January 31, 2045 regardless of the number of planting permit sites that are issued through the ordinance.

Based on the OPR Technical Advisory, the proposed planting ordinance would result in a significant transportation impact if it would exceed a level of 15 percent below existing regional VMT per employee per day (OPR 2018). As previously stated, the existing (2020) regional (unincorporated San Luis Obispo County) VMT per employee per day is 30.2, and 15 percent below the existing regional VMT per employee per day is 25.7 (County of San Luis Obispo 2021). Because the planting ordinance would result in an average of 2.0 VMT per employee per day, the ordinance would not exceed the significance threshold for VMT. Therefore, implementation of the ordinance would not conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b), and impacts would be less than significant.

### **Mitigation Measures**

Because impacts would be less than significant, no mitigation is required.

### **Significance After Mitigation**

Impacts on transportation would be less than significant and no mitigation is required.

#### **4.11.4 Cumulative Impacts**

Cumulative VMT impacts would occur if VMT from the proposed ordinance were to combine with VMT associated with the projected residential and non-residential development within the PBLUMA. As discussed under Impact TRA-1, worker commute and hauling trips associated with the proposed planting ordinance would result in less VMT per employee than the existing regional VMT

per employee, and transportation impacts associated with the proposed ordinance would be less than significant. Cumulative development may result in greater VMT than 15 percent below the existing regional VMT per employee, which would contribute to cumulative impacts to VMT. However, without knowing the specifics of individual cumulative development projects, it would be too speculative at this time to estimate a realistic change in regional VMT from such development. It is also currently unknown what avoidance, minimization, and/or mitigation measures could be included as part of the individual cumulative development projects to alleviate potential significant impacts to VMT. Therefore, cumulative VMT impacts would potentially be significant, although the proposed ordinance's contribution to cumulative impacts would not be considerable.

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## 4.12 Tribal Cultural Resources

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This section evaluates the potential impacts associated with tribal cultural resources. This section focuses on potential impacts related to tribal cultural resources pursuant to Assembly Bill (AB) 52 and Senate Bill (SB) 18.

### 4.12.1 Setting

The PBLUMA lies within an area traditionally occupied by the Obispeño Chumash. A detailed discussion of the prehistoric and ethnographic setting of the region is presented in Section 4.4.1, *Setting*, in Section 4.4, *Cultural Resources*.

### 4.12.2 Regulatory Setting

#### **Federal Regulations**

There are no federal regulations applicable to tribal cultural resources.

#### **State Regulations**

##### *Senate Bill 18 of 2004*

California Government Code Section 65352.3 (adopted pursuant to the requirements of SB 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general plan or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Governor's Office of Planning and Research's *Tribal Consultation Guidelines* (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."

##### *Assembly Bill 52 of 2014*

California Assembly Bill 52(AB 52) went into effect in July 2015, expanding CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that a "project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code [PRC] Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074(a) defines tribal cultural resources as either of the following:

- (1) Sites, features, places, cultural landscapes, 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.
  - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.



**Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance**

- (2) 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.

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, it is the intent of AB 52 to accomplish the following:

1. Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
2. Establish a category of resources in CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
3. Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
4. Recognize 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. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.
5. In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.
6. Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
7. Ensure that local and tribal governments, public agencies, and project proponents have information available, early in the CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.
8. Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
9. Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

AB 52 also establishes a formal consultation process for California tribes regarding tribal cultural resources. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project."

Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

## **Local Regulations**

### *County Grading Code*

Pursuant to Section 22.52.070 of the County Code, the following activities are exempt from obtaining a grading permit:

- Small agricultural projects involving 50 cubic yards or less of excavation for grading to create new fields, including vegetation removal and drainage improvements;
- Grading activities related to ongoing crop production on land that has been previously cultivated within the previous 10 years, including relocating roads within existing fields; and
- Installation of agricultural water supplies, not including reservoirs.

The following activities are required to submit an Agricultural Grading Form to the County prior to commencement of any grading activities and comply with the standards and practices contained in the NRCS Field Office Technical Guide (FOTG):

- New crop production on slopes up to 30 percent, including drainage improvements and vegetation removal, but not including construction of new agricultural roads; and
- Construction of small agricultural reservoirs with a capacity of one acre-foot of water or less.

Pursuant to Section 22.52 of the County Code, a grading permit from the County or Alternative Review by the NRCS or Resource Conservation District (RCD), both of which are subject to CEQA review, is required for agricultural activities not meeting the requirements for an exemption or Agricultural Grading Form, such as:

- Grading for new crop production on slopes over 30 percent;
- Construction of agricultural reservoirs with a capacity of more than one acre-foot; and
- Grading of new agricultural roads.

### *Section 22.10.040 – Archaeological Resources*

Pursuant to Section 22.10.040 of the County Code, the following standards apply when archaeological resources are unearthed or discovered during any construction activities:

- A. Construction activities shall cease, and the Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.
- B. In the event archeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner shall be notified in addition to the Department so proper disposition may be accomplished.

### *San Luis Obispo County General Plan Conservation and Open Space Element*

The following General Plan goal policies, and implementation measures relate to Native American consultation and participation, and tribal cultural resources.

**Goal CR 2.** The County will promote public awareness and support for the preservation of cultural resources in order to maintain the county’s uniqueness and promote economic vitality.

**Policy CR 2.3, “Living Resources.”** Preserve historic sites and buildings and recognize cultural and archaeological resources as “living resources” that are part of a continuing culture.

**Implementation Strategy CR 2.3.1, Stakeholder Outreach.** Support and facilitate ongoing discussions or forums about protecting and preserving cultural resources with Native American groups, historical and archaeological interest groups, cultural resource professionals, decision makers, and landowners.

**Implementation Strategy CR 2.3.2, Government-to-Government Consultation.** Establish a government-to-government consultation process with the Native American community and a consultation process with other stakeholders to identify potentially significant cultural resources in the county and to discuss issues relevant to the protection and preservation of cultural resources.

**Goal CR 4.** The County’s known and potential Native American, archaeological, and paleontological resources will be preserved and protected.

**Policy CR 4.1, Non-development Activities.** Discourage or avoid non-development activities that could damage or destroy Native American and archaeological sites, including off-road vehicle use on or adjacent to known sites. Prohibit unauthorized collection of artifacts. (Also refer to Implementation Strategy CR 2.1.3.)

**Policy CR 4.2, Protection of Native American Cultural Sites.** Ensure protection of archaeological sites that are culturally significant to Native Americans, even if they have lost their scientific or archaeological integrity through previous disturbance. Protect sites that have religious or spiritual value, even if no artifacts are present. Protect sites that contain artifacts, which may have intrinsic value, even though their archaeological context has been disturbed.

**Implementation Strategy CR 4.2.1, Archaeological Sensitivity Mapping.** Identify significant archaeological and cultural sites and conduct sensitivity mapping in consultation with Native Americans and archaeological and conservation organizations to improve the County’s ability to protect the resources. Map resources consistently in urban and rural areas of the county.

**Implementation Strategy CR 4.2.2, Archaeological Site Records.** Establish and maintain, but do not publicize archaeological site records. Site records may be released to limited individuals and groups with appropriate professional or tribal credentials.

**Policy CR 4.3, Cultural Resources and Open Space.** The County supports the concept of cultural landscapes and the protection and preservation of archaeological or historical resources as open space or parkland on public or private lands.

**Policy CR 4.4, Development Activities and Archaeological Sites.** Protect archaeological and culturally sensitive sites from the effects of development by avoiding disturbance where feasible. Avoid archaeological resources as the primary method of protection.

**Implementation Strategy CR 4.4.1, Native American participation in development review process.** In areas likely to contain Native American and cultural resources, include Native Americans in tasks such as Phase I II, and III surveys, resource assessment, and impact mitigation. Consult with Native American representatives early in the development review process and in the design of appropriate mitigations. Enable their presence during archaeological excavation and construction in areas likely to contain cultural resources.

### 4.12.3 Impact Analysis

#### Significance Thresholds

Per Appendix G of the *CEQA Guidelines*, a project would result in a significant impact to tribal cultural resources if it would:

- a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); and/or
  - ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

#### Methodology

In accordance with AB 52 and SB 18, the County of San Luis Obispo notified California Native American tribes listed in Table 4.12-1 below and invited them to participate in consultation. The list in Table 4.12-1 was provided to the County by the NAHC. The County mailed letters to the tribes in accordance with AB 52 and SB 18 on August 12, 2021. No requests for formal consultation were received from these California Native American tribes within the 30-day and 90-day request periods for AB 52 and SB 18, respectively. In addition to the letters, the County conducted follow-up telephone calls to the representatives. The County received a letter dated August 23, 2021 from the Santa Ynez Band of Chumash Indians, which stated they do not want to consult on the proposed planting ordinance. The County received a voicemail from Lorie Laguna of the yak tityu yak tiñhini – Northern Chumash Tribe on October 19, 2021, in which the tribe did not request formal consultation. No other responses from Native American Tribes were received.

**Table 4.12-1 Native American Tribes that Received AB 52 and SB 18 Requests for Formal Consultation**

Tribal Contact	AB 52	SB 18	Responded?
Barbareño/Ventureño Band of Mission Indians <i>Julie Tumamait-Stenslie, Chairperson</i>	X	X	No
Chumash Council of Bakersfield <i>Julio Quair, Chairperson</i>	X	X	No
Coastal Band of the Chumash Nation <i>Mariza Sullivan, Chairperson</i>	X	X	No

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<b>Tribal Contact</b>	<b>AB 52</b>	<b>SB 18</b>	<b>Responded?</b>
Northern Chumash Tribal Council <i>Fred Collins, Spokesperson</i>	X	X	No
Salinan Tribe of Monterey, San Luis Obispo Counties <i>Patti Dutton, Tribal Administrator</i>	X	X	No
San Luis Obispo County Chumash Council <i>Mark Vigil, Chief</i>	X	X	No
Santa Rosa Rancheria Tachi Yokut Tribe <i>Leo Sisco, Chairperson</i>	X	X	No
Santa Ynez Band of Chumash Indians <i>Kenneth Kahn, Chairperson</i>	X	X	Yes, no formal consultation requested
Tule River Indian Tribe <i>Neil Peyron, Chairperson</i>	X	X	No
Xolon-Salinan Tribe <i>Karen White, Chairperson</i>	X	X	No
yak tityu tityu yak tithini – Northern Chumash Tribe <i>Mona Tucker, Chairperson</i> <i>Lorie Laguna, Representative</i>	X	X	Yes; no formal consultation requested

**Project Impacts and Mitigation Measures**

**Threshold a:** Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

**Impact TCR-1 IMPLEMENTATION OF THE PROPOSED PLANTING ORDINANCE COULD RESULT IN POTENTIALLY SIGNIFICANT IMPACTS TO TRIBAL CULTURAL RESOURCES. NO FEASIBLE MITIGATION MEASURES ARE AVAILABLE TO REDUCE DIRECT IMPACTS ON TRIBAL CULTURAL RESOURCES. IMPACTS TO TRIBAL CULTURAL RESOURCES WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

As discussed in Section 4.12.3, no requests for formal consultation pursuant to AB 52 or SB 18 were received from Native American tribes.

Although no specific tribal cultural resources were identified by the tribes associated with the PBLUMA, ground-disturbing activities related to proposed new and expanded agricultural activities and proposed accessory infrastructure associated with planting ordinance, particularly in previously uncultivated/undisturbed areas, in areas requiring deeper ripping/grading activities than what previously occurred, and/or within 100 feet of the bank of a creek or spring, or 300 feet of a creek

where the slope is less than 10 percent on sites that are not currently in active cultivation, have the potential to impact tribal cultural resources that may be present on or below the ground surface. Consequently, impacts to subsurface tribal cultural resources could potentially occur as a result of new and expanded plantings and/or construction of accessory infrastructure under the proposed ordinance.

Increased groundwater extraction resulting from the proposed planting ordinance would not have the potential to result in impacts to tribal cultural resources, because groundwater extraction would not result in soil disturbance where tribal cultural resources could be present. However, construction of new irrigation groundwater wells would potentially impact underlying tribal cultural resources. The drill used to install wells pulverizes soil as it digs, making it impossible to determine whether tribal cultural resources were present and destroyed by the drilling.

Grading for site preparation and construction of agriculture infrastructure (e.g., ponds/reservoirs, access roads, irrigation pipelines) could impact tribal cultural resources in previously undisturbed areas. In addition, tribal cultural resources could be impacted in areas with active or past agricultural activities if crops that require shallow excavation (e.g., alfalfa, vegetables, etc.) are replaced with crops that require deep ripping to provide for adequate drainage (e.g., for wine and table grapes, orchards, etc.).

The County has adopted policies and regulations to identify, designate, and minimize potential impacts to tribal cultural resources. The County of San Luis Obispo General Plan Conservation and Open Space Element's goals, policies, and implementation measures encourage the identification, designation, and reduction of potential impacts to archaeological (tribal cultural) resources. The specific policies and implementation measures are included in Section 4.4.2 above.

In addition, grading activities that have a potential to result in impacts to tribal cultural resources are regulated under the County Grading Ordinance (Section 22.52 of the County Code). Pursuant to Section 22.52.070 of the County Code, many smaller agricultural grading activities with smaller areas of grading or grading in previously disturbed areas, such as small agricultural projects involving less than 50 cubic yards of excavation, grading for ongoing crop production, and/or installation of water supplies, are exempt from obtaining a grading permit. New crop production on slopes up to 30 percent and construction of agricultural reservoirs with less than 1 acre-foot of capacity must submit an Agricultural Grading Form to the County prior to commencement of grading activities. Grading for new crop production on slopes greater than 30 percent, construction of agricultural reservoirs with greater than 1 acre-foot of capacity, and grading for agricultural roads must obtain a grading permit from the County or Alternative Review by the NRCS or Resource Conservation District (RCD), all of which are subject to separate CEQA review. Impacts from agricultural grading from agricultural projects that are not required to obtain a grading permit were analyzed in *Final Grading and Stormwater Management General Plan Ordinance Revisions Environmental Impact Report* (Grading Ordinance FEIR; County of San Luis Obispo 2009). The proposed planting ordinance may facilitate additional grading for agricultural production beyond that analyzed in the Grading Ordinance FEIR because additional water supplies would be available for irrigation. Because grading activities have a potential to result in additional impacts to tribal cultural resources, impacts would be potentially significant.

Specific potential impacts to tribal cultural resources can only be determined on an individual planting permit/exemption basis because potential impacts are dependent upon both the individual resource and the characteristics of the proposed activity, including the location. However, activities facilitated by the project could affect tribal cultural resources on previously undisturbed land, or

where disturbance would be at greater depths than past disturbance. Therefore, impacts to tribal cultural resources would be potentially significant.

### **Mitigation Measures**

The County has complied with the requirements of AB 52 and SB 18 for sending notifications for requests for formal consultation with tribes affiliated with the PBLUMA. The new and expanded agricultural activities allowed under the ordinance would be permitted via ministerial permits, and no further CEQA clearances or amendments to the General Plan would occur, and thus, further tribal consultation would not be required. With compliance with the regulatory frameworks discussed in Section 4.12.2, *Regulatory Setting*, and discussed under Impact TCR-1, including the County Grading Ordinance, impacts to tribal cultural resources from agricultural activities in the County would be reduced to the greatest extent feasible. There are no additional feasible mitigation measures available to reduce impacts to tribal cultural resources (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility).

### **Significance After Mitigation**

Since no feasible mitigation measures are available to reduce impacts to tribal cultural resources, impacts would be significant and unavoidable.

#### **4.12.4 Cumulative Impacts**

Cumulative residential and non-residential development, in combination with the proposed planting ordinance, would result in potential exposure of and permanent loss of tribal cultural resources. The County would require mitigation measures for cumulative residential and non-residential development subject to CEQA review. Project-specific mitigation measures may include monitoring during ground-disturbing activities, as well as a Phase I Inventory, Phase II Testing and Evaluation, and/or Phase III Data Recovery, depending on the significance of tribal cultural resources on the project sites. However, it is not feasible for the County to require mitigation measures as part of the ministerial permits issued under the proposed planting ordinance. Therefore, the planting ordinance could incrementally contribute to the cumulative loss of tribal cultural resources. When combined with potential impacts of the other cumulative projects, cumulative impacts to tribal cultural resources would be potentially significant, and the proposed ordinance's incremental contribution to this impact would be cumulatively considerable.

## 4.13 Utilities and Services Systems

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This section evaluates construction and operational impacts related to the relocation or construction of new or expanded water, storm water drainage, electric power, or natural gas, facilities and related to water supplies.

Impacts related to relocation or construction of new or expanded wastewater or telecommunications facilities, wastewater treatment capacity, and solid waste were found to be less than significant in the Initial Study prepared for the proposed project and, therefore, are not further analyzed in this section. For further discussion regarding the impacts determined to be less than significant, please refer to the Initial Study in Appendix A and to Section 4.14, *Effects Found Not to be Significant*.

### 4.13.1 Setting

#### **Stormwater Drainage and Infrastructure**

The Salinas River corridor drains a large watershed that extends from Santa Margarita to the Pacific Ocean. South of San Miguel, within the PBLUMA, the Salinas River and Estrella River merge into a large, relatively undefined flood plain. Within the area of San Miguel, the Salinas River is the primary drainage feature. Drainage generally sheet-flows<sup>1</sup> from higher topography towards the Salinas River, and storm drains discharge to the Salinas River (County of San Luis Obispo 2016).

In the area of Shandon, within the PBLUMA, the Cholame Creek and San Juan Creek converge to form the westward-flowing Estrella River. Runoff within the community of Shandon generally sheet-flows to the north, due to an absence of clearly defined natural channels to the above-mentioned watercourses. Within the area of Shandon, roadside swales and culverts provide drainage (County of San Luis Obispo 2012).

#### **Electric Power and Natural Gas**

The Pacific Gas & Electric Company (PG&E) is the primary electricity provider and both PG&E and the Southern California Gas Company (SoCalGas) provide natural gas services for urban and rural communities within San Luis Obispo County. Agricultural operations within the PBLUMA use electricity from PG&E, solar, or propane. Electric service is provided by overhead lines for unincorporated areas within the PBLUMA, such as Shandon, Creston, and San Miguel (County of San Luis Obispo 2012, 2016). Refer to Section 4.5, *Energy*, for a discussion on the electrical and natural gas consumption with the PG&E and SoCalGas service areas.

#### **Water Service and Infrastructure**

Community water systems provide water from groundwater wells to urban and village communities, subdivisions, and businesses within the PBLUMA, including: San Miguel Community Services District, Shandon Community Service Area 16, Green River Mutual Water Company, Spanish Lakes Mutual Water Company, and Rancho Salinas Mutual Benefit Water. However, most residents and agricultural operations in the PBLUMA use on-site groundwater wells not subject to community water systems State reporting standards. As stated in the Paso Robles Subbasin Groundwater Sustainability Plan (GSP), the total number of existing and active wells is not known. However, using

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<sup>1</sup> Sheet-flow refers to water (usually storm runoff) that flows in a thin, continuous film, rather than concentrated into a stream.



the County Public Health Department's well construction permit inventory database from 1965 to present-day, there are an estimated 5,164 wells. The majority of the 5,164 total wells are domestic wells, with approximately 600 irrigation wells. Most of the wells are concentrated on the western portion of the Paso Robles Subbasin (County of San Luis Obispo et al. 2020).

A pipeline for the Lake Nacimiento Water Project, which delivers water from Lake Nacimiento to the City of Paso Robles, City of San Luis Obispo, and other County areas, runs alongside the western boundary of the PBLUMA. The California State Coastal Branch pipeline, which diverts water from the California Aqueduct to parts of San Luis Obispo County, runs through the northeastern portion of the PBLUMA before exiting southwest, south of Creston (San Luis Obispo County Flood Control and Water Conservation District [SLOFCWCD] 2012).

## **Water Supply and Demand**

There are three sources of water supply in the PBLUMA: groundwater; Salinas River underflow, which is regulated as surface water by the State Water Resources Control Board; and imported surface water. Total annual water use for Water Year 2020<sup>2</sup> was 68,037 AF for the Paso Robles Subbasin, with 67,300 AF (98.9 percent) from groundwater supplies and 737 AF (1.1 percent) from imported surface water use (GSI Water Solutions, Inc. 2021). These water sources are discussed further below. Two potential sources of water supply in the PBLUMA include recycled water from the City of Paso Robles and the San Miguel Community Services District and stormwater.

## **Groundwater**

The Paso Robles Subbasin is located within the larger Salinas Valley Groundwater Basin, and is identified as Groundwater Basin Number 3-4.06 by the California Department of Water Resources (DWR). The estimated total storage capacity and usable capacity of the Paso Robles Subbasin are estimated at 304,400,000 acre-feet (AF) and 1,700,000 AF, respectively (DWR 2004). In 2005, the perennial yield<sup>3</sup> for the Paso Robles Subbasin was estimated to be 81,300 acre-feet per year (AFY)<sup>4</sup> (SLOFCWCD 2012). Recharge of the Paso Robles Subbasin occurs from infiltration of precipitation, infiltration of surface water from streams and creeks, irrigation return flow, and infiltration of treated wastewater from disposal ponds (County of San Luis Obispo et al. 2020).

Groundwater elevations in the Paso Robles Subbasin have been decreasing over the past few decades. Groundwater models estimate that from 1981 through 2011, groundwater outflows exceeded inflows resulting in an average annual deficit of 12,600 AFY. During this time frame, approximately 369,000 AF was lost from storage in the aquifer. Additional model estimates concluded that approximately 646,000 AF were removed from storage between 1981 and 2016. This loss in groundwater storage resulted from a combination of increased pumping since 1999, as well as a number of dry years with limited recharge.

The County of San Luis Obispo's Resource Management System provides information to guide land use decisions and sets Levels of Severity (LOS) to identify levels of resource deficiency (County of San Luis Obispo 2019). The Paso Robles Subbasin is designated as LOS III, which occurs when resource demand equals or exceeds resource supply, and is the most critical level of concern. For water supply, LOS III occurs when (a) the projected water demand over 15 years equals or exceeds

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<sup>2</sup> Water Year refers to the 12-month period from October 1<sup>st</sup> for any given year through September 30<sup>th</sup> of the following year.

<sup>3</sup> Perennial yield refers to the amount of groundwater that can be withdrawn from a groundwater basin over a period of time without exceeding recharge of the basin or resulting in overdraft of the groundwater basin.

<sup>4</sup> Estimated from the perennial yield of 97,700 AFY for the Paso Robles Groundwater, which includes the Atascadero Subbasin which has a perennial yield of 16,400 AFY (97,700 AFY - 16,400 AFY = 81,300 AFY).

the estimated dependable supply, or (b) the time required to address the issue is greater than the time available before the dependable supply is reached. The Paso Robles Subbasin GSP projects a long-term imbalance between future groundwater inflows and outflows (i.e., projected water demand will exceed projected water recharge), leading to an average annual decrease of 13,700 AFY in groundwater storage (County of San Luis Obispo et al. 2020).

In order to prevent the continued drawdown of the groundwater levels, the Paso Robles Subbasin GSP set a future estimated long-term sustainable annual yield goal of 61,100 AFY, under reasonable climate change assumptions and absent the addition of supplemental water (County of San Luis Obispo et al. 2020). In 2020, groundwater storage decreased by 80,800 AF from 2019 conditions, coinciding with below average precipitation in 2020. Total annual ground water use for Water Year 2020<sup>5</sup> was 67,300 AF for the Paso Robles Subbasin, of which 60,700 AF was for agriculture. The total groundwater extraction of 67,300 AF in 2020 exceeded the sustainable yield goal of 61,100 AF.

### **Imported Surface Water**

Until 2015, all water demand in the Paso Robles Subbasin was supplied by groundwater. In 2015, the City of Paso Robles began using its contractual entitlement to receive 6,488 AFY from the Nacimiento Water Project, which delivers water from Lake Nacimiento, northwest of Paso Robles. The community of Shandon, located in Community Service Area 16, also has a contract entitlement to 100 AFY from the Coastal Branch of the State Water Project, which diverts water from the California Aqueduct (County of San Luis Obispo et al. 2020). The State Water Project is a supplementary source of water supply as operational requirements or hydrologic variability can cause reduced deliveries or total shutdown of the delivery system (SLOCFCWCD 2012). In 2020, surface water use from the Nacimiento Water Project was 737 AF, and no water was used from the State Water Project (GSI Water Solutions, Inc. 2021).

According to the Paso Robles Subbasin Water Year 2020 Annual Report, no surface water is available for agricultural or recharge project use within the Paso Robles Subbasin (GSI Water Solutions, Inc. 2021). The GSP identifies possible expansion of the Salinas Dam and Santa Margarita Reservoir to increase releases to the Salinas River by up to 18,000 AFY as a conceptual project, which is still speculative at this time.

### **Recycled Water**

Recycled water from wastewater treatment plants is a potential water source within the PBLUMA and Paso Robles Subbasin. The San Miguel Community Services District is in the final design phase to upgrade its wastewater treatment plant to provide 200 to 450 AFY of recycled water for irrigation use by nearby vineyards. The City of Paso Robles is also exploring potential construction of a pipeline system to convey recycled water from its wastewater treatment plant to the agricultural areas east of Paso Robles that could be blended with surplus water from the Nacimiento Water Project when available. The City estimates up to 2,200 AFY of recycled water could be available for use within Paso Robles and in the eastern agricultural areas (County of San Luis Obispo et al. 2020).

### **Stormwater**

A potential GSP management action is diverting stormwater flows from local streams and rivers to nearby fields or undeveloped areas to infiltrate into the groundwater basin. A stormwater capture and recharge feasibility study prepared for the Paso Robles Subbasin in December 2020 estimated

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<sup>5</sup> Water Year refers to the 12-month period from October 1<sup>st</sup> for any given year through September 30<sup>th</sup> of the following year.

that capturable flows are only available for 2 or 3 years out of every 10 to 15 years with a potential flow diversion capacity of 5,020 AFY on average over a 15-year period for five identified target areas with the most favorable diversion and recharge capacity. The study concluded that the required infrastructure may not be cost effective given the limited potential flow diversion and recommended focusing on developing specific projects with landowner support. Stormwater recharge grants may be available in the future from DWR (GSI Water Solutions, Inc. 2021).

### 4.13.2 Regulatory Setting

#### **Federal Regulations**

There are no federal regulations related to utilities and service systems, including water supply.

#### **State Regulations**

##### *California Department of Water Resources*

DWR is responsible for preparing and updating the California Water Plan, which is a policy document that guides the development and management of State water resources. The plan is updated every five years to reflect changes in resources and urban, agricultural, and environmental water demands. The California Water Plan suggests methods for managing demand and augmenting supply to balance water supply with demand.

##### *Sustainable Groundwater Management Act*

In September 2014, Governor Jerry Brown signed legislation requiring California's critical groundwater resources to be sustainably managed by local agencies. The Sustainable Groundwater Management Act (SGMA) grants local agencies the power to sustainably manage groundwater, provides for the creation of regional Groundwater Sustainability Agencies (GSAs), and requires Groundwater Sustainability Plans (GSPs) to be developed for medium- and high-priority groundwater basins. SGMA also requires basins in "critical overdraft" to develop GSPs immediately (DWR 2020a).

As discussed in Section 2, *Project Description*, the Paso Robles Subbasin was designated by DWR as being a "high priority" basin and in a state of "critical overdraft" and the GSAs were required to develop and implement a GSP. The GSP is discussed below under Section 4.13.2 under *Local Regulations*.

##### *AB 1668*

Assembly Bill 1668, passed in May 2018, builds upon Governor Brown's efforts to create long-term improvements in California's water conservation and drought planning. Under AB 1688, agricultural water suppliers must set annual water budgets and prepare for drought. Agricultural water suppliers must submit annual reports to the DWR by April 1 of each year, starting in 2019. The annual reports may be organized by the groundwater basin or subbasin within the service area of the agricultural water supplier. Additionally, AB 1668 includes provisions that identify small water supplies and rural communities that may be at risk of drought and offers recommendations for drought planning (DWR 2020b).

AB 1668 requires the Department of Water Resources to provide recommendations and guidance concerning implementation of countywide drought and water shortage contingency plans by

January 1, 2020, and to identify small water suppliers or rural communities at risk of water shortage or drought by January 1, 2020.

#### *Executive Order N-7-22*

On March 28, 2022, the Governor enacted an executive order to be in effect during states of emergency due to drought conditions that requires that before jurisdictions may permit the construction of new non-domestic groundwater wells, they must determine that extraction of groundwater from the proposed well is not likely to interfere with the production and functioning of existing nearby wells and not likely to cause subsidence that would adversely impact or damage nearby infrastructure. For wells within a medium or high-priority SGMA basin, well permitting jurisdictions must also ask the appropriate GSA to verify that groundwater extraction by the proposed well would not be inconsistent with any GSP management programs and would not decrease the likelihood of achieving a GSP sustainability goal.

These requirements do not apply to permits for wells that will provide less than two (2) acre-feet per year of groundwater for individual domestic users or that will exclusively provide groundwater to public water supply systems as defined in Health and Safety Code Section 116275.

In accordance with the Executive Order, the San Luis Obispo County Health Agency – Environmental Health Services (EHS) has established a procedure to require water well construction permit applications for a non-exempt new or altered groundwater well to include a report signed by a California licensed Professional Geologist with a Certified Hydrogeologist specialty certification that concludes both that extraction of groundwater from the well (1) “is not likely to interfere with the production and functioning of existing nearby wells” and (2) “is not likely to cause subsidence that would adversely impact or damage nearby infrastructure.”

Additionally, EHS will not issue a water well construction permit for a non-exempt new groundwater well or alteration of an existing groundwater well located within the Salinas Valley-Paso Robles Area Subbasin, within the San Luis Obispo Valley Basin or within the Cuyama Valley Basin as identified by the Department of Water Resources without first obtaining from the relevant GSA verification regarding consistency with GSP sustainability goals.

Due to the recent enactment of this Executive Order, it is too speculative to discuss how or whether the GSAs will be able to make the required GSP consistency findings for new wells subject to the Executive Order.

## **Local Regulations**

### *San Luis Obispo County Integrated Regional Water Management Plan*

The San Luis Obispo County Integrated Regional Water Management Plan (IRWMP) was originally developed and adopted by the SLOFCWCD in 2005. The 2019 IRWMP provides a comprehensive water resources management approach to manage the region’s water resources; it focuses on strategies that would improve sustainability of current or future water needs and plans for near-term water management. The IRWMP is updated on a regular cycle, typically every five years (SLOFCWCD 2020).

### *Paso Robles Subbasin Groundwater Sustainability Plan*

The Paso Robles Subbasin GSP was published on November 13, 2019 and was formally adopted by the four GSAs within the Paso Robles Subbasin area (City of Paso Robles, County of San Luis Obispo,

San Miguel Community Services District, and Shandon-San Juan) before the January 31, 2020 deadline required by SGMA (County of San Luis Obispo et al. 2020).

The GSP outlines current and future monitoring requirements and seeks to increase monitoring requirements from small extractors in the future. The GSP also outlines development and implementation of a fee schedule for monitoring services and the creation of regional monitoring co-operatives to alleviate individual monitoring burdens for small users under potential future regulatory structures.

On June 3, 2021, the DWR provided its initial review and evaluation of submitted GSP. The DWR did not approve the Paso Robles Subbasin GSP, and instead listed a set of deficiencies with the plan as submitted along with a set of recommendations for addressing them. This review began a process of consultations with the GSAs to begin addressing the issues prior to DWR's issuance of a final determination. Issues that the DWR found with the GSP in general include:

- A lack of justification and explanation of the selected SMCs, especially the minimum thresholds and undesirable results;
- A lack of explanation of the effects of the selected SMCs on the interests of users of groundwater;
- A lack of justification for not developing SMCs for depletions of interconnected surface waters; and
- Inconsistent and conflicting depictions of the connections between surface and groundwaters in the Basin.

The DWR issued its final determination regarding the completeness of the GSP on January 21, 2022, and notified the GSAs that the GSP was determined to be incomplete. The GSAs have 180 days from that date to address any remaining deficiencies. Currently, DWR and the GSAs are in consultations to address the issues prior to final determination by DWR.

The Paso Robles Subbasin GSAs are in the process of applying for a DWR non-competitive grant for GSP implementation. There is \$7.6 million available for the Paso Robles Subbasin to be awarded in Summer 2022 with a three-year spending timeline. GSP implementation activities that would be funded by the DWR grant include development and implementation of a basin-wide well verification and registration program, an expanded basin monitoring program, the initial phases of the San Miguel Community Services District and City of Paso Robles recycled water distribution (purple pipe) systems, and several technical studies to support moving additional projects and management actions forward, all contingent upon adoption by the GSAs.

#### *Central Coast Regional Water Quality Control Board's Irrigated Lands Program*

The Central Coast Regional Water Quality Control Board (CCRWQCB) regulates irrigated agricultural discharges, including stormwater runoff, to protect surface and groundwater under Order No. R3-2021-0040, General Waste Discharge Requirements for Discharges from Irrigated Lands (also known as the Agricultural Order), most recently updated April 15, 2021. The Agricultural Order requires dischargers to create, implement, and regularly update a Farm Water Quality Management Plan (Farm Plan) which includes sections for irrigation and nutrient management, pesticide management, and erosion management. Requirements imposed upon growers and dischargers are tiered based on the overall risk the discharger's operations present to water quality.

The 2021 Order incorporates several requirements for dischargers; requirements pertaining to stormwater or drainage associated with discharge are discussed below:

- Dischargers who use agricultural drainage pumps must implement management practices to dissipate flow and prevent streambank erosion, resulting in increased sediment or turbidity within surface water.
- Dischargers must comply with any applicable stormwater permits.
- Dischargers must ensure that all agricultural roads are, to the extent possible, hydrologically disconnected from waters of the state by installing drainage features and increasing the frequency of ditch drainage relief.
- Dischargers must ensure that agricultural roads are out-sloped whenever possible to promote even drainage of the agricultural road surface, prevent the concentration of stormwater flow within an inboard or inside ditch, and to prevent disruption of the natural sheet flow pattern off a hill slope to waters of the state.
- Agricultural road stormwater drainage structures must not discharge onto unstable slopes, earthen fills, or directly into waters of the state. Drainage structures must discharge onto stable areas with straw bales, slash, vegetation, and/or rock riprap.

### *County of San Luis Obispo General Plan*

The County of San Luis Obispo's General Plan is divided into Elements; the Agricultural Element and Conservation and Open Space Element contain policies or statements that pertain to water supply and water conservation for agricultural resources. The sections below discuss relevant policies from these Elements as well as applicable implementation strategies to meet these policies.

#### **AGRICULTURAL ELEMENT**

The County's Agricultural Element of the General Plan requires the County to, within the limits of its authority, ensure that actions by individuals or agencies maintain balance of the County's groundwater resources. The Agricultural Element states water scarcity to be a key issue and that proposed developments should be reviewed for cumulative impacts to degradation of water supplies. Additionally, the Agricultural Element encourages individuals and agencies to reduce water demands and increase water supplies and offers appropriate mitigation measures for proposals that might adversely impact groundwater supply (County of San Luis Obispo 2010). Furthermore, the Agricultural Element contains policies that pertain to water conservation. Applicable goals and policies are listed below, including one that would be modified by the proposed project:

- **AG-1d Support County Agricultural Production.** Develop agricultural permit processing requirements that are rapid and efficient. Do not require permits for agricultural practices and improvements that are currently exempt. Keep the required level of permit processing for non-exempt projects at the lowest possible level consistent with the protection of agricultural resources and sensitive habitats.
- **AG-2b Conserve Agricultural Resources.** Conserve the soil and water that are the vital components necessary for a successful agricultural industry in this county.
- **AGP10 Water Conservation.**
  - a. Encourage water conservation through feasible and appropriate "best management practices." Emphasize efficient water application techniques; the use of properly designed irrigation systems; and the control of runoff from croplands, rangelands, and agricultural roads.
  - b. Encourage the U.C. Cooperative Extension to continue its public information and research program describing water conservation techniques that may be appropriate for agricultural

practices in this county. Encourage landowners to participate in programs that conserve water.

▪ **AGP11 Agricultural Water Supplies.**

- a. Maintain water resources for production of agriculture, both in quality and quantity, so as to prevent the loss of agriculture due to competition for water with urban and suburban development.
- b. Do not approve proposed general plan amendments or re-zonings that result in increased residential density or urban expansion if the subsequent development would adversely affect: (1) water supplies and quality, or (2) groundwater recharge capability needed for agricultural use.

Goal AG-1d would be modified by the proposed planting ordinance to specify that permits are not required for agricultural practices and improvements, with the exception of ministerial permits to regulate production agriculture irrigated with groundwater wells within the PBLUMA. See Appendix C for the proposed General Plan revisions.

**CONSERVATION AND OPEN SPACE ELEMENT**

The County's Conservation and Open Space Element devotes an entire chapter to water resources; in this chapter, the County identifies water to be a scarce and valuable resource and states that water supply, water conservation, and groundwater monitoring and management are key County issues. In addition to outlining the County's water resources, the Conservation and Open Space Element also contains several policies that are designed to help the County reach its pre-defined goals of maintaining a reliable and secure water supply and collaboratively managing groundwater resources to ensure a sustainable supply. Applicable policies are discussed below:

- **Policy WR 1.1 Protect water supplies.** Continue to coordinate with water suppliers and managers to identify water management strategies to protect existing and secure new water supplies.
- **Policy WR 1.2 Conserve Water Resources.** Water conservation is acknowledged to be the primary method to serve the county's increasing population. Water conservation programs should be implemented countywide before more expensive and environmentally costly forms of new water are secured.
  - **Implementation Strategy WR 1.2.1 Revise Resource Management System.** Revise the Resource Management System Annual Resource Summary Report to collect and report on water usage and trends, water rates and conservation programs.
- **Policy WR 1.3 New Water Supply.** Development of new water supplies should focus on efficient use of our existing resources. Use of reclaimed water, interagency cooperative projects, desalination of contaminated groundwater supplies, and groundwater recharge projects should be considered prior to using imported sources of water or seawater desalination, or dams and on-stream reservoirs.
- **Policy WR 1.7 Agricultural operations.** Groundwater management strategies will give priority to agricultural operations. Protect agricultural water supplies from competition by incompatible development through land use controls.
- **Policy WR 1.14 Avoid net increase in water use.** Avoid a net increase in non-agricultural water use in groundwater basins that are recommended or certified as Level of Severity II or III for

water supply. Place limitations on further land divisions in these areas until plans are in place and funded to ensure that the safe yield will not be exceeded.

- **Policy WR 2.1 Groundwater quality assessments.** Prepare groundwater quality assessments, including recommended monitoring, and management measures.
  - **Implementation Strategy WR 2.1.1: Groundwater monitoring: secure funding.** Continue efforts to prioritize and secure funding for groundwater monitoring and management.
  - **Implementation Strategy WR 2.1.2: Consider countywide groundwater ordinance.** Adopt a countywide groundwater ordinance to manage groundwater in areas of the county not currently under adjudication.
  - **Implementation Strategy 2.1.3: Prepare groundwater management plans.** Continue to develop groundwater management plans in conjunction with overlying users in the development of management plans. Provide periodic updates to the Board of Supervisors every five years or less.
- **Policy WR 2.2 Groundwater basin reporting programs.** Support monitoring and reporting programs for groundwater basins in the region.
  - **Implementation Strategy WR 2.2.1:** Collaborate for groundwater data collection. The County will cooperate with local entities and use local analysis and data to the maximum extent possible to collect and assess groundwater.
  - **Implementation Strategy WR 2.2.4:** Groundwater data collection from water purveyors. Require, to the extent feasible, all water purveyors with five or more connections to report monthly pumping data to the Department of Planning and Building on an annual basis for use in the Resource Management System.
  - **Implementation Strategy WR 2.2.5:** Groundwater data collection for new development. Condition discretionary land use permits for new, nonagricultural uses in groundwater basins with a recommended or certified Level of Severity I, II, or III to monitor and report water use to the Department of Planning and Building on an annual basis for use in the Resource Management System.
- **Policy WR 2.3 Well permits.** Require all well permits to be consistent with the adopted groundwater management plans
- **Policy WR 2.4 Groundwater recharge.** Where conditions are appropriate, promote groundwater recharge with high-quality water.
- **Policy WR 4.1 Reduce water use.** Employ water conservation programs to achieve an overall 20% reduction in per capita residential and commercial water use in the unincorporated area by 2020. Continue to improve agricultural water use efficiency consistent with Policy AGP 10 in the Agricultural Element.
- **Policy WR 4.2 Water pricing structures.** Support water-pricing structures to encourage conservation by individual water users and seek to expand the use of conservation rate structures in areas with Levels of Severity II and III for water supply.
- **Policy WR 4.8 Efficient irrigation.** Support efforts of the resource conservation districts, California Polytechnic State University (CalPoly), the University of California Cooperative Extension, and others to research, develop, and implement more efficient irrigation techniques.
  - **Implementation Strategy WR 4.8.1:** Improve water efficiency conservation in County irrigation systems. Evaluate the efficiency of irrigation systems at County Parks and other



County facilities with the assistance of Resource Conservation Districts and water purveyors. The goals of such evaluations are to reduce water use and improve water efficiencies.

- **Policy WR 5.1 Watershed approach.** The County will consider watersheds and groundwater basins in its approach to managing water resources in order to include ecological values and economic factors in water resources development
- **Policy WR 5.3 Cooperative water planning and management.** Continue to support cooperative, interregional water planning efforts such as the Integrated Regional Water Management Plan, the Resource Management System, and the Water Master Plan.
  - **Implementation Strategy WR 5.3.1:** Promote the coordinate of watershed protection efforts. Coordinate water resource management plans with other conservation planning efforts, such as those related to open space, parkland, and agricultural preservation.
  - **Implementation Strategy WR 5.3.2:** Cumulative impacts to watersheds. Identify mitigation strategies or programs at the watershed, groundwater basin level, or a portion thereof that address cumulative impacts within watersheds, groundwater basins or in portions of watersheds, or groundwater basins in coordination with cities and watershed managers.

Policy WR-1.14 would be modified by the proposed planting ordinance to specify that the avoidance of net increases in water use in groundwater basins that are certified at Level of Severity II or III for water supply are not applicable to net increases that are the result of actions to promote the agricultural use of the supply in a manner that is equitable and consistent with groundwater rights. See Appendix C for the proposed General Plan revisions.

#### *Shandon Community Plan*

The Shandon Community Plan sets forth several policies designed to reduce adverse impacts associated with stormwater and drainage. Applicable policies are listed below:

- **SDP-1:** Provide comprehensive stormwater management to minimize flooding and property damage throughout the community.
- **SDP-2:** Design and construct a stormwater system that minimizes impacts to surface and groundwater quality and helps maintain the river and creeks in a natural state.
- **SDP-3:** Require the use of suitable low impact development techniques and best management practices in site design and development.
- **SDP-4:** Groundwater recharge shall be a priority in stormwater and drainage system design.

#### *San Miguel Community Plan*

The San Miguel Community Plan sets forth several policies designed to reduce adverse impacts associated with stormwater and drainage, as well as programs to implement such policies.

Applicable policies and programs are listed below:

- **Policy 7-7:** Provide comprehensive stormwater management to minimize flooding and property damage throughout the community.
- **Policy 7-8:** Design and construct a stormwater system that minimizes impacts to surface and groundwater and maintains rivers and creeks in their natural state.
- **Policy 7-9:** Require the use of suitable Low Impact Development (LID) techniques and best management practices in site design and development, both on private and public land.

- **Policy 7-10:** Groundwater recharge shall be a priority in stormwater and drainage system design.
- **Program 7-5:** Update the San Miguel Drainage Plan. Update the communitywide drainage plan for San Miguel to reflect current conditions and anticipated development.
- **Program 7-6:** Incorporation of LID techniques and emphasis on groundwater recharge over direct conveyance to surface waters.

### *San Luis Obispo County Code*

#### **AGRICULTURAL OFFSET ORDINANCE (SECTION 22.30.204)**

The County Land Use Ordinance, Title 22, Section 22.30.204 (the 'Agricultural Offset Ordinance') was adopted on October 27, 2015 in response to declining groundwater levels in the Paso Robles Subbasin. The ordinance requires new and expanded irrigated crop production within the PBLUMA to use the same amount of groundwater or less than previously irrigated and removed crops so as not to allow an increase in groundwater demand basin-wide, with a 5-AFY exemption for sites without previous irrigated crop production outside of an "area of severe decline" where groundwater well monitoring indicates persistent decline in groundwater elevation levels.

See Section 2.3.4 for a more detailed explanation of the Agricultural Offset Ordinance, which expires on August 31, 2022. The County Board of Supervisors is scheduled to hold a hearing on July 12, 2022 to consider extending the existing Agricultural Offset Requirements to January 31, 2023 to coincide with the anticipated effective date of the proposed planting ordinance, assuming it is adopted by the Board of Supervisors in December 2022. The Agricultural Offset Ordinance would be replaced by the proposed planting ordinance as detailed in Section 2.5, *Project Characteristics*. Also see Appendix C for the proposed ordinance revisions.

#### **PASO ROBLES GROUNDWATER BASIN PLANNING AREA STANDARDS (SECTION 22.94.025)**

The County Land Use Ordinance, Title 22, Section 22.94.025 (the 'Paso Robles Groundwater Basin Planning Area Standards'), adopted September 25, 2012, prohibits General Plan amendments that would result in a net increase in water use for non-agricultural purposes and all land divisions except for public use or conservation purposes until the Paso Basin water supply is certified as Level of Severity I. The standards also require new discretionary non-agricultural development using groundwater to offset water use at a 2:1 ratio.

#### **COUNTY WELL CONSTRUCTION ORDINANCE (CHAPTER 8.40)**

Chapter 8.40 of the County Code Section (the 'Well Construction Ordinance') sets the standards for construction, modification, use, and retirement of both domestic and commercial groundwater extraction wells within the County. With regards to construction of new wells, the ordinance specifies compliance with the Agricultural Offset Ordinance as a condition of permit issuance; therefore, the Well Construction Ordinance reinforces the Agricultural Offset Ordinance by ensuring that the physical source of groundwater extraction complies with the offset requirements.

Section 8.40.030 of the Well Construction Ordinance would be slightly modified under the proposed planting ordinance to require compliance with the new planting ordinance rather than the Agricultural Offset Ordinance as a condition of permit issuance for new well construction or modification. See Appendix C for the proposed ordinance revisions.

### **GROUNDWATER EXPORT ORDINANCE (CHAPTER 8.95)**

Chapter 8.95 of the County Code states that no person shall export groundwater underlying San Luis Obispo County without first obtaining a permit. An export permit shall only be approved if the County Director of Public Works finds that a proposed export would not cause or contribute to significant harmful impacts to groundwater resources within the County or on the groundwater basin. Any proposed exports shall not result in chronic lowering of groundwater levels or adversely affect the long-term ability for groundwater storage. Approved permits are valid until a year has passed since permit issuance.

Furthermore, the County Director of Public Works is required to incorporate a monitoring and/or reporting program for each export permit. County Code Section 8.95.080 states that the monitoring and/or reporting program should be of an appropriate size and extent to ensure that the permitted export of groundwater would not cause detrimental impacts on groundwater wells, levels, or associated vegetation and wildlife.

#### 4.13.3 Impact Analysis

##### **Significance Thresholds**

Per Appendix G of the *CEQA Guidelines*, a project would result in a significant impact to utilities and service systems if it would:

- a) 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;
- b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; and/or
- e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

The Initial Study prepared for the proposed project and circulated during the scoping period for the PEIR determined that impacts associated with Thresholds c, d, and e would be less than significant. These impacts are briefly discussed in Section 4.14, *Effects Found Not to be Significant*. See also Appendix A for the Initial Study. Accordingly, the impact analysis below discusses only Thresholds a and b. In addition, the Initial Study concluded that impacts related to relocation or construction of new or expanded wastewater treatment or telecommunication facilities would be less than significant; therefore, these topics are not discussed below under Threshold a.

##### **Methodology**

The analysis of impacts to utilities and service systems utilizes the energy consumption estimates detailed in Section 4.5, *Energy*, and the groundwater extraction estimates detailed in Appendix B.

## Project Impacts and Mitigation Measures

**Threshold a:** Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

**Impact UTIL-1** REASONABLY FORESEEABLE CROP PRODUCTION UNDER THE PROPOSED ORDINANCE MAY REQUIRE THE RELOCATION OR CONSTRUCTION OF NEW OR EXPANDED WATER, STORMWATER, AND ELECTRIC POWER OR NATURAL GAS FACILITIES IN THE PBLUMA. HOWEVER, SUCH RELOCATION AND CONSTRUCTION WOULD NOT CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS BEYOND THOSE ALREADY IDENTIFIED IN THIS PEIR. IMPACTS WOULD BE CLASS III, LESS THAN SIGNIFICANT.

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### Water Facilities

The proposed ordinance would affect approximately 240 acres of previously uncultivated land per year, resulting in a total of 5,280 acres of previously uncultivated land that would be affected through January 31, 2045. This would equate to an annual increase in groundwater use of approximately 450 acre-feet per year (AFY) for a total increase of 9,900 AFY through January 31, 2045. This estimated water use for crop irrigation is based on crop-specific water duty factors and crop acreage (please refer to Appendix B for a detailed discussion of water use assumptions).

The annual increase in groundwater use would likely require the construction and use of additional groundwater infrastructure. The proposed ordinance is anticipated to result in the construction of new groundwater wells, pumps, and distribution pipelines and agriculture ponds/reservoirs for irrigation of new plantings. According to projections detailed in Appendix B, an estimated 88 new groundwater irrigation wells, 88 new groundwater well pumps, and 12 new agriculture ponds/reservoirs would indirectly result from the proposed planting ordinance through January 31, 2045. The environmental effects from construction of these facilities have been accounted for throughout this EIR. As described below, the proposed ordinance is not anticipated to require additional water facilities beyond those required to serve the expanded irrigation. The GSP identifies potential management actions to increase water supply, including recycled water pipelines for the City of Paso Robles and San Miguel Community Services District, which are still speculative at this time and would be subject to separate environmental review. GSP management actions are outside the scope of this PEIR.

The proposed ordinance would not require community-serving water infrastructure for municipal use, such as water pipelines or water treatment, as the ordinance would not be expected to induce new uses that would result in water consumption, such as residential uses. As detailed in Appendix B, the proposed ordinance is not anticipated to require construction of additional agricultural worker housing beyond baseline construction rates. Given the assumption that the proposed ordinance would not induce construction of housing beyond baseline rates, the proposed ordinance would not result in the need for new or expanded water facilities beyond those anticipated to be required to serve the expanded irrigation, and impacts concerning water facilities would be less than significant.

### Stormwater Facilities

Expanded crop production would not be anticipated to substantially increase impervious surface areas; therefore, runoff would not be expected to increase in a manner that would require

downstream drainage improvements. Construction of agricultural roads would have to comply with the Agricultural Order, which requires drainage improvements to manage on-site stormwater runoff. For these reasons, no additional stormwater drainage facilities beyond those required to comply with existing regulations would be anticipated to be needed.

### **Electric and Natural Gas Facilities**

Agricultural operations would use electricity from PG&E, solar, or propane. Agricultural operations do not typically use natural gas. Propane would be trucked to the project sites and would not require expanded infrastructure beyond installation of on-site propane tanks. As described in Section 4.5, *Energy*, construction activities do not typically result in the consumption of large quantities of electricity and would not result in electrical consumption greater than a typical operation day for agricultural activities. Electricity consumption from operation of the new agricultural facilities (wells and booster pumps) would use approximately 2.5 GWh of electricity annually, which would be provided by either PG&E or on-site solar facilities. Given PG&E's annual sales of 78,502 gigawatt-hours, the expanded agricultural activities would consume less than 0.003 percent of PG&E's annual electricity demand per year. Therefore, PG&E would have sufficient supplies for the expanded agricultural operations and the proposed planting ordinance would not place a significant demand on the electrical supply.

PG&E connections to existing facilities would likely be on-site and require minimal infrastructure for the connection. If PG&E transmission facilities would need to be extended to a site, it would likely be environmentally cleared under separate CEQA review. However, since PG&E would require the agricultural operator to cover the cost of connection, it would likely be cost prohibitive. Thus, it is reasonable to assume that sites that would require additional electric power transmission lines would opt for solar energy which would be installed on-site. For these reasons, impacts regarding electric power and natural gas facilities would be less than significant.

### **Mitigation Measures**

Impacts would be less than significant and no mitigation is required.

### **Significance After Mitigation**

Impacts would be less than significant and no mitigation is required.

**Threshold b:** Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

**Impact UTIL-2 REASONABLY FORESEEABLE CROP PRODUCTION UNDER THE PROPOSED ORDINANCE WOULD INCREASE GROUNDWATER DEMAND WITHIN THE PBLUMA. THE PASO ROBLES SUBBASIN IS CURRENTLY IN CRITICAL OVERDRAFT. IMPLEMENTATION OF THE PROPOSED ORDINANCE WOULD INCREASE GROUNDWATER USE AND EXACERBATE OVERDRAFT CONDITIONS. IMPACTS RELATED TO WATER SUPPLY WOULD BE CLASS I, SIGNIFICANT AND UNAVOIDABLE.**

The Paso Robles Subbasin is currently in a state of critical overdraft. As detailed in Section 4.13.1, *Setting*, groundwater demand currently exceeds the perennial yield in the Paso Robles Subbasin. As a result, groundwater storage in the Paso Robles Subbasin has been declining.

The Paso Robles Subbasin GSP identifies an annual sustainable yield of 61,100 AFY of groundwater. From 2017 through 2020, the average annual groundwater extraction in the Paso Robles Subbasin was 66,877 AFY (Appendix B), indicating that the sustainable yield is currently being exceeded. Given that the Paso Robles Subbasin is currently identified by RMS to be LOS III, and that the proposed ordinance would extract additional groundwater from the Paso Robles Subbasin, the ordinance would further increase water demands from a currently overdrafted subbasin.

The proposed ordinance would require a planting permit for new and expanded planting of crops irrigated from groundwater wells within the PBLUMA. Agricultural plantings that receive ministerial planting permits must demonstrate that such plantings are “water neutral” and would not contribute to overdraft of the Paso Robles Subbasin. However, new or expanded crop plantings that demand a total of 25 AFY or less per site would be exempt from the planting permit. These exemptions would increase groundwater annual extraction by approximately 450 AFY, for a total increase of 9,900 AFY by 2045. This increase in groundwater extraction would exacerbate the decline in groundwater storage in the Paso Robles Subbasin which could negatively affect the available groundwater supplies in the Paso Robles Subbasin during normal, dry, and multiple dry years. Increased groundwater extraction could also negatively affect the productivity of nearby groundwater wells. If groundwater levels were to decline to a level below the depth of nearby wells, the wells could no longer be used to extract groundwater which would disrupt water supply to the affected properties. Impacts to groundwater supply would be significant and mitigation is required.

Agricultural operations in the PBLUMA would likely implement water conservation measures to ensure the efficient use of groundwater supplies. Agricultural practices in the County include standard Best Management Practices (BMPs) to ensure water supplies are used efficiently. For example, BMPs for irrigation management include measuring and recording water use during irrigation, measuring soil moisture to help guide irrigation applications, using evapotranspiration data to help determine how much irrigation water to apply, assessing both water and soil chemistry to make any needed adjustments to irrigation (e.g., to avoid salinity stress), and measuring plant water stress to ensure that the irrigation program is achieving its goals. In addition, it is reasonable to assume that planting permit applicants would manage agricultural operations in a manner which would avoid wasteful use of water from overirrigation because overirrigation reduces crop productivity and increases operational cost. For example, overirrigation reduces the quality of crops, results in soil water logging which reduces seed germination, increases operational costs for groundwater pumping, resulting in excessive vegetation growth which increases crop disease and leaches nitrogen from the soil which increases fertilizer cost. For these reasons, it would be reasonable to assume that the agricultural practices would be managed in such a manner that does

not result in wasteful use of groundwater or overirrigation, as growers would want to maximize crop production.

The County is engaged in current practices, and evaluating future potential practices, to improve water supply resiliency in the PBLUMA, which include:

- Encouraging the U.C. Cooperative Extension to continue its public information and research program describing water conservation techniques that may be appropriate for agricultural practices in North County.
- Providing financial support to the Upper Salinas-Las Tables Resource Conservation District's North County Mobile Irrigation Lab program that provides irrigation audits and recommendations to improve irrigation systems to reduce water usage.
- Promoting the use of stormwater capture for groundwater recharge by facilitating a subcommittee of the Water Resources Advisory Committee and implementing the San Luis Obispo County Stormwater Resource Plan. This effort is still in the capacity development stage.
- Implementing the Paso Robles Subbasin Groundwater Sustainability Plan, which calls for basin-wide monitoring of groundwater pumping, promoting voluntary water conservation and fallowing, increasing water supply, and mandating area-specific pumping reductions. No management actions have been adopted at this time.
- Working with the USACE and congressional representatives to explore the possibility of the SLOCFWCD taking ownership of the Salinas Dam to enable possible expansion of the dam's capacity and possible coordination with the City of San Luis Obispo to obtain water rights to use the increased dam capacity to increase releases to the Salinas River. This project is still in the early development phases of exploring feasibility.

Even with implementation of water conservation practices discussed above, the proposed ordinance would increase water demand beyond future water budget assumptions. The GSP identifies potential management actions to increase water supply in the Paso Robles Subbasin, which likely would not be sufficient to address the projected groundwater storage deficit based on the 2020 GSP modeling that assumed no net increase in agricultural water use; area-specific pumping reduction mandates would be required to achieve basin sustainability even with no net increase in agricultural water use. The planting permit would allow up to 25 AFY of groundwater extraction per site; therefore, total annual groundwater extraction would increase by approximately 450 AFY, for a total increase of 9,900 AFY by 2045 (per assumptions in Appendix B). The water efficiency measures that would be implemented by planting permit applicants would not reduce the maximum water use allowed per site. This increase in groundwater extraction would exacerbate the decline in groundwater storage in the Paso Robles Subbasin which could negatively affect the available groundwater supplies in the Paso Robles Subbasin during normal, dry, and multiple dry years. The planting ordinance would likely increase the cutbacks required for existing users in the GSP area-specific pumping reduction program, mostly agricultural operations in the PBLUMA. Therefore, impacts related to water supply would be significant.

### **Mitigation Measures**

The following mitigation measures are proposed to reduce water supply impacts from the planting ordinance.

### *UTIL-1 Well Metering and Reporting*

Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following planting requirement in Section 22.30.205 of Title 22 of the San Luis Obispo County Code:

- The planting permit applicant shall install well meter(s) in accordance with County standards to measure all groundwater used to irrigate plantings allowed by a planting permit or exemption under this section prior to beginning irrigation of the new or expanded plantings. The property owner or responsible party designated by the property owner must read the water meter and record the water usage on or near the first day of the month with a date-stamped photo or other date verification method, maintain monthly meter records, and submit an annual report of groundwater usage to the County of San Luis Obispo, Department of Planning & Building. The metered groundwater use for irrigation shall not exceed the estimated annual water demand based on the methodology in Section G, subject to the enforcement provisions of Chapter 22.74.

### *UTIL-2 Hydrology Report*

Prior to adoption of the planting ordinance, the County of San Luis Obispo shall amend the ordinance to include the following planting requirement in Section 22.30.205 of Title 22 of the San Luis Obispo County Code:

- Exemption verification applications proposing to irrigate new plantings using groundwater wells located within 750 feet of existing off-site wells shall include a hydrology report prepared by a licensed geologist that verifies the proposed water use on site will not negatively impact nearby off-site wells.

In addition to the mitigation measures listed above, the County considered several other options for mitigation for water supply impacts which were determined infeasible. The County received public comments on the Initial Study that requested consideration of supplemental water sources to mitigate the water supply impacts of the planting ordinance. Developing these supplemental water sources is currently underway or in consideration through GSP implementation efforts (e.g., recycled water, stormwater recharge, and dam expansion projects) (see the discussion under “Water Supply and Demand” in Section 4.13.1, *Setting*, above) and would require complex and time-intensive permitting, agency coordination, and environmental review. Therefore, such infrastructure projects are outside of the scope of feasible mitigation for this planting ordinance.

Reducing the 25 AFY exemption allowance to a smaller volume as a mitigation measure is also infeasible. As discussed in Section 2.5.2 in Section 2, *Project Description*, small-scale new plantings allowed by the proposed ordinance under the 25-AFY of groundwater per site exemption may already not be economically feasible for typical crop production that require a larger area to be profitable, given operating cost of labor or equipment. Most agricultural management companies require a minimum acreage above what would be allowed by a 25-AFY exemption to work for an agricultural operation. Small-scale specialty crops, which typically cater to local and direct-sale markets, may be more economically successful within the acreage allowed by the 25-AFY of groundwater per site exemption. Reducing the allowable groundwater extraction to below 25 AFY would further reduce the number of agricultural operations that could feasibly utilize the planting ordinance and would not achieve the project objective to allow an exemption for farms to plant irrigated crops that were not previously able to under the existing agricultural offset requirements.



Requiring plantings allowed by 25 AFY exemptions to offset their water use at a 1:1 ratio through water conservation projects for existing uses within the PBLUMA is also infeasible. Growers wanting to use the 25-AFY exemption would likely have difficulty finding off-site offsets because growers with existing water use would likely want to maintain their allowed water use on-site at existing levels in anticipation of potential groundwater pumping reduction mandates adopted through GSP implementation. Requiring a water offset as part of the planting ordinance would likely discourage agricultural operations from utilizing the planting ordinance because water use reduction required by an offset, when combined with the anticipated future pumping restrictions, would affect the productivity of existing agricultural operations in a manner that would make it economically infeasible to utilize the planting ordinance.

### **Significance After Mitigation**

The water duty factors in the planting ordinance are based on irrigated crops' water needs to maximize crop yield assuming the use of BMPs for efficient irrigation. Mitigation Measure UTIL-1 would help ensure that the increased groundwater pumping allowed by the planting ordinance is consistent with agricultural BMPs for irrigation efficiency. This mitigation measure would be consistent with the project objective to conserve groundwater resources in the PBLUMA for use by production agriculture in a manner that is equitable and consistent with groundwater rights. Regardless, the planting ordinance would allow up to 25 AFY of groundwater extraction per site which would further increase water demands from a currently overdrafted subbasin. As a result, impacts to available groundwater supply in the Paso Robles Subbasin would remain significant and unavoidable.

Mitigation Measure UTIL-2 requires hydrology report verification of no negative drawdown impacts to off-site wells within 750 feet of on-site well(s) for 25-AFY exemption plantings. This distance criteria is based on a drawdown impact calculation for an average well in the PBLUMA with the following assumptions:

- Two feet or less of drawdown in neighboring wells over five years would not substantially affect well operation.
- Wells serving the proposed new plantings allowed by 25-AFY exemptions would extract 25 AFY at a constant pumping rate of 15.5 gallons per minute.
- Wells serving the new plantings allowed by 25-AFY exemptions would be located in areas with the following average aquifer characteristics (Fugro West, Inc. and Cleath and Associates 2002):
  - 250-foot saturated thickness
  - 4 feet per day hydraulic conductivity
  - 0.09 storage coefficient

Table 4.13-1 shows the predicted drawdown after one and five years at varying distances from a 25-AFY well. The estimated maximum impact to an adjacent well would be no more than one foot after five years for off-site wells located 750 feet or more from a 25-AFY well. This distance was selected as the threshold to incorporate a factor of safety of two to account for possible site-specific variations from the average assumptions used in the drawdown analysis. It is conservatively assumed that neighboring wells located 750 feet or more away from a well serving a new planting exemption would experience drawdown of two feet or less over five years resulting from the new extraction, which would not substantially affect well operation.

**Table 4.13-1 Drawdown Impact Analysis for a 25-AFY Exemption**

Distance from Well (feet)	1-Year Drawdown (feet)	5-Year Drawdown (feet)
0	3.8	4.2
100	1.6	2
250	1.2	1.6
500	0.9	1.2
750	0.7	1
1,000	0.5	0.9
1,250	0.4	0.8
1,500	0.4	0.7

Drawdown impact calculation performed by the County Director of Groundwater Sustainability using the following assumptions:  
 Constant pumping rate of 15.5 gallons per minute based on a 25-AFY allowance  
 Average aquifer characteristics (Fugro West, Inc. and Cleath and Associates 2002):  
 250-foot saturated thickness  
 4 feet per day hydraulic conductivity  
 0.09 storage coefficient

Negative drawdown impacts to off-site wells within 750 feet of a 25-AFY well would be evaluated on a case-by-case basis by a qualified hydrologist as required by Mitigation Measure UTIL-2, and a 25-AFY exemption would only be approved if the hydrology report showed no negative drawdown impacts. Therefore, the mitigation measure would reduce localized hydrology impacts to less than significant.

#### 4.13.4 Cumulative Impacts

The cumulative impacts analysis examines effects from increased agricultural production associated with implementation of the proposed planting ordinance, in addition to projected development within the PBLUMA, to address cumulative effects from growth as described in Section 3, *Environmental Setting*. Projected non-residential and residential development anticipated to occur within the PBLUMA by 2045 are detailed in Table 3-1 in Section 3.3, *Cumulative Development*.

#### Stormwater and Drainage

Foreseeable development within the PBLUMA would add 588,000 square feet of non-residential area and 2,520 residential units by 2045 (Appendix B). Future development is projected to occur in San Miguel, Shandon, Creston, and rural PBLUMA areas. New development would adhere to policies set forth in the County Code and applicable community plans regarding stormwater drainage or infrastructure (i.e., Shandon Community Plan, San Miguel Community Plan), minimizing impacts associated with stormwater drainage. As discussed within threshold a, expanded crop production allowed by the proposed planting ordinance would result in less than significant impacts to stormwater and drainage facilities. Construction of agricultural roads would have to comply with the Agricultural Order, requiring drainage improvements to manage on-site stormwater runoff. Therefore, cumulative impacts regarding stormwater drainage and infrastructure would not be significant.

## Electric Power and Natural Gas

As discussed in Section 3.3, *Cumulative Development*, foreseeable development within the PBLUMA would add 588,000 square feet of non-residential area and 2,520 residential units by 2045 (see Section 3.3, *Cumulative Development*). Future development is projected to occur in San Miguel, Shandon, Creston, and rural PBLUMA areas. These new developments (e.g., wineries, event centers, bed and breakfasts, greenhouses; see Appendix B) may require electric power or natural gas connections. Rural and unincorporated areas of the PBLUMA are currently provided with electricity from PG&E via overhead lines, as well as natural gas services through SoCalGas or individual propane tanks.

While other cumulative development would likely result in natural gas consumption, the expanded agriculture is unlikely to utilize natural gas and would therefore not contribute to cumulative impacts to natural gas.

Cumulative development in the PBLUMA and the surrounding area would increase demand for energy resources. Electricity consumption from operation of the agricultural facilities would use 2.5 GWh of electricity, which account for less than 0.003 percent of the amount of electrical power PG&E provides. In addition, any necessary upgrades to the electrical system would be made in coordination with PG&E or via on-site solar facilities. For these reasons, the project would not significantly contribute to cumulative impacts to electrical supply.

## Water Supply and Demand

Table 4.13-2 details the increase in groundwater extraction anticipated to occur as a result of the proposed planting ordinance combined with the groundwater extraction that is anticipated to occur as a result of the cumulative non-agricultural development projected to occur within the PBLUMA by 2045.

**Table 4.13-2 Baseline (2017-2020 Average) and 2045 Buildout PBLUMA Groundwater Extraction**

Sector	Groundwater Extraction (AFY)		
	Baseline	2045	Increase
Agriculture	64,025	74,375	9,900 <sup>1</sup>
Non-Agriculture	2,852	4,538	1,686 <sup>2</sup>
<b>Total</b>	<b>66,877</b>	<b>78,913</b>	<b>12,036</b>

<sup>1</sup> The increase in groundwater extraction includes increased agricultural production resulting from the proposed planting ordinance.

<sup>2</sup> The increase in non-agricultural groundwater projection is a result from other cumulative development.

By 2045, the total increase in groundwater extraction due to implementation of the proposed ordinance and other reasonably foreseeable development would be 12,036 AFY (Appendix B). Reasonably foreseeable development would include 2,520 residential units and 588,000 square feet of non-residential area for the PBLUMA by 2045. The increase in residential units and non-residential square footage would result in increased water demand related to non-agricultural uses, such as commercial uses and residential outdoor water uses such as landscaping.

As discussed in Section 3.3, *Cumulative Development*, buildout of non-agricultural uses within the PBLUMA would increase groundwater extractions by 1,686 AFY by 2045. Buildout of agricultural uses would increase annual groundwater extraction by 450 AFY, for a total increase of 9,900 AFY by 2045. Groundwater extractions from both agricultural and non-agricultural operations would

increase from 66,811 to 78,913 AFY, which represents an increase of 18 percent over existing conditions. The Paso Robles Subbasin Groundwater Sustainability Plan (County of San Luis Obispo et al. 2020) identifies an annual sustainable yield of 61,100 AFY of groundwater. From 2017-2020, the average annual groundwater extraction was 66,877 AFY (Appendix B), indicating that the sustainable yield has already been exceeded. Buildout and agricultural operations associated with the proposed planting ordinance would increase extraction by an additional 12,036 AFY, further exacerbating the overdraft conditions within the Paso Robles Subbasin. However, future area-specific mandatory pumping reductions would be required by the GSP to off-set groundwater supply deficits and exacerbated declining groundwater elevation levels from increased groundwater extractions. Such pumping restrictions may contribute to the inability of cumulative projects, including agricultural operations, in the PBLUMA to be implemented due to the lack of water supply. However, the GSP pumping restrictions would help to reduce overdraft of the Basin within the PBLUMA. Nonetheless, given the cumulative increase in groundwater extraction in a currently overdrafted groundwater basin, cumulative impacts to water supply would be significant. Given that the agricultural operations allowed by the proposed planting ordinance would account for 86 percent of the total increase in groundwater extraction, the project would result in a cumulatively considerable contribution to significant cumulative water supply impacts. Even with implementation of Mitigation Measures UTIL-1 and UTIL-2, cumulative water supply impacts would be significant and unavoidable.

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## 4.14 Effects Found Not to be Significant

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Section 15128 of the *CEQA Guidelines* requires a PEIR briefly describe any possible effects that were determined not to be significant. The environmental factors discussed below are in response to the checklist questions listed in Appendix G of the *CEQA Guidelines* that are not discussed in Sections 4.1 through 4.13 of the PEIR. This section includes brief discussions of environmental impacts that were determined to result in less than significant or no impacts in the Initial Study for the proposed planting ordinance (see Appendix A). Any items not addressed in this section are addressed in Sections 4.1 through 4.13 of this PEIR.

The Initial Study determined that the proposed planting ordinance would not result in potentially significant impacts based on all environmental thresholds included under Aesthetics, Hazards and Hazardous Materials, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire. The Initial Study also determined that the proposed planting ordinance would not result in potentially significant impacts based on some of the environmental thresholds included under Agriculture and Forestry Resources, Air Quality, Biological Resources, Energy, Geology and Soils, Hydrology and Water Quality, Land Use and Planning, Noise, Transportation, and Utilities and Service Systems.

It is noted that since circulation of the Initial Study, the project description has been refined (see Section 2, *Project Description*, for the characteristics of the proposed planting ordinance analyzed throughout this PEIR). The proposed planting ordinance would regulate new or expanded crop production that is irrigated from groundwater wells within the PBLUMA. The project analyzed in this PEIR includes direct operational activities resulting from the proposed planting ordinance, including field preparation (e.g., grading and tilling) and crop planting, irrigation, cultivation, and harvest, as well as potential indirect activities such as construction and use of agricultural accessory infrastructure (e.g., access roads, drainage, water infrastructure, etc.). Analysis and significance conclusions within this section reflect the refined project description.

### 4.14.1 Aesthetics

#### Thresholds of Significance

*Except as provided in Public Resource Code Section 21099, would the project:*

- a. Have a substantial adverse effect on a scenic vista?
- b. Substantially damage scenic resources, including but not limited to trees, outcroppings, and historic buildings within a state scenic highway?
- c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

#### Impacts

County planning documents do not identify sensitive visual resource areas in the PBLUMA. The proposed planting ordinance would allow planting of irrigated crops on fallowed lands as well as on

lands that have historically been uncultivated. However, the new and expanded plantings of irrigated crops that would be allowed by the proposed planting ordinance would maintain the existing agricultural landscape within the PBLUMA and preserve rural separation between communities, consistent with the goals of the County's General Plan Conservation and Open Space Element. Therefore, impacts regarding scenic vistas (Threshold a) would be less than significant.

There are no officially designated state scenic highways in the PBLUMA. However, the PBLUMA includes a portion of State Route (SR) 46 that is listed as eligible for designation as a state scenic highway by the California Department of Transportation (Caltrans). The new and expanded agricultural crop production would maintain the existing agricultural landscape that is visible from this eligible scenic highway. Therefore, impacts regarding scenic resources, including trees, rock outcroppings, and historic buildings within a state scenic highway (Threshold b), would be less than significant.

The new and expanded plantings allowed by the proposed planting ordinance would be predominantly in the rural agricultural areas of the PBLUMA rather than the urban and village areas. In addition, the new and expanded agricultural crop production would maintain the existing agricultural landscape that is visible from eligible scenic highways. Therefore, impacts related to substantial degradation of the PBLUMA's existing visual character and quality of views within the PBLUMA (Threshold c) would be less than significant.

Cultivation of irrigated crops may involve temporary intermittent night lighting, which is consistent with current agricultural practices in the PBLUMA. As a result, impacts related to new sources of substantial light or glare which would adversely affect day or nighttime views (Threshold d) would be less than significant.

#### 4.14.2 Agricultural and Forestry Resources

##### **Thresholds of Significance**

*Would the project:*

- c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- d. Result in the loss of forest land or conversion of forest land to non-forest use?

See Section 4.1, *Agriculture and Forestry Resources*, for the impact analyses for Thresholds a, b, and e.

##### **Impacts**

The proposed planting ordinance would not change existing zoning or land use designations, or allow conversion of forest land or timberland. If individual projects would result in the removal of oak woodlands to allow for irrigated crop production, such projects would be subject to the Oak Woodland Ordinance, as described in Section 4.3, *Biological Resources*. This standard requires a discretionary permit subject to environmental review for clear-cutting of an acre or more of oak woodlands. Compliance with this standard would reduce potential impacts to forestry resources (Thresholds c and d) to less-than-significant levels.

### 4.14.3 Air Quality

#### Thresholds of Significance

*Would the project:*

- d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

See Section 4.2, *Air Quality*, for the impact analyses for Thresholds a through c.

#### Impacts

Farming activities, including construction of accessory infrastructure and irrigated crop production, often create emissions leading to odors (e.g., due to equipment emissions, crop type, or chemical application). However, such odors are consistent with existing agricultural practices within the PBLUMA, would be temporary and intermittent, and would occur in rural and agricultural areas with low residential density. Therefore, agricultural activities facilitated by the proposed planting ordinance would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (Threshold d), and impacts would be less than significant.

### 4.14.4 Biological Resources

#### Thresholds of Significance

*Would the project:*

- e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

See Section 4.3, *Biological Resources*, for the impact analyses for Thresholds a through d.

#### Impacts

The proposed planting ordinance would not supersede local policies or ordinances protecting biological resources. Except for the current offset ordinance and hemp cultivation standards, the County Land Use Ordinance does not require permits for crop production. If individual projects would result in the removal of oak woodlands to allow for irrigated crop production, such projects would be subject to the Oak Woodland Ordinance, as described in Section 4.3, *Biological Resources*. This standard requires a discretionary permit subject to environmental review for clear-cutting of an acre or more of oak woodlands. In addition, there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan in the PBLUMA. Project impacts related to policies, ordinances, and plans governing biological resources (Thresholds e and f) would be less than significant.



## 4.14.5 Energy

### Thresholds of Significance

*Would the project:*

- b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

See Section 4.5, *Energy*, for the impact analysis for Threshold a.

### Impacts

The County of San Luis Obispo General Plan Conservation and Open Space Element establishes goals and policies that aim to reduce vehicle miles traveled (VMT), conserve water, increase energy efficiency and the use of renewable energy, and reduce GHG emissions (County of San Luis Obispo 2010). The Conservation and Open Space Element provides the basis and direction for the development of the *County of San Luis Obispo EnergyWise Plan* (County of San Luis Obispo 2011), which outlines in greater detail the County's strategy to reduce government and community GHG emissions through a number of goals, measures, and actions, including energy efficiency and development and use of renewable energy resources.

The proposed planting ordinance would not change land use designations, obstruct the development of renewable energy facilities, or conflict with existing energy efficiency plans such as the *County of San Luis Obispo EnergyWise Plan*. In addition, it is reasonable to assume that construction activities and operational agricultural activities would be conducted in a manner to reduce energy and fuel consumption in order to reduce costs. Therefore, impacts regarding conflict with state or local plans or renewable energy or energy efficiency (Threshold b) would be less than significant.

## 4.14.6 Geology and Soils

### Thresholds of Significance

*Would the project:*

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?
- b. Result in substantial soil erosion or the loss of topsoil?
- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

See Section 4.6, *Geology and Soils*, for the impact analysis for Thresholds a(ii), a(iii), a(iv), and f.

## Impacts

The Alquist-Priolo Earthquake Hazard Zone Act developed by the State identifies active earthquake fault zones and restricts building habitable structures over known active or potentially active faults. As discussed in more detail in Section 4.6, *Geology and Soils*, the San Andreas Fault is located approximately one to twelve miles from the eastern boundary of the PBLUMA. The San Andreas Fault is designated as an Alquist-Priolo Earthquake Fault Zone<sup>1</sup> by the California Department of Conservation pursuant to the Alquist-Priolo Fault Hazards Act. Additionally, the County has mapped and established Geologic Study Area (GSA) land use designations in potentially hazardous areas, to ensure new development considers geologic and soil conditions that may impose risks to life and property. The PBLUMA contains no GSAs outside urban and village reserve lines. Given that the proposed planting ordinance would regulate the planting of irrigated crops and would not facilitate the construction of housing or other structures near the San Andreas Fault, it is unlikely that the project would directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death, involving rupture of the San Andreas Fault. Impacts regarding Threshold a(i) would be less than significant.

As discussed in detail in Section 4.8, *Hydrology and Water Quality*, grading for site preparation, construction of accessory infrastructure, and operational agricultural activities have the potential to increase erosion and loss of topsoil. There are several existing regulations for these types of activities to reduce impacts related to soil erosion from construction and grading activities, including Chapter 22.52 of the San Luis Obispo County Code and the Construction General Permit. These regulations require implementation of Best Management Practices, including Erosion Control and Sediment Control Best Management Practices designed to minimize erosion and retain sediment on site, for projects with the greatest potential to result in impacts related to erosion and loss of topsoil. Operation of the new and expanded agricultural uses would be required to comply with the waste discharge requirements contained within the Agricultural Order, which requires implementation of sediment and erosion management measures. Compliance with existing regulations and implementation of BMPs would ensure that impacts related to erosion and loss of topsoil (Threshold b) would be less than significant.

Within the PBLUMA, rural and agricultural areas have lower potential for landslides, whereas the steeper hillsides have high to very high landslide risks. However, any grading on slopes over 30% would require approval by the local Resource Conservation District or a grading permit from the County to ensure measures are implemented to reduce risk of landslide. Liquefaction occurs in areas with saturated soils. Areas within the PBLUMA that are prone to liquefaction primarily underlie the Salinas River and its tributaries (County of San Luis Obispo 2021). However, as detailed in Section 4.13, *Utilities and Service Systems*, there are standard Best Management Practices implemented by agricultural operations in the PBLUMA to ensure water efficiency, prevent wasteful irrigation practices, and limit overirrigation. Implementation of agricultural Best Management Practices would reduce risks related to liquefaction. Furthermore, the Paso Robles Subbasin Groundwater Sustainability Plan does not identify subsidence as a significant issue of concern. In addition, as stated above, there are no Geologic Study Areas within the PBLUMA. Therefore, impacts regarding unstable soil and potential landslides, liquefaction, or subsidence (Threshold c) would be less than significant.

During periods of water saturation, soils with high clay content tend to expand; during dry periods, these same kinds of soils tend to shrink. As volume changes with moisture content, structures that

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<sup>1</sup> Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults. For purposes of the Alquist-Priolo Act, an active fault is one that has ruptured within the last 11,000 years.

are located on top of expansive soils may crack or be damaged. However, the proposed planting ordinance would not facilitate construction of housing or accessory structures that could exacerbate risk related to expansive soils. New irrigated crops would not be anticipated to increase substantial direct or indirect risks to life or property related to expansive soils. Thus, impacts from the proposed planting ordinance regarding expansive soils (Threshold d) would be less than significant.

Existing residences within the PBLUMA are connected to septic systems for wastewater. The proposed planting ordinance would not result in construction of new housing or structures or result in new uses requiring septic tank systems. Therefore, no impacts regarding septic tank systems (Threshold e) would occur.

#### 4.14.7 Hazards and Hazardous Materials

##### **Thresholds of Significance**

*Would the project:*

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or environment?
- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

##### **Impacts**

Irrigated crop production often involves use of pesticides, which are hazardous materials. Increased irrigated crop production associated with the proposed planting ordinance would lead to an increase in the routine transportation, use, and disposal of pesticides. Pesticide application is regulated by federal Worker Protection Standards as well as California pesticide safety regulations for workers. These state-level regulations are developed by the California Department of Pesticide Regulation and are implemented by the County of San Luis Obispo's Agricultural Commissioner's office. Landowners of irrigated crops are required to obtain a pesticide use permit from the Agricultural Commissioner's office. In addition, the Agricultural Order requires implementation of pesticide management measures. Furthermore, transportation of hazardous waste is regulated by the Hazardous Materials Transportation Act. Due to federal and state regulations that facilitate the safe transport, use, and disposal of pesticides, impacts related to creation of a significant hazard to

the public or the environment through the routine transport, use, or disposal of hazardous materials (Threshold a) would be less than significant.

In addition to the regulations mentioned above, agricultural worker trainings for pesticide handling protocols would reduce the risk of release of hazardous materials into the environment. Thus, impacts regarding the accidental release of hazardous materials (Threshold b) would also be less than significant.

In 2017, the California Department of Pesticide Regulation set forth regulations (California Code of Regulations, Title 3, Sections 6690-6692) addressing agricultural pesticide applications within 0.25 mile of public kindergarten to twelfth grade schools and licensed child day care centers. These regulations provide minimum distance standards for certain agricultural pesticide applications within 0.25 mile of a school and also require annual grower notifications to school sites. Following compliance of these existing regulations, impacts related to hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (Threshold c) would be less than significant.

The Hazardous Waste and Substances Site List (Cortese List), compiled pursuant to California Government Code (CGC) Section 65962.5, is a planning document used by the State, local agencies, and developers to comply with CEQA requirements related to the disclosure of information about the location of hazardous materials release sites. The PBLUMA includes two sites from the Cortese List in the community of San Miguel, one site in the community of Shandon, and one site off U.S. 101 from San Miguel to Paso Robles. All sites within the PBLUMA that are on the Cortese List have the status “Completed—Case Closed” (Department of Toxic Substance Control [DTSC] 2021). It is not anticipated that sites within the affected areas would apply for permits or utilize exemptions for agricultural plantings under the proposed planting ordinance, given the urbanized location of these sites. Thus, impacts involving pre-existing hazardous waste sites (Threshold d) would be less than significant.

A portion of the PBLUMA, northeast of the City of Paso Robles, is within two miles of the Paso Robles Municipal Airport. Planning documents from the City of Paso Robles indicate that these PBLUMA properties are within the 55 decibel (dB) CNEL noise contours (San Luis Obispo Airport Land Use Commission 2005). County noise standards set a 70 dB maximum for daytime exterior noise levels. None of the agricultural properties within the PBLUMA are within the 60-75 dB CNEL contours, meaning that none of these properties would be exposed to noise greater than 55 dB. In addition, the proposed planting ordinance would not facilitate construction of tall structures that could result in a safety hazard to airports. Therefore, impacts regarding safety hazards or excessive noise from airports (Threshold e) would be less than significant.

The proposed planting ordinance would not alter land use designations or interfere with emergency response or evacuation plans. Any new road construction associated with plantings allowed by the proposed planting ordinance would be subject to County grading standards, which require California Department of Forestry and Fire Protection (CAL FIRE) and County of San Luis Obispo Department of Public Works review on a project-by-project basis to ensure emergency access requirements are met. Therefore, impacts regarding impairment of emergency response or evacuation plans (Threshold f) would be less than significant.

As discussed in more detail in the Section 4.14.17, *Wildfires*, the PBLUMA is located in high and very high Fire Hazard Severity Zones (CAL FIRE 2021). The proposed planting ordinance would allow planting of new or expanded crops and would not increase the rate of construction of agricultural accessory structures or agricultural worker housing beyond baseline trends. In addition, irrigated

cropland can serve as a buffer between wildlands and urban areas, helping to reduce the risk of loss, injury, or death from wildland fires. Therefore, impacts related to exposure of people or structures to a significant risk of loss, injury or death involving wildland fires (Threshold g) would be less than significant.

#### 4.14.8 Hydrology and Water Quality

##### **Thresholds of Significance**

*Would the project:*

- c. 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 substantial erosion or siltation on- or off-site?
  - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
  - 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?
  - iv. Impede or redirect flood flows?
- d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

See Section 4.8, *Hydrology and Water Quality*, for the impact analysis for Thresholds a, b, and e.

##### **Impacts**

Compliance with the County grading standards, Construction General Permit, and Agricultural Order, which require implementation of Erosion Control and Sediment Control Best Management Practices on sites with the greatest potential to result in impacts related to erosion and siltation, would reduce potential impacts regarding erosion or siltation to less than significant levels, as discussed in response to Threshold b in Section 4.14.6, *Geology and Soils* and in Section 4.8, *Hydrology and Water Quality*. Subsequently, impacts regarding erosion or siltation (Threshold c[i]) would also be less than significant.

Increases in impervious surface area increase stormwater runoff. As discussed in more detail in Section 4.8, *Hydrology and Water Quality*, most of the agricultural activities facilitated by the proposed planting ordinance would be new or expanded crop production which would not substantially increase impermeable surfaces. The majority of the agricultural infrastructure that would be facilitated by the planting ordinance, such as groundwater wells, plumps, irrigation pipelines, and agriculture ponds/reservoirs would result in minimal to no increase in impervious surface areas. Construction of agricultural roads could compact soils and reduce infiltration. However, the area of any agricultural roads would be minimal compared to the overall size of the agricultural property since they are typically only located along the perimeter of the cultivated areas. In addition, construction of agricultural roads would have to comply with the Agricultural Order, which requires drainage improvements to manage on-site stormwater runoff, as well as management of stormwater runoff from agricultural fields with more than 22,500 square feet (0.5 acres) of impermeable surfaces, to reduce stormwater runoff from impervious areas. In addition, new fields on greater than 30% slope and construction of agricultural roads require an Agricultural Grading permit, which require implementation of drainage improvements and Best Management

Practices to reduce stormwater runoff. Thus, impacts related to increases in the rate or amount of surface runoff in a manner that would result in flooding Threshold c[ii]) would be less than significant.

As discussed above, most of the new and expanded agricultural use facilitated by the proposed planting ordinance would be new or expanded crop production which would not substantially increase impermeable surfaces. Drainage improvements would be required for new fields on greater than 30% slope and construction of agricultural roads to reduce runoff. Therefore, the proposed planting ordinance would not result in increased runoff in a manner that would exceed storm drain capacity. The Agricultural Order requires monitoring of stormwater runoff and implementation of measures to minimize pollutants for irrigated agricultural operations to reduce polluted runoff (See Section 4.8, *Hydrology and Water Quality*). Therefore, impacts regarding runoff, stormwater drainage, and substantial additional sources of polluted runoff (Threshold c[iii]) would be less than significant.

Agricultural activities and most accessory infrastructure facilitated by the proposed planting ordinance would not involve structures that could impede or redirect flood flows. As discussed above, new agricultural roadways would be required to include drainage improvements to direct stormwater flows. Impacts related to impeded or redirected flood flows (Threshold c[iv]) would be less than significant.

The PBLUMA is located in the inland portion of the County, approximately 15 miles from the Pacific Ocean, and is thus not subject to tsunami or seiche risk. Portions of the PBLUMA along waterways may be subject to flood hazard; however, the use of hazardous agricultural materials such as pesticides requires a pesticide use permit from the Agricultural Commissioner's office and is subject to regulations regarding safe storage protocols. In addition, the Agricultural Order requires growers to implement pesticide management measures, including proper storage of pesticides, to reduce the potential for the release of pollutants due to flood inundation. Therefore, impacts regarding release of pollutants due to tsunami-, seiche-, or flood-induced inundation (Threshold d) would be less than significant.

#### 4.14.9 Land Use and Planning

##### **Thresholds of Significance**

*Would the project:*

- a. Physically divide an established community?

See Section 4.9, *Land Use and Planning*, for the impact analysis for Threshold b.

##### **Impacts**

New plantings allowed by the proposed planting ordinance would not physically divide an established community. The PBLUMA is primarily rural and agricultural, with distinct urban and village areas protected by land use standards set forth in community plans or the County General Plan. It is assumed that new plantings would be located in rural and agricultural areas of the PBLUMA and not within the urban and village areas. In addition, the agricultural activities would be consistent with the surrounding agricultural uses and would not include construction of structures that could physically divide a community. Therefore, impacts related to physical division of an established community (Threshold a) would be less than significant.

## 4.14.10 Mineral Resources

### **Thresholds of Significance**

*Would the project:*

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

### **Impacts**

As defined by the County's Framework for Planning (Inland), the energy or extractive area (EX) designation is applied to areas where oil, gas, or mineral extraction occurs or is proposed, or where there are mineral reserves of statewide significance. Extractive resource area (EX1) designation is applied to areas that contain or are highly likely to contain significant mineral deposits (County of San Luis Obispo 2015). The purpose of these designations is to protect significant mineral resource extraction and energy production areas from encroachment by incompatible land uses that might hinder extraction activities. The PBLUMA contains several properties with EX or EX1 designations; these properties are located south of Creston and east of Atascadero, along the reaches of the PBLUMA's southern boundary (County of San Luis Obispo 2021).

Title 22 of the San Luis Obispo County Code includes standards to protect mineral resources from land uses that would adversely affect the continuing operation or expansion of the extraction use. Sections 22.14.040 and 22.14.050 state that approval of land uses other than mineral resource extraction in areas designated as EX or EX1 may be granted only if the proposed use would not adversely affect the continuing operation or expansion of mineral resource extraction use. In addition, crop production in areas that may contain mineral resources (EX or EX1) would not interfere with the availability of the site to be used for mineral extraction in the future. Therefore, impacts regarding the loss of availability of a known mineral resource or locally important mineral resource recovery site (Thresholds a and b) would be less than significant.

## 4.14.11 Noise

### **Thresholds of Significance**

*Would the project:*

- a. Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

See Section 4.10, *Noise*, for the impact analysis for Threshold b.

## Impacts

Agricultural activities associated with the plantings allowed by the proposed planting ordinance and construction of accessory infrastructure would generate noise, such as from the operation of pumps and diesel equipment. Pursuant to Section 22.10.120 of the County Code, noise standards in the County Land Use Ordinance do not apply to noise sources associated with agricultural land uses, including but not limited to wind machines used for direct climate control, water well pumps and pest-repelling devices, provided that the pest-repelling devices are used in accordance with accepted standards and practices. Pursuant to Section 22.10.120 of the County Code, construction noise associated with construction of accessory structures would be exempt from County noise standards, provided construction activities do not take place before 7:00 a.m. or after 9:00 p.m. weekdays or before 8:00 a.m. or after 5:00 p.m. on Saturday or Sunday. Regardless, noise associated with grading, construction of accessory infrastructure, and on-going agricultural activities is expected and would be consistent with the surrounding noise levels, as these activities would occur in a primarily agricultural area. Noise associated with site grading and preparation and construction of accessory infrastructure would be temporary and would cease once the site is ready for agricultural operations to commence. Additionally, noise associated with agricultural operations would typically be seasonal and sporadic. These activities would not occur in the vicinity of the communities of Shandon, Creston, and San Miguel, where the non-agricultural land uses with sensitive receivers are located. Therefore, impacts regarding temporary or permanent increases in ambient noise levels (Threshold a) would be less than significant.

As stated in Section 4.14.7, *Hazards and Hazardous Materials*, a portion of the PBLUMA northeast of the City of Paso Robles is within two miles of the Paso Robles Municipal Airport. The City of Paso Robles planning documents indicate these PBLUMA properties are within the 55 decibel (dBA) airport noise contours. The County noise standards set a 70-dBA maximum for daytime exterior noise levels. Impact related to excess noise within the vicinity of an airport (Threshold c) would be less than significant because none of the agricultural properties within the PBLUMA are within the 60-75 dBA airport noise contours.

### 4.14.12 Population and Housing

#### Thresholds of Significance

*Would the project:*

- a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

## Impacts

The proposed planting ordinance would regulate irrigated crop production only. As detailed in Appendix B, agricultural activities facilitated by the proposed planting ordinance are projected to not necessitate the construction of agricultural worker housing above baseline levels. Therefore, impacts related to substantial unplanned population growth (Threshold a) would be less than significant.



The proposed planting ordinance would result in new or expanded agricultural activities, which would not result in displacement of people or housing. Therefore, no impacts related to displacement of people or housing (Threshold b) would occur.

#### 4.14.13 Public Services

##### **Thresholds of Significance**

- a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  1. Fire protection?
  2. Police protection?
  3. Schools?
  4. Parks?
  5. Other public facilities?

##### **Impacts**

Fire protection services in unincorporated San Luis Obispo County are provided by CAL FIRE (County of San Luis Obispo 2014). Police protection and emergency services in the unincorporated portions of the county are provided by the San Luis Obispo County Sheriff's Office (County of San Luis Obispo 2014). The proposed planting ordinance would not result in construction of new housing or structures or result in population growth that could increase demand for fire or police protection services, as evaluated in Appendix B. Any new agricultural roads required with new plantings allowed by the proposed planting ordinance would be subject to County standards for new construction and grading that require consultation with CAL FIRE and County of San Luis Obispo Department of Public Works, to ensure emergency access standards are met. Agricultural uses are currently allowed within the PBLUMA, and the increased agricultural activities would not substantially increase demand for emergency services. Therefore, impacts to fire and police protection services (Threshold a[1] and a[2]) would be less than significant.

Multiple school districts are located within or in the vicinity of the PBLUMA, such as the Paso Robles Joint Unified School District, Templeton Unified School District, San Miguel Elementary School District, and Shandon Joint Unified School District (County of San Luis Obispo 2014). The proposed planting ordinance is not anticipated to induce construction of agricultural worker housing beyond baseline trends (Appendix B) or result in population growth that would increase demand for school services (as discussed Section 4.14.12, *Population and Housing*). Thus, no impacts to school services (Threshold a[3]) would occur.

Within the County's unincorporated areas, there are currently 23 parks, three golf courses, four trails/staging areas, and eight Special Areas that include natural areas, coastal access, and historic facilities currently operated and maintained by the County. As discussed above, the proposed planting ordinance is not anticipated to result in new housing or population growth. Therefore, the proposed planting ordinance would not increase demand for parks or other public facilities. No impacts to parks or other public facilities (Thresholds a[4] and a[5]) would occur.

#### 4.14.14 Recreation

##### Thresholds of Significance

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

##### Impacts

Public facilities fees, Quimby fees, and developer conditions are ways through which the County currently funds public parks and recreational facilities. Public facility fees are collected upon construction of new residential units and currently provide funding for new community-serving recreation facilities. The proposed planting ordinance would regulate irrigated crop production and would not result in the construction of new housing above baseline trends, as detailed in Appendix B. In addition, as discussed in Section 4.14.12, *Population and Housing*, the proposed planting ordinance would not result in population growth. Therefore, the proposed planting ordinance would not increase demand for neighborhood or regional parks or recreational facilities. In addition, the proposed planting ordinance would not require construction or expansion of recreational facilities. Therefore, no impacts related to parks or recreational facilities (Thresholds a and b) would occur.

#### 4.14.15 Transportation

##### Thresholds of Significance

*Would the project:*

- a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
- c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- d. Result in inadequate emergency access?

See Section 4.11, *Transportation*, for the impact analysis for Threshold b.

##### Impacts

The San Luis Obispo Council of Governments (SLOCOG) is responsible for preparing a Regional Transportation Plan (RTP) for the County. The 2019 RTP identifies and analyzes transportation needs of the region and creates a framework for project priorities. Additionally, the Circulation Element of the Framework for Planning (Inland) sets transportation objectives for the County, such as the integration of land use and transportation planning so necessary transportation facilities or services can be provided to accommodate rural or urban development (County of San Luis Obispo 2014).

The proposed planting ordinance would not remove or block existing or planned circulation systems. Any agricultural roads that are required for new or expanded agricultural activities facilitated by the proposed planting ordinance would most likely be located only along the perimeter of the cultivated areas. In addition, construction of new agricultural roads would be

subject to County grading standards and would require review and approval by the local Resource Conservation District or County Planning & Building to ensure they do not conflict with existing transportation facilities and are consistent with existing land use designations and circulation planning documents. Therefore, impacts related to conflict with circulation system plans or policies (Threshold a) would be less than significant.

New plantings allowed by the proposed planting ordinance would require the use of farm equipment. It is assumed that plantings would occur in rural and agricultural areas, where such equipment is compatible with existing land use and circulation patterns. As stated above, construction of new agricultural roads would be subject to County grading standards and would require approval by the local Resource Conservation District or County Planning & Building to ensure they do not include hazardous design features. Therefore, impacts related to increased hazards due to incompatible uses or geometric design features (Threshold c) would be less than significant.

As discussed in Section 4.14.7, *Hazards and Hazardous Materials*, the proposed planting ordinance would not alter land use designations or interfere with emergency response or evacuation plans. Any new road construction associated with plantings allowed by the proposed planting ordinance would be subject to County grading standards, which require CAL FIRE and County of San Luis Obispo Department of Public Works review on a project-by-project basis to ensure emergency access requirements are met. Therefore, impacts related to inadequate emergency access (Threshold d) would be less than significant.

#### 4.14.16 Utilities and Service Systems

##### **Thresholds of Significance**

*Would the project:*

- c. 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?
- d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

See Section 4.13, *Utilities and Service Systems*, for the impact analysis for Thresholds a and b.

##### **Impacts**

The majority of residences and agricultural operations within the PBLUMA rely upon individual on-site wastewater treatment systems. Irrigated crop production does not require wastewater treatment. As detailed in Appendix B, the proposed planting ordinance would not result in construction of new housing or structures or result in new uses requiring new wastewater systems. Therefore, no impacts related to wastewater system capacity (Threshold c) would occur.

New and expanded irrigated crop production may increase the generation of solid agricultural waste. Agricultural waste management systems require approval by the local Resource Conservation District. In addition, agricultural operations would be required to comply with State Bill (SB) 1383, which requires reduction of statewide disposal of organic waste (thus including agricultural waste). The County Department of Public Works coordinates efforts to comply with SB

1383 mandates (formerly the responsibility of the County Integrated Waste Management Authority). Additionally, the Food Bank Coalition of San Luis Obispo County has a program that allows farmers to donate unused produce, reducing overall agricultural waste. Thus, impacts related to solid waste generation and compliance with solid waste regulations (Thresholds d and e) would be less than significant.

#### 4.14.17 Wildfire

##### **Thresholds of Significance**

*If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

##### **Impacts**

The PBLUMA is located in high and very high Fire Hazard Severity Zones (FHSVs) (California Department of Forestry and Fire Protection [CAL FIRE] 2021).

The proposed planting ordinance would not interfere with emergency response or evacuation plans. Any new road construction associated with plantings allowed by the proposed planting ordinance would be subject to County grading standards, which CAL FIRE and County of San Luis Obispo Department of Public Works review on a project-by-project basis to ensure emergency access requirements are met. Therefore, impacts regarding impairment of emergency response or evacuation plans within a wildfire zone (Threshold a) would be less than significant.

The proposed planting ordinance regulates crop production, and would not result in the construction of housing or other structures above baseline trends, as discussed in Appendix B. In addition, irrigated cropland, such as that allowed by the proposed planting ordinance, can serve as a buffer between wildlands and urban areas, helping to reduce wildfire risk. Therefore, impacts related to risk of exacerbated wildfires or exposure to wildfires (Threshold b) would be less than significant.

The proposed planting ordinance may require the installation of new agricultural roads. However, these roads would be consistent with existing development patterns and subject to County grading standards and would not exacerbate fire risk. Impacts related to infrastructure that might exacerbate wildfire risk (Threshold c) would be less than significant.

Due to the topography within the PBLUMA, most of the agricultural activities would not be anticipated to occur on steep slopes. In addition, the proposed planting ordinance does not include construction of housing or structures. Additionally, irrigated cropland, such as that allowed by the proposed planting ordinance, can serve as a buffer between wildlands and urban areas, helping to

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wildfire risk. For these reasons, impacts related to exposure of people or structures to wildfire-induced hazards (Threshold d) would be less than significant.

## 5 Other CEQA Required Discussions

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This section discusses other issues for which the California Environmental Quality Act (CEQA) requires analysis in addition to the specific issue areas discussed in Section 4.0, *Environmental Impact Analysis*. These additional issues include the potential to induce population growth and/or economic expansion; development or encroachment in an isolated or adjacent area of open space; removal of obstacles to growth; significant unavoidable effects of the project; and significant and irreversible impacts on the environment.

### 5.1 Growth Inducement

Section 15126.2(d) of the CEQA Guidelines requires a discussion of a proposed project's potential to foster economic or population growth, either directly or indirectly. CEQA also requires a discussion of ways in which a project may remove obstacles to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The project's growth inducing potential is therefore considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas. Generally speaking, a project may be considered growth inducing if it results in one or more of the five conditions identified below:

1. Induces population growth;
2. Induces economic expansion;
3. Establishes a precedent setting action (e.g. an innovation, a radical change in zoning or general plan designation);
4. Results in development or encroachment in an isolated or adjacent area of open space (i.e. being distinct from "infill" development); or
5. Removes an impediment to growth (e.g. the establishment of an essential public service or the provision of new access to an area).

Growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment (*State CEQA Guidelines*, Section 15126.2[e]). This issue is presented to provide additional information on ways in which the proposed planting ordinance could contribute to significant changes in the environment beyond the direct consequences of approving and implementing the proposed planting ordinance as described in earlier sections of this PEIR.

#### 5.1.1 Population Growth

The proposed planting ordinance would only regulate irrigated crop production and would not increase the need for additional housing above baseline levels (as discussed in more detail in Appendix B). Therefore, the proposed planting ordinance would not have any direct growth-inducing impacts. However, the proposed planting ordinance may indirectly induce population growth if new agricultural workers relocated to San Luis Obispo County or the surrounding area for planting, maintenance, and harvesting activities associated with new or expanded irrigated crops. It is too speculative to estimate the potential increase in agricultural workers that would result from water neutral planting permits, since the new crops could be either more or less labor intensive. The

new plantings allowed by the 25-AFY water use exemptions are anticipated to result in the need for 2,497 seasonal agricultural workers to support the expanded crop production.<sup>1</sup> These jobs may be accommodated by existing crews and management companies who already work in the region, likely already residing in the County or commuting from outside of the County.

However, in a conservative scenario where all projected employees and their families were to relocate to San Luis Obispo County full time for seasonal work, there would be a population growth of 6,186 persons based on the average household of 2.37 persons for San Luis Obispo County (California Department of Finance [CDOF] 2021). In 2020, the population in San Luis Obispo County was 282,424 people (US Census Bureau, 2020). Population projections from the San Luis Obispo Council of Governments' (SLOCOG) 2050 Regional Growth Forecast indicate that the population will increase to 318,025 persons by the year 2045, which represents an increase of 35,601 from the 2020 population (SLOCOG 2017). Therefore, a population increase of 6,186 could be accommodated within the County's growth projections. However, as noted above, this is a conservative scenario as a large percentage of the jobs could reasonably be assumed to be filled by people already residing in the region. Therefore, although the new and expanded agricultural activities facilitated by the proposed planting ordinance would provide employment opportunities, it would not result in direct population growth nor induce substantial indirect growth in San Luis Obispo County.

### 5.1.2 Induce Economic Expansion

As discussed in Section 2, *Project Description*, Subsection 2.6, *Project Objectives*, one of the primary objectives for the proposed planting ordinance is to promote a healthy and competitive agricultural industry within the PBLUMA. The proposed planting ordinance would generate temporary employment opportunities during construction of agricultural infrastructure. As construction workers would be expected to be drawn from the existing regional work force, construction associated with the proposed planting ordinance would not be growth-inducing from a temporary employment standpoint. However, the proposed planting ordinance would also add long-term employment opportunities associated with the planting, maintenance, and harvesting of new and expanded irrigated crops. By 2045, the proposed planting ordinance would result in the addition of approximately 5,280 acres of cultivated land to the PBLUMA, which would require an estimated 2,376 to 2,640 seasonal employees.<sup>1</sup>

In 2019, employment in San Luis Obispo was 96,358 jobs (US Census Bureau, 2020). Employment in the County of San Luis Obispo is forecasted to increase to 132,511 jobs by 2045, which represents an increase of 36,153 from 2019 (SLOCOG 2017). The 2,376 to 2,640 jobs anticipated by the proposed planting ordinance would be approximately 7 percent of the projected job growth between 2015 and 2045. Thus, the proposed planting ordinance would be within employment forecasts, and would not be expected to induce substantial economic expansion to the extent that direct physical environmental effects would occur.

### 5.1.3 Precedent Setting Action

The proposed planting ordinance would increase agricultural operations within the PBLUMA, an area with predominately agricultural land use. The proposed planting ordinance involves amendments to the County Health and Sanitation Ordinance (Title 8), the County Land Use Ordinance (Title 22), and the Agriculture and Conservation and Open Space Elements of the County General Plan. These amendments are necessary to replace the County's existing agricultural offset

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<sup>1</sup> [(5,280 previously uncultivated acres / 20 acres per site) x 9-10 workers per site] = 2,376 to 2,640 workers (source data from Appendix B)

requirements which expire on August 31, 2022 and to ensure the proposed planting ordinance remains consistent with applicable County planning documents and policies.

As discussed in Section 2, *Project Description*, subsection 2.6, *Project Objectives*, the primary objectives of the proposed planting ordinance are to continue to exercise the County's land use authority to regulate the planting of production agriculture irrigated from groundwater wells within the PBLUMA with ministerial permits not subject to CEQA review; require new crop plantings that are to be irrigated from groundwater wells within the PBLUMA to be "water neutral," meaning new crops replace crops that are estimated to have had the same water demand and have been fallowed/removed within a certain time frame; allowance of an exemption for farms to plant irrigated crops that were not able to under the existing agricultural offset requirements; conserve groundwater resources in the PBLUMA for use by production agriculture in a manner that is equitable and consistent with groundwater rights; and, support and promote a healthy and competitive agricultural industry in the PBLUMA, whose products are recognized in national and international markets as being produced in San Luis Obispo County. The PBLUMA currently contains agricultural operations similar in character to the ones allowed by the proposed planting ordinance. As such, the proposed planting ordinance would support the continued agricultural uses in the surrounding area. The proposed planting ordinance would replace the existing agricultural offset requirements which expire on August 31, 2022<sup>2</sup> and would not encourage adoption of additional planting ordinances for irrigated cropland. For these reasons, the project would not set a precedent that would have growth-inducing impacts in the area.

#### 5.1.4 Development of Open Space/Vacant Land

Development of open space is considered growth-inducing when it occurs outside urban boundaries or in isolated locations instead of infill areas. The proposed planting ordinance would result in agricultural development in the rural, unincorporated area of the County, outside of urban boundaries. The new or expanded agriculture would be located on approximately 4,994 acres of previously uncultivated land that is designated for agriculture. The proposed planting ordinance would not facilitate other types of development, such as housing, expanded utilities, or new non-agricultural roadways (other than expanded accessory infrastructure needed to support the increased agriculture) in urban areas that would facilitate other future development in the PBLUMA.

Activities facilitated by the proposed planting ordinance would be generally consistent with the goals of applicable land use documents, such as the County Conservation and Open Space Element, the Shandon Community Plan, San Miguel Community Plan, and the Inland Planning Framework (see Section 4.9, *Land Use and Planning*). Agricultural operations facilitated by the proposed planting ordinance would comply with policies within existing land use documents that prevent siting of incompatible land uses and preserve urban or village boundaries. The proposed planting ordinance would not induce any type of residential, commercial, or industrial development. Therefore, the proposed planting ordinance would not induce development of open space areas or vacant lands beyond the expanded agricultural activities on land already designated for agriculture.

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<sup>2</sup> The County Board of Supervisors is scheduled to hold a hearing on July 12, 2022 to consider extending the existing Agricultural Offset Requirements to January 31, 2023 to coincide with the anticipated effective date of the proposed planting ordinance, assuming it is adopted by the Board of Supervisors in December 2022.



## 5.1.5 Removal of an Impediment to Growth

Agriculture is a predominant type of land use within the PBLUMA. The proposed planting ordinance would only regulate irrigated crop production and would not directly remove an impediment to growth. Associated development, such as accessory infrastructure needed to support agriculture, would occur on agricultural properties. The proposed planting ordinance would not result in extension of utility facilities or roadways to areas not already served by such facilities. As detailed in Section 4.13, *Utilities and Service Systems*, the new and expanded agriculture would not require new natural gas or wastewater infrastructure. Electric power connections necessitated by the proposed planting ordinance would likely be on-site and require minimal infrastructure for connection. If new electrical transmission lines were required to deliver electrical power to a site, it is likely the agricultural operator would opt for solar power because PG&E requires the agricultural operator to cover the cost of new connections, which would likely be cost prohibitive. The proposed planting ordinance would result in construction of an estimated 88 new groundwater irrigation wells through January 31, 2045 (Appendix B). The proposed planting ordinance is not anticipated to require additional water facilities or infrastructure beyond those required to serve the expanded irrigation. No additional stormwater drainage facilities beyond those required to comply with existing regulations would be anticipated to be needed. In addition, no new roadways would be needed beyond agricultural roadways located on the agricultural properties. For these reasons, implementation of the proposed planting ordinance would not extend utility infrastructure or roadways through undeveloped areas in a manner that would remove obstacles to development. Overall, the proposed planting ordinance would not induce substantial new development in the surrounding area, or otherwise remove any existing impediment to growth.

## 5.2 Significant Unavoidable Effects

The *CEQA Guidelines §15126(b)* requires that a PEIR identify those significant impacts that cannot be reduced to a less than significant level with the application of mitigation measures. The implications and reasons why the project is being proposed, notwithstanding, must be described.

As discussed in respective sections within Section 4.0, Environmental Impact Analysis, implementation of the proposed planting ordinance would result in significant, unavoidable impacts with the following issues:

- Section 4.2, *Air Quality*
  - Criteria air pollutants generated by construction and operation associated with the proposed ordinance in excess of San Luis Obispo Air Pollution Control District thresholds
  - Cumulatively considerable impact to air quality
- Section 4.3, *Biological Resources*
  - Substantial adverse impact on special status plant and animal species, either directly or through habitat modification
  - Substantial adverse impact on sensitive habitats, including riparian and wetland habitat
  - Substantial interference with wildlife movement, including fish migration and native wildlife nurseries
  - Cumulative contribution and cumulative impacts to special status species; riparian, wetland, and/or other sensitive natural communities; and wildlife movement through facilitating further groundwater depletion and the conversion of natural habitats to agricultural use

- Section 4.4, *Cultural Resources*
  - Impacts to historical resources and historical landscapes/settings
  - Impacts to archaeological resources
  - Cumulative contribution and cumulative impacts to cultural resources
- Section 4.6, *Geology and Soils*
  - Impacts to paleontological resources
  - Cumulative impacts to paleontological resources
- Section 4.7, *Greenhouse Gas Emissions*
  - Greenhouse gas emissions in excess of significance thresholds
  - Conflict with greenhouse gas plans, policies, and regulations
  - Cumulative contribution to greenhouse gas emissions
- Section 4.8, *Hydrology and Water Quality*
  - Degradation of groundwater quality through a combination of decreasing water levels and increasing pollutant amounts throughout the PBLUMA
  - Decrease of groundwater supplies such that sustainable management of the Paso Robles Subbasin would be impeded
  - Impacts to water quality within the Paso Robles Subbasin that lead to conflict with goals reducing water quality pollution, achieving water quality objectives, and maintaining beneficial uses identified in the Basin's plan
  - Increased groundwater extraction that conflicts with the Groundwater Sustainability Plan's (GSP's) goal of sustainable groundwater management and conflicts with the GSP's projections for groundwater extraction in the Paso Robles Subbasin
  - Cumulative contribution and significant cumulative impacts to groundwater storage and groundwater quality
- Section 4.9, *Land Use and Planning*
  - Potential inconsistencies with several General Plan goals and policies
  - Cumulative contribution and potentially cumulative impacts to land use and planning
- Section 4.12, *Tribal Cultural Resources*
  - Impacts to previously unidentified tribal cultural resources
  - Cumulative contribution and cumulative impacts to tribal cultural resources
- Section 4.13, *Utilities and Service Systems*
  - Increased water use that would exacerbate overdraft conditions, leading to impacts to water supply
  - Cumulative contribution and cumulative impacts to water supply

## 5.3 Significant Irreversible Environmental Effects

*State CEQA Guidelines* §15126.2(c) requires a discussion of any significant irreversible environmental changes which would be caused by the project should it be implemented. Such significant irreversible environmental changes may include the following:

- Use of non-renewable resources during the initial and continued phases of the project which would be irreversible because a large commitment of such resources makes removal or non-use unlikely;
- Primary impacts and, particularly secondary impacts (such as highway improvement which provides access to a previously inaccessible area) which generally commit future generations to similar uses; or
- Irreversible damage which may result from environmental accidents associated with the project.

As a result of the proposed planting ordinance, agricultural development would require building materials and energy, some of which are non-renewable resources. Construction materials for agricultural accessory infrastructure allowed by the proposed ordinance may include aggregate materials used in concrete and asphalt (e.g., sand, gravel, and stone), metals (e.g., steel, copper, and lead), and petrochemical construction materials (e.g., plastics).

The additional plantings would irreversibly increase demand for energy needed for crop cultivation. The addition of farming equipment associated with the new and expanded plantings would irreversibly increase local demand for non-renewable energy resources such as petroleum, electricity from PG&E, or propane. Section 4.5, *Energy*, includes a full analysis of the potential impacts related to energy resources from construction and operation of the proposed planting ordinance.

The new and expanded plantings would also require an irreversible commitment of utility services, such as groundwater supplies and solid waste disposal. See Section 4.13, *Utilities and Service Systems*, for a full analysis of potential impacts to water supply, stormwater drainage, and electric power and natural gas; see Section 4.14, *Effects Found Not to be Significant*, for a full analysis of potential impacts to wastewater, solid waste, and telecommunications.

The proposed planting ordinance would result in new or expanded agriculture on agriculturally designated land, which would be consistent with the surrounding primarily agricultural area. The proposed planting ordinance would not result in construction of infrastructure (such as utilities or new non-agricultural roads) that would provide access to previously inaccessible areas. In addition, the proposed planting ordinance would not exclude different uses of the agricultural land in the future. Therefore, the proposed planting ordinance would not commit future generations to similar, agricultural uses.

As discussed in Section 4.14.7, *Hazards and Hazardous Materials*, in Section 4.14, *Effects Found Not to be Significant*, new and expanded agricultural activities would involve the use of pesticides, which are hazardous materials. However, such use would be consistent with the use already occurring for agricultural operations throughout the PBLUMA. Such hazardous materials would be transported, stored, and handled in accordance with existing regulations that govern the safe transport, use, and disposal of pesticides. Therefore, the proposed planting ordinance would not result in irreversible damage from environmental accidents.

## 6 Alternatives

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As required by Section 15126.6 of the *CEQA Guidelines*, this PEIR examines a range of reasonable alternatives to the proposed planting ordinance that that could feasibly achieve similar project objectives but would avoid or substantially lessen the significant adverse impacts associated with the proposed planting ordinance.

As discussed in Section 2, *Project Description*, the objectives for the proposed planting ordinance, are as follows:

- Continue to exercise the County’s land use authority to regulate the planting of production agriculture irrigated from groundwater wells within the PBLUMA with ministerial permits not subject to CEQA review.
- Require new crop plantings that are to be irrigated from groundwater wells within the PBLUMA to be “water neutral,” meaning new crops replace crops that are estimated to have had the same water demand and have been fallowed/removed within a certain time frame.
- Allowance of an exemption for farms to plant irrigated crops that were not able to under the existing agricultural offset requirements.
- Conserve groundwater resources in the PBLUMA for use by production agriculture in a manner that is equitable and consistent with groundwater rights.
- Support and promote a healthy and competitive agricultural industry in the PBLUMA, whose products are recognized in national and international markets as being produced in San Luis Obispo County.
- Encourage and facilitate smaller production agriculture operations.

### 6.1 Alternative Development and Screening Process

The analysis of alternatives for the proposed planting ordinance focuses on changes to the ordinance to limit the amount of groundwater extraction and new and expanded agriculture allowed under the ordinance. Alternatives provided are intended to reduce or avoid significant and unavoidable impacts where the potential for impact reduction is feasible. As discussed in Section 4, *Environmental Impact Analysis*, the planting ordinance would have significant and unavoidable impacts related to the following environmental topics:

#### **Air Quality**

- Criteria air pollutants generated by construction and operation associated with the proposed ordinance in excess of San Luis Obispo Air Pollution Control District (SLOAPCD) thresholds
- Cumulatively considerable impact to air quality

#### **Biological Resources**

- Substantial adverse impact on special status plant and animal species, either directly or through habitat modification
- Substantial adverse impact on sensitive natural communities, including riparian and wetland habitat
- Substantial interference with wildlife movement

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- Cumulative contribution and cumulative impacts to special status species; riparian, wetland, and/or other sensitive natural communities; and wildlife movement through facilitating further groundwater depletion and the conversion of natural habitats to agricultural use

**Cultural Resources**

- Impacts to historical resources (except to historical buildings)
- Impacts to archaeological resources
- Cumulative contribution and cumulative impacts to cultural resources

**Geology and Soils**

- Impacts to paleontological resources
- Cumulative impacts to paleontological resources

**Greenhouse Gas Emissions**

- Greenhouse gas (GHG) emissions in excess of significance thresholds
- Potential conflicts with plans, policies, and/or regulations adopted to reduce GHG emissions
- Cumulative contribution to GHG emissions

**Hydrology and Water Quality**

- Degradation of surface or groundwater quality through a combination of decreasing water levels and increasing pollutant amounts throughout the PBLUMA
- Decrease of groundwater supplies such that sustainable management of the Paso Robles Subbasin would be impeded
- Impacts to water quality within the Paso Robles Subbasin that lead to conflict with goals reducing water quality pollution, achieving water quality objectives, and maintaining beneficial uses identified in the Central Coast Regional Water Quality Control Board's (RWQCB) Water Quality Control Plan for the Central Coastal Basin
- Increased groundwater extraction that conflicts with the Groundwater Sustainability Plan's (GSP) goal of sustainable groundwater management and conflicts with the GSP's projections for groundwater extraction within the Paso Robles Subbasin
- Cumulative contribution and significant cumulative impacts to groundwater storage, and surface and groundwater quality

**Land Use and Planning**

- Potential inconsistencies with County's General Plan goals and policies
- Potential cumulative inconsistencies with County's General Plan goals and policies

**Tribal Cultural Resources**

- Impacts to previously unidentified tribal cultural resources
- Cumulative contribution and cumulative impacts to tribal cultural resources

**Utilities and Service Systems**

- Increased water use that would exacerbate overdraft conditions, leading to impacts to water supply
- Cumulative contribution and cumulative impacts to water supply

### 6.1.1 Alternatives Considered but Rejected

Potential alternatives included consideration of alternate locations, which was rejected on the basis that an alternative location is practically infeasible and would fail to accomplish the basic project objectives.

An alternate location is not feasible because the project is an ordinance intended to allow the County to continue exercising its land use authority to regulate planting of production agriculture irrigated from groundwater wells within the PBLUMA. Although no alternate location is feasible, it is noted that Alternative 3 excludes portions of the PBLUMA from utilizing exemptions associated with the proposed planting ordinance.

### 6.1.2 Project Alternatives

Included in this analysis are five alternatives, including the CEQA-required “no project” alternative (Alternative 1), that involve changes to the project that may reduce the project-related environmental impacts as identified in this PEIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed project.

The following alternatives are evaluated in this PEIR:

- Alternative 1: No Project – Existing Agricultural Offset Requirements Expire on January 31, 2023
- Alternative 2: Continuation of Existing Agricultural Offset Requirements Through 2025
- Alternative 3: No Exemptions Within Areas of Severe Groundwater Elevation Decline
- Alternative 4: No Exemptions
- Alternative 5: Exemptions Limited to Existing Williamson Act Contracts

Table 6-1 summarizes the primary program components of the proposed project and the project alternatives. Table 6-2 provides a summary comparison of the new and expanded agriculture and groundwater extractions allowed by the proposed project and each of the alternatives considered. Table 6-3 includes a comparison of the total disturbed area, new accessory infrastructure, and vehicle trips that could reasonably be assumed to result from implementation of the proposed project and project alternatives. Detailed descriptions of the alternatives are included below in the impact analysis for each alternative. The potential environmental impacts of each alternative are analyzed in Sections 6.2 through 6.6. This section only discusses those topics analyzed in detailed in Sections 4.1 through 4.13. Topics determined to have no impact or a less than significant impact in the Initial Study (Appendix A), as summarized in Section 4.14, *Effects Found Not to be Significant*, are not discussed below.

**Table 6-1 Program Components of Proposed Project and Project Alternatives**

Alternative	Program Components				
	Summary of Primary Program Elements	Planting Ordinance Expiration	Water Neutrality Requirement for Planting Permits	Exemptions	Cap on Groundwater Extraction
Proposed Planting Ordinance	New planting permit ordinance in effect from January 31, 2023 to January 31, 2045; water neutrality required for planting permits; exemptions for up to 25 AFY of groundwater extraction	January 31, 2045	Yes	25 AFY	None
Alternative 1: No Project – Existing Agricultural Offset Requirements Expire on January 31, 2023	Existing agricultural offset requirements expire on January 31, 2023	January 31, 2023	N/A	N/A	N/A
Alternative 2: Continuation of Existing Agricultural Offset Requirements Through 2025	Existing agricultural offset requirements expire on December 31, 2025	December 31, 2025	Yes	5 AFY through December 31, 2025	None
Alternative 3: No Exemptions Within Areas of Severe Groundwater Elevation Decline	New planting permit ordinance in effect from January 31, 2023 to January 31, 2045; water neutrality required for planting permits; exemptions for up to 25 AFY of groundwater extraction; no exemptions allowed in areas of severe groundwater elevation decline	January 31, 2045	Yes	25 AFY only for sites not located in an area of severe decline	None
Alternative 4: No Exemptions	New planting permit ordinance in effect from January 31, 2023 to January 31, 2045; water neutrality required for planting permits; no exemptions allowed	January 31, 2045	Yes	None	Water neutral plantings only
Alternative 5: Exemptions Limited to Existing Williamson Act Contracts	New planting permit ordinance in effect from January 31, 2023 to January 31, 2045; water neutrality required for planting permits; exemptions for up to 25 AFY of groundwater extraction; exemptions limited to existing Williamson Act contracts	January 31, 2045	Yes	25 AFY only for sites with existing Williamson Act contracts	None

**Table 6-2 Comparison of Increase in Irrigated Crop Acreage and Groundwater Extraction for Project Alternatives**

Alternative	Estimated Increase in Irrigated Crops (acres)		Estimated Increase in Groundwater Extraction (AFY)	
	Annual	By January 31, 2045	Annual	By January 31, 2045
Proposed Planting Ordinance	240	5,280	450	9,900
Alternative 1: No Project – Existing Agricultural Offset Requirements Expire on January 31, 2023	646-658 from January 31, 2023 to December 31, 2025	8,699	1,281-1,306 from January 31, 2023 to December 31, 2025	17,254
	336-406 from January 1, 2026 to January 31, 2045		666-805 from January 1, 2026 to January 31, 2045	
Alternative 2: Continuation of Existing Agricultural Offset Requirements Through 2025	8 from January 31, 2023 to December 31, 2025	6,745	10 from January 31, 2023 to December 31, 2025	13,360
	323-386 from January 1, 2026 to January 31, 2045		641-766 from January 1, 2026 to January 31, 2045	
Alternative 3: No Exemptions Within Areas of Severe Groundwater Elevation Decline	200	4,400	396	8,712
Alternative 4: No Exemptions	Unknown <sup>1</sup>	Unknown <sup>1</sup>	Unknown <sup>1</sup>	Unknown <sup>1</sup>
Alternative 5: Exemptions Limited to Existing Williamson Act Contracts	133.5	2,937	265	5,830

<sup>1</sup> Alternative 4 would not increase total groundwater extraction for irrigated crops within the PBLUMA. It is too speculative to estimate site-specific changes in crop acreage or intensity of labor or vehicle demands for “water neutral” planting permits that may convert from a higher-to-lower or lower-to-higher water and/or labor intensive crop. Therefore, this alternative assumes there would be no increase in overall irrigated cropland or groundwater usage within the PBLUMA.

**Table 6-3 Disturbance Area, Accessory Infrastructure, and Vehicle Trips for the Proposed Project and Project Alternatives**

Alternative	Total Disturbance (acres)	Groundwater Wells	Ponds/Reservoirs	Booster Pumps	Total Commute Miles	Tractor Passes
Proposed Planting Ordinance	5,280	88	12	253	400,499	3,542
Alternative 1: No Project – Existing Agricultural Offset Requirements Expire on January 31, 2023	8,699	145	20	417	659,822	5,835
Alternative 2: Continuation of Existing Agricultural Offset Requirements Through 2025	6,745	112	15	323	511,604	4,525



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<b>Alternative</b>	<b>Total Disturbance (acres)</b>	<b>Groundwater Wells</b>	<b>Ponds/ Reservoirs</b>	<b>Booster Pumps</b>	<b>Total Commute Miles</b>	<b>Tractor Passes</b>
Alternative 3: No Exemptions Within Areas of Severe Groundwater Elevation Decline	4,400	73	10	211	333,723	2,951
Alternative 4: No Exemptions	Unknown <sup>1</sup>	Unknown <sup>1</sup>	Unknown <sup>1</sup>	Unknown <sup>1</sup>	Unknown <sup>1</sup>	Unknown <sup>1</sup>
Alternative 5: Exemptions Limited to Existing Williamson Act Contracts	2,937	49	7	141	222,778	1,970

<sup>1</sup> Alternative 4 would not increase total groundwater extraction for irrigated crops within the PBLUMA. It is too speculative to estimate site-specific changes in crop acreage or intensity of labor or vehicle demands for “water neutral” planting permits that may convert from a higher-to-lower or lower-to-higher water and/or labor intensive crop. Therefore, this alternative assumes there would be no increase in overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA.

## 6.2 Alternative 1: No Project – Existing Agricultural Offset Requirements Expire on January 31, 2023

### 6.2.1 Description

Alternative 1 assumes that the County Board of Supervisors would not adopt the proposed planting ordinance, and the existing agricultural offset requirements (Land Use Ordinance, Title 22, Section 22.30.204) would expire on January 31, 2023 and would not be further extended. (It is noted that the agricultural offset ordinance is currently set to expire on August 31, 2022. On July 12, 2022, the Board of Supervisors will hold a hearing to consider extending the agricultural offset ordinance to January 31, 2023 to coincide the with anticipated effective date of the proposed planting ordinance). Under this alternative, the County would not adopt any land use regulations for new or expanded irrigated crops in the PBLUMA. Because it is not known at this time what future groundwater restrictions will be implemented as part of the Paso Basin GSP, this alternative does not account for a GSP area-specific pumping reduction program or other GSP management actions.

A reasonable projected annual increase in groundwater extractions for the first three years after the existing agricultural offset requirements terminate (from January 31, 2023 through December 31, 2025) would be two percent of the total existing agricultural water use, to account for suspended demand and the absence of any restrictions on new plantings, from neither County land use nor GSA actions. This increased rate is based on the planting rate observed during the 2015 three-month gap between the termination of the urgency planting ordinance and the agricultural offset requirements taking effect. Based on the GSP implementation funding timeline discussed in Section 4.13, *Utilities and Service Systems*, it is assumed that a GSP allocation and area-specific pumping reduction program would be in place by 2025 that would give GSAs some measure of control of increased groundwater pumping in the Subbasin to limit this planting rush beyond 2025, although the program would not necessarily reduce overall pumping and may allow new groundwater extractors to be established. Without any groundwater management actions in place, after the initial rush, a reasonable projected annual increase in groundwater extractions would be one percent of the total existing agricultural water use, which is consistent with the growth assumptions used to model projected water demands in the 2014 Paso Robles Groundwater Basin Model Update

(San Luis Obispo County Flood Control and Water Conservation District 2014:ES-9). Over 22 years (January 31, 2023 to January 31, 2045) with a compounding two percent annual increase from January 31, 2023 through December 31, 2025 and a one percent annual increase from January 1, 2026 through January 31, 2045, the total projected increase in groundwater extraction for the PBLUMA would be 17,254 AFY by 2045, with an annual increase ranging from 666 to 1,306 AFY. Total groundwater extraction would likely be lower once GSP management actions are adopted; however, it is currently too speculative to estimate how much of a reduction would occur.

Based on the methodology detailed in Appendix B, 666 to 1,306 AFY of annual groundwater use could be used to plant 139 to 272 acres of irrigated pasture or 533 to 1,045 acres of irrigated wine grapes per year. Based on these assumptions, the estimated reasonable increase in irrigated crop production would be an average of 223 to 658 acres per year, for a total increase of up to 8,699 acres by 2045. As shown in Table 6-3, total ground disturbance, construction of new accessory infrastructure (e.g., groundwater wells, booster pumps, and ponds/reservoirs), and vehicle trips resulting from Alternative 1 would increase proportionally to the increase in acreage planted compared to the proposed project, which equates to a 65 percent increase compared to the proposed project.

## 6.2.2 Impact Analysis

### **Agricultural Resources**

Alternative 1 would be located in the same geographic area (the PBLUMA) as the proposed project. While both the proposed project and Alternative 1 would increase the amount of irrigated farmland in the PBLUMA, Alternative 1 would increase irrigated farmland acreage to a greater extent. The proposed project would increase total irrigated farmland by 5,280 acres by January 31, 2045, and Alternative 1 would increase total irrigated farmland by 8,699 acres by January 31, 2045; thus, Alternative 1 would result in an additional 3,419 acres of farmland by January 31, 2045. However, similar to the proposed project, Alternative 1 would not convert farmland to non-agricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. Accordingly, under Alternative 1, similar to the proposed project, impacts to agricultural resources would be less than significant (Class III).

### **Air Quality**

Similar to the proposed project, Alternative 1 would not conflict with or obstruct implementation of the SLOAPCD 2001 Clean Air Plan, as Alternative 1 would not involve development of new residences, and therefore, would not alter current population trends for the region. Impacts regarding conflict with an applicable air quality plan for both the proposed project and Alternative 1 would be less than significant (Class III).

As discussed in Section 4.2, *Air Quality*, the proposed project has the potential to emit criteria air pollutants in exceedance of SLOAPCD thresholds. Criteria air pollutants may be emitted by operation of off-road diesel equipment and by activities that disturb the soil, such as grading, tilling, excavation, and vehicle movement on unpaved roads. Given that Alternative 1 would result in more irrigated cropland by January 31, 2045 when compared to the proposed project, impacts involving criteria air pollutant emissions would be greater under Alternative 1, as this alternative would result in more land disturbance, vehicle movement, and off-road equipment. Under Alternate 1, no mitigation would apply. With compliance with applicable regulatory plans, policies, and regulations, impacts related to air quality would be reduced to the greatest extent feasible. As with the

proposed project, impacts involving criteria air pollutant emissions under Alternative 1 would be significant and unavoidable (Class I).

### **Biological Resources**

The proposed project would involve conversion of current natural areas to irrigated crop fields, construction of accessory infrastructure, and associated projected groundwater extraction within the PBLUMA. Alternative 1 would result in more irrigated cropland by January 31, 2045 when compared to the proposed project; therefore, direct and indirect impacts to special status species, direct impacts to sensitive natural communities (including riparian and wetlands areas), and direct and indirect impacts to wildlife movement would be greater under Alternative 1 than the proposed project. Under Alternate 1, no mitigation would apply. With compliance with applicable regulatory policies and regulations, impacts to biological resources would be reduced to the greatest extent feasible. Nonetheless, as with the proposed project, Alternative 1 would result in significant and unavoidable impacts to biological resources (Class I).

Conversion of land to agricultural use could indirectly impact downstream water quality through erosion and sedimentation from exposed soils, as well as through introducing herbicides and pesticides, if planting sites are located within proximity of riparian and/or wetland areas. Following compliance with existing water quality regulations (see Section 4.8, *Hydrology and Water Quality*), the proposed project and Alternative 1 would result in less than significant impacts to water quality in riparian and wetland habitats. Although Alternative 1 would involve more irrigated cropland and thus more erosion and sedimentation than the proposed project, required compliance with existing regulations would reduce indirect impacts to riparian and wetland habitats to less than significant (Class III), as with the proposed project.

### **Cultural Resources**

Implementation of the proposed planting ordinance could result in potentially significant impacts to historical resources either directly (via demolition or alteration) and/or indirectly (damage to structures due to vibrations from use of heavy equipment). Alternative 1 would result in more irrigated cropland within the PBLUMA by January 31, 2045 than the proposed project, and by association, would involve more demolition, alteration, and use of heavy equipment. Thus, compared to the proposed project, Alternative 1 would result in greater direct and/or indirect impacts to historical resources and historical buildings. Under Alternate 1, no mitigation would apply. With compliance with applicable regulatory policies and regulations, impacts to historical resources would be reduced to the greatest extent feasible. Nonetheless, impacts would be significant and unavoidable (Class I), as with the proposed project.

The proposed project may result in impacts to known and previously unknown subsurface archaeological resources in previously uncultivated/undisturbed areas, in areas requiring deeper ripping/grading activities than what previously occurred, and/or within 100 feet of the bank of a creek or spring or 300 feet of a creek where the slope is less than 10 percent on sites that are not currently in active cultivation. Alternative 1 would result in more irrigated cropland by January 31, 2045, compared to the proposed project, and thus, would involve more ground-disturbing activities. Therefore, potential impacts to archaeological resources under Alternative 1 would be greater than the proposed project. With compliance with applicable regulatory policies and regulations, impacts to archaeological resources would be reduced to the greatest extent feasible. As with the proposed project, impacts to archaeological resources would remain significant and unavoidable (Class I).

Ground-disturbing activities associated with implementation of the proposed project could result in damage to or destruction of human remains. Given that Alternative 1 would involve more ground disturbance than the proposed project, Alternative 1 would result in greater potential impacts related to damage or destruction of human remains. However, Public Resources Code (PRC) Section 5097 and the California Health and Safety Code Sections 7050.5, 7051, and 7054 include specific provisions for treatment and protection of encountered human remains. As with the proposed project, with compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98, potential impacts to human remains under Alternative 1 would be less than significant (Class III).

## **Energy**

Construction activities do not typically result in the consumption of large quantities of electricity and would not result in electrical consumption greater than a typical operation day for agricultural activities. Compared to the proposed project, Alternative 1 would increase total irrigated farmland acreage, proportionally increasing associated agricultural infrastructure. Thus, Alternative 1 would result in greater impacts regarding construction energy than the proposed project. However, it is reasonable to assume that construction activities would be conducted in a manner to avoid wasteful, inefficient, and unnecessary fuel consumption to reduce construction costs. Therefore, construction activities under Alternative 1 (similar to the proposed project) would result in less than significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy (Class III).

Similar to the proposed project, operation of agricultural activities facilitated by Alternative 1 would contribute to regional energy demand by consuming electricity, gasoline, and diesel fuels. Energy consumption during operation of Alternative 1 would equate to a 65 percent increase compared to the proposed project. Thus, following 2045 buildout, Alternative 1 would consume approximately 659,655 gallons of diesel fuel and 130,840 gallons of gasoline annually, representing less than 0.04 percent of the State's total annual diesel consumption and less than 0.0008 percent of the State's total annual gasoline consumption. Accordingly, Alternative 1 would result in a greater operational energy impact than the proposed project. Similar to the proposed project, diesel-powered equipment would not be operated any more than is necessary to maintain and harvest crops, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by operation of each planting site under Alternative 1. As with the proposed project, operational impacts under Alternative 1 would be less than significant (Class III).

## **Geology and Soils**

Implementation of Alternative 1 would involve a 65 percent increase in irrigated cropland acreage compared to the proposed project, with a larger grading footprint and more construction of agricultural infrastructure, such as groundwater wells, ponds/reservoirs, and booster pumps. Grading for site preparation, construction of accessory infrastructure, and operational agricultural activities have the potential to increase erosion and loss of topsoil. As Alternative 1 would involve a larger grading footprint, the potential for erosion and loss of topsoil under Alternative 1 would be greater than the proposed project. However, Alternative 1 would implement best management practices under Chapter 22.52 of the San Luis Obispo County Code and the Construction General Permit, similar to the proposed project, resulting in less than significant impacts (Class III) regarding grading and soil erosion.

Geology and soil hazards would be similar to the proposed project because Alternative 1 would take effect in the same geographic setting as the proposed project. Overall risks related to fault line

rupture, seismic ground shaking, soil erosion, liquefaction, unstable soil, and expansive soils would be similar to the proposed project, and would result in less than significant impacts (Class III).

Alternative 1 would occur in the PBLUMA, where the vast majority of the geologic units are Quaternary alluvium, older Quaternary alluvium, and Pliocene rocks, which have a high potential to bear scientifically important paleontological resources. Thus, ground-disturbing activities associated with expanded agricultural plantings have the potential to impact paleontological resources that may be present at or below the ground surface. Under Alternate 1, no mitigation would apply. Given that Alternative 1 involves more agricultural planting, and thus, more site preparation and grading, impacts to paleontological resources have a greater potential to occur than under the proposed project. Similar to the proposed project, such impacts would be significant and unavoidable (Class I), even with adherence to the County grading ordinance.

### **Greenhouse Gas Emissions**

The proposed project would involve the use of off-road vehicles, irrigation pumps, and other machinery that emit greenhouse gases (GHGs). Construction and operation of the proposed project would generate GHG emissions in excess of significance thresholds, resulting in a significant and unavoidable impact regarding GHG emissions. Considering Alternative 1 is projected to increase the amount of irrigated cropland in the PBLUMA, compared to the proposed project, Alternative 1 would thus result in greater impacts involving GHG emissions, as Alternative 1 would involve more off-road vehicles, irrigation pumps, and use of heavy machinery. Under Alternate 1, no mitigation would apply. With compliance with applicable regulatory plans, policies and regulations, impacts associated with GHG emissions would be reduced to the greatest extent feasible. Therefore, as with the proposed project, Alternative 1 would result in significant and unavoidable impacts (Class I) regarding GHG emissions.

Both Alternative 1 and the proposed project would be potentially inconsistent with applicable plans, policies, and regulations designed to reduce GHG emissions. While agricultural activities facilitated by Alternative 1 would reduce GHG emissions to the greatest extent feasible, GHG emissions may exceed GHG emissions thresholds under Alternative 1, and thus, would not conflict with the ability for the County, region, and State to meet their applicable GHG reduction goals. As with the proposed project, impacts involving conflicts with applicable GHG reduction plans under Alternative 1 would be potentially significant and unavoidable (Class I).

### **Hydrology and Water Quality**

Alternative 1 would increase the amount of agricultural acreage and associated infrastructure in the PBLUMA. Similar to the proposed project, the construction of accessory infrastructure, grading and site preparation, and operation of new and expanded agriculture facilitated by Alternative 1 would be required to comply with existing water quality regulations to ensure that point source discharges do not violate water quality standards or waste discharge requirements set forth in the County Code, Construction General Permit, and Agricultural Order. Consequently, agricultural activities under Alternative 1 would not degrade surface water quality. Although impacts to water quality under Alternative 1 would be greater than the proposed project (due to Alternative 1's larger area of ground disturbance) impacts would remain less than significant (Class III), similar to the proposed project.

Similar to the proposed project, Alternative 1 would increase the amount of groundwater extracted from the Paso Robles Subbasin, and would result in impacts to sustainable groundwater management. Through increased agricultural activities, Alternative 1 would lead to a combination of

decreasing water levels and increasing pollutant amounts through the PBLUMA. While the proposed project would increase groundwater extraction by 9,900 AF by January 31, 2045, Alternative 1 would increase groundwater extraction by 17,254 AF, resulting in an additional 7,354 AF under Alternative 1. Thus, impacts to groundwater quality and supply would be greater under Alternative 1, and would be significant and unavoidable (Class I), as with the proposed project.

Similar to the proposed project, Alternative 1 would not substantially increase impervious surfaces or obstruct natural or artificial groundwater percolation or recharge. Agricultural development facilitated by Alternative 1, although greater than estimated development under the proposed project, would not increase the amount of impervious surface area within the proposed PBLUMA area such that percolation and recharge of groundwater from natural sources such as rainfall would be impeded. The majority of the agricultural infrastructure that would be facilitated by Alternative 1, such as groundwater wells and agriculture ponds/reservoirs, would result in minimal to no increase in impervious surface areas. As with the proposed project, impacts involving impervious surfaces would remain less than significant (Class III).

Considering Alternative 1 is projected to increase the amount of irrigated cropland and groundwater extraction within the PBLUMA—entailing increases in fertilizer use and decreases in groundwater levels—impacts to groundwater quality within the Paso Robles Subbasin would be potentially inconsistent with goals reducing water quality pollution, water quality objectives, and maintenance of beneficial uses identified in the Basin Plan. As Alternative 1 would increase the amount of irrigated cropland and groundwater extraction compared to the proposed project, Alternative 1 would result in greater impacts regarding conflict with water quality control plans. Therefore, similar to the proposed project, such impacts would be significant and unavoidable (Class I).

Increased groundwater extraction allowed under Alternative 1 would be potentially inconsistent with the GSP's goals and water balance projections and would increase the burden on GSP management actions. Alternative 1 would increase groundwater extraction by an additional 6,904 AF by 2045; thus, Alternative 1 would result in greater impacts regarding inconsistency with the GSP, and as with the proposed project, impacts would be significant and unavoidable (Class I).

## **Land Use and Planning**

The proposed project would be consistent with most applicable goals and policies of the County General Plan (including the area plans and community plans) and would be consistent with the General Plan as a whole. Similar to the proposed project, Alternative 1 would be consistent with the General Plan as a whole. However, the proposed planting ordinance is also potentially inconsistent with some of the goals and policies, specifically those found in the Conservation and Open Space Element, Land Use Element, and Agricultural Element pertaining to air quality, GHG emissions, sensitive biological resources, sensitive ecological habitats, wildlife corridors, historic resources, cultural and tribal cultural resources, paleontological resources, and groundwater management and supply. Although Alternative 1 would result in more agricultural development by January 31, 2045 than the proposed project, impacts involving policy inconsistency would not necessarily be greater, as General Plan policies focus on qualitative exceedance thresholds, rather than quantitative. Under Alternate 1, no mitigation would apply. With compliance with applicable regulatory policies and regulations, impacts to land use and planning would be reduced to the greatest extent feasible. Nonetheless, Alternative 1 would result in significant and unavoidable impacts (Class I) regarding conflict with land use plans, policies, and/or regulations adopted for the purpose of avoiding or mitigating an environmental effect, as with the proposed project.

## **Noise**

Similar to the proposed project, Alternative 1 would involve the use of heavy equipment for construction of accessory infrastructure, field preparation, and grading activities. These activities can result in groundborne noise and vibration in the vicinity of sensitive receivers. However, due to their location in the more developed communities of Shandon, Creston, and San Miguel, sensitive noise receptors, such as schools, churches, parks, libraries, and offices, are not located in close proximity to agricultural uses. Therefore, construction and operational activities are not anticipated to occur in the vicinity of these sensitive receivers, and neither the proposed project nor Alternative 1 would result in groundborne noise or vibration in the vicinity of sensitive receivers that have not already been impacted by similar agricultural activity. Accordingly, similar to the proposed project, Alternative 1 would result in less than significant impacts (Class III) related to groundborne noise and vibration.

## **Transportation**

Similar to the proposed project, Alternative 1 would generate VMT related to worker commute trips and hauling trips. Based on the California Governor's Office of Planning and Research's (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, Alternative 1 would result in a significant transportation impact if it would exceed a level of 15 percent below existing regional VMT per employee per day (OPR 2018). The existing (2020) regional (unincorporated San Luis Obispo County) VMT per employee per day is 30.2, and 15 percent below the existing regional VMT per employee per day is 25.7 (County of San Luis Obispo 2021). The proposed project would result in 2.0 average daily VMT per worker (see Section 4.11, *Transportation*). Alternative 1 would allow for an estimated increase in overall irrigated crop production in the PBLUMA of 646 to 658 acres annually until January 31, 2025 and 336 to 406 acres annually until January 31, 2045, for a total increase of 8,699 acres by January 31, 2045. The total VMT generated under Alternative 1 would increase annually until January 31, 2045—as more sites are planted, each planting site would require its own 10 workers. Although Alternative 1 would involve more irrigated crop production (and thus more planting sites) than the proposed project, the average daily VMT of 2.0 per worker would be maintained throughout the duration of Alternative 1 through January 31, 2045.

Therefore, Alternative 1 would not exceed the applicable VMT significance threshold, and implementation of Alternative 1 would not conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b). Similar to the proposed project, impacts would be less than significant (Class III).

## **Tribal Cultural Resources**

Similar to the proposed project, Alternative 1 would involve ground-disturbing activities related to new and expanded agricultural activities. Although no specific tribal cultural resources were identified by the tribes associated with the PBLUMA, ground-disturbing activities related to new and expanded agricultural activities and proposed accessory infrastructure associated with proposed project, particularly in previously uncultivated/undisturbed areas, in areas requiring deeper ripping/grading activities than what previously occurred, within 100 feet of the bank of a creek or spring, and/or within 300 feet of a creek where the slope is less than 10 percent on sites that are not currently in active cultivation have the potential to impact tribal cultural resources that may be present on or below the ground surface. Given that Alternative 1 would result in more irrigated crop production (and thus, more ground distance) than the proposed project, potential impacts to tribal cultural resources would be greater under Alternative 1 than the proposed project. With compliance of applicable regulatory policies and regulations related to tribal cultural resources, including the

County's General Plan and Grading Ordinance, impacts to tribal cultural resources would be reduced to the greatest extent feasible. However, impacts to tribal cultural resources under Alternative 1 would remain significant and unavoidable (Class I), as with the proposed project.

### **Utilities and Service Systems**

Compared to the proposed project, Alternative 1 is estimated to add 57 more groundwater wells and 8 more agricultural ponds/reservoirs. However, similar to the proposed project, Alternative 1 would not include construction of housing or commercial areas, Alternative 1 would not result in the need for new or expanded water facilities beyond those anticipated to serve the expanded irrigation, and impacts concerning water facilities would be less than significant (Class III).

No additional stormwater drainage facilities beyond those required to comply with existing regulations would be needed under the proposed project or Alternative 1. Accordingly, similar to the proposed project, Alternative 1 would result in less than significant impacts (Class III) to stormwater facilities.

Similar to the proposed project, PG&E connections to existing facilities under Alternative 1 would likely be on-site and require minimal infrastructure for the connection—if PG&E transmission facilities would need to be extended to a planting site, it would likely be environmentally cleared under separate CEQA review. However, since PG&E would require the agricultural operator to cover the cost of connection, it would likely be cost prohibitive. Thus, it is reasonable to assume that sites under the proposed project and Alternative 1 that would require additional electric power transmission lines would opt for solar energy which would be installed on site. For these reasons, impacts regarding electric power and natural gas facilities would be less than significant (Class III).

Similar to the proposed project, foreseeable crop production under Alternative 1 would increase groundwater demand within the PBLUMA. While the proposed project would increase groundwater extraction by an estimated 9,900 AF by January 31, 2045, Alternative 1 would increase groundwater extraction by an estimated 17,254 AF, resulting in an additional 7,354 AF under Alternative 1 and greater impacts to groundwater extraction. The Paso Robles Subbasin is currently in a state of critical overdraft. As Alternative 1 would further increase water demands from a currently overdrafted subbasin, impacts to available groundwater supply in the Paso Robles Subbasin would remain significant and unavoidable (Class I).

### **Conclusion**

Alternative 1 would result in incrementally greater impacts to all environmental issue areas when compared to the proposed project. Additionally, this alternative would not meet any of the project objectives.

## **6.3 Alternative 2: Continuation of Existing Agricultural Offset Requirements Through 2025**

### **6.3.1 Description**

Alternative 2 assumes that the County Board of Supervisors would not adopt the proposed planting ordinance and would extend the existing agricultural offset requirements (Land Use Ordinance, Title 22, Section 22.30.204) through December 31, 2025. Under this alternative, the existing agricultural offset requirements would serve as interim regulations for groundwater extractions for irrigated



crops until the Paso Robles Subbasin GSP area-specific pumping reduction program is implemented, which is anticipated to occur in 2025. Because it is not known at this time what future groundwater restrictions will be implemented as part of the Paso Robles Subbasin GSP, this alternative does not account for a GSP area-specific pumping reduction program or other GSP management actions.

Alternative 2 assumes that up to two 5-AFY exemptions are approved per year from January 31, 2023 through December 31, 2025, based on the historical application rate under the existing agricultural offset requirements (12 applications received from October 2015 through January 2022). The resulting estimated increase in groundwater extractions from the 5-AFY exemptions would be 10 AFY annually and a total of 30 AFY by December 31, 2025. Assuming 4 acres of wine grapes planted per exemption (maximum allowed acreage), the resulting estimated increase in cultivated acreage would be 8 acres annually and a total of 24 acres by December 31, 2025.

On January 1, 2026, the existing agricultural offset requirements would expire. Without any groundwater management actions in place, a reasonable projected annual increase in groundwater extractions between January 1, 2026 and January 31, 2045 would be one percent of the total existing agricultural water use, which is consistent with the growth assumptions used to model projected water demands in the 2014 Paso Robles Groundwater Basin Model Update (San Luis Obispo County Flood Control and Water Conservation District 2014:ES-9). Over a 20-year period (January 1, 2026 to January 31, 2045), with a compounding one percent annual increase, the total increase in groundwater extraction for the PBLUMA would be an estimated 13,360 AFY by January 31, 2045, with an annual increase ranging from 641 to 766 AFY. Accordingly, 641 to 766 AFY of annual groundwater use could be used to plant 133 to 160 acres of irrigated pasture or 512 to 613 acres of irrigated wine grapes per year. Based on these assumptions, the estimated reasonable increase in irrigated crop production would be an average of 323 to 386 acres per year, for a total increase of 6,745 acres by January 31, 2045.

In summary, between January 31, 2023 and January 31, 2045, the total estimated increase in groundwater extraction resulting from Alternative 2 would be 13,360 AFY, and the total estimated increase in new irrigated crop production would be 6,745 acres. In addition, as shown in Table 6-3, total ground disturbance, construction of new accessory infrastructure (e.g., groundwater wells, booster pumps, and ponds/reservoirs), and vehicle trips resulting from Alternative 2 would increase proportionally to the increase in acreage planted compared to the proposed project, which equates to a 28 percent increase over the proposed project.

### 6.3.2 Impact Analysis

#### **Agricultural Resources**

While both the proposed project and Alternative 2 would increase the amount of irrigated farmland in the PBLUMA, Alternative 2 would increase irrigated farmland acreage to a greater extent. The proposed project would increase total irrigated farmland by 5,280 acres by January 31, 2045, and Alternative 2 would increase total irrigated farmland by 6,745 acres by January 31, 2045; thus, Alternative 2 would result in an additional 1,465 acres of farmland by January 31, 2045. However, similar to the proposed project, Alternative 2 would not convert farmland to non-agricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. Additionally, by irrigating land that is not currently irrigated, there is a potential for Alternative 2, similar to the proposed project, to increase Prime Farmland in the PBLUMA because the definition of "Prime Farmland" requires the land to be irrigated. Accordingly, under Alternative 2, similar to the proposed project, impacts to agricultural resources would be less than significant (Class III).

## Air Quality

Similar to the proposed project, Alternative 2 would not conflict with or obstruct implementation of the SLOAPCD 2001 Clean Air Plan, as Alternative 2 would not involve development of new residences, and therefore, would not alter current population trends for the region. Impacts regarding conflict with an applicable air quality plan for both the proposed project and Alternative 2 would be less than significant (Class III).

As discussed under Alternative 1 above, the proposed project has the potential to emit criteria air pollutants in exceedance of SLOAPCD thresholds. Given that Alternative 2 would result in more irrigated cropland by January 31, 2045 when compared to the proposed project, impacts involving criteria air pollutant emissions would be greater under Alternative 2, as this alternative would result in more land disturbance, vehicle movement, and off-road equipment. While Mitigation Measure AQ-1 would reduce impacts associated with fugitive dust emissions by requiring the planting permit applicants and/or property owners to help suppress dust from use of unpaved roads, driveways, and parking areas, there are no additional feasible mitigation measures available to reduce criteria pollutant impacts (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility). As with the proposed project, impacts involving criteria air pollutant emissions under Alternative 2 would be significant and unavoidable (Class I).

## Biological Resources

Alternative 2 would result in more irrigated cropland by January 31, 2045 when compared to the proposed project; therefore, direct and indirect impacts to special status species, direct impacts to sensitive natural communities (including riparian and wetlands areas), and direct and indirect impacts to wildlife movement would be greater under Alternative 2 than the proposed project. Compliance with regulatory frameworks discussed in *Section 4.3, Biological Resources*, as well as implementation of Mitigation Measure BIO-1 and Mitigation Measures UTIL-1 and UTIL-2 in *Section 4.13, Utilities and Service Systems*, would reduce significant impacts to special status species, natural communities (including riparian and wetlands areas), and wildlife movement to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts to biological resources. Thus, as with the proposed project, Alternative 2 would result in significant and unavoidable impacts to biological resources (Class I).

Conversion of land to agricultural use could indirectly impact downstream water quality through erosion and sedimentation from exposed soils, as well as through introducing herbicides and pesticides, if planting sites are located within proximity of riparian and/or wetland areas. Following compliance with existing water quality regulations (see *Section 4.8, Hydrology and Water Quality*), the proposed project and Alternative 2 would result in less than significant impacts to water quality in riparian and wetland habitats. Although Alternative 2 would involve more irrigated cropland and thus more erosion and sedimentation than the proposed project, required compliance with existing regulations would reduce indirect impacts to riparian and wetland habitats to less than significant (Class III), as with the proposed project.

## Cultural Resources

As stated under Alternative 1 above, implementation of the proposed planting ordinance could result in potentially significant impacts to historical resources. Alternative 2 would result in more irrigated cropland within the PBLUMA by January 31, 2045 than the proposed project, and by association, would involve more demolition, alteration, and use of heavy equipment. Thus,

compared to the proposed project, Alternative 2 would result in greater direct and/or indirect impacts to historical resources and historical buildings. While implementation of existing regulations would reduce indirect and direct impacts to historical buildings to less than significant (Class III), no feasible mitigation measures are available to reduce direct impacts to other historical resources and impacts would remain significant and unavoidable. Since no feasible mitigation measures are available to reduce impacts to other historical resources, impacts would be significant and unavoidable (Class I), as with the proposed project.

Similarly, Alternative 2 would result in more irrigated cropland by January 31, 2045, compared to the proposed project, and thus, would involve more ground-disturbing activities. Therefore, potential impacts to archaeological resources under Alternative 2 would be greater than the proposed project. Beyond compliance with regulatory frameworks (see Section 4.4, *Cultural Resources*), there are no additional feasible mitigation measures available to reduce impacts to archeological resources. As with the proposed project, impacts to archaeological resources would remain significant and unavoidable (Class I).

Given that Alternative 2 would involve more ground disturbance than the proposed project, Alternative 2 would result in greater impacts to damage or destruction of human remains. However, PRC Section 5097 and the California Health and Safety Code include specific provisions for treatment and protection of encountered human remains. As with the proposed project, with compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98, potential impacts to human remains under Alternative 2 would be less than significant (Class III).

## **Energy**

Compared to the proposed project, Alternative 2 would increase total irrigated farmland acreage, proportionally increasing associated agricultural infrastructure. Thus, Alternative 2 would result in greater impacts regarding construction energy than the proposed project. However, it is reasonable to assume that construction activities would be conducted in a manner to avoid wasteful, inefficient, and unnecessary fuel consumption to reduce construction costs. Therefore, construction activities under Alternative 2 (similar to the proposed project) would result in less than significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy (Class III).

Similar to the proposed project, operation of agricultural activities facilitated by Alternative 2 would contribute to regional energy demand by consuming electricity, gasoline, and diesel fuels. Energy consumption during operation of Alternative 2 would equate to a 28 percent increase compared to the proposed project. Thus, following 2045 buildout, Alternative 2 would consume approximately 511,732 gallons of diesel fuel and 101,500 gallons of gasoline annually, representing less than 0.03 percent of the State's total annual diesel consumption and less than 0.0007 percent of the State's total annual gasoline consumption. Accordingly, Alternative 2 would result in a greater operational energy impact than the proposed project. Similar to the proposed project, diesel-powered equipment would not be operated any more than is necessary to maintain and harvest crops, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by operation of a planting site under Alternative 2. As with the proposed project, operational impacts under Alternative 2 would be less than significant (Class III).

## **Geology and Soils**

Implementation of Alternative 2 would involve a 28 percent increase in irrigated cropland acreage compared to the proposed project, with a larger grading footprint and more construction of agricultural infrastructure, such as groundwater wells, ponds/reservoirs, and booster pumps.

Grading for site preparation, construction of accessory infrastructure, and operational agricultural activities have the potential to increase erosion and loss of topsoil. As Alternative 2 would involve a larger grading footprint, the potential for erosion and loss of topsoil under Alternative 2 would be greater than the proposed project. However, Alternative 2 would implement best management practices under Chapter 22.52 of the San Luis Obispo County Code and the Construction General Permit, similar to the proposed project, resulting in less than significant impacts (Class III) regarding grading and soil erosion.

Geology and soil hazards would be similar to the proposed project because Alternative 2 would take effect in the same geographic setting as the proposed project. Overall risks related to fault line rupture, seismic ground shaking, soil erosion, liquefaction, unstable soil, and expansive soils would be similar to the proposed project, and would result in less than significant impacts (Class III).

Given that Alternative 2 involves more agricultural planting, and thus, more site preparation and grading, impacts to paleontological resources have a greater potential to occur than under the proposed project. Similar to the proposed project, such impacts would be significant and unavoidable (Class I), even with adherence to the County grading ordinance.

### **Greenhouse Gas Emissions**

Considering Alternative 2 is projected to increase the amount of irrigated cropland in the PBLUMA, compared to the proposed project, Alternative 2 would thus result in greater impacts involving GHG emissions, as Alternative 2 would involve more off-road vehicles, irrigation pumps, and use of heavy machinery. Mitigation Measure GHG-1, which would require agricultural operators to sequester carbon and/or reduce GHG emissions, and compliance with regulatory frameworks discussed in Section 4.7, *Greenhouse Gas Emissions*, would reduce impacts to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts associated with GHG emissions. Therefore, as with the proposed project, Alternative 2 would result in significant and unavoidable impacts (Class I) regarding GHG emissions.

Both Alternative 2 and the proposed project would be potentially inconsistent with applicable plans, policies, and regulations designed to reduce GHG emissions. While agricultural activities facilitated by Alternative 2 would reduce GHG emissions to the greatest extent feasible, GHG emissions may exceed GHG emissions thresholds under Alternative 2, and thus, would potentially conflict with the ability for the County, region, and State to meet their applicable GHG reduction goals. As with the proposed project, impacts involving conflicts with applicable GHG reduction plans under Alternative 2 would be potentially significant and unavoidable (Class I).

### **Hydrology and Water Quality**

Alternative 2 would increase the amount of agricultural acreage and associated infrastructure in the PBLUMA. Similar to the proposed project, the construction of accessory infrastructure, grading and site preparation, and operation of new and expanded agriculture facilitated by Alternative 2 would be required to comply with existing water quality regulations to ensure that point source discharges do not violate water quality standards or waste discharge requirements set forth in the County Code, Construction General Permit, and Agricultural Order. Consequently, agricultural activities under Alternative 2 would not degrade surface water quality. Although impacts to water quality under Alternative 2 would be greater than the proposed project (due to Alternative 2's larger area of ground disturbance) impacts would remain less than significant (Class III), similar to the proposed project.

Similar to the proposed project, Alternative 2 would increase the amount of groundwater extracted from the Paso Robles Subbasin, and would result in impacts to sustainable groundwater management. Through increased agricultural activities, Alternative 2 would lead to a combination of decreasing water levels and increasing pollutant amounts through the PBLUMA. While the proposed project would increase groundwater extraction by 9,900 AF by 2045, Alternative 2 would increase groundwater extraction by 13,360 AF, resulting in an additional 3,460 AF under Alternative 2. Thus, impacts to groundwater quality and supply would be greater under Alternative 2, and would be significant and unavoidable (Class I), as with the proposed project.

Similar to the proposed project, Alternative 2 would not substantially increase impervious surfaces or obstruct natural or artificial groundwater percolation or recharge. Agricultural development facilitated by Alternative 2, although greater than estimated development under the proposed project, would not increase the amount of impervious surface area within the proposed PBLUMA area such that percolation and recharge of groundwater from natural sources such as rainfall would be impeded. The majority of the agricultural infrastructure that would be facilitated by Alternative 2, such as groundwater wells and agriculture ponds/reservoirs, would result in minimal to no increase in impervious surface areas. As with the proposed project, impacts involving impervious surfaces would remain less than significant (Class III).

Considering Alternative 2 is projected to increase the amount of irrigated cropland and groundwater extraction within the PBLUMA—entailing increases in fertilizer use and decreases in groundwater levels—impacts to groundwater quality within the Paso Robles Subbasin would be potentially inconsistent with goals reducing water quality pollution, water quality objectives, and maintenance of beneficial uses identified in the Basin Plan. As Alternative 2 would increase the amount of irrigated cropland and groundwater extraction compared to the proposed project, Alternative 2 would result in greater impacts regarding conflict with water quality control plans. Therefore, similar to the proposed project, such impacts would be significant and unavoidable (Class I).

Increased groundwater extraction allowed under Alternative 2 would be potentially inconsistent with the GSP's goals and water balance projections and would increase the burden on GSP management actions. Alternative 2 would increase groundwater extraction by an additional 4,224 AF by 2045; thus, Alternative 2 would result in greater impacts regarding inconsistency with the GSP, and as with the proposed project, impacts would be significant and unavoidable (Class I).

## **Land Use and Planning**

The proposed project would be consistent with most applicable goals and policies of the County General Plan (including the area plans and community plans) and would be consistent with the General Plan as a whole. Similar to the proposed project, Alternative 2 would be consistent with the General Plan as a whole. However, the proposed planting ordinance is also potentially inconsistent with some of the goals and policies, specifically those found in the Conservation and Open Space Element, Land Use Element, and Agricultural Element pertaining to air quality, GHG emissions, sensitive biological resources, sensitive ecological habitats, wildlife corridors, historic resources, cultural and tribal cultural resources, paleontological resources, and groundwater management and supply. Although Alternative 2 would result in more agricultural development by January 31, 2045 than the proposed project, impacts involving policy inconsistency would not necessarily be greater, as General Plan policies focus on qualitative exceedance thresholds, rather than quantitative. Implementation of mitigation measures identified in Sections 4.1 through 4.13 would reduce impacts to the extent feasible; however, both the proposed project and Alternative 2 would result in

significant and unavoidable impacts (Class I) regarding conflict with land use plans, policies, and/or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

## Noise

Similar to the proposed project, Alternative 2 would involve the use of heavy equipment for construction of accessory infrastructure, field preparation, and grading activities. These activities can result in groundborne noise and vibration in the vicinity of sensitive receivers. However, due to their location in the more developed communities of Shandon, Creston, and San Miguel, sensitive noise receptors, such as schools, churches, parks, libraries, and offices, are not located in close proximity to agricultural uses. Therefore, construction and operational activities are not anticipated to occur in the vicinity of these sensitive receivers, and neither the proposed project nor Alternative 2 would result in groundborne noise or vibration in the vicinity of sensitive receivers that have not already been impacted by similar agricultural activity. Accordingly, similar to the proposed project, Alternative 2 would result in less than significant impacts (Class III) related to groundborne noise and vibration.

## Transportation

Similar to the proposed project, Alternative 2 would generate VMT related to worker commute trips and hauling trips. As previously stated under Alternative 1, a significant transportation impact would occur if a project would exceed a level of 15 percent below existing regional VMT per employee per day (OPR 2018), or 25.7 VMT per employee per day (County of San Luis Obispo 2021). The proposed project would result in 2.0 average daily VMT per worker (see Section 4.11, *Transportation*). For the reasons discussed under Alternative 1, although Alternative 2 would involve more irrigated crop production (and thus more planting sites) than the proposed project, the average daily VMT of 2.0 per worker would be maintained throughout the duration of Alternative 2 through January 31, 2045. Therefore, Alternative 2 would not exceed the applicable VMT significance threshold, and implementation of Alternative 2 would not conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b). Similar to the proposed project, impacts would be less than significant (Class III).

## Tribal Cultural Resources

Although no specific tribal cultural resources were identified by the tribes associated with the PBLUMA, ground-disturbing activities related to new and expanded agricultural activities and proposed accessory infrastructure associated with the proposed project and Alternative 2, particularly in previously uncultivated/undisturbed areas, in areas requiring deeper ripping/grading activities than what previously occurred, within 100 feet of the bank of a creek or spring, and/or within 300 feet of a creek where the slope is less than 10 percent on sites that are not currently in active cultivation have the potential to impact tribal cultural resources that may be present on or below the ground surface. Given that Alternative 2 would result in more irrigated crop production (and thus, more ground distance) than the proposed project, potential impacts to tribal cultural resources would be greater under Alternative 2 than the proposed project. With compliance of applicable regulatory policies and regulations related to tribal cultural resources, including the County's General Plan and Grading Ordinance, impacts to tribal cultural resources would be reduced to the greatest extent feasible. However, since no feasible mitigation measures are available to reduce impacts to tribal cultural resources under Alternative 2, impacts would remain significant and unavoidable (Class I), as with the proposed project.

## **Utilities and Service Systems**

Compared to the proposed project, Alternative 2 would add 24 more groundwater wells and 3 more agricultural ponds/reservoirs. However, similar to the proposed project, Alternative 2 would not include construction of housing or commercial areas, Alternative 2 would not result in the need for new or expanded water facilities beyond those anticipated to serve the expanded irrigation, and impacts concerning water facilities would be less than significant (Class III).

No additional stormwater drainage facilities beyond those required to comply with existing regulations would be needed under the proposed project or Alternative 2. Accordingly, similar to the proposed project, Alternative 2 would result in less than significant impacts (Class III) to stormwater facilities.

As discussed under Alternative 1, it is reasonable to assume that sites under the proposed project and Alternative 2 that would require additional electric power transmission lines would opt for solar energy which would be installed on site. Therefore, impacts regarding power facilities, including electric and natural gas, would be less than significant (Class III).

While the proposed project would increase groundwater extraction by 9,900 AF by January 31, 2045, Alternative 2 would increase groundwater extraction by 13,360 AF, resulting in an additional 3,460 AF under Alternative 2 and greater impacts to groundwater extraction. As previously stated, the Paso Robles Subbasin is currently in a state of critical overdraft. As Alternative 2 would further increase water demands from a currently overdrafted subbasin, impacts to available groundwater supply in the Paso Robles Subbasin would remain significant and unavoidable (Class I).

## **Conclusion**

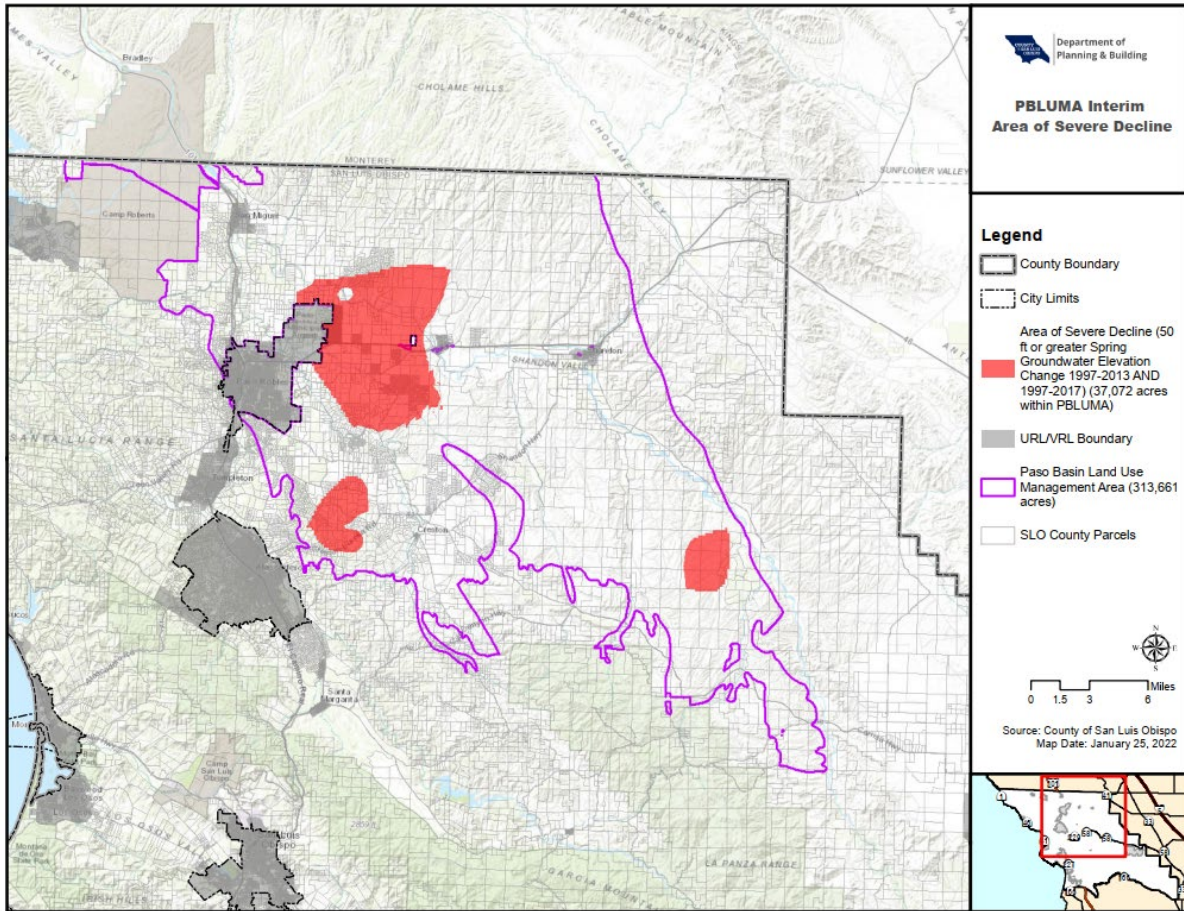
Although this alternative would generally meet the project objectives, Alternative 2 would result in incrementally greater impacts to all environmental issue areas when compared to the proposed project but incrementally less impacts than Alternative 1.

## **6.4 Alternative 3: No Exemptions Within Areas of Severe Groundwater Elevation Decline**

### **6.4.1 Description**

Alternative 3 assumes the County Board of Supervisors would adopt the planting ordinance as proposed with one change: exclude the 25-AFY exemptions within designated areas of severe groundwater elevation decline. The boundary of the “areas of severe decline” would be defined as the areas where pumping reductions are required by a GSP area-specific reduction program (once adopted by the Paso Robles Subbasin GSAs). In the interim until such GSP program is adopted, the area of severe decline would be defined using the designation in the existing agricultural offset requirements (Section 22.30.205.B, of the County Code), which include areas that experienced a springtime groundwater decline exceeding 50 feet from 1997 through 2013 and from 1997 through 2017 (Figure 6-1), which includes 37,072 acres of the 313,661-acre PBLUMA. Because the boundary of a GSP area-specific pumping reduction program is not defined at this time, the analysis for Alternative 3 is based on the areas of severe groundwater elevation decline as defined in the existing agricultural offset requirements.

**Figure 6-1 Areas of Severe Groundwater Elevation Decline (Interim Boundary)**



Assuming the sites that would utilize the 25-AFY exemptions are spread evenly throughout the PBLUMA, except for the 37,072 acres of areas of severe groundwater elevation decline, meaning up to 276,589 acres (88 percent) of the PBLUMA would be eligible for irrigated planting under this alternative. Therefore, under Alternative 3, the estimated annual increase in groundwater extraction for new and/or expanded crops would be approximately 396 AFY, which represents 88 percent of the 450-AFY annual increase estimated for the proposed planting ordinance. By January 31, 2045, the total estimated increase in groundwater extraction for Alternative 3 would be approximately 8,712 AFY. The 396 AFY of annual groundwater extraction could be used to plant 82.5 acres of irrigated pasture or 316.8 acres of irrigated wine grapes per year. Based on these assumptions, the estimated reasonable increase in irrigated crop production would be up to 200 acres per year, for a total increase of up to 4,400 acres by January 31, 2045.

As shown in Table 6-3, total ground disturbance, construction of new accessory infrastructure (e.g., groundwater wells, booster pumps, and ponds/reservoirs), and vehicle trips resulting from Alternative 3 would decrease proportionally to the decrease in acreage planted compared to the proposed project, which equates to a 17 percent decrease compared to the proposed project.



## 6.4.2 Impact Analysis

### **Agricultural Resources**

While both the proposed project and Alternative 3 would increase the amount of irrigated farmland in the PBLUMA, the proposed project would increase irrigated farmland acreage to a greater extent. The proposed project would increase total irrigated farmland by 5,280 acres by January 31, 2045, and Alternative 3 would increase total irrigated farmland by 4,400 acres by January 31, 2045; thus, Alternative 3 would result in 880 fewer acres of farmland by January 31, 2045. However, similar to the proposed project, Alternative 3 would not convert farmland to non-agricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. Additionally, by irrigating land that is not currently irrigated, there is a potential for Alternative 3, similar to the proposed project, to increase Prime Farmland in the PBLUMA because the definition of “Prime Farmland” requires the land to be irrigated. Accordingly, under Alternative 3, similar to the proposed project, impacts to agricultural resources would be less than significant (Class III).

### **Air Quality**

Similar to the proposed project, Alternative 3 would not conflict with or obstruct implementation of the SLOAPCD 2001 Clean Air Plan, as Alternative 3 would not involve development of new residences, and therefore, would not alter current population trends for the region. Impacts regarding conflict with an applicable air quality plan for both the proposed project and Alternative 3 would be less than significant (Class III).

Given that Alternative 3 would result in less irrigated cropland by January 31, 2045 when compared to the proposed project, impacts involving criteria air pollutant emissions would be smaller under Alternative 3, as this alternative would result in less land disturbance, vehicle movement, and use of off-road equipment. While Mitigation Measure AQ-1 would reduce impacts associated with fugitive dust emissions by requiring the planting permit applicants and/or property owners to help suppress dust from use of unpaved roads, driveways, and parking areas, there are no additional feasible mitigation measures available to reduce criteria pollutant impacts (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility). As with the proposed project, impacts involving criteria air pollutant emissions under Alternative 3 would be significant and unavoidable (Class I).

### **Biological Resources**

Alternative 3 would result in less irrigated cropland by January 31, 2045 when compared to the proposed project; therefore, direct and indirect impacts to special status species, direct impacts to sensitive natural communities (including riparian and wetlands areas), and direct and indirect impacts to wildlife movement would be smaller under Alternative 3 than the proposed project. Compliance with regulatory frameworks discussed in Section 4.3, *Biological Resources*, as well as implementation of Mitigation Measure BIO-1 and Mitigation Measures UTIL-1 and UTIL-2 in Section 4.13, *Utilities and Service Systems*, would reduce significant impacts to special status species, sensitive natural communities (including riparian and wetlands areas), and wildlife movement to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts to biological resources. Thus, as with the proposed project, Alternative 3 would result in significant and unavoidable impacts to biological resources (Class I).

Conversion of land to agricultural use could indirectly impact downstream water quality through erosion and sedimentation from exposed soils, as well as through introducing herbicides and pesticides, if planting sites are located within proximity of riparian and/or wetland areas. Following compliance with existing water quality regulations (see Section 4.8, *Hydrology and Water Quality*), the proposed project and Alternative 3 would result in less than significant impacts to water quality in riparian and wetland habitats. Additionally, Alternative 3 would involve less irrigated cropland and thus less erosion and sedimentation than the proposed project. Required compliance with existing regulations would reduce indirect impacts to riparian and wetland habitats to less than significant (Class III), as with the proposed project.

## **Cultural Resources**

Alternative 3 would result in less irrigated cropland within the PBLUMA by January 31, 2045 than the proposed project, and by association, would involve less demolition, alteration, and use of heavy equipment. Thus, compared to the proposed project, Alternative 3 would result in smaller direct and/or indirect impacts to historical resources and historical buildings. While implementation of existing regulations would reduce indirect and direct impacts to historical buildings to less than significant (Class III), no feasible mitigation measures are available to reduce direct impacts to other historical resources and impacts would remain significant and unavoidable. Since no feasible mitigation measures are available to reduce impacts to other historical resources, impacts would be significant and unavoidable (Class I), as with the proposed project.

Similarly, Alternative 3 would result in less irrigated cropland by January 31, 2045, compared to the proposed project, and thus, would involve less ground-disturbing activities. Therefore, potential impacts to archaeological resources under Alternative 3 would be less than the proposed project. Nevertheless, impacts would result. Beyond compliance with regulatory frameworks (see Section 4.4, *Cultural Resources*), there are no additional feasible mitigation measures available to reduce impacts to archeological resources. As with the proposed project, impacts to archaeological resources would remain significant and unavoidable (Class I).

Ground-disturbing activities associated with implementation of the proposed project could result in damage to or destruction of human remains. Given that Alternative 3 would involve less ground disturbance than the proposed project, Alternative 3 would result in smaller impacts to damage or destruction of human remains. Additionally, PRC Section 5097 and the California Health and Safety Code include specific provisions for treatment and protection of encountered human remains. As with the proposed project, with compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98, potential impacts to human remains under Alternative 3 would be less than significant (Class III).

## **Energy**

Compared to the proposed project, Alternative 3 would decrease total irrigated farmland acreage, proportionally decreasing associated agricultural infrastructure. Thus, Alternative 3 would result in fewer impacts regarding construction energy than the proposed project. Additionally, it is reasonable to assume that construction activities would be conducted in a manner to avoid wasteful, inefficient, and unnecessary fuel consumption to reduce construction costs. Therefore, construction activities under Alternative 3 (similar to the proposed project) would result in less than significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy (Class III).

Similar to the proposed project, operation of agricultural activities facilitated by Alternative 3 would contribute to regional energy demand by consuming electricity, gasoline, and diesel fuels. Energy

consumption during operation of Alternative 3 would equate to a 17 percent decrease compared to the proposed project. Thus, following 2045 buildout, Alternative 3 would consume approximately 331,827 gallons of diesel fuel and 65,816 gallons of gasoline annually, representing less than 0.02 percent of the State's total annual diesel consumption and less than 0.0004 percent of the State's total annual gasoline consumption. Accordingly, Alternative 3 would result in a smaller operational energy impact than the proposed project. Similar to the proposed project, diesel-powered equipment would not be operated any more than is necessary to maintain and harvest crops, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by operation of a planting site under Alternative 3. As with the proposed project, operational impacts under Alternative 3 would be less than significant (Class III).

## **Geology and Soils**

Implementation of Alternative 3 would involve a 17 percent decrease in irrigated cropland acreage compared to the proposed project, with a smaller grading footprint and less construction of agricultural infrastructure, such as groundwater wells, ponds/reservoirs, and booster pumps. Grading for site preparation, construction of accessory infrastructure, and operational agricultural activities have the potential to increase erosion and loss of topsoil. As Alternative 3 would involve a smaller grading footprint, the potential for erosion and loss of topsoil under Alternative 3 would be less than the proposed project. Additionally, Alternative 3 would implement best management practices under Chapter 22.52 of the San Luis Obispo County Code and the Construction General Permit, similar to the proposed project, resulting in less than significant impacts (Class III) regarding grading and soil erosion.

Geology and soil hazards would be similar to the proposed project because Alternative 3 would take effect in the same geographic setting as the proposed project. Overall risks related to fault line rupture, seismic ground shaking, soil erosion, liquefaction, unstable soil, and expansive soils would be similar to the proposed project, and would result in less than significant impacts (Class III).

Given that Alternative 3 involves less agricultural planting, and thus, less site preparation and grading, impacts to paleontological resources have a smaller potential to occur than under the proposed project. Similar to the proposed project, such impacts would be significant and unavoidable (Class I), even with adherence to the County grading ordinance.

## **Greenhouse Gas Emissions**

Considering Alternative 3 is projected to decrease the amount of irrigated cropland in the PBLUMA, compared to the proposed project, Alternative 3 would thus result in fewer impacts involving GHG emissions, as Alternative 3 would involve fewer off-road vehicles, irrigation pumps, and use of heavy machinery. Mitigation Measure GHG-1, which would require agricultural operators to sequester carbon and/or reduce GHG emissions, and compliance with regulatory frameworks discussed in Section 4.7, *Greenhouse Gas Emissions*, would reduce impacts to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts associated with GHG emissions. Therefore, as with the proposed project, Alternative 3 would result in significant and unavoidable impacts (Class I) regarding GHG emissions.

Both Alternative 3 and the proposed project would be potentially inconsistent with applicable plans, policies, and regulations designed to reduce GHG emissions. While agricultural activities facilitated by Alternative 3 would reduce GHG emissions to the greatest extent feasible, GHG emissions may exceed GHG emissions thresholds under Alternative 3, and thus, would potentially conflict with the ability for the County, region, and State to meet their applicable GHG reduction goals. As with the

proposed project, impacts involving conflicts with applicable GHG reduction plans under Alternative 3 would be potentially significant and unavoidable (Class I).

## Hydrology and Water Quality

Alternative 3 would increase the amount of agricultural acreage and associated infrastructure in the PBLUMA but to a lesser extent than the proposed project. Similar to the proposed project, the construction of accessory infrastructure, grading and site preparation, and operation of new and expanded agriculture facilitated by Alternative 3 would be required to comply with existing water quality regulations to ensure that point source discharges do not violate water quality standards or waste discharge requirements set forth in the County Code, Construction General Permit, and Agricultural Order. Consequently, agricultural activities under Alternative 3 would not degrade surface water quality. Although impacts to water quality under Alternative 3 would be lesser than the proposed project (due to Alternative 3's smaller area of ground disturbance) impacts would remain less than significant (Class III), similar to the proposed project.

Similar to the proposed project, Alternative 3 would increase the amount of groundwater extracted from the Paso Robles Subbasin, and would result in impacts to sustainable groundwater management. Through increased agricultural activities, Alternative 3 would lead to a combination of decreasing water levels and increasing pollutant amounts through the PBLUMA. While the proposed project would increase groundwater extraction by 9,900 AF by 2045, Alternative 3 would increase groundwater extraction by 8,712 AF, resulting in 1,188 fewer AF under Alternative 3. Thus, impacts to groundwater quality and supply would be lesser under Alternative 3, but would be significant and unavoidable (Class I), as with the proposed project.

Similar to the proposed project, Alternative 3 would not substantially increase impervious surfaces or obstruct natural or artificial groundwater percolation or recharge. Agricultural development facilitated by Alternative 3 would be lesser than development under the proposed project and would not increase the amount of impervious surface area within the proposed PBLUMA area such that percolation and recharge of groundwater from natural sources such as rainfall would be impeded. The majority of the agricultural infrastructure that would be facilitated by Alternative 3, such as groundwater wells and agriculture ponds/reservoirs, would result in minimal to no increase in impervious surface areas. As with the proposed project, impacts involving impervious surfaces would remain less than significant (Class III).

Considering Alternative 3 is projected to increase the amount of irrigated cropland and groundwater extraction within the PBLUMA—entailing increases in fertilizer use and decreases in groundwater levels—impacts to groundwater quality within the Paso Robles Subbasin would be potentially inconsistent with goals reducing water quality pollution, water quality objectives, and maintenance of beneficial uses identified in the Basin Plan. As Alternative 3 would decrease the amount of irrigated cropland and groundwater extraction compared to the proposed project, Alternative 3 would result in lesser impacts regarding conflict with water quality control plans; however, similar to the proposed project, such impacts would be significant and unavoidable (Class I).

Increased groundwater extraction allowed under Alternative 3 would be potentially inconsistent with the GSP's goals and water balance projections and would increase the burden on GSP management actions. Alternative 3 would decrease groundwater extraction by 1,188 AFY by 2045 compared to the proposed project, and this decrease would occur in the most severely impacted areas of the Paso Robles Subbasin. Therefore, Alternative 3 would have lesser impacts regarding inconsistency with the GSP, yet as with the proposed project, impacts would be significant and unavoidable (Class I).

## **Land Use and Planning**

The proposed project would be consistent with most applicable goals and policies of the County General Plan (including the area plans and community plans) and would be consistent with the General Plan as a whole. Similar to the proposed project, Alternative 3 would be consistent with the General Plan as a whole. However, the proposed planting ordinance is also potentially inconsistent with some of the goals and policies, specifically those found in the Conservation and Open Space Element, Land Use Element, and Agricultural Element pertaining to air quality, GHG emissions, sensitive biological resources, sensitive ecological habitats, wildlife corridors, historic resources, cultural and tribal cultural resources, paleontological resources, and groundwater management and supply. Although Alternative 3 would result in less agricultural development by January 31, 2045, than the proposed project, impacts involving policy inconsistency would not necessarily be smaller, as General Plan policies focus on qualitative exceedance thresholds, rather than quantitative. Implementation of mitigation measures identified in Sections 4.1 through 4.13 would reduce impacts to the extent feasible; however, both the proposed project and Alternative 3 would result in significant and unavoidable impacts (Class I) regarding conflict with land use plans, policies, and/or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

## **Noise**

Similar to the proposed project, Alternative 3 would involve the use of heavy equipment for construction of accessory infrastructure, field preparation, and grading activities. These activities can result in groundborne noise and vibration in the vicinity of sensitive receivers. However, due to their location in the more developed communities of Shandon, Creston, and San Miguel, sensitive noise receptors, such as schools, churches, parks, libraries, and offices, are not located in close proximity to agricultural uses. Therefore, construction and operational activities are not anticipated to occur in the vicinity of these sensitive receivers, and neither the proposed project nor Alternative 3 would result in groundborne noise or vibration in the vicinity of sensitive receivers that have not already been impacted by similar agricultural activity. Accordingly, similar to the proposed project, Alternative 3 would result in less than significant impacts (Class III) related to groundborne noise and vibration.

## **Transportation**

Similar to the proposed project, Alternative 3 would generate VMT related to worker commute trips and hauling trips. As previously stated under Alternative 1, a significant transportation impact would occur if a project would exceed a level of 15 percent below existing regional VMT per employee per day (OPR 2018), or 25.7 VMT per employee per day (County of San Luis Obispo 2021). The proposed project would result in 2.0 average daily VMT per worker (see Section 4.11, *Transportation*). For the reasons discussed under Alternative 1, Alternative 3 would involve less irrigated crop production (and thus fewer planting sites) than the proposed project. Accordingly, the average daily VMT of 2.0 per worker would be maintained throughout the duration of Alternative 3 through January 31, 2045. Therefore, Alternative 3 would not exceed the applicable VMT significance threshold, and implementation of Alternative 3 would not conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b). Similar to the proposed project, impacts would be less than significant (Class III).

## **Tribal Cultural Resources**

Although no specific tribal cultural resources were identified by the tribes associated with the PBLUMA, ground-disturbing activities related to new and expanded agricultural activities and

proposed accessory infrastructure associated with the proposed project and Alternative 3, particularly in previously uncultivated/undisturbed areas, in areas requiring deeper ripping/grading activities than what previously occurred, within 100 feet of the bank of a creek or spring, and/or within 300 feet of a creek where the slope is less than 10 percent on sites that are not currently in active cultivation have the potential to impact tribal cultural resources that may be present on or below the ground surface. Given that Alternative 3 would result in less irrigated crop production than the proposed project (and thus, more ground distance), potential impacts to tribal cultural resources would be lesser under Alternative 3 than the proposed project. With compliance of applicable regulatory policies and regulations related to tribal cultural resources, including the County's General Plan and Grading Ordinance, impacts to tribal cultural resources would be reduced to the greatest extent feasible. However, since no feasible mitigation measures are available to reduce impacts to tribal cultural resources under Alternative 3, impacts would remain significant and unavoidable (Class I), as with the proposed project.

### **Utilities and Service Systems**

Compared to the proposed project, Alternative 3 would result in 15 less groundwater wells and 2 less agricultural pond/reservoir. However, similar to the proposed project, Alternative 3 would not include construction of housing or commercial areas. Alternative 3 would not result in the need for new or expanded water facilities beyond those anticipated to serve the expanded irrigation, and impacts concerning water facilities would be less than significant (Class III).

No additional stormwater drainage facilities beyond those required to comply with existing regulations would be needed under the proposed project or Alternative 3. Accordingly, similar to the proposed project, Alternative 3 would result in less than significant impacts (Class III) to stormwater facilities.

As discussed under Alternative 1, it is reasonable to assume that sites under the proposed project and Alternative 3 that would require additional electric power transmission lines would opt for solar energy which would be installed on site. Therefore, impacts regarding power facilities, including electric and natural gas, would be less than significant (Class III).

While the proposed project would increase groundwater extraction by 9,900 AF by January 31, 2045, Alternative 3 would increase groundwater extraction by 8,712 AFY, resulting in 1,188 fewer AFY and lower impacts to groundwater extraction compared to the proposed project. Alternative 3 would also avoid increased pumping for irrigated agriculture in the most severely impacted areas of the subbasin. As previously stated, the Paso Robles Subbasin is currently in a state of critical overdraft. As Alternative 3 would further increase water demands from a currently overdrafted subbasin, impacts to available groundwater supply in the Paso Robles Subbasin would remain significant and unavoidable (Class I).

### **Conclusion**

Although this alternative would generally meet the project objectives, Alternative 3 would result in incrementally less impacts to all environmental issue areas when compared to the proposed project and Alternatives 1 and 2.

## 6.5 Alternative 4: No Exemptions

### 6.5.1 Description

Under Alternative 4, the County Board of Supervisors would adopt the proposed planting ordinance modified to exclude the 25-AFY per site exemption allowance; the ordinance would only allow “water neutral” planting permits.

Alternative 4 would not increase total groundwater extraction for irrigated crops within the PBLUMA. It is too speculative to estimate site-specific changes in crop acreage or intensity of labor or vehicle demands for “water neutral” planting permits that may convert from a higher-to-lower or lower-to-higher water and/or labor intensive crop. Therefore, this alternative assumes there would be no increase in overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA.

### 6.5.2 Impact Analysis

#### **Agricultural Resources**

Alternative 4 would not increase overall irrigated cropland. Alternative 4 could have a greater impact on agricultural resources when compared to the proposed ordinance because this alternative would essentially cap the amount of irrigated agriculture overlying the Paso Robles Subbasin. Without the ability to irrigate, agricultural landowners may file for non-renewal on their Williamson Act contracts and convert their land to non-agricultural land use. Nonetheless, when compared to existing baseline conditions, as with the proposed project, Alternative 4 would result in less than significant (Class III) impacts on agricultural resources.

#### **Air Quality**

Similar to the proposed project, Alternative 4 would not conflict with or obstruct implementation of the SLOAPCD 2001 Clean Air Plan, as Alternative 4 would not involve development of new residences, and therefore, would not alter current population trends for the region. Impacts regarding conflict with an applicable air quality plan for both the proposed project and Alternative 4 would be less than significant (Class III).

Given there would be no increase in overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA under Alternative 4, criteria air pollutant emissions would not increase beyond the existing baseline. In contrast to the proposed project’s significant and unavoidable impacts (Class I), Alternative 4 would result in less than significant impacts involving air quality (Class III).

#### **Biological Resources**

There would be no increase in overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA under Alternative 4. Therefore, Alternative 4 would result in fewer impacts to biological resources than the proposed project. In contrast to the proposed project’s significant and unavoidable impacts (Class I), Alternative 4 would result in less than significant impacts involving special status species and their habitats, sensitive natural communities (including riparian and wetland areas), and wildlife movement (Class III).

## Cultural Resources

Under Alternative 4, there would be no increase in overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA. Therefore, Alternative 4 would result in fewer impacts to cultural resources than the proposed project. In contrast to the proposed project's significant and unavoidable impacts (Class I), Alternative 4 would result in less than significant impacts to unknown historical and archaeological resources (Class III).

As with the proposed project, with compliance with existing regulations, potential impacts to historical buildings and human remains under Alternative 4 would be less than significant (Class III).

## Energy

Under Alternative 4, there would be no increase in overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA. Therefore, Alternative 4 would result in fewer impacts related to energy than the proposed project. Similar to the proposed project, impacts due to the wasteful, inefficient, or unnecessary consumption of energy would be less than significant (Class III) under Alternative 4.

## Geology and Soils

Alternative 4 would result in no increase in overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA. As Alternative 4 would involve a smaller grading footprint, the potential for erosion and loss of topsoil under Alternative 4 would be less than the proposed project. Additionally, Alternative 4 would also implement best management practices under Chapter 22.52 of the San Luis Obispo County Code and the Construction General Permit, resulting in less than significant impacts (Class III) regarding grading and soil erosion, similar to the proposed project.

Geology and soil hazards would be similar to the proposed project because Alternative 4 would take effect in the same geographic setting. Overall risks related to fault line rupture, seismic ground shaking, soil erosion, liquefaction, unstable soil, and expansive soils would be similar to the proposed project, but to a lesser effect, and would also result in less than significant impacts (Class III).

In contrast to the proposed project's significant and unavoidable impacts (Class I), Alternative 4 would result in less than significant impacts to paleontological resources (Class III). paleontological resources

## Greenhouse Gas Emissions

Given there would be no increase in overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA under Alternative 4, GHG emissions would not increase beyond the existing baseline. In contrast to the proposed project's significant and unavoidable impacts (Class I), Alternative 4 would result in less than significant impacts associated with GHG emissions (Class III).

Both Alternative 4 and the proposed project would be potentially inconsistent with applicable plans, policies, and regulations designed to reduce GHG emissions. GHG emissions may exceed GHG emissions thresholds under Alternative 4, similar to the proposed project, and thus, would potentially conflict with the ability for the County, region, and State to meet their applicable GHG



reduction goals. As with the proposed project, impacts involving conflicts with applicable GHG reduction plans under Alternative 4 would be potentially significant and unavoidable (Class I).

### **Hydrology and Water Quality**

Alternative 4 would not increase the amount of agricultural acreage and associated infrastructure in the PBLUMA. Consequently, agricultural activities under Alternative 4 would not degrade surface water quality. Due to Alternative 4's smaller area of disturbance, impacts to water quality under Alternative 4 would be incrementally smaller than the proposed project and impacts would remain less than significant (Class III).

Alternative 4 would not increase the amount of groundwater extracted from the Paso Robles Subbasin, and thus, would result in less than significant impacts to sustainable groundwater management (Class III). Impacts to groundwater quality and supply would be smaller under Alternative 4, in contrast to the proposed project's significant and unavoidable impacts (Class I).

Alternative 4 would not increase agricultural infrastructure that could increase impervious surfaces, and thus, impacts involving impervious surfaces would be smaller than the proposed project and would be less than significant (Class III), as with the proposed project.

Considering Alternative 4 would not increase the amount of irrigated cropland and groundwater extraction within the PBLUMA—thus avoiding increases in fertilizer use and decreases in groundwater levels—impacts to groundwater quality within the Paso Robles Subbasin would be consistent with goals reducing water quality pollution, water quality objectives, and of beneficial uses identified in the Basin Plan. Alternative 4 would result in fewer impacts regarding conflict with water quality control plans; in contrast to the proposed project (which would result in significant and unavoidable impacts [Class I]), such impacts would be reduced to less than significant (Class III). Alternative 4 would also result in fewer impacts regarding inconsistency with the GSP, and in contrast to the proposed project (which would result in significant and unavoidable impacts [Class I]), such impacts would be reduced to less than significant (Class III).

### **Land Use and Planning**

The proposed project would be consistent with most applicable goals and policies of the County General Plan (including the area plans and community plans) and would be consistent with the General Plan as a whole. Similar to the proposed project, Alternative 4 would be consistent with the General Plan as a whole. However, the proposed planting ordinance is also potentially inconsistent with some of the goals and policies, specifically those found in the Conservation and Open Space Element, Land Use Element, and Agricultural Element pertaining to air quality, GHG emissions, sensitive biological resources, sensitive ecological habitats, wildlife corridors, historic resources, cultural and tribal cultural resources, paleontological resources, and groundwater management and supply. Considering Alternative 4 would not result in an increase of irrigated crop acreage or groundwater extraction, Alternative 4 would be consistent with General Plan policies with which the proposed project would be potentially inconsistent. While the proposed project would result in significant and unavoidable impacts (Class I) regarding conflict with land use plans, policies, and/or regulations adopted for the purpose of avoiding or mitigating an environmental effect, Alternative 4 would result in a less than significant impact (Class III).

## Noise

In contrast to the proposed project, Alternative 4 would not increase beyond existing conditions the use of heavy equipment for planting site preparation and construction of accessory infrastructure, which can result in groundborne noise and vibration in the vicinity of sensitive receivers. Alternative 4 would result in less irrigated crop production than the proposed project, and this alternative would generate less noise and vibration compared to the proposed project. Given that Alternative 4 would not increase overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA, Alternative 4 would result in less than significant impacts (Class III) involving noise and vibration, similar to the proposed project.

## Transportation

In contrast to the proposed project, Alternative 4 would not increase overall worker commute trips and hauling trips. As discussed under Alternative 1, a significant transportation impact would occur if a project result in more than 25.7 VMT per employee per day (County of San Luis Obispo 2021).

The proposed project would result in 2.0 average daily VMT per worker (see Section 4.11, *Transportation*). Alternative 4 would not increase the overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA. Thus, total daily and annual VMT per employee under Alternative 4 would not increase beyond the existing baseline, and transportation impacts under this alternative would be less than significant (Class III), similar to the proposed project.

## Tribal Cultural Resources

Alternative 4 would not increase the overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA. Therefore, Alternative 4 would result in fewer impacts to tribal cultural resources than the proposed project. In contrast to the proposed project's significant and unavoidable impacts (Class I), Alternative 4 would result in less than significant impacts to unknown tribal cultural resources (Class III).

## Utilities and Service Systems

Alternative 4 would not increase the overall irrigated cropland, ground disturbance, accessory infrastructure, or vehicle trips within the PBLUMA, and thus, this alternative would not require the relocation or construction of new or expanded water, stormwater, and electric power or natural gas facilities in the PBLUMA. Impacts involving utility facility construction or expansion would be less than under the proposed project, and as with the proposed project, less than significant (Class III).

Alternative 4 would not increase groundwater usage within the PBLUMA, while the proposed project would increase groundwater extraction by 9,900 AF by January 31, 2045. Because Alternative 4 would not increase water demands from the currently overdrafted Paso Robles Subbasin, impacts to available groundwater supply in the subbasin would be less than significant (Class III), in contrast to the proposed project's significant and unavoidable impacts (Class I).

## Conclusion

Overall, in comparison to the proposed project, Alternative 4 would eliminate significant and unavoidable impacts to air quality, biological resources, cultural resources, paleontological resources, GHG emissions, hydrology and water quality, land use and planning, tribal cultural resources, and utilities and service systems. In contrast to the proposed planting ordinance, no

mitigation measures would be required for this alternative. However, this alternative would not meet Objective 3 (allowance of an exemption for farms to plant irrigated crops that were not able to under the existing agricultural offset requirements) or Objective 5 (support and promote a healthy and competitive agricultural industry in the PBLUMA). Alternative 4 would result in incrementally lower impacts to all environmental issue areas when compared to the proposed project and Alternatives 1 through 3.

## 6.6 Alternative 5: Exemptions Limited to Existing Williamson Act Contracts

### 6.6.1 Description

Under Alternative 5, the planting ordinance would limit the 25-AFY exemption allowance for use by sites that are entirely or partially under a Williamson Act land conservation contract in place when the planting ordinance takes effect that can meet current Williamson Act qualification requirements with the allowed increase in water use. This alternative is proposed to reduce the extent of proposed project impacts resulting from 25-AFY exemptions and to limit the exemptions to be used for sites with a demonstrated commitment to agriculture to better align with the project objectives.

As detailed in Section 4.1, *Agriculture and Forestry Resources*, 70 percent of the PBLUMA is currently under a Williamson Act land conservation contract. The County's Williamson Act Rules of Procedure (County of San Luis Obispo 2019) require 10 acres of irrigated crops on Class 1 or 2 soils; 20 acres of irrigated orchard or vineyard on Class 3, 4, 6, 7, or better soils; or 40 acres of other irrigated crops on Class 3, 4, or better soils to qualify for a land conservation contract with an irrigated use. The 25-AFY exemption could be used to plant 20 acres of wine grapes (1.25 AFY per acre), 16.7 acres of hemp (1.5 AFY per acre), 13 acres of vegetables (1.9 AFY per acre), 10.9 acres of citrus (2.3 AFY per acre), or 10 acres of soil-dependent nursery (2.5 AFY per acre) as qualifying crops. Therefore, sites with at least 10 acres of Class 1 and/or 2 soils or 20 acres of Class 1, 2, 3, 4, 6, and/or 7 soils are assumed to be able to meet current Williamson Act qualification requirements with a 25-AFY water use allowance, not accounting for site-specific restrictions such as existing oak woodlands that would limit plantable areas.

A total of 233 sites in the PBLUMA:

- Are currently under Williamson Act land conservation contract (see Section 4.1, Figure 4.2-2);
- Contain at least 10 acres of Class 1 and/or 2 soils or 20 acres of Class 1, 2, 3, 4, 6, and/or 7 soils (based on Natural Resource Conservation Service soils data); and
- Are estimated to extract less than 25 AFY of groundwater for irrigated crops based on current use (see Appendix B, Section 3, Figure 3).

If all 233 sites were to use the full 25-AFY groundwater use amount allowed by the exemption by January 31, 2045, the resulting estimated increase in groundwater extraction would be 5,825 AFY, for an average annual increase of 265 AFY. The 265 AFY of annual groundwater use could be used to plant 55 acres of irrigated pasture or 212 acres of irrigated wine grapes per year. Based on these assumptions, the estimated reasonable increase in irrigated crop production would be approximately 133.5 acres per year, for a total increase of 2,937 acres by January 31, 2045.

As shown in Table 6-3, total ground disturbance, construction of new accessory infrastructure (e.g., groundwater wells, booster pumps, and ponds/reservoirs), and vehicle commute trips resulting

from Alternative 5 would decrease proportionally with the decrease in acreage planted compared to the proposed project, which equates to a 44 percent decrease compared to the proposed project.

## 6.6.2 Impact Analysis

### **Agricultural Resources**

While both the proposed project and Alternative 5 would increase the amount of irrigated farmland in the PBLUMA, Alternative 5 would increase irrigated farmland acreage to a lesser extent (2,209 fewer acres of farmland by January 31, 2045). However, similar to the proposed project, Alternative 5 would not convert farmland to non-agricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. Accordingly, under Alternative 5, similar to the proposed project, impacts to agricultural resources would be less than significant (Class III).

### **Air Quality**

Similar to the proposed project, Alternative 5 would not conflict with or obstruct implementation of the SLOAPCD 2001 Clean Air Plan, as Alternative 5 would not involve development of new residences, and therefore, would not alter current population trends for the region. Impacts regarding conflict with an applicable air quality plan for both the proposed project and Alternative 5 would be less than significant (Class III).

Given that Alternative 5 would result in less irrigated cropland by January 31, 2045 when compared to the proposed project, impacts involving criteria air pollutant emissions would be smaller under Alternative 5, as this alternative would result in less land disturbance, vehicle movement, and use of off-road equipment. While Mitigation Measure AQ-1 would reduce impacts associated with fugitive dust emissions by requiring the planting permit applicants and/or property owners to help suppress dust from use of unpaved roads, driveways, and parking areas, there are no additional feasible mitigation measures available to reduce criteria pollutant impacts (refer to *Section 4.0, Environmental Impact Analysis*, for further discussion of mitigation feasibility). As with the proposed project, impacts involving criteria air pollutant emissions under Alternative 5 would be significant and unavoidable (Class I).

### **Biological Resources**

Alternative 5 would result in less irrigated cropland by January 31, 2045 when compared to the proposed project; therefore, direct and indirect impacts to special status species, direct impacts to sensitive natural communities (including riparian and wetlands areas), and direct and indirect impacts to wildlife movement would be smaller under Alternative 5 than the proposed project. Compliance with regulatory frameworks and Mitigation Measure BIO-1 discussed in Section 4.3, *Biological Resources*, as well as implementation of Mitigation Measures UTIL-1 and UTIL-2 in Section 4.13, *Utilities and Service Systems*, would reduce significant impacts to special status species, natural communities (including riparian and wetlands areas), and wildlife movement to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts to biological resources. Thus, as with the proposed project, Alternative 5 would result in significant and unavoidable impacts to biological resources (Class I).

Conversion of land to agricultural use could indirectly impact downstream water quality through erosion and sedimentation from exposed soils, as well as through introducing herbicides and pesticides, if planting sites are located within proximity of riparian and/or wetland areas. Following compliance with existing water quality regulations (see Section 4.8, *Hydrology and Water Quality*),

the proposed project and Alternative 5 would result in less than significant impacts to water quality in riparian and wetland habitats. Additionally, Alternative 5 would involve less irrigated cropland and thus less erosion and sedimentation than the proposed project. Required compliance with existing regulations would reduce indirect impacts to riparian and wetland habitats to less than significant (Class III), as with the proposed project.

## **Cultural Resources**

Alternative 5 would result in less irrigated cropland within the PBLUMA by January 31, 2045 than the proposed project, and by association, would involve less demolition, alteration, and use of heavy equipment. Thus, compared to the proposed project, Alternative 5 would result in smaller direct and/or indirect impacts to historical resources and historical buildings. While implementation of existing regulations would reduce indirect and direct impacts to historical buildings to less than significant (Class III), no feasible mitigation measures are available to reduce direct impacts to other historical resources and impacts would remain significant and unavoidable. Since no feasible mitigation measures are available to reduce impacts to other historical resources, impacts would be significant and unavoidable (Class I), as with the proposed project.

Similarly, Alternative 5 would result in less irrigated cropland by January 31, 2045, compared to the proposed project, and thus, would involve less ground-disturbing activities. Therefore, potential impacts to archaeological resources under Alternative 5 would be less than the proposed project. Beyond compliance with regulatory frameworks (see Section 4.4, *Cultural Resources*), there are no additional feasible mitigation measures available to reduce impacts to archeological resources. As with the proposed project, impacts to archaeological resources would remain significant and unavoidable (Class I).

Ground-disturbing activities associated with implementation of the proposed project could result in damage to or destruction of human remains. Given that Alternative 5 would involve less ground disturbance than the proposed project, Alternative 5 would result in smaller impacts to damage or destruction of human remains. Additionally, PRC Section 5097 and the California Health and Safety Code include specific provisions for treatment and protection of encountered human remains. As with the proposed project, with compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98, potential impacts to human remains under Alternative 5 would be less than significant (Class III).

## **Energy**

Compared to the proposed project, Alternative 5 would decrease total irrigated farmland acreage, proportionally decreasing associated agricultural infrastructure. Thus, Alternative 5 would result in fewer impacts regarding construction energy than the proposed project. Additionally, it is reasonable to assume that construction activities would be conducted in a manner to avoid wasteful, inefficient, and unnecessary fuel consumption to reduce construction costs. Therefore, construction activities under Alternative 5 (similar to the proposed project) would result in less than significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy (Class III).

Similar to the proposed project, operation of agricultural activities facilitated by Alternative 5 would contribute to regional energy demand by consuming electricity, gasoline, and diesel fuels. Energy consumption during operation of Alternative 5 would equate to a 44 percent decrease compared to the proposed project. Thus, following 2045 buildout, Alternative 5 would consume approximately 223,883 gallons of diesel fuel and 44,406 gallons of gasoline annually, representing less than 0.01 percent of the State's total annual diesel consumption and less than 0.0003 percent of the State's

total annual gasoline consumption. Accordingly, Alternative 5 would result in a smaller operational energy impact than the proposed project. Similar to the proposed project, diesel-powered equipment would not be operated any more than is necessary to maintain and harvest crops, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by operation of a planting site under Alternative 5. As with the proposed project, operational impacts under Alternative 5 would be less than significant (Class III).

## Geology and Soils

Implementation of Alternative 5 would involve a 44 percent decrease in irrigated cropland acreage compared to the proposed project, with a smaller grading footprint and less construction of agricultural infrastructure, such as groundwater wells, ponds/reservoirs, and booster pumps. Grading for site preparation, construction of accessory infrastructure, and operational agricultural activities have the potential to increase erosion and loss of topsoil. As Alternative 5 would involve a smaller grading footprint, the potential for erosion and loss of topsoil under Alternative 5 would be less than the proposed project. Additionally, Alternative 5 would implement best management practices under Chapter 22.52 of the San Luis Obispo County Code and the Construction General Permit, similar to the proposed project, resulting in less than significant impacts (Class III) regarding grading and soil erosion.

Geology and soil hazards would be similar to the proposed project because Alternative 5 would take effect in the same geographic setting as the proposed project. Overall risks related to fault line rupture, seismic ground shaking, soil erosion, liquefaction, unstable soil, and expansive soils would be similar to the proposed project, and would result in less than significant impacts (Class III).

Given that Alternative 5 involves less agricultural planting, and thus, less site preparation and grading, impacts to paleontological resources have a smaller potential to occur than under the proposed project. Similar to the proposed project, such impacts would be significant and unavoidable (Class I), even with adherence to the County grading ordinance.

## Greenhouse Gas Emissions

Considering Alternative 5 is projected to decrease the amount of irrigated cropland in the PBLUMA, compared to the proposed project, Alternative 5 would thus result in fewer impacts involving GHG emissions, as Alternative 5 would involve fewer off-road vehicles, irrigation pumps, and use of heavy machinery. Mitigation Measure GHG-1, which would require agricultural operators to sequester carbon and/or reduce GHG emissions, and compliance with regulatory frameworks discussed in Section 4.7, *Greenhouse Gas Emissions*, would reduce impacts to the greatest extent feasible. However, there are no additional feasible mitigation measures available to reduce impacts associated with GHG emissions. Therefore, as with the proposed project, Alternative 5 would result in significant and unavoidable impacts (Class I) regarding GHG emissions.

Both Alternative 5 and the proposed project would be potentially inconsistent with applicable plans, policies, and regulations designed to reduce GHG emissions. While agricultural activities facilitated by Alternative 5 would reduce GHG emissions to the greatest extent feasible, GHG emissions may exceed GHG emissions thresholds under Alternative 5, and thus, would potentially conflict with the ability for the County, region, and State to meet their applicable GHG reduction goals. As with the proposed project, impacts involving conflicts with applicable GHG reduction plans under Alternative 5 would be potentially significant and unavoidable (Class I).

## **Hydrology and Water Quality**

Alternative 5 would increase the amount of agricultural acreage and associated infrastructure in the PBLUMA. Similar to the proposed project, the construction of accessory infrastructure, grading and site preparation, and operation of new and expanded agriculture facilitated by Alternative 5 would be required to comply with existing water quality regulations to ensure that point source discharges do not violate water quality standards or waste discharge requirements set forth in the County Code, Construction General Permit, and Agricultural Order. Consequently, agricultural activities under Alternative 5 would not degrade surface water quality. Although impacts to water quality under Alternative 5 would be lesser than the proposed project (due to Alternative 5's smaller area of ground disturbance) impacts would remain less than significant (Class III), similar to the proposed project.

Similar to the proposed project, Alternative 5 would increase the amount of groundwater extracted from the Paso Robles Subbasin, and would result in impacts to sustainable groundwater management. Through increased agricultural activities, Alternative 5 would lead to a combination of decreasing water levels and increasing pollutant amounts through the PBLUMA. While the proposed project would increase groundwater extraction by 9,900 AF by 2045, Alternative 5 would increase groundwater extraction by 5,830 AF, resulting in 4,070 fewer AF under Alternative 5. Thus, impacts to groundwater quality and supply would be lesser under Alternative 5, but would be significant and unavoidable (Class I), as with the proposed project.

Similar to the proposed project, Alternative 5 would not substantially increase impervious surfaces or obstruct natural or artificial groundwater percolation or recharge. Agricultural development facilitated by Alternative 5 would be lesser than development under the proposed project and would not increase the amount of impervious surface area within the proposed PBLUMA area such that percolation and recharge of groundwater from natural sources such as rainfall would be impeded. The majority of the agricultural infrastructure that would be facilitated by Alternative 5, such as groundwater wells and agriculture ponds/reservoirs, would result in minimal to no increase in impervious surface areas. As with the proposed project, impacts involving impervious surfaces would remain less than significant (Class III).

Considering Alternative 5 is projected to increase the amount of irrigated cropland and groundwater extraction within the PBLUMA—entailing increases in fertilizer use and decreases in groundwater levels—impacts to groundwater quality within the Paso Robles Subbasin would be potentially inconsistent with goals reducing water quality pollution, water quality objectives, and maintenance of beneficial uses identified in the Basin Plan. As Alternative 5 would decrease the amount of irrigated cropland and groundwater extraction compared to the proposed project, Alternative 5 would result in lesser impacts regarding conflict with water quality control plans; however, similar to the proposed project, such impacts would be significant and unavoidable (Class I).

Increased groundwater extraction allowed under Alternative 5 would be potentially inconsistent with the GSP's goals and water balance projections and would increase the burden on GSP management actions. Alternative 5 would decrease groundwater extraction by 4,070 fewer AF by 2045, thus Alternative 5 would have lesser impacts regarding inconsistency with the GSP, yet as with the proposed project, impacts would be significant and unavoidable (Class I).

## **Land Use and Planning**

The proposed project would be consistent with most applicable goals and policies of the County General Plan (including the area plans and community plans) and would be consistent with the

General Plan as a whole. Similar to the proposed project, Alternative 5 would be consistent with the General Plan as a whole. However, the proposed planting ordinance is also potentially inconsistent with some of the goals and policies, specifically those found in the Conservation and Open Space Element, Land Use Element, and Agricultural Element pertaining to air quality, GHG emissions, sensitive biological resources, sensitive ecological habitats, wildlife corridors, historic resources, cultural and tribal cultural resources, paleontological resources, and groundwater management and supply. Although Alternative 5 would result in less agricultural development by January 31, 2045, than the proposed project, impacts involving policy inconsistency would not necessarily be smaller, as General Plan policies focus on qualitative exceedance thresholds, rather than quantitative. Implementation of mitigation measures identified in Sections 4.1 through 4.13 would reduce impacts to the extent feasible; however, both the proposed project and Alternative 5 would result in significant and unavoidable impacts (Class I) regarding conflict with land use plans, policies, and/or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

## Noise

Similar to the proposed project, Alternative 5 would involve the use of heavy equipment for construction of accessory infrastructure, field preparation, and grading activities. These activities can result in groundborne noise and vibration in the vicinity of sensitive receivers. However, due to their location in the more developed communities of Shandon, Creston, and San Miguel, sensitive noise receptors, such as schools, churches, parks, libraries, and offices, are not located in close proximity to agricultural uses. Therefore, construction and operational activities are not anticipated to occur in the vicinity of these sensitive receivers, and neither the proposed project nor Alternative 5 would result in groundborne noise or vibration in the vicinity of sensitive receivers that have not already been impacted by similar agricultural activity. Accordingly, similar to the proposed project, Alternative 5 would result in less than significance impacts (Class III) related to groundborne noise and vibration.

## Transportation

Similar to the proposed project, Alternative 5 would generate VMT related to worker commute trips and hauling trips. As previously stated under Alternative 1, a significant transportation impact would occur if a project would exceed 25.7 VMT per employee per day (County of San Luis Obispo 2021). For the reasons discussed under Alternative 1, Alternative 5 would involve less irrigated crop production (and thus fewer planting sites) than the proposed project. Accordingly, the average daily VMT of 2.0 per worker would be maintained throughout the duration of Alternative 5 through January 31, 2045. Therefore, Alternative 5 would not exceed the applicable VMT significance threshold, and implementation of Alternative 5 would not conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b). Similar to the proposed project, impacts would be less than significant (Class III).

## Tribal Cultural Resources

Although no specific tribal cultural resources were identified by the tribes associated with the PBLUMA, ground-disturbing activities related to new and expanded agricultural activities and proposed accessory infrastructure associated with proposed project and Alternative 5, particularly in previously uncultivated/undisturbed areas, in areas requiring deeper ripping/grading activities than what previously occurred, within 100 feet of the bank of a creek or spring, and/or within 300 feet of a creek where the slope is less than 10 percent on sites that are not currently in active



cultivation have the potential to impact tribal cultural resources that may be present on or below the ground surface. Given that Alternative 5 would result in less irrigated crop production than the proposed project (and thus, more ground distance), potential impacts to tribal cultural resources would be lesser under Alternative 5 than the proposed project. With compliance of applicable regulatory policies and regulations related to tribal cultural resources, including the County's General Plan and Grading Ordinance, impacts to tribal cultural resources would be reduced to the greatest extent feasible. However, since no feasible mitigation measures are available to reduce impacts to tribal cultural resources under Alternative 5, impacts would remain significant and unavoidable (Class I), as with the proposed project.

### **Utilities and Service Systems**

Compared to the proposed project, Alternative 5 would result in 39 fewer groundwater wells and 5 fewer agricultural ponds/reservoirs. Similar to the proposed project, Alternative 5 would not include construction of housing or commercial areas. Alternative 5 would not result in the need for new or expanded water facilities beyond those anticipated to serve the expanded irrigation, and impacts concerning water facilities would be less than significant (Class III).

No additional stormwater drainage facilities beyond those required to comply with existing regulations would be needed under the proposed project or Alternative 5. Accordingly, similar to the proposed project, Alternative 5 would result in less than significant impacts (Class III) to stormwater facilities.

As discussed under Alternative 1, it is reasonable to assume that sites under the proposed project and Alternative 5 that would require additional electric power transmission lines would opt for solar energy which would be installed on site. Therefore, impacts regarding power facilities, including electric and natural gas, would be less than significant (Class III).

While the proposed project would increase groundwater extraction by 9,900 AF by January 31, 2045, Alternative 5 would increase groundwater extraction by 5,830 AF, resulting in 4,070 fewer AF under Alternative 5 and fewer impacts to groundwater extraction. As previously stated, the Paso Robles Subbasin is currently in a state of critical overdraft. As Alternative 5 would further increase water demands from a currently overdrafted subbasin, impacts to available groundwater supply in the Paso Robles Subbasin would remain significant and unavoidable (Class I).

### **Conclusion**

Alternative 5 would result in incrementally fewer impacts to all environmental issue areas when compared to the proposed project. However, this alternative would not meet Objective 3 (allowance of an exemption for farms to plant irrigated crops that were not able to under the existing agricultural offset requirements) or Objective 5 (support and promote a healthy and competitive agricultural industry in the PBLUMA).

## **6.7 Environmentally Superior Alternative**

Table 6-4 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed project for each of the issue areas studied. Based on the alternatives analysis provided above, Alternative 4 (No Exemption) would be the environmentally superior alternative, as it would result in the less amount of impacts to the environmental issues analyzed in this PEIR, although it would not meet the project objectives 3 or 5.

**Table 6-4 Impact Comparison of Alternatives**

Issue	Proposed Project Impact Classification	Comparison to Proposed Project				
		Alternative 1: No Project – Existing Agricultural Offset Requirements Expire on January 31, 2023	Alternative 2: Continuation of Existing Agricultural Offset Requirements Through 2025	Alternative 3: No Exemptions Within Areas of Severe Groundwater Elevation Decline	Alternative 4: No Exemptions	Alternative 5: Exemptions Limited to Existing Williamson Act Contracts
Agriculture and Forestry Resources	LTS	LTS =	LTS =	LTS =	LTS =	LTS =
Air Quality	SU	SU -	SU -	SU +	LTS +	SU +
Biological Resources	SU	SU -	SU -	SU +	LTS +	SU +
Cultural Resources	SU	SU -	SU -	SU +	LTS +	SU +
Energy	LTS	LTS =	LTS =	LTS =	LTS =	LTS =
Geology and Soils	SU	SU -	SU -	SU +	LTS +	SU +
Greenhouse Gas Emissions	SU	SU -	SU -	SU +	SU +	SU +
Hydrology and Water Quality	SU	SU -	SU -	SU +	LTS +	SU +
Land Use and Planning	SU	SU =	SU =	SU =	LTS +	SU =
Noise	LTS	LTS =	LTS =	LTS =	LTS =	LTS =
Transportation	LTS	LTS =	LTS =	LTS =	LTS =	LTS =
Tribal Cultural Resources	SU	SU -	SU -	SU +	LTS +	SU +
Utilities and Service Systems	SU	SU -	SU -	SU +	LTS +	SU +

LTS = less than significant

SU = significant and unavoidable

+ Superior to the proposed project (reduced level of impact)

- Inferior to the proposed project (increased level of impact)

= Similar level of impact to the proposed project

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# 7 References

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## 7.1 Bibliography

### Introduction

Fugro West, Inc. and Cleath and Associates. 2002. Final Report Paso Robles Groundwater Basin Study. Report prepared for the County of San Luis Obispo Public Works Department. August 2002. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Archived-Documents/2002-08-PRGB-Study,-Phase-I.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Archived-Documents/2002-08-PRGB-Study,-Phase-I.pdf) (accessed October 2021).

San Luis Obispo, County of. n.d. Title 22 – Land Use Ordinance. [https://library.municode.com/ca/san\\_luis\\_obispo\\_county/codes/county\\_code?nodeId=TIT22LAUSOR](https://library.municode.com/ca/san_luis_obispo_county/codes/county_code?nodeId=TIT22LAUSOR) (accessed September 2021).

### Project Description

California Department of Water Resources (DWR). 2003. California’s Groundwater – Bulletin 118, Update 2003. October 2003. [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Statewide-Reports/Bulletin\\_118\\_Update\\_2003.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Statewide-Reports/Bulletin_118_Update_2003.pdf) (October 2021).

\_\_\_\_\_. 2019. Final 2018 Basin Boundary Modifications. Released February 11, 2019. <https://water.ca.gov/Programs/Groundwater-Management/Basin-Boundary-Modifications> (accessed October 2021).

Fugro West, Inc. and Cleath and Associates. 2002. Final Report Paso Robles Groundwater Basin Study. Report prepared for the County of San Luis Obispo Public Works Department. August 2002. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Archived-Documents/2002-08-PRGB-Study,-Phase-I.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Archived-Documents/2002-08-PRGB-Study,-Phase-I.pdf) (accessed October 2021).

San Luis Obispo, County of, Shandon San Juan Water District, City of Paso Robles, and San Miguel Community Services District. 2020. Paso Robles Subbasin Groundwater Sustainability Plan. January 2020. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf) (accessed December 2021).

University of California Cooperative Extension (UCCE). 1998. Sample Costs to Establish and Produce Alfalfa, San Luis Obispo County. [https://coststudyfiles.ucdavis.edu/uploads/cs\\_public/8a/12/8a12d445-e578-4e2c-9199-c8cdf7bdf42/sloalfalfa.pdf](https://coststudyfiles.ucdavis.edu/uploads/cs_public/8a/12/8a12d445-e578-4e2c-9199-c8cdf7bdf42/sloalfalfa.pdf) (accessed November 2021).

## **Environmental Setting**

- California Department of Conservation. 2015. Fault Activity Map of California. <https://maps.conservation.ca.gov/cgs/fam/> (accessed October 2021).
- California Department of Finance (DOF). May 2021. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2021, with 2010 Benchmark. <https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/> (accessed September 2021).
- County of San Luis Obispo, Department of Planning and Building. 2021. Land Use View. [https://gis.slocounty.ca.gov/Html5Viewer/Index.html?configBase=/Geocortex/Essentials/REST/sites/PL\\_LandUseView/viewers/PL\\_LandUseView/virtualdirectory/Resources/Config/Default](https://gis.slocounty.ca.gov/Html5Viewer/Index.html?configBase=/Geocortex/Essentials/REST/sites/PL_LandUseView/viewers/PL_LandUseView/virtualdirectory/Resources/Config/Default) (accessed November 2021).
- Western Regional Climate Center. 2016. Period of Record Monthly Climate Summary: San Luis Obispo Polytech, California, Period of Record: 02/01/1893 to 06/01/2016. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7851> (accessed September 2021).

## **Agriculture and Forestry Resources**

- Agricultural Impact Associates. 2019. Economic Contributions of San Luis Obispo County Agriculture. October 2019. <https://www.slocounty.ca.gov/getattachment/d9b75eeb-0bc8-4da9-ba9b-ddf8f96d661c/Economic-Impact-Report-2019.aspx> (accessed December 2021).
- California Department of Food and Agriculture. 2020. California Agricultural Statistics Review: 2019-2020. [https://www.cdfa.ca.gov/Statistics/PDFs/2020\\_Ag\\_Stats\\_Review.pdf](https://www.cdfa.ca.gov/Statistics/PDFs/2020_Ag_Stats_Review.pdf) (accessed December 2021).
- California Department of Conservation (DOC). 2016. Farmland Mapping and Monitoring Program – California Important Farmland. 2016. <https://maps.conservation.ca.gov/DLRP/CIFF/> (accessed January 2022).
- \_\_\_\_\_. 2019. Important Farmland Categories. <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx> (accessed December 2021).
- San Luis Obispo, County of. 2010a. County of San Luis Obispo General Plan Conservation and Open Space Element. May 2010. [https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Conservation-and-Open-Space-Element-\(1\)/Conservation-and-Open-Space-Element.pdf](https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Conservation-and-Open-Space-Element-(1)/Conservation-and-Open-Space-Element.pdf) (accessed December 2021).
- \_\_\_\_\_. 2010b. County of San Luis Obispo General Plan Agriculture Element. May 2010. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Agriculture-Element.pdf> (accessed December 2021).
- \_\_\_\_\_. 2019. Rules of Procedure to Implement the California Land Conservation Act of 1965. Adopted June 26, 1972, and revised December 2019. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Williamson-Act-Forms-and-Documents/Land-Conservation-Act-Rules-of-Procedure.pdf> (accessed December 2021).

- San Luis Obispo, County of, Department of Agriculture/Weights and Measures. 2021. 2020 Annual Crop Report: Honoring Essential Agricultural Workers. 2021.  
<https://www.slocounty.ca.gov/Departments/Agriculture-Weights-and-Measures/All-Forms-Documents/Information/Crop-Report/Crop-Report-Current/Crop-Report-2020.pdf>  
 (accessed December 2021).
- United States Department of Agriculture Natural Resources Conservation Service (NRCS). 1983. Soil Survey of San Luis Obispo County, California, Paso Robles Area.  
[https://www.nrcs.usda.gov/Internet/FSE\\_MANUSCRIPTS/california/sanluisCA1983/sanluisCA1983.pdf](https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/sanluisCA1983/sanluisCA1983.pdf) (accessed December 2021).
- \_\_\_\_\_. 2019. Web Soil Survey: San Luis Obispo Paso Robles Area.  
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx> (accessed October 2021).

## Air Quality

- California Air Resources Board (CARB). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005. <https://www.arb.ca.gov/ch/handbook.pdf> (accessed November 2021).
- \_\_\_\_\_. 2016. Ambient Air Quality Standards. May 4, 2016.  
<https://www.arb.ca.gov/research/aaqs/aaqs2.pdf> (accessed October 2021).
- California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. March 6, 2005.  
<https://oehha.ca.gov/air/cnrn/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0> (accessed December 2021).
- San Luis Obispo, County of. 2008. Draft Environmental Impact Report for the County of San Luis Obispo Los Osos Wastewater Project (LOWWP). State Clearinghouse No. 2007121034. November 14, 2008. <https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Projects/LOWWP/Environmental-Documents.aspx> (accessed November 2021).
- San Luis Obispo County Air Pollution Control District (SLOAPCD). 2001. 2001 Clean Air Plan San Luis Obispo County. December 2001. <https://www.slocleanair.org/rules-regulations/clean-air-plan.php> (accessed October 2021).
- \_\_\_\_\_. 2012. CEQA Air Quality Handbook. April 2012. [https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA\\_Handbook\\_2012\\_v2%20%28Updated%20November%202017%29\\_LinkedwithMemo%281%29.pdf](https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA_Handbook_2012_v2%20%28Updated%20November%202017%29_LinkedwithMemo%281%29.pdf) (accessed October 2021).
- \_\_\_\_\_. 2017. Clarification Memorandum for the San Luis Obispo County Air Pollution Control District's 2012 CEQA Air Quality Handbook. November 14, 2017.  
[https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/FINAL\\_Clarification%20Memorandum%202017%28UpdatedTable1-1\\_July2021%29.pdf](https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/FINAL_Clarification%20Memorandum%202017%28UpdatedTable1-1_July2021%29.pdf) (accessed January 2022).
- \_\_\_\_\_. 2021. 2021 Ambient Air Monitoring Network Plan. June 2021.  
<https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/2021-network-plan-for-publication.pdf> (accessed October 2021).
- U.S. Environmental Protection Agency (U.S. EPA). 2021. NAAQS Table.  
<https://www.epa.gov/criteria-air-pollutants/naaqs-table> (accessed October 2021).

Western Regional Climate Center. 2016. Paso Robles, California (046730) Monthly Climate Summary. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6730> (accessed January 2022).

## **Biological Resources**

California Department of Fish and Wildlife (CDFW). California Natural Diversity Database (CNDDDB). Rarefind V 5.2.14. commercial license. (accessed January 2022).

\_\_\_\_\_. 2022b. List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, Sacramento, California.

\_\_\_\_\_. 2022c. Biogeographic Information and Observation System (BIOS). <https://apps.wildlife.ca.gov/bios/> (accessed January 2022).

California Native Plant Society (CNPS). 2022. Rare Plant Program. Inventory of Rare and Endangered Plants of California (online edition, v9-01 1.0). <https://www.rareplants.cnps.org> (accessed January 2022).

Center for Ecosystem Management and Restoration (CEMR). 2008. Steelhead/Rainbow Trout (*Oncorhynchus mykiss*) Resources South of the Golden Gate, California. October 2008. [http://www.cemar.org/SSRP/pdfs/SSRP\\_textOnly.pdf](http://www.cemar.org/SSRP/pdfs/SSRP_textOnly.pdf) (accessed December 2021).

Mayer, K.E., and W.F. Laudenslayer. 1988. A Guide to Wildlife Habitats of California. California Department of Fish and Game, Sacramento, California.

San Luis Obispo, County of, Shandon San Juan Water District, City of Paso Robles, and San Miguel Community Services District. 2019. Paso Robles Subbasin Groundwater Sustainability Plan. November 13, 2019. [https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Groundwater-Sustainability-Plan-Annual-Reporting.aspx](https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Groundwater-Sustainability-Plan-Annual-Reporting.aspx) (accessed October 2021).

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2022. A Manual of California Vegetation, Online Edition. <http://www.cnps.org/cnps/vegetation/> California Native Plant Society, Sacramento, California (accessed January 2022).

Todd Groundwater. 2022. Interconnected Surface Water Assessment, Paso Robles Basin GSP. January 31, 2022.

United States Fish and Wildlife Service (USFWS). 2010. San Joaquin Kit Fox (*Vulpes macrotis mutica*) 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service Sacramento Fish and Wildlife Office Sacramento, California.

\_\_\_\_\_. 2022a. National Wetlands Inventory. <http://www.fws.gov/wetlands/Data/Mapper.html> (accessed January 2022).

\_\_\_\_\_. 2022b. Critical Habitat Mapper. <https://ecos.fws.gov/ecp/report/table/critical-habitat.html> (accessed January 2022).

\_\_\_\_\_. 2022c. USFWS Information for Planning and Consultation (IPaC). <https://ecos.fws.gov/ipac/> (accessed January 2022).

## **Cultural Resources**

Aiken, S. Robert. 1983. The Spanish Missions of Alta California Rise, Decline, and Restoration. *Pioneer America*, vol. 15, no.1, Pioneer American Society, 3-19.

- Applegate, Richard B. 1974. Chumash Placenames. *The Journal of California Anthropology*, 1(2), 187-205.
- Arnold, Jeanne E. 1995. Transportation Innovation and Social Complexity among Maritime Hunter – Gatherer Societies. *American Anthropologist* 97(4):733-747.
- Bickel, P. McW. 1978. Changing Sea Levels along the California Coast: Anthropological Implications. *Journal of California Anthropology* 5:6-20.
- California Office of Historic Preservation. 1995. *Instructions for Recording Historical Resources*. March 1995. [https://ohp.parks.ca.gov/?page\\_id=1069](https://ohp.parks.ca.gov/?page_id=1069) (accessed October 2021).
- \_\_\_\_\_. 2006. California Office of Historic Preservation Technical Assistance Series #6 – California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register). [https://ohp.parks.ca.gov/?page\\_id=1069](https://ohp.parks.ca.gov/?page_id=1069) (accessed October 2021).
- \_\_\_\_\_. 2020. Built Environment Resource Directory (BERD) – San Luis Obispo County. March 2020. [https://ohp.parks.ca.gov/?page\\_id=30338](https://ohp.parks.ca.gov/?page_id=30338) (accessed February 2022).
- Cole, Alexandra. 1999. Santa Barbara Waterfront Historic Context. Prepared by Preservation Planning Associates. Prepared for the City of Santa Barbara Community Development Department, Planning Division.
- Dallas, S.F. 1955. The Hide and Tallow Trade in Alta, California, 1822-1848. Ph.D. dissertation. Indiana University, Bloomington.
- Dumke, Glenn S. 1994. The Boom of the 1880s in Southern California. *Southern California Quarterly* 76(1):99-114.
- Erlandson, Jon M., Theodore Cooley, and Richard Carrico. 1987. A Fluted Projectile Point Fragment from the Southern California Coast: Chronology and Context at CA-SBA-1951. *Journal of California and Great Basin Anthropology* 9:120–128.
- Gamble, L.H. 2005. Culture and Climate: Reconsidering the Effect of Palaeoclimatic Variability Among Southern California Hunter-Gatherer Societies. *World Archaeology*, Vol. 37, No. 1, Archaeology in North America (March 2005), pp. 92-108.
- Gamble, Lynn H., Philip L. Walker, and Glenn S. Russell. 2001. Integrative Approach to Mortuary Analysis: Social and Symbolic Dimensions of Chumash Burial Practices. *American Antiquity* 66:185–212.
- Golla, Victor. 2007. Linguistic Prehistory. In *California Prehistory: Colonization, Culture, and Complexity*. AltaMira Press, Lanham, Maryland.
- Ineseño Chumash. 1913. The Dog Girl. Narrated by María Solares, collected by J.P. Harrington, and translated by Richard Applegate. In *Surviving Through the Days: Translations of Native California Stories and Songs, a California Indian Reader*, edited by Herbert W. Luthin, pp. 382-396. University of California Press.
- Jones, Terry L. and Jennifer A. Ferneau. 2002. Deintensification along the Central California Coast. In *Catalysts to Complexity, Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 205-232. Perspectives in California Archaeology Vol. 6. Costen Institute of Archaeology, University of California, Los Angeles.



**Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance**

- Jones, Terry L., Richard T. Fitzgerald, Douglas J. Kennett, Charles Miksicek, John L. Fagan, John Sharp, and Jon M. Erlandson. 2002. The Cross Creek Site and Its Implications for New World Colonization. *American Antiquity* 67:213–230.
- Jones, Terry L., Kenneth W. Gobalet, and Brian F. Coddig. 2016. The Archaeology of Fish and Fishing on the Central Coast of California: The Case for an Under-Exploited Resource. *Journal of Anthropological Archaeology* 41:88-108.
- Jones, Terry L. and Kathryn A. Klar. 2007. *California Prehistory: Colonization, Culture, and Complexity*. AltaMira Press, Lanham, Maryland.
- Jones, Terry L., Nathan E. Stevens, Deborah A. Jones, Richard T. Fitzgerald, and Mark G. Hylkema. 2007. The Central Coast: A Midlatitude Milieu. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 125–146. AltaMira Press, Lanham, Maryland.
- Jones, Terry L. and Georgie Waugh. 1995. Central California Prehistory: A View from Little Pico Creek. *Perspectives in California Archaeology* 3. Institute of Archaeology, University of California, Los Angeles.
- \_\_\_\_\_. 1997. Climatic Consequences of Population Pragmatism? A Middle Holocene Prehistory of the Central Coast. In *Archaeology of the California Coast During the Middle Holocene*, edited by Jon M. Erlandson and Michael A. Glassow, pp. 111–128. *Perspectives in California Archaeology* 4. Institute of Archaeology, University of California, Los Angeles.
- Joslin, Terry L. 2010. *Middle and Late Holocene Hunter-Gatherer Adaptations to Coastal Ecosystems Along the Southern San Simeon Reef, California*. Doctoral dissertation, University of California, Santa Barbara.
- King, Chester D. 1990. Evolution of Chumash Society: A Comparative Study of Artifacts Used in Social System Maintenance in the Santa Barbara Channel Region Before A.D. 1804. Revised Ph.D. dissertation with a new preface and updated bibliography. In *The Evolution of North American Indians*, edited by David Hurst Thomas. Garland Publishing, New York.
- Kyle, Douglas E. 2002. *Historic Spots in California*. Stanford, California: Stanford University Press.
- Lebow, Clayton G., Douglas R. Harro, Rebecca L. McKim, Charles M. Hodges, Ann M. Munns, Erin A. Enright, and Leeann G. Haslouer. 2016. The Sudden Flats Site: A Pleistocene/Holocene Transition Shell Midden on Alta California’s Central Coast. *California Archaeology* 7(2):265-294.
- Levinson, Sanford and Bartholomew H. Sparrow. 2005. *The Louisiana Purchase and American Expansion 1803-1898*, (7). Lanham, MD: Rowan & Littlefield Publishers, Inc.
- Livingston, M.M. 1914. The Earliest Spanish Land Grants in California. *Annual Publication of the Historical Society of Southern California* 9(3):195-199.
- Mathes, W. Michael. 1994. The Expedition of Juan Rodríguez Cabrillo, 1542-1543: An Historiographical Reexamination. *Southern California Quarterly*, vol. 76, no. 3. University of California Press, Historical Society of Southern California. 247-253.
- Milliken, R.T. and J.R. Johnson. 2005. *An Ethnography of Salinan and Northern Chumash-1769 to 1810*. Report prepared for California Department of Transportation District 5. Far Western Anthropological Research Group, Davis. Copies available from California Department of Transportation, San Luis Obispo.

- Moratto, Michael. 1984. *California Archaeology*. Academic Press, New York.
- Paso Robles, City of. 2015. History of Paso Robles. <https://www.prcity.com/377/History-of-Paso-Robles> (accessed December 2021).
- National Park Service (NPS). 1983. Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines. September 29, 1983. <https://www.doi.gov/pam/asset-management/historic-preservation/PQS> (accessed October 2021).
- \_\_\_\_\_. 1990. How to Apply the National Register of Historic Places Criteria for Evaluation. National Register Bulletin No. 15. National Register Branch, National Park Service, U.S. Department of the Interior, Washington, D.C. <http://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf> (accessed October 2021).
- \_\_\_\_\_. 2020. National Register of Historic Places [interactive map]. Last updated September 2020. <https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466> (accessed February 2022).
- Rick, Torben C., Jon M. Erlandson, René L. Vellanoweth, and Todd J. Braje. 2005. From Pleistocene Mariners to Complex Hunter-Gatherers: The Archaeology of the California Channel Islands. *Journal of World Prehistory* 19:169-228.
- Wallace, William. 1955. Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214–230.
- \_\_\_\_\_. 1978. Post-Pleistocene Archaeology, 9000 to 2000 B.C. In *California*, edited by R.F. Heizer, pp. 25–36. *Handbook of North American Indians*, Vol. 8, W.C. Sturtevant, general editor, Smithsonian Institution, Washington D.C.
- Wiggins, Kaya. 2016. A Bead Analysis of Northern Chumash Village Site, *Tstywiwi*: CS-SLO-51/H. Senior Project, Social Sciences Department, California Polytechnic State University, San Luis Obispo, California.

## Energy

- California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. December 14, 2017. [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf) (accessed December 2021).
- California Energy Commission (CEC). 2019. 2019 IERP Workshops, Notices and Documents, California Energy Demand 2020-2030 Revised Forecast. <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2019-integrated-energy-policy-report/2019-iepr> (accessed January 2022).
- \_\_\_\_\_. 2019a. "2019 Building Energy Efficiency Standards." March 2018. [https://ww2.energy.ca.gov/title24/2019standards/documents/2018\\_Title\\_24\\_2019\\_Building\\_Standards\\_FAQ.pdf](https://ww2.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf)(accessed December 2021).
- \_\_\_\_\_. 2020. "California Retail Fuel Outlet Annual Reporting (CEC-A15) Results." <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>(accessed December 2021).
- \_\_\_\_\_. 2021a. Total System Electric Generation. <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2019-total-system-electric-generation>(accessed December 2021).

\_\_\_\_\_. 2021b. "Supply and Demand of Natural Gas in California." <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>(accessed December 2021).

\_\_\_\_\_. 2021c. "California's Petroleum Market." <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market>(accessed December 2021).

County of San Luis Obispo (County). 2010. Conservation and Open Space Element of the San Luis Obispo County General Plan. May. Available at:

<https://www.slocounty.ca.gov/getattachment/ba01754b-50ac-4c13-ba16-1a9eb9d56a01/Conservation-and-Open-Space-Element.aspx>(accessed December 2021).

\_\_\_\_\_. 2016. EnergyWise Plan 2016 Update. Available at:

<https://www.slocounty.ca.gov/getattachment/d8cf48aa-eeb4-403b-81cd-e5da063458dc/EnergyWise-Plan-2016-Update.aspx>(accessed December 2021).

United States Energy Information Administration. 2021. California State Profile and Energy Estimates. February 18, 2021. <https://www.eia.gov/state/?sid=CA>(accessed December 2021).

## **Geology and Soils**

California Department of Conservation. 1977. California Geological Survey, Geologic Data Map No. 2 [interactive map]. Compilation and interpretation by Charles W. Jennings. Updated version by Carlos Gutierrez, William Bryant, George Saucedo, and Chris Wills. Graphics by Milind Patel, Ellen Sander, Jim Thompson, Barbara Wanish, and Milton Fonseca.

<https://maps.conservation.ca.gov/cgs/gmc/> (accessed December 2021).

\_\_\_\_\_. 2015. Fault Activity Map of California. 2015. <https://maps.conservation.ca.gov/cgs/fam/> (accessed December 2021).

California Geological Survey (CGS). 2002. California Geomorphic Provinces, Note 36. December 2002. <https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf> (accessed December 2021).

Dibblee, T.W. 1974. Geologic map of the Shandon and Orchard Peak quadrangles, San Luis Obispo and Kern Counties, California. United States Geological Survey, Miscellaneous Investigations Series Map I-788, scale 1:62,500.

Dibblee, T.W., and J.A. Minch. 2004a. Geologic map of the Paso Robles quadrangle, San Luis Obispo County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-137, scale 1:24,000.

\_\_\_\_\_. 2004b. Geologic map of the Estrella & Shandon quadrangles, San Luis Obispo County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-138, scale 1:24,000.

\_\_\_\_\_. 2004c. Geologic map of the Creston & Shedd Canyon quadrangles, San Luis Obispo County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-136, scale 1:24,000.

\_\_\_\_\_. 2004d. Geologic map of the Wilson Corner quadrangle, San Luis Obispo County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-134, scale 1:24,000.

\_\_\_\_\_. 2006. Geologic map of the Camatta Canyon quadrangle, San Luis Obispo County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-267, scale 1:24,000.

- Jefferson, G.T. 2010. A catalogue of late Quaternary vertebrates from California. Natural History Museum of Los Angeles County Technical Report 7, p. 5-172.
- Norris, R.M., and R.W. Webb. 1990. Geology of California. John Wiley and Sons, Inc. New York.
- Paleobiology Database (PBDB). 2021. Online fossil locality database. <https://paleobiodb.org/#/> (accessed December 2021).
- San Luis Obispo, County of. 1999a. County of San Luis Obispo General Plan Safety Element. December 1999. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Safety-Element.pdf> (accessed December 2021).
- \_\_\_\_\_. 1999b. Safety Element Technical Background Report of the County of San Luis Obispo General Plan Safety Element. December 1999. Technical Background Report starts after page 30 of the Safety Element. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Safety-Element.pdf> (accessed December 2021).
- \_\_\_\_\_. 2008. Draft Environmental Impact Report for the County of San Luis Obispo Los Osos Wastewater Project (LOWWP). State Clearinghouse No. 2007121034. November 2008. <https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Projects/LOWWP/Environmental-Documents.aspx> (accessed December 2021).
- \_\_\_\_\_. 2009. Final Grading and Stormwater Management General Plan Ordinance Revisions Environmental Impact Report. October.
- \_\_\_\_\_. 2021. Land Use View. [https://gis.slocounty.ca.gov/Html5Viewer/Index.html?configBase=/Geocortex/Essentials/REST/sites/PL\\_LandUseView/viewers/PL\\_LandUseView/virtualdirectory/Resources/Config/Default](https://gis.slocounty.ca.gov/Html5Viewer/Index.html?configBase=/Geocortex/Essentials/REST/sites/PL_LandUseView/viewers/PL_LandUseView/virtualdirectory/Resources/Config/Default) (accessed December 2021).
- San Luis Obispo, County of, Shandon San Juan Water District, City of Paso Robles, and San Miguel Community Services District. 2020. Paso Robles Subbasin Groundwater Sustainability Plan. January 2020. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf) (accessed December 2021).
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. [https://vertpaleo.org/wp-content/uploads/2021/01/SVP\\_Impact\\_Mitigation\\_Guidelines-1.pdf](https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf) (accessed December 2021).
- University of California Museum of Paleontology (UCMP). 2021. UCMP Specimen Search. <https://ucmpdb.berkeley.edu/> (accessed December 2021).
- United States Department of Agriculture, Natural Resources Conservation Service (NRCS). 1983. Soil Survey of San Luis Obispo County, California. May 1983. [https://www.nrcs.usda.gov/Internet/FSE\\_MANUSCRIPTS/california/sanluisCA1983/sanluisCA1983.pdf](https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/sanluisCA1983/sanluisCA1983.pdf) (accessed December 2021).

United States Geological Survey (USGS). 2001. Use of InSAR to Identify Land-Surface Displacements Caused by Aquifer-System Compaction in the Paso Robles Area, San Luis Obispo County, California, March to August 1997. 2001. <https://pubs.usgs.gov/of/2000/ofr00-447/> (accessed December 2021).

\_\_\_\_\_. 2021. U.S. Quaternary Faults. <https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf> (accessed December 2021).

## **Greenhouse Gas Emissions**

California Air Pollution Control Officers Association. 2008. CEQA and Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. January 2008. <http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf> (accessed December 2021).

California Air Resources Board (CARB). 2008. Climate Change Scoping Plan. December 2008, last amended May 2009. <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2008-scoping-plan-documents> (accessed November 2021).

\_\_\_\_\_. 2013. California Air Resources Board’s Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation. May. <https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/compliance-offset-protocol-process.pdf> (accessed January 2022).

\_\_\_\_\_. 2014. First Update to the Climate Change Scoping Plan. Approved May 2014. <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2013-scoping-plan-documents> (accessed November 2021).

\_\_\_\_\_. 2017. California’s 2017 Climate Change Scoping Plan. November 2017, adopted December 14, 2017. [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf) (accessed November 2021).

\_\_\_\_\_. 2021. California Greenhouse Gas Emissions for 2000 to 2019 Trends of Emissions and Other Indicators. July. [https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2019/ghg\\_inventory\\_trends\\_00-19.pdf](https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf) (accessed December 2021).

\_\_\_\_\_. 2022. Offset Project Registries. <https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/offset-project-registries> (Accessed January 2022).

California Climate Change Center. 2006. Climate Scenarios for California. March 2006. <https://research.fit.edu/media/site-specific/researchfitedu/coast-climate-adaptation-library/united-states/west-coast-amp-hawaix27i/california---statewide/CCCC.--2006.--Climate-Scenarios-for-California.pdf> (accessed November 2021).

California Department of Food and Agriculture. 2020. California Agricultural Statistics Review. August. [https://www.cdfa.ca.gov/Statistics/PDFs/2020\\_Ag\\_Stats\\_Review.pdf](https://www.cdfa.ca.gov/Statistics/PDFs/2020_Ag_Stats_Review.pdf) (accessed December 2020).

\_\_\_\_\_. 2021. 2021 Healthy Soils Program Incentives Program – Grant Award Procedures Manual. <https://www.cdfa.ca.gov/oefi/healthysouils/docs/2021-HSPIncentives-GAPManual.pdf> (accessed February 2022).

- California Department of Water Resources. 2018. Indicators of Climate Change in California. May 2018. <https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf> (accessed November 2021).
- California Natural Resources Agency (CNRA). 2009. 2009 California Climate Adaptation Strategy. March 2009. [http://resources.ca.gov/docs/climate/Statewide\\_Adaptation\\_Strategy.pdf](http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf) (accessed November 2021).
- \_\_\_\_\_. 2021. Natural and Working Land Climate Smart Strategy – Draft for Public Comment. October 11, 2021. [https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Expanding-Nature-Based-Solutions/FINAL\\_DesignDraft\\_NWL\\_100821\\_508-opt.pdf](https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Expanding-Nature-Based-Solutions/FINAL_DesignDraft_NWL_100821_508-opt.pdf) (accessed February 2022).
- Forster, P., V. Ramaswamy, P. Artaxo, T. Berntsen, R. Betts, D.W. Fahey, J. Haywood, J. Lean, D.C. Lowe, G. Myhre, J. Nganga, R. Prinn, G. Raga, M. Schulz, and R. Van Dorland. 2007. Changes in Atmospheric Constituents and in Radiative Forcing. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. <https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter2-1.pdf> (accessed December 2021).
- Intergovernmental Panel on Climate Change (IPCC). 2007. Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. <https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-spm-1.pdf> (accessed October 2021).
- \_\_\_\_\_. 2014a. Climate Change 2014: Mitigation of Climate Change. Summary for Policymakers - Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. <https://www.ipcc.ch/report/ar5/wg3/> (accessed October 2021).
- \_\_\_\_\_. 2014b. Climate Change 2014 Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri, and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland. [https://www.ipcc.ch/site/assets/uploads/2018/05/SYR\\_AR5\\_FINAL\\_full\\_wcover.pdf](https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf) (accessed October 2021).
- \_\_\_\_\_. 2018. Summary for Policymakers. In: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. <https://www.ipcc.ch/sr15/> (accessed November 2021).

- \_\_\_\_\_. 2021. Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)] August 7, 2021. Cambridge University Press. [https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_Full\\_Report.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf) (accessed November 2021).
- Parmesan, Camille. 2006. Ecological and Evolutionary Responses to Recent Climate Change. August 24, 2006. In: Annual Review of Ecology, Evolution, and Systematics, Vol. 37 (2006), pp. 637-669. [https://www.fws.gov/southwest/es/documents/R2ES/LitCited/LPC\\_2012/Parmesan\\_2006.pdf](https://www.fws.gov/southwest/es/documents/R2ES/LitCited/LPC_2012/Parmesan_2006.pdf) (accessed December 2021).
- San Luis Obispo, County of. 2016. EnergyWise Plan 2016 Update. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Energy-and-Climate-Reports/EnergyWise-Plan-2016-Update.pdf> (accessed December 2021).
- San Luis Obispo County Air Pollution Control District (SLOAPCD). 2012. CEQA Air Quality Handbook. April. [https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA\\_Handbook\\_2012\\_v2%20%28Updated%20November%202017%29\\_LinkedwithMemo%281%29.pdf](https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA_Handbook_2012_v2%20%28Updated%20November%202017%29_LinkedwithMemo%281%29.pdf) (accessed December 2021).
- \_\_\_\_\_. 2021. Interim CEQA Greenhouse Gas Guidance for the San Luis Obispo County Air Pollution Control District's 2012 CEQA Air Quality Handbook. January 28, 2021. [https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA-GHGInterimGuidance\\_Final2.pdf](https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA-GHGInterimGuidance_Final2.pdf) (accessed December 2021).
- State of California. 2018. California's Fourth Climate Change Assessment Statewide Summary Report. August 27, 2018. <http://www.climateassessment.ca.gov/state/> (accessed December 2021).
- United States Department of Agriculture Natural Resources Conservation Service. 2022. COMET Planner: Carbon and greenhouse gas evaluation for NRCS conservation practice planning. [http://bfuels.nrel.colostate.edu/health/COMET-Planner\\_Report\\_Final.pdf](http://bfuels.nrel.colostate.edu/health/COMET-Planner_Report_Final.pdf) (accessed February 2022).
- \_\_\_\_\_. 2021. COMET-Planner for the California Department of Food and Agriculture (CDFA) Healthy Soils Program (HSP). <http://comet-planner-cdfahsp.com> (accessed February 2022).
- United States Environmental Protection Agency (U.S. EPA). 2020. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2018. U.S. EPA #430-R-20-002. April 2020. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2018> (accessed December 2021).
- World Meteorological Organization. 2021. Greenhouse Gases. <https://public.wmo.int/en/our-mandate/focus-areas/environment/greenhouse%20gases> (accessed December 2021).

## Hydrology and Water Quality

- California Department of Water Resources (DWR). 2003. California's Groundwater – Bulletin 118, Update 2003. October 2003. [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Statewide-Reports/Bulletin\\_118\\_Update\\_2003.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Statewide-Reports/Bulletin_118_Update_2003.pdf) (accessed October 2021).
- \_\_\_\_\_. 2019. Final 2018 Basin Boundary Modifications. Released February 11, 2019. <https://water.ca.gov/Programs/Groundwater-Management/Basin-Boundary-Modifications> (accessed October 2021).
- \_\_\_\_\_. 2020. Sustainable Groundwater Management Act: 2019 Basin Prioritization – Process and Results. May 2020. [https://data.cnra.ca.gov/dataset/13ebd2d3-4e62-4fee-9342-d7c3ef3e0079/resource/ffafd27b-5e7e-4db3-b846-e7b3cb5c614c/download/sgma\\_bp\\_process\\_document.pdf](https://data.cnra.ca.gov/dataset/13ebd2d3-4e62-4fee-9342-d7c3ef3e0079/resource/ffafd27b-5e7e-4db3-b846-e7b3cb5c614c/download/sgma_bp_process_document.pdf) (accessed January 2022).
- Central Coast Regional Water Quality Control Board (CCRWQCB). 2018a. TMDL Concise Tabular Summary – TMDLs for Nitrogen Compounds and Orthophosphate in Streams of the Lower Salinas River and Reclamation Canal Basin and the Moro Cojo Slough Subwatershed. Last updated July 11, 2018. [https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/docs/salinas/nutrients/index.html](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/salinas/nutrients/index.html) (accessed December 2021).
- \_\_\_\_\_. 2018b. Estrella River Basin TMDLs for Boron – Concise Summary. Last updated July 11, 2018. [https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/docs/estrella\\_riv\\_boron/](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/estrella_riv_boron/) (accessed December 2021).
- Central Coast Regional Water Quality Control Board (CCRWQCB), State Water Resources Control Board, and California Environmental Protection Agency. 2019. Water Quality Control Plan for the Central Coastal Basin. June 2019. [https://www.waterboards.ca.gov/centralcoast/publications\\_forms/publications/basin\\_plan/docs/2019\\_basin\\_plan\\_r3\\_complete\\_webaccess.pdf](https://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/docs/2019_basin_plan_r3_complete_webaccess.pdf) (accessed November 2021).
- Fugro West, Inc. and Cleath and Associates. 2002. Final Report Paso Robles Groundwater Basin Study. Report prepared for the County of San Luis Obispo Public Works Department. August 2002. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Archived-Documents/2002-08-PRGB-Study,-Phase-I.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Archived-Documents/2002-08-PRGB-Study,-Phase-I.pdf) (accessed October 2021).
- GSI Water Solutions, Inc. 2021. Final Paso Basin Cooperative Committee and the Groundwater Sustainability Agencies – Paso Robles Subbasin Water Year 2020 Annual Report. March 17, 2021. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Annual-Reports/Paso-Basin-WY2020-Annual-Report.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Annual-Reports/Paso-Basin-WY2020-Annual-Report.pdf) (accessed October 2021).
- Levy, Z.F., B.C. Jurgens, K.R. Burow, S.A. Voss, K.E. Faulkner, J.A. Arroyo-Lopez, and M.S. Fram. 2021. Critical aquifer overdraft accelerates degradation of groundwater quality in California's Central Valley during drought. *Geophysical Research Letters*, 48, e2021GL094398. <https://doi.org/10.1029/2021GL094398> (accessed December 2021).



- San Luis Obispo County Flood Control and Water Conservation District (SLOCFCWCD) 2014. Paso Robles Basin Groundwater Model Update. December 19, 2014.  
[https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Integrated-Regional-Water-Management-\(IRWM\)/Grant-Funded-Planning-Documents/Paso-Robles-Groundwater-Model-Update/2015-01-13-PRGB-Final-Model-Report.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Integrated-Regional-Water-Management-(IRWM)/Grant-Funded-Planning-Documents/Paso-Robles-Groundwater-Model-Update/2015-01-13-PRGB-Final-Model-Report.pdf) (accessed December 2021).
- \_\_\_\_\_. 2020. San Luis Obispo County Final 2019 Integrated Regional Water Management Plan. Adopted May 2020, and amended August 2020.  
[https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Integrated-Regional-Water-Management-\(IRWM\)/IRWM-Plan/2019-IRWM-Plan/2019-IRWM-Plan.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Integrated-Regional-Water-Management-(IRWM)/IRWM-Plan/2019-IRWM-Plan/2019-IRWM-Plan.pdf) (accessed January 2022).
- San Luis Obispo, County of, Shandon San Juan Water District, City of Paso Robles, and San Miguel Community Services District. 2020. Paso Robles Subbasin Groundwater Sustainability Plan. January 2020. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf) (accessed October 2021).
- Todd Groundwater. 2022. Interconnected Surface Water Assessment, Paso Robles Basin GSP. January 31, 2022.

## **Land Use and Planning**

- County of San Luis Obispo Department of Planning and Building. 2003. Creston Village Plan. Adopted February 2014. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Community-Plans/Creston-Village-Plan.pdf> (accessed January 10, 2022).
- \_\_\_\_\_. 2012. Shandon Community Plan. April 2012.  
<https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Community-Plans/Shandon-Community-Plan.pdf> (accessed January 10, 2022).
- \_\_\_\_\_. 2014. Land Use and Circulation Elements (Part II): The Area Plans. February 2014.  
<https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Area-Plans/Inland-Area-Plans.pdf> (accessed January 10, 2022).
- \_\_\_\_\_. 2016. San Miguel Community Plan. December 2016.  
<https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Community-Plans.aspx> (accessed January 10, 2022).
- \_\_\_\_\_. 2018. General Plan User Guide. March 2018.  
<https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/General-Plan-Forms-and-Documents/General-Plan-User-Guide.pdf> (accessed January 10, 2022).

## **Noise**

- California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-20-365.01.01). April 2020. <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf> (accessed November 2021).

Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September 2018. [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf) (accessed November 2021).

San Luis Obispo, County of. 1992. Noise Element (Part I) Policy Document. May 1992. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Noise-Element.pdf> (accessed November 2021).

## **Transportation**

California Air Resources Board (CARB). 2021. SB 375 Regional Transportation Plan Climate Targets. <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets> (accessed October 2021).

California Governor's Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. [https://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf) (accessed November 2021).

Institute of Transportation Engineers. 2021. Trip Generation Manual, 11th Edition. Volume 1: Desk Reference. September 2021.

San Luis Obispo Council of Governments (SLOCOG). 2019a. 2019 Regional Transportation Plan. <https://www.slocog.org/2019RTP> (accessed October 2021).

\_\_\_\_\_. 2019b. 2019 Regional Transportation Plan Final Environmental Impact Report. June 5, 2019. <https://www.slocog.org/2019RTP> (accessed December 2021).

San Luis Obispo, County of. 1980. The Land Use and Circulation Elements of the San Luis Obispo General Plan – Framework for Planning (Inland). Adopted September 22, 1980 and revised April 2015. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Framework-for-Planning-Inland.pdf> (accessed October 2021).

\_\_\_\_\_. 2021. VMT Threshold Study – County of San Luis Obispo. March 20, 2021.

San Luis Obispo, County of, and San Luis Obispo Bicycle Advisory Committee. 2016. 2015/16 County Bikeways Plan. July 6, 2016. <https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Bicycle-Advisory-Committee/Plans-Documents/2016-Bikeways-Plan.pdf> (accessed November 2021).

## **Tribal Cultural Resources**

California Governor's Office of Planning and Research. 2005. Tribal Consultation Guidelines. November 14, 2005. <http://nahc.ca.gov/wp-content/uploads/2019/04/SB-18-Tribal-Consultation-Guidelines.pdf> (accessed December 2021).

## **Utilities and Service Systems**

California Department of Water Resources (DWR). 2004. California's Groundwater – Bulletin 118, Central Coast Hydrologic Region, Salinas Valley Groundwater Basin, Paso Robles Area Subbasin. Last updated February 27, 2004. [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/3\\_004\\_06\\_PasoRoblesAreaSubbasin.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/3_004_06_PasoRoblesAreaSubbasin.pdf) (accessed December 20, 2021).

**Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance**

\_\_\_\_\_. 2020a. Sustainable Groundwater Management Act: 2019 Basin Prioritization – Process and Results. May 2020. [https://data.cnra.ca.gov/dataset/13ebd2d3-4e62-4fee-9342-d7c3ef3e0079/resource/ffafd27b-5e7e-4db3-b846-e7b3cb5c614c/download/sgma\\_bp\\_process\\_document.pdf](https://data.cnra.ca.gov/dataset/13ebd2d3-4e62-4fee-9342-d7c3ef3e0079/resource/ffafd27b-5e7e-4db3-b846-e7b3cb5c614c/download/sgma_bp_process_document.pdf) (accessed January 2022).

\_\_\_\_\_. 2020b. California Statutes Making Conservation a California Way of Life. Last updated May 22, 2020. [https://www.waterboards.ca.gov/water\\_issues/programs/conservation\\_portal/california\\_statutes.html](https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/california_statutes.html) (accessed January 2022).

Fugro West, Inc. and Cleath and Associates. 2002. Final Report Paso Robles Groundwater Basin Study. Report prepared for the County of San Luis Obispo Public Works Department. August 2002. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Archived-Documents/2002-08-PRGB-Study,-Phase-I.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Archived-Documents/2002-08-PRGB-Study,-Phase-I.pdf) (accessed February 2022).

GSI Water Solutions, Inc. 2021. Paso Robles Subbasin Water Year 2020 Annual Report. March 2021. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Annual-Reports/Paso-Basin-WY2020-Annual-Report.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Annual-Reports/Paso-Basin-WY2020-Annual-Report.pdf) (accessed December 15, 2021).

San Luis Obispo County Flood Control and Water Conservation District (SLOCFCWCD). 2012. San Luis Obispo County Master Water Report – Volume I of III. May 2012. <https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Water-Resources/Master-Water-Report.aspx> (accessed December 2021).

\_\_\_\_\_. 2020. San Luis Obispo County Final 2019 Integrated Regional Water Management Plan. Adopted May 2020, and amended August 2020. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Integrated-Regional-Water-Management-\(IRWM\)/IRWM-Plan/2019-IRWM-Plan/2019-IRWM-Plan.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Integrated-Regional-Water-Management-(IRWM)/IRWM-Plan/2019-IRWM-Plan/2019-IRWM-Plan.pdf) (accessed December 2021).

San Luis Obispo, County of. 2010. General Plan Conservation and Open Space Element. Adopted May 11, 2010. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements.aspx/> (accessed December 2021).

\_\_\_\_\_. 2012. Shandon Community Plan. Adopted April 3, 2012. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Community-Plans.aspx/> (accessed December 2021).

\_\_\_\_\_. 2016. San Miguel Community Plan. Adopted December 6, 2016. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Community-Plans.aspx/> (accessed December 2021).

San Luis Obispo, County of, Shandon San Juan Water District, City of Paso Robles, and San Miguel Community Services District. 2020. Paso Robles Subbasin Groundwater Sustainability Plan. January 2020. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf) (accessed December 15, 2021).

## Effects Found Not to be Significant

- California Department of Conservation. 2021. Earthquake Zones of Required Investigation. <https://maps.conservation.ca.gov/cgs/EQZApp/app/> (accessed December 27, 2021).
- California Department of Forestry and Fire Protection (CAL FIRE). 2021. Fire Hazard Severity Map. <https://egis.fire.ca.gov/FHSZ/> (accessed December 27, 2021).
- California Department of Toxic Substance Control (DTSC). 2021. Hazardous Waste and Substances Site List (Cortese). <https://dtsc.ca.gov/dtscs-cortese-list/> (accessed November 2021).
- County of San Luis Obispo. 2010. County of San Luis Obispo General Plan Conservation and Open Space Element. May 2010. [https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Conservation-and-Open-Space-Element-\(1\).aspx](https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Conservation-and-Open-Space-Element-(1).aspx) (accessed December 2021).
- \_\_\_\_\_. 2011. County of San Luis Obispo EnergyWise Plan. November 2011. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Energy-and-Climate-Reports.aspx> (accessed December 2021).
- \_\_\_\_\_. 2015. Framework for Planning (Inland). April 2015. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Framework-for-Planning-Inland.pdf> (accessed December 27, 2021).
- County of San Luis Obispo Airport Land Use Commission. 2005. Airport Land Use Plan: Paso Robles Municipal Airport. February 2005. <https://www.prcity.com/DocumentCenter/View/25601/Airport-Land-Use-Plan> (accessed December 27, 2021).
- County of San Luis Obispo Department of Planning and Building. 2014. The Area Plans. February 2014. <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Area-Plans/Inland-Area-Plans.pdf> (accessed December 28, 2021).
- \_\_\_\_\_. 2020. Onsite Wastewater Treatment Systems Local Agency Management Plan. May 2020. [https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Septic-System-\(Onsite-Wastewater-Treatment-Systems/County-of-San-Luis-Obispo-LAMP-2020.pdf](https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Septic-System-(Onsite-Wastewater-Treatment-Systems/County-of-San-Luis-Obispo-LAMP-2020.pdf) (accessed December 27, 2021).
- \_\_\_\_\_. 2021. Land Use View. [https://gis.slocounty.ca.gov/Html5Viewer/Index.html?configBase=/Geocortex/Essentials/REST/sites/PL\\_LandUseView/viewers/PL\\_LandUseView/virtualdirectory/Resources/Config/Default](https://gis.slocounty.ca.gov/Html5Viewer/Index.html?configBase=/Geocortex/Essentials/REST/sites/PL_LandUseView/viewers/PL_LandUseView/virtualdirectory/Resources/Config/Default) (accessed December 27, 2021).

## Other CEQA Required Discussions

- California Department of Finance. 2021. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. 2021. <https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/> (accessed January 14, 2022).

San Luis Obispo, County of. 2010. County Conservation and Open Space Element.

[https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Conservation-and-Open-Space-Element-\(1\)/Conservation-and-Open-Space-Element.pdf](https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Conservation-and-Open-Space-Element-(1)/Conservation-and-Open-Space-Element.pdf) (accessed October 2021).

San Luis Obispo, County of. 2020. 2020-2028 Housing Element. Adopted November 2020.

<https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Housing-Element.pdf> (accessed January 14, 2022).

\_\_\_\_\_. 2012. Shandon Community Plan. April 3, 2012.

<https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Community-Plans/Shandon-Community-Plan.pdf> (accessed October 2021).

\_\_\_\_\_. 2016. San Miguel Community Plan. December 6, 2016.

<https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Community-Plans/San-Miguel-Community-Plan.pdf> (accessed October 2021)

San Luis Obispo Council of Governments (SLOCOG). 2017. 2050 Regional Growth Forecast for San Luis Obispo County. June 2017. <https://www.slocog.org/programs/data-services/regional-growth-forecast> (accessed January 18, 2022).

United States Census Bureau. 2020. QuickFacts: San Luis Obispo County, California.

<https://www.census.gov/quickfacts/sanluisobispocountycalifornia> (accessed January 18, 2021)

## **Alternatives**

California Governor’s Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. [https://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf) (accessed November 2021).

San Luis Obispo, County of. 2019. Rules of Procedure to Implement the California Land Conservation Act of 1965. Adopted June 26, 1972, and revised December 2019.

<https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Williamson-Act-Forms-and-Documents/Land-Conservation-Act-Rules-of-Procedure.pdf> (accessed December 2021).

San Luis Obispo, County of, Shandon San Juan Water District, City of Paso Robles, and San Miguel Community Services District. 2020. Paso Robles Subbasin Groundwater Sustainability Plan. January 2020. [https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf) (accessed October 2021).

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