

4 CUMULATIVE IMPACTS AND OVERCONCENTRATION

4.1 CUMULATIVE IMPACTS

4.1.1 CEQA Requirements

Cumulative impacts are defined in State CEQA Guidelines Section 15355 as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” A cumulative impact occurs from “the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (State CEQA Guidelines Section 15355[b]).

This section provides an analysis of cumulative impacts resulting from implementation of the CLUO together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the State CEQA Guidelines. The goal of such an analysis is twofold: first, to determine whether the overall long-term impacts of all such projects combined would be cumulatively significant; and second, to determine whether the incremental contribution to any such cumulatively significant impacts from adoption and implementation of the proposed CLUO would be “cumulatively considerable” (and thus significant). (See State CEQA Guidelines Sections 15130[a]–[b], 15355[b], 15064[h], and 15065[a].) In other words, the required analysis examines the broad context in which cumulative impacts occur, and examines whether incremental contributions from project regulated under the CLUO would result in new significant cumulative impacts, or significantly add to anticipated cumulative impacts.(i.e., “cumulatively considerable”).

Consistent with State CEQA Guidelines Section 15130, the discussion of cumulative impacts in this draft EIR focuses on significant cumulative impacts. Section 15130(b) of the State CEQA Guidelines provides, in part, the following:

[t]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

4.1.2 Cumulative Setting

SCOPE OF THE CUMULATIVE ANALYSIS

The geographic area that could be affected from implementation of the CLUO varies depending on the type of environmental resource being considered. This geographic area provides the context for consideration of cumulative impacts. The general geographic area associated with various environmental effects defines the boundaries of the area used for compiling the list of projects considered in the cumulative impact analysis. Table 4-1 presents the general geographic areas associated with the different resources addressed in this draft EIR and evaluated in those sections of this cumulative analysis.

Table 4-1 Geographic Scope of Cumulative Impacts

Resource Issue	Geographic Area
Aesthetics	Primarily site specific; larger localized area for certain impacts.
Agricultural Resources	Yolo County
Air Quality and Odors	Regional for criteria pollutants within the Yolo Solano Air Quality Management District Generally site specific or within a larger localized area for odor)
Biological Resources	Yolo County (Yolo HCP/NCCP Planning Area) and site- specific
Cultural Resources	Primarily site specific; larger localized area for certain impacts
Energy	Regional (PG&E energy grid)
Geology and Soils	Site specific
Greenhouse Gas Emissions and Climate Change	Global
Hazards and Hazardous Materials	Site specific
Hydrology and Water Quality	Localized and regional
Land Use and Planning	Yolo County and site- specific
Noise	Site specific and localized (e.g. along transportation corridors)
Public Services	Site specific
Transportation and Circulation	Yolo County and regional
Utilities and Service Systems	Site specific

LAND USE CONDITIONS/ACTIVITIES IN THE COUNTY

Cumulative impact analysis evaluates whether implementation of the CLUO would result in new or greater impacts that were not addressed in the 2030 Countywide General Plan EIR (State Clearinghouse No. 2008102034) (General Plan EIR). This analysis also considers the proposed nine development agreement applications for cannabis uses under the early implementation development agreement policy and the nursery and processing facilities pilot program described below and in Chapter 2, “Description of Preferred Alternative and Equal Weight Alternatives.”

Yolo County 2030 Countywide General Plan

The Yolo County 2030 General Plan EIR examined the impacts associated with planned growth of 23,265 residents, 7,263 residential dwelling units, and 20,818 jobs in the unincorporated area in 2008/2009 to approximately 64,700 residents, 22,061 residential dwelling units, and 53,154 jobs by 2030. Buildout of a specific plan area in the community of Dunnigan was assumed to account for most of this growth. (Yolo County 2019)

The General Plan designates the majority of the unincorporated area of the County, approximately 545,000 acres, for agricultural use. Open space is the second largest designation, with approximately 53,000 acres, followed by approximately 7,000 acres of public and quasi-public uses. The remaining areas (approximately 18,000 acres) are designated for parks and recreation, residential, commercial, industrial, specific plan, and other uses.

The General Plan Agriculture land use designation allows the following uses:

Agriculture (AG) – Full range of cultivated agriculture such as row crops, orchards, vineyards, dryland farming, livestock grazing, forest products, confined animal facilities, and equestrian facilities.
Agricultural industrial – agricultural research, processing and storage; crop dusting. Agricultural commercial – roadside stands, “Yolo Stores,” wineries, farm-based tourism (e.g. u-pick, dude ranch, lodging), horse shows, rodeos, crop-based seasonal events; agricultural chemical and equipment

sales. Pre-existing isolated restaurants and/or stores (e.g. old stage stops and cross-roads) serving rural areas. Farmworker housing. Surface mining. Incidental habitat.

The General Plan EIR assumed these uses on the 545,000 acres of designated as Agriculture, and additionally assumed agricultural commercial and agricultural industrial uses (as described in the designation) on 1,178 acres of these acres. The cannabis uses that would be allowed under the proposed CLUO (see for example the Table of Cannabis Development Regulations presented in CLUO Section 8-2.1407) are consistent with the assumptions of the General Plan EIR.

Additional growth may occur in the County as a result of planned land uses within the four incorporated cities, on the University of California Davis campus, and on lands held in trust by the federal government for the Yocha Dehe Wintun Nation. Although these are all activities the County does not control, the General Plan EIR examined the potential for cumulative effects associated with buildout of planned growth within the unincorporated County area, growth within these areas of the County not under County jurisdiction, and growth in jurisdictions adjoining Yolo County (see pages 805 through 817 of the Draft volume of the 2030 Countywide General Plan Final EIR (SCH # 2008102034, certified November 10, 2009).

In 2017 the County Board of Supervisors approved two General Plan amendments that removed four specific plans from the General Plan for Dunnigan, Elkhorn, Knights Landing, and Madison. These actions removed approximately 10,200 residential dwelling units and approximately 960 acres of commercial and industrial land use growth (Yolo County 2019). This growth reduction in the General Plan will reduce many of the significant environmental impacts identified in the General Plan EIR (i.e., land use and housing, agricultural resources, transportation and circulation, air quality, noise, greenhouse gases and climate change, utilities, energy, cultural resources, biological resources, hydrology and water quality, hazards and hazardous materials, and visual and scenic resources).

Cannabis Nursery and Processing Facilities Pilot Program and Early Implementation Development Agreements

As part of the cumulative scenario, this EIR considers the nine “early implementation” development agreements and nursery and processing pilot program cannabis projects summarized in Table 2-2 and shown in Exhibit 2-3 of Chapter 2, “Description of Preferred Alternative and Equal Weight Alternatives.” As identified in Chapter 2, the County Board of Supervisors approved an early implementation development agreement policy for existing licensed cannabis cultivators in the County proposing projects that include indoor or mixed-light cultivation. This process has been merged with the County’s nursery and processing facilities pilot program. Eight of these applications are existing licensed cultivators who have applied for “early implementation” development agreements, and two of the eight are also applicants for the separate nursery and processing pilot program (Kind Farms and Green Coast Industries [GCI]). The ninth application (Dark Heart) is a pilot program-only applicant. Each of the applicants is seeking a development agreement for a term of 10 years. The applications are currently undergoing separate CEQA reviews. Combined, the development agreement applications seek to vest approximately 12 acres of indoor and mixed-light cultivation canopy on nine sites that total 408 acres countywide. The maximum combined developed area of these applications totals 1,011,824 sq. ft as summarized in Table 2-2. Spatially, these applications are clustered in the west, central, and northwest areas of the County as shown in Exhibit 2-3. The reader is referred to Chapter 2, “Description of Preferred Alternative and Equal Weight Alternatives,” for a detailed description of process that lead to these nine projects.

At the time of this analysis none of the nine development agreement applications have been approved. These projects are summarized in Table 2-2. Eight of the sites are already included within the 78 existing and eligible sites that comprise Alternative 1, and are also assumed in Alternatives 2 through 5. The Dark Heart application is not currently located at an existing or eligible cultivation site. Were the nine development agreement applications to be approved in advance of the CLUO being in effect, the key differences would be as follows:

- Approval of the development agreement applications would result in two commercial nurseries and one commercial processing operation. Alternative 1 assumes cannabis cultivation only with no commercial nurseries or processing, except ancillary to the cultivation for on-site product only.
- Cultivation covered under the development agreement applications cannot occur outdoors, meaning such activities would be moved into buildings or greenhouses.
- Activities covered under the development agreement applications would not be covered by the CLUO regulations, though the rigors of the early application process, although different, were developed with the intention of ensuring protections similar to and as rigorous, as the draft CLUO.

4.1.3 Cumulative Impact Analysis

The following sections contain a discussion of the cumulative effects anticipated from implementation of the CLUO, together with planned land use activities in the County, and including the nine development agreement projects, for each of the environmental issue areas evaluated in this draft EIR.

When considered in relation to other reasonably foreseeable projects, cumulative impacts on some resources would be significant and more severe than those caused by the project alone.

For purposes of this EIR, the project would result in a significant cumulative effect if:

- the cumulative effects of related projects and land use activities (past, current, and probable future projects) are not significant but the incremental impact of implementing the CLUO under any of the five alternatives is substantial enough, when added to the cumulative effects of related projects, to result in a cumulatively significant impact; or
- the cumulative effects of related projects and land use activities (past, current, and probable future projects) are already significant and implementation of the CLUO under any of the five alternatives makes a considerable contribution to the effect.

This cumulative analysis assumes that commercial cannabis operations that may occur under each of the five alternatives comply with state and County cannabis regulations and all mitigation measures identified in Sections 3.1 through 3.15 are adopted and implemented. The analysis herein analyzes whether, after implementation of project-specific mitigation and performance criteria that minimize environmental effects, the residual impacts of the project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects. Where the project would so contribute, additional mitigation is recommended where feasible.

IMPACT CUM-1: CONTRIBUTION TO CUMULATIVE AESTHETIC IMPACTS

Visual quality and scenic resources are generally site-specific and/or localized, and not cumulative in nature. For example, the creation of glare or physical alteration of a site at one location is not generally worsened by these conditions occurring at another location in a different part of the County. Based on the analysis provided in Section 3.1, "Aesthetics," this cumulative impact analysis focuses on whether impacts described under AES-1 through AES-4 would be worsened under cumulative conditions including implementation of planned land use activities under the General Plan and the nine development agreement projects.

While the General Plan EIR did identify significant and unavoidable visual character, glare, and nighttime lighting impacts from planned growth, no significant cumulative impacts were identified because the planned growth would be concentrated near adjacent communities and would not affect regional visual and scenic resources (Yolo County 2009).

The development agreement projects include locations along the scenic SR 16 and Cache Creek viewshed would convert existing outdoor cannabis cultivation to indoor and mixed-light cultivation, as well as any ancillary processing facilities, that would involve construction of greenhouses and buildings. These project would also contribute to alteration of visual character.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel developed with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas of parcels developed with residences. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. As described in Impact AES-1 and AES-4, these activities would be required to be outside of front yard and side yard setback areas. CLUO Section 8-2.1408(GG) requires that personal outdoor cultivation not be visible from public rights-of-way.

As described further below, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would result in a cumulatively considerable contribution to cumulative aesthetic impacts related to visual character.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

As described in Impact AES-1 through AES-4, Alternative 1 assumes continued operation of the 78 existing and eligible cannabis cultivation sites that currently exist in the County. Impacts to scenic vistas/viewsheds (Impact AES-1), scenic resources along scenic highways (Impact AES-2), and impacts related to light and glare (Impact AES-4) would be less than significant under cumulative conditions because existing and relocated cultivation sites would be subject to proposed CLUO standards. These include regulation of aesthetic concerns by requiring maintenance of the cultivation site and surrounding land area (Sections 8-2.1408[B] and [PP]), buildings and structures designed to be compatible with the character and scale of what is allowed in the applicable zone (Section 8-2.1408[F]), screening of outdoor cultivation from public rights-of-way (Section 8-2.1408[KK]), preservation of on-site trees (Section 8-2.1408[RR]), restoration of closed cultivation sites (Section 8-2.1412[C]), use of nonreflective building materials (Sections 8-2.1408[F] and [OO]), prohibition of lighting of hoop houses (Section 8-2.1408[X]), and standards that include shielding of exterior lighting and containment of mixed-light and indoor cultivation lighting within buildings to avoid off-site impacts (Section 8-2.1408[Z]).

The General Plan EIR evaluated the continued use of agricultural land for a variety of agricultural uses including new non-traditional crops encouraged by policies in the General Plan. The project's contribution to cumulative aesthetic impacts related to Impacts AES-1, 2, and 4, would not be greater than those evaluated in the General Plan EIR and **would not be cumulatively considerable** under Alternative 1.

However, for cumulative impacts related to visual character (Impact AES-3), the potential for impact is conservatively considered **cumulatively considerable and significant**. While implementation of the CLUO would regulate visual characteristics of existing and relocated cannabis sites and reduce the likelihood of adverse aesthetic contrast with adjacent rural and agricultural areas. Nevertheless, aesthetic impacts related to visual character are subjective, and cannabis uses have distinctly recognizable visual characteristics as compared to other traditional forms of agriculture in the County. Therefore, implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would conservatively result in cumulatively considerable contributions to cumulative visual character impacts. See Section 4.2, "Overconcentration," for analysis of potential aesthetic impacts due to clustering of cannabis uses within smaller areas of the County.

Alternative 2: All License Types with Moderate Limits

As described in Impact AES-1 through AES-4, Alternative 2 assumes the development of 54 new cannabis uses on 164 acres that would be located in the County primarily on agricultural zoned lands. Impacts to scenic vistas/viewsheds (Impact AES-1), scenic resources along scenic highways (Impact AES-2), and impacts related to light and glare (Impact AES-4) would be less than significant under cumulative conditions because all cannabis uses would be subject to CLUO standards that include regulation of aesthetic

conditions and visual character at cultivation sites through new regulations described above under Alternative 1. Cannabis uses would consist of field crops, structures, and associated improvements that would be generally visually similar to other allowed uses in the same land use designations throughout the County and would only occur on lands designated for similar land uses in the General Plan and Zoning Regulations. For example, outdoor cannabis cultivation is an outdoor agricultural use that would occur on lands designated Agriculture. Cannabis retail uses would be restricted to land designated for similar commercial uses, cannabis manufacturing activities would be restricted to land designated for similar industrial or agricultural industrial activities, etc. In addition, the proposed CLUO imposes a discretionary conditional use permit process that requires a site-specific, project-specific assessment of each proposed cannabis use for compliance and suitability.

Thus, the project's contribution to cumulative aesthetic impacts related to Impacts AES-1, 2, and 4, would not be greater than those evaluated in the General Plan EIR, and **would not be cumulatively considerable** under Alternative 2.

However, for cumulative impacts related to visual character (Impact AES-3), the potential for impact is conservatively considered **cumulatively considerable and significant**. While implementation of the CLUO would regulate visual characteristics of existing and relocated cannabis sites and reduce the likelihood of adverse aesthetic contrast with adjacent rural and agricultural areas. Nevertheless, aesthetic impacts related to visual character are subjective, and cannabis uses have distinctly recognizable visual characteristics as compared to other traditional forms of agriculture in the County. Therefore, implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would conservatively result in cumulatively considerable contributions to cumulative visual character impacts. See Section 4.2, "Overconcentration," for analysis of potential aesthetic impacts due to clustering of cannabis uses within smaller areas of the County.

Alternative 3: All License Types with High Limits

As described in Impact AES-1 through AES-4, Alternative 3 assumes the development of 186 new cannabis uses on 379 acres that would be located in the County primarily on agricultural zoned lands. Impacts to scenic vistas/viewsheds (Impact AES-1), scenic resources along scenic highways (Impact AES-2), and impacts related to light and glare (Impact AES-4) would be less than significant under cumulative conditions because all cannabis uses would be subject to CLUO standards that include regulation of aesthetic conditions and visual character at cultivation sites through new regulations described above under Alternative 2. Alternative 3's contribution to cumulative impacts to scenic viewsheds and lighting would be similar to impacts identified above for Alternative 2.

Thus, the project's contribution to cumulative aesthetic impacts related to Impacts AES-1, 2, and 4, would not be greater than those evaluated in the General Plan EIR, and **would not be cumulatively considerable** under Alternative 3.

However, for cumulative impacts related to visual character (Impact AES-3), the potential for impact is conservatively considered **cumulatively considerable and significant**. While implementation of the CLUO would regulate visual characteristics of existing and relocated cannabis sites and reduce the likelihood of adverse aesthetic contrast with adjacent rural and agricultural areas. Nevertheless, aesthetic impacts related to visual character are subjective, and cannabis uses have distinctly recognizable visual characteristics as compared to other traditional forms of agriculture in the County. Therefore, implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would conservatively result in cumulatively considerable contributions to cumulative visual character impacts. See Section 4.2, "Overconcentration," for analysis of potential aesthetic impacts due to clustering of cannabis uses within smaller areas of the County.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

As described in Impact AES-1 through AES-4, Alternative 4 assumes the development of 54 new cannabis uses on 122 acres that would be located in the County primarily on agricultural zoned lands. Impacts to scenic vistas/viewsheds (Impact AES-1), scenic resources along scenic highways (Impact AES-2), and

impacts related to light and glare (Impact AES-4) would be less than significant under cumulative conditions because all cannabis uses would be subject to CLUO standards that include regulation of aesthetic conditions and visual character at cultivation sites through new regulations described above under Alternative 2. Alternative 4's contribution to cumulative impacts to scenic viewsheds and lighting would be similar to impacts identified above for Alternative 2 (though no outdoor cultivation would occur under this alternative).

Thus, the project's contribution to cumulative aesthetic impacts related to Impacts AES-1, 2, and 4, would not be greater than those evaluated in the General Plan EIR, and **would not be cumulatively considerable** under Alternative 4.

However, for cumulative impacts related to visual character (Impact AES-3), the potential for impact is conservatively considered **cumulatively considerable and significant**. While implementation of the CLUO would regulate visual characteristics of existing and relocated cannabis sites and reduce the likelihood of adverse aesthetic contrast with adjacent rural and agricultural areas. Nevertheless, aesthetic impacts related to visual character are subjective, and cannabis uses have distinctly recognizable visual characteristics as compared to other traditional forms of agriculture in the County. Therefore, implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would conservatively result in cumulatively considerable contributions to cumulative visual character impacts. See Section 4.2, "Overconcentration," for analysis of potential aesthetic impacts due to clustering of cannabis uses within smaller areas of the County.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

As described in Impact AES-1 through AES-4, Alternative 5 assumes the development of 52 new cannabis uses on 163 acres that would be located in the County on agricultural zoned lands. Impacts to scenic vistas/viewsheds (Impact AES-1), scenic resources along scenic highways (Impact AES-2), and impacts related to light and glare (Impact AES-4) would be less than significant under cumulative conditions because all cannabis uses would be subject to CLUO standards that include regulation of aesthetic conditions and visual character at cultivation sites through new regulations described above under Alternative 2. Alternative 5's contribution to cumulative impacts to scenic viewsheds and lighting would be similar to impacts identified above for Alternative 2.

Thus, the project's contribution to cumulative aesthetic impacts related to Impacts AES-1, 2, and 4, would not be greater than those evaluated in the General Plan EIR, and **would not be cumulatively considerable** under Alternative 5.

However, for cumulative impacts related to visual character (Impact AES-3), the potential for impact is conservatively considered **cumulatively considerable and significant**. While implementation of the CLUO would regulate visual characteristics of existing and relocated cannabis sites and reduce the likelihood of adverse aesthetic contrast with adjacent rural and agricultural areas. Nevertheless, aesthetic impacts related to visual character are subjective, and cannabis uses have distinctly recognizable visual characteristics as compared to other traditional forms of agriculture in the County. Therefore, implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would conservatively result in cumulatively considerable contributions to cumulative visual character impacts. See Section 4.2, "Overconcentration," for analysis of potential aesthetic impacts due to clustering of cannabis uses within smaller areas of the County.

Mitigation Measures

As described above, the proposed CLUO contains requirements that would regulate the overall visual quality of cannabis operations including the appearance of buildings and structures, and general maintenance of the sites. There are no other known feasible measures that would offset cumulative aesthetic impacts that are not already include in the CLUO and/or in the five alternatives under consideration.

Notwithstanding implementation of these measures and other identified existing and proposed regulations, the potential for aesthetics impacts to occur is conservatively identified as **cumulatively considerable and significant and unavoidable** because aesthetic impacts are subjective, and cannabis uses have distinctly recognizable visual characteristics as compared to other traditional forms of agriculture in the County.

IMPACT CUM-2: CONTRIBUTION TO CUMULATIVE AGRICULTURAL RESOURCE IMPACTS

The cumulative setting for agricultural resources consists of the entire County. A defining characteristic of Yolo County is its agricultural setting, which comprises over 80 percent of the total land area in the County. The General Plan designates approximately 545,00 acres (of over 654,000 total acres) of land in Yolo County for agricultural use. Agriculture in Yolo County is varied and includes farms of all sizes, as well as equestrian, ranching, and other related uses. The top three agricultural commodities, by dollar value, produced in Yolo County in 2017 were almonds, tomatoes, and wine grapes. These top three commodities accounted for approximately 45 percent of the County's total gross valuation (\$635,246,000) for all agricultural commodities produced in 2017 (Yolo County Agricultural Commissioner 2018).

Since 2006, there has been a decline in the acreage of farmland, including prime farmland, unique farmland, and/or farmland of statewide importance, compared to nonagricultural uses in the region. There were approximately 540,000 acres of agricultural land in Yolo County in 2006. Between 2006 and 2016, approximately 7,700 acres of farmland (including grazing land) were converted to nonagricultural uses, an approximately 1.4 percent decline in available farmland over that period (California Department of Conservation 2017). This number includes conversion to habitat by other local, state and federal agencies outside of the County's jurisdiction. Conversion to urban uses does occur in Yolo County but to a minimal extent. Utilization of agricultural land for designated agricultural support uses such as barns, agricultural processing facilities, and other uses described in the General Plan as allowed in the Agriculture land use designation is not considered conversion as these uses have been identified by the County as necessary infrastructure and support facilities to maintain the viability of the agricultural economic sector. The conversion of agricultural land to non-agricultural uses would be considered a cumulatively considerable contribution to farmland impacts within Yolo County.

The General Plan EIR identified significant and unavoidable cumulative impacts for the loss of agricultural land from implementation of planned land use activities (Yolo County 2009). The nine development agreements projects would involve cannabis cultivation and supporting uses and would not contribute to cumulative agricultural resource impacts.

Pursuant to California Health and Safety Code Section 11362.777(a) and Business and Profession Code Section 26067(a), the state has defined medical and adult-use cannabis as agricultural products. CLUO Section 8-2.1404(E) identifies that cannabis cultivation and related activities are agricultural land uses.

As described in Section 2.2.1, "Summary of Cannabis Cultivation and Commerce Processes," of Chapter 2, "Description of Preferred Alternative and Equal Weight Alternatives," the cultivation and commerce process for cannabis involves the same practices as other agricultural products generated currently in the County. These similar practices include:

- cultivation of the crop through a growth medium (soil), light, water, and nutrients;
- harvesting and processing of the crop for sale;
- industrial activities that create products from the crop; and
- sales of crop and/or products created from the crop.

The CLUO would add Article 14 to Title 8, Chapter 2, of the Zoning Regulations within the Yolo County Code. It would regulate all cannabis operations within the unincorporated area of the County. Specific land use requirements and development performance standards are included in the Proposed Ordinance that address agriculture operation-related issues and would not conflict with existing agricultural zoning, Williamson Act contracts, or other agricultural operations. Thus, adoption and implementation of the CLUO,

including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would not result in a cumulatively considerable contribution to cumulative impacts related to the loss of agricultural resources in the County. This conclusion applies to all alternatives.

IMPACT CUM-3: CONTRIBUTION TO CUMULATIVE AIR QUALITY AND ODOR IMPACTS

The cumulative setting for air quality is the Sacramento Valley Air Basin (SVAB). The SVAB includes all of Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo, and Yuba Counties; the western portion of Placer County; and the eastern portion of Solano County. The cumulative setting for odor is generally site-specific and/or a larger localized area based on the site, the proposed cannabis operation, topography, meteorology, and other relevant conditions.

The Yolo-Solano Air Quality Management District (YSAQMD) regulates air pollutant point sources in the SVAB. The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by the sources of air pollutants and the atmosphere's ability to transport and dilute such emissions. As described in Section 3.3, "Air Quality and Odors," Yolo County is nonattainment for ozone and respirable particulate matter (PM₁₀) with respect to the California Ambient Air Quality Standards (CAAQS) and is in nonattainment for ozone and fine particulate matter (PM_{2.5}) with respect to the National Ambient Air Quality Standards. Therefore, NO_x, ROG (ozone precursors), and PM emissions from cumulative conditions are significant in the air basin.

According to YSAQMD's CEQA Handbook, projects that are not consistent with the Air Quality Attainment Plan, State Implementation Plan, or whose emissions exceed YSAQMD's thresholds would have a significant cumulative impact (YSAQMD 2007:23). For the attainment and maintenance of ozone, in July 2016, YSAQMD adopted its 2016 Triennial Plan Update which examined air quality conditions and documents efforts made by YSAQMD to improve air quality (YSAQMD 2016c). In addition, as a part of the Sacramento federal ozone nonattainment area, YSAQMD works with the Sacramento Metropolitan Air Quality Management District to develop a regional air quality management plan under CAA requirements. The 2017 Sacramento Regional 2008 8-Hour Ozone Attainment and Further Reasonable Progress Plan was approved by the California Air Resources Board on November 16, 2017 (CARB 2017).

Toxic air contaminants and carbon monoxide are also localized impacts. As discussed in Section 3.0, "Approach to the Environmental Analysis," implementation of the CLUO is expected to have no impact.

The General Plan EIR identified significant and unavoidable cumulative impacts for ozone and particulate matter from implementation of planned land use activities (Yolo County 2009). Other air quality and odor impacts were identified as less than significant.

The nine development agreements projects would convert existing outdoor cannabis cultivation to indoor and mixed-light cultivation as well as new processing and nursery facilities that would involve construction of greenhouses and buildings that would contribute to air pollutant emissions during construction as well as odor impacts. Operational emissions would be similar to existing cannabis operations occurring on these sites as well as existing agricultural uses that are replaced by expanded cannabis uses.

Section 3.3, "Air Quality and Odor" identifies odor impacts as generally localized effects that are affected by many variables including topography and meteorology. The CLUO would establish odor control regulations that require odor management and set thresholds for acceptable vs nuisance odor. Odors must be controlled at the property line to a dilution-to-threshold ratio (D/T) of seven parts clean or filtered air to one part odorous air (7 D/T) or less. The proposed CLUO requires the development of an Odor Control Plan (CLUO Section 8-2.1410[D][2]) for each operation and identifies a process of corrective actions for nuisance odor conditions (CLUO Section 8-2.1408[CC] and 8-2.1408[DD]). Notwithstanding the implementation of these regulations, the potential for impacts to occur is conservatively identified as significant and unavoidable because:

- Cannabis remains a controversial activity.
- Some neighbors have expressed that they are very sensitive to the odor and find it to be highly objectionable.
- The proposed regulatory threshold is not zero-detect which means that some odor will be detectable and will be considered acceptable under the regulations.
- Odor exceedances in excess of the allowable level may be higher in early years as the industry and technology evolve despite the fact that enforcement will occur under the ordinance.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. As described in Impact AQ-1 and AQ-2, criteria air pollutant and precursor emissions generated from this ancillary use of the parcel would not exceed YSAQMD thresholds and would not result in air quality impacts that could contribute to cumulative impacts.

As described further below, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would not result in a cumulatively considerable contribution to cumulative air quality impacts but would conservatively result in cumulatively considerable contributions to cumulative odor impacts.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Alternative 1 is assumed to result in construction-generated emissions of ROG, NO_x, PM₁₀, and PM_{2.5} from the relocation of cannabis cultivation sites as described in Impact AQ-2. Construction emissions associated with relocated sites were quantified and are shown in Table 4-2 by license type. To be conservative, it was assumed that construction of all relocated sites could be constructed simultaneously.

Table 4-2 Cumulative Construction-Generated Emissions of Criteria Air Pollutants and Precursors for Relocated Cultivation Sites – Alternative 1 (2020)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Cultivation				
Outdoor	3.4	5.8	54	30
Mixed-Light	9.2	9.1	87	44
Total	12.6	15.0	141	74

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.

Relocated cultivation sites were based on County GIS data.

For analysis purposes, it was assumed that no new indoor cultivation sites would be constructed.

Source: Modeling conducted by Ascent Environmental in 2019

As discussed under Impact AQ-2, all individual sites that are permitted under the CLUO would be required to control dust emissions in accordance with YSAQMD's rules, as described in Section 8-2.1408(L).

YSAQMD's 2016 Triennial Assessment and Plan Update includes three measures to reduce ozone emissions through the regulation of architectural coatings, printing processes for graphic arts, and process boilers. Architectural coatings are the only source of ozone precursors associated with construction. All architectural coatings applied to cannabis sites would be required to comply with YSAQMD regulations for VOC content.

Thus, the project construction activities would not conflict with the 2016 Triennial Assessment and Plan Update that aims to reduce ozone precursor emissions.

Emissions of criteria air pollutants and ozone precursors associated with operation are shown by license type in Table 4-3. Table 4-3 also provides total emissions for Alternative 1 that assumes all existing and eligible cultivation sites are in operation at the same time.

Table 4-3 Cumulative Operational Emissions of Criteria Air Pollutants and Precursors – Alternative 1 (2020)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Cultivation				
Outdoor	13.4	4.9	3	2
Mixed-Light	7.0	1.3	1	1
Indoor	0.4	0.1	<1	<1
Total	20.9	6.3	3	3

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

As discussed under Impact AQ-3, cultivation sites are required to generate 50 percent of their energy demand from renewable sources under the CLUO Section 8-2.1408(O). Sections 8-2.1408(K) and 8-2.1408(L) of the CLUO would reduce dust emissions and would require compliance with YSAQMD rules. Section 8-2.1408(T) of the CLUO requires compliance of generators with YSAQMD and CCR Section 8306.

YSAQMD's 2016 Triennial Assessment and Plan Update includes three measures to reduce ozone emissions through the regulation of architectural coatings, printing processes for graphic arts, and process boilers. There is no anticipated graphic art printing associated with cannabis sites, nor are process boilers anticipated to be used at cultivation sites. Thus, the project operation would not conflict with the 2016 Triennial Assessment and Plan Update that aims to reduce ozone precursor emissions.

Because there is no increase in VMT associated with Alternative 1 (see Section 3.14, "Transportation and Circulation," for further discussion of VMT), implementation of the project would not conflict with transportation control measures outlined in the Sacramento Regional Ozone Attainment and Reasonable Further Progress Plan.

Cannabis cultivation operations are considered agricultural uses. The General Plan EIR air quality analysis considered continued agricultural operations in the County in addition to planned growth. Alternative 1 air pollutant emissions would not be greater than those evaluated in the General Plan EIR and **would not be cumulatively considerable**.

Alternative 2: All License Types with Moderate Limits

Based on the assumptions for Alternative 2, construction emissions associated with relocated sites were quantified and are shown in Table 4-4 by cannabis use type. To be conservative, it was assumed that construction of all cannabis uses could be constructed simultaneously.

Table 4-4 Cumulative Construction-Generated Emissions of Criteria Air Pollutants and Precursors – Alternative 2 (2021)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Cultivation				
Outdoor	12.6	21.9	201	112
Mixed-Light	10.1	10.1	96	49
<i>Cultivation Total</i>	22.7	32.0	297	161
Noncultivation				
Nurseries	5.6	5.6	102	60
Processing	0.4	1.8	7	4
Manufacturing	1.1	7.0	27	18
Testing	0.3	2.4	7	5
Distribution	0.4	3.4	13	9
Retail	0.1	0.7	3	2
Microbusiness	0.2	1.7	7	4
<i>Noncultivation Total</i>	8.2	22.6	165	102
Total	30.9	54.6	462	263

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.

Totals may not sum exactly due to rounding.

For analysis purposes, it was assumed that no new indoor cultivation sites would be constructed.

Source: Modeling conducted by Ascent Environmental in 2019

As discussed under Impact AQ-2, all individual sites that are permitted under the CLUO would be required to control dust emissions in accordance with YSAQMD's rules, as described in Section 8-2.140(L).

Implementation of these required dust control measures are included in the emissions modeling shown in Table 4-4.

YSAQMD's 2016 Triennial Assessment and Plan Update includes three measures to reduce ozone emissions through the regulation of architectural coatings, printing processes for graphic arts, and process boilers. Architectural coatings are the only source of ozone precursors associated with construction. All architectural coatings applied to cannabis sites would be required to comply with YSAQMD regulations for VOC content. Thus, the project construction activities would not conflict with the 2016 Triennial Assessment and Plan Update that aims to reduce ozone precursor emissions.

Emissions of criteria air pollutants and ozone precursors associated with operation are shown by license type in Table 4-5. Table 4-5 also provides total emissions for Alternative 2 that assumes all cannabis sites are in operation at the same time.

As discussed under Impact AQ-3, cannabis uses are required to generate 50 percent of their energy demand from renewable sources under the CLUO Section 8-2.1408(O). Sections 8-2.1408(K) and 8-2.1408(L) of the CLUO would reduce dust emissions and would require compliance with YSAQMD rules. Section 8-2.1408(T) of the CLUO requires compliance of generators with YSAQMD and CCR Section 8306.

YSAQMD's 2016 Triennial Assessment and Plan Update includes three measures to reduce ozone emissions through the regulation of architectural coatings, printing processes for graphic arts, and process boilers. There is no anticipated graphic art printing associated with cannabis sites, nor are process boilers

anticipated to be used at cultivation nor noncultivation sites. Thus, the project operation would not conflict with the 2016 Triennial Assessment and Plan Update that aims to reduce ozone precursor emissions.

Table 4-5 Cumulative Operational Emissions of Criteria Air Pollutants and Precursors – Alternative 2 (2022)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Cultivation				
Outdoor	13.6	4.9	3	3
Mixed-Light	7.6	1.4	1	9
Indoor	0.4	0.1	0	0
<i>Cultivation Total</i>	21.6	6.4	3	3
Noncultivation				
Nurseries	3.3	0.5	<1	<1
Processing	7.6	1.4	<1	<1
Manufacturing	0.4	1.6	1	1
Testing	0.1	0.4	<1	<1
Distribution	0.1	0.8	<1	<1
Retail	<1	0.2	<1	<1
Microbusiness	0.1	0.4	<1	<1
<i>Noncultivation Total</i>	4.3	4.2	2	2
Total	25.9	10.6	6	5
Notes: ROG = reactive organic gases; NO _x = oxides of nitrogen; PM ₁₀ = respirable particulate matter; PM _{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.				
Totals may not sum exactly due to rounding.				
Source: Modeling conducted by Ascent Environmental in 2019				

There are no land use conversions associated with implementation of the proposed CLUO and associated cannabis uses that are not already covered in the General Plan EIR. Outdoor cultivation would occur on agricultural land similar to other agricultural crops. Cannabis manufacturing would be restricted to land designated Agricultural Industrial or Industrial land uses. Cannabis retail would be limited to land designated Commercial and Industrial, etc. Therefore, VMT would not change from what could result under existing planned conditions as analyzed in the General Plan EIR. Because there is no increase in VMT associated with Alternative 2 (see Section 3.14, “Transportation and Circulation,” for further discussion of VMT), implementation of the project would not conflict with transportation control measures outlined in the Sacramento Regional Ozone Attainment and Reasonable Further Progress Plan.

Cannabis operations are considered agricultural uses. The General Plan EIR air quality analysis considered continued agricultural operations in the County in addition to planned growth. Alternative 2 air pollutant emissions would not be greater than those evaluated in the General Plan EIR and **would not be cumulatively considerable**.

Alternative 3: All License Types with High Limits

Based on the assumptions for Alternative 3, construction emissions associated with relocated sites were quantified and are shown in Table 4-6 by cannabis use type. To be conservative, it was assumed that development of all cannabis uses would be constructed over two years.

Table 4-6 Cumulative Construction-Generated Emissions of Criteria Air Pollutants and Precursors – Alternative 3 (2021-2022)

Cannabis Use	ROG (tons/year)		NO _x (tons/year)		PM ₁₀ (lb/day)		PM _{2.5} (lb/day)	
	2021	2022	2021	2022	2021	2022	2021	2022
Cultivation								
Outdoor	9.8	20.8	17.1	36.3	157	333	87	185
Mixed-Light	7.1	15.0	7.0	14.9	67	142	34	72
Indoor	0.4	0.8	0.7	1.5	6	14	4	9
<i>Cultivation Total</i>	<i>17.2</i>	<i>36.7</i>	<i>24.8</i>	<i>52.7</i>	<i>230</i>	<i>489</i>	<i>125</i>	<i>267</i>
Noncultivation								
Nurseries	3.5	7.6	3.6	7.6	65	139	38	81
Processing	0.3	0.6	1.1	2.4	4	9	3	6
Manufacturing	0.7	1.5	4.5	9.5	17	36	11	23
Testing	0.2	0.5	1.5	3.3	4	9	3	6
Distribution	0.3	0.6	2.2	4.7	9	18	5	11
Retail	0.1	0.1	0.4	1.0	2	4	1	2
Microbusiness	0.2	0.3	1.1	2.4	4	9	3	6
<i>Noncultivation Total</i>	<i>5.3</i>	<i>11.2</i>	<i>14.5</i>	<i>30.8</i>	<i>106</i>	<i>225</i>	<i>63</i>	<i>134</i>
Total	22.5	47.9	39.2	83.5	335	714	190	406

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.

Source: Modeling conducted by Ascent Environmental in 2019

As discussed under Alternative 2, all individual sites that are permitted under the CLUO would be required to control dust emissions in accordance with YSAQMD's rules, as described in Section 8-2.140(L). Implementation of these required dust control measures are included in the emissions modeling shown in Table 4-6. Cannabis uses would also be required with YSAQMD regulations for VOC content. Thus, the project construction activities would not conflict with the 2016 Triennial Assessment and Plan Update that aims to reduce ozone precursor emissions.

Emissions of criteria air pollutants and ozone precursors associated with operation are shown by license type in Table 4-7. Table 4-7 also provides total emissions for Alternative 3 that assumes all cannabis sites are in operation at the same time.

As discussed in Alternative 2, cannabis uses are required to generate 50 percent of their energy demand from renewable sources under the CLUO Section 8-2.1408(O). Sections 8-2.1408(K) and 8-2.1408(L) of the CLUO would reduce dust emissions and would require compliance with YSAQMD rules. Section 8-2.1408(T) of the CLUO requires compliance of generators with YSAQMD and CCR Section 8306. VMT would not change from what could result under existing planned conditions as analyzed in the General Plan EIR.

Cannabis operations are considered agricultural uses. The General Plan EIR air quality analysis considered continued agricultural operations in the County in addition to planned growth. Alternative 3 air pollutant emissions would not be greater than those evaluated in the General Plan EIR and **would not be cumulatively considerable**.

Table 4-7 Cumulative Operational Emissions of Criteria Air Pollutants and Precursors – Alternative 3 (2023)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Cultivation				
Outdoor	27.3	9.9	5	5
Mixed-Light	14.6	2.8	1	1
Indoor	1.1	0.1	<1	<1
<i>Cultivation Total</i>	42.9	12.8	7	6
Noncultivation				
Nurseries	6.6	1.0	<1	<1
Processing	0.4	0.8	<1	<1
Manufacturing	0.9	3.1	2	2
Testing	0.2	0.8	<1	<1
Distribution	0.3	1.5	1	1
Retail	0.1	0.3	<1	<1
Microbusiness	0.2	0.8	<1	<1
<i>Noncultivation Total</i>	8.6	8.4	4	4
Total	51.5	21.2	11	10

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Based on the assumptions for Alternative 4, construction emissions associated with relocated sites were quantified and are shown in Table 4-8 by cannabis use type. To be conservative, it was assumed that development of all cannabis uses would be constructed at the same time, including assumed conversion of outdoor cultivation sites to mixed-light or indoor cultivation operations with the construction of greenhouses or indoor buildings.

Table 4-8 Cumulative Construction-Generated Emissions of Criteria Air Pollutants and Precursors – Alternative 4 (2021)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Cultivation				
Mixed Light	59.9	59.4	566	288
Indoor	5.0	8.8	81	54
<i>Cultivation Total</i>	64.8	68.2	647	341
Noncultivation				
Nurseries	5.6	5.6	102	60
Processing	0.4	1.8	7	4
Manufacturing	1.1	7.0	27	18
Testing	0.3	2.4	7	5
Distribution	0.4	3.4	13	9

Table 4-8 Cumulative Construction-Generated Emissions of Criteria Air Pollutants and Precursors – Alternative 4 (2021)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Retail	0.1	0.7	3	2
Microbusiness	0.2	1.7	7	4
<i>Noncultivation Total</i>	8.2	22.6	165	102
Total	73.1	90.9	812	443

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

As discussed under Alternative 2, all individual sites that are permitted under the CLUO would be required to control dust emissions in accordance with YSAQMD's rules, as described in Section 8-2.140(L). Implementation of these required dust control measures are included in the emissions modeling shown in Table 4-8. Cannabis uses would also be required with YSAQMD regulations for VOC content. Thus, the project construction activities would not conflict with the 2016 Triennial Assessment and Plan Update that aims to reduce ozone precursor emissions.

Emissions of criteria air pollutants and ozone precursors associated with operation are shown by license type in Table 4-9. Table 4-9 also provides total emissions for Alternative 4 that assumes all cannabis sites are in operation at the same time.

Table 4-9 Cumulative Operational Emissions of Criteria Air Pollutants and Precursors – Alternative 4 (2022)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Cultivation				
Mixed-Light	36.7	7.0	3	3
Indoor	2.5	0.3	<1	<1
<i>Cultivation Total</i>	39.3	7.4	3	3
Noncultivation				
Nurseries	3.3	0.5	<1	<1
Processing	0.2	0.4	<1	<1
Manufacturing	0.4	1.6	1	1
Testing	0.1	0.8	<1	<1
Distribution	0.1	0.8	<1	<1
Retail	<0.1	0.2	<1	<1
Microbusiness	0.1	0.4	<1	<1
<i>Noncultivation Total</i>	4.3	4.2	2	2
Total	43.6	11.5	5	5

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

As discussed in Alternative 2, cannabis uses are required to generate 50 percent of their energy demand from renewable sources under the CLUO Section 8-2.1408(O). Sections 8-2.1408(K) and 8-2.1408(L) of the CLUO would reduce dust emissions and would require compliance with YSAQMD rules. Section 8-2.1408(T) of the CLUO requires compliance of generators with YSAQMD and CCR Section 8306. VMT would not change from what could result under existing planned conditions as analyzed in the General Plan EIR.

Cannabis operations are considered agricultural uses. The General Plan EIR air quality analysis considered continued agricultural operations in the County in addition to planned growth. Alternative 4 air pollutant emissions would not be greater than those evaluated in the General Plan EIR and **would not be cumulatively considerable**.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

Based on the assumptions for Alternative 5, construction emissions associated with relocated sites were quantified and are shown in Table 4-10 by cannabis use type. To be conservative, it was assumed that construction of all cannabis uses would be constructed at the same time.

Table 4-10 Cumulative Construction-Generated Emissions of Criteria Air Pollutants and Precursors – Alternative 5 (2021)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Cultivation				
Outdoor	12.6	21.9	201	112
Mixed-Light	10.1	10.1	96	49
<i>Cultivation Total</i>	<i>22.7</i>	<i>32.0</i>	<i>297</i>	<i>161</i>
Noncultivation				
Nurseries	5.6	5.6	102	60
Processing	0.4	1.8	7	4
Manufacturing	1.1	7.0	27	18
Testing	0.3	2.4	7	5
Distribution	0.4	3.4	13	9
Microbusiness	0.2	1.7	7	4
<i>Noncultivation Total</i>	<i>8.1</i>	<i>21.9</i>	<i>162</i>	<i>100</i>
Total	30.8	53.9	459	261

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.

For analysis purposes, it was assumed that no new indoor cultivation sites would be constructed.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

As discussed under Alternative 2, all individual sites that are permitted under the CLUO would be required to control dust emissions in accordance with YSAQMD's rules, as described in Section 8-2.140(L). Implementation of these required dust control measures are included in the emissions modeling shown in Table 4-10. Cannabis uses would also be required with YSAQMD regulations for VOC content. Thus, the project construction activities would not conflict with the 2016 Triennial Assessment and Plan Update that aims to reduce ozone precursor emissions.

Emissions of criteria air pollutants and ozone precursors associated with operation are shown by license type in Table 4-11. Table 4-11 also provides total emissions for Alternative 5 that assumes all cannabis sites are in operation at the same time.

Table 4-11 Cumulative Operational Emissions of Criteria Air Pollutants and Precursors – Alternative 5 (2022)

Cannabis Use	ROG (tons/year)	NO _x (tons/year)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Cultivation				
Outdoor	13.6	4.9	3	3
Mixed-Light	7.6	1.4	1	1
Indoor	0.4	0.1	<1	<1
<i>Cultivation Total</i>	21.6	6.4	3	3
Noncultivation				
Nurseries	3.3	0.5	<1	<1
Processing	0.2	0.4	<1	<1
Manufacturing	0.4	1.6	1	1
Testing	0.1	0.4	<1	<1
Distribution	0.1	0.8	<1	<1
Microbusiness	0.1	0.4	<1	<1
<i>Noncultivation Total</i>	4.3	4.0	2	2
Total	25.9	10.5	5	5

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; N/A = not applicable.

Totals may not sum exactly due to rounding.

Source: Modeling conducted by Ascent Environmental in 2019

As discussed in Alternative 2, cannabis uses are required to generate 50 percent of their energy demand from renewable sources under the CLUO Section 8-2.1408(O). Sections 8-2.1408(K) and 8-2.1408(L) of the CLUO would reduce dust emissions and would require compliance with YSAQMD rules. Section 8-2.1408(T) of the CLUO requires compliance of generators with YSAQMD and CCR Section 8306. VMT would not change from what could result under existing planned conditions as analyzed in the General Plan EIR.

Cannabis operations are considered agricultural uses. The General Plan EIR air quality analysis considered continued agricultural operations in the County in addition to planned growth. Alternative 5 air pollutant emissions would not be greater than those evaluated in the General Plan EIR and **would not be cumulatively considerable**.

Odor Impacts - Alternatives 1 through 5

Odors with distinct odor characteristics, emanating from proximate sources, are generally not additive or amplified. However, odor with the same or similar odor characteristics, emanating from proximate sources may be additive. Therefore, multiple odor sources in a given geographic area would not necessarily increase the strength of an odor, although a higher frequency of odor detection would be expected. It is not possible to predict what specific cannabis plant strains would occur at proximate sources. As documented in Section 3.3, “Air Quality and Odors” under certain conditions, odor may be detected as much as two miles from the source, particularly where the odor is perceived as objectionable by the receptor.

As previously discussed, odor is affected by many variables including the specific site, the proposed activity, topography, and meteorology, among many others. The CLUO would establish odor control regulations that require odor management and set thresholds for acceptable vs nuisance odor. Odors must be controlled at the property line to a dilution-to-threshold ratio (D/T) of seven parts clean or filtered air to one part odorous air (7 D/T) or less. The proposed CLUO requires the development of an Odor Control Plan (CLUO Section 8-2.1410[D][2]) for each operation and identifies a process of corrective actions for nuisance odor conditions (CLUO Section 8-2.1408[CC] and 8-2.1408[DD]).

Despite these regulations and controls, the potential for cumulative odor impacts to occur as a result of adoption and implementation of the CLUO, including issuance of future Cannabis Use Permits, is conservatively identified as **cumulatively considerable and significant and unavoidable** for the same reasons considered in Section 3.3, “Air Quality and Odors.” Namely cannabis remains a controversial activity, many neighbors are very sensitive to the odor and find it to be highly objectionable, the proposed regulatory threshold is not zero-detect which means that some odor will be detectable and will be considered acceptable under the regulations, and in recognition that odor exceedances in excess of the allowable level may be higher in early years as the industry and technology evolve despite the fact that enforcement will occur under the ordinance.

Therefore, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, may result in a **cumulatively considerable** contribution to cumulative odor impacts that would be **significant and unavoidable**. See Section 4.2, “Overconcentration,” for analysis of the potential for odor impacts due to clustering of cannabis uses within smaller areas of the County.

IMPACT CUM-4: CONTRIBUTION TO CUMULATIVE BIOLOGICAL RESOURCE IMPACTS

The cumulative setting for some biological resources is countywide. However, depending on the resource, many biological resource impacts are site-specific rather than cumulative in nature.

The General Plan includes policies to protect habitats (e.g., wetlands, oak woodlands, grassland prairies, riparian habitat, aquatic habitat) and special-status species in the County. The General Plan EIR identified significant and unavoidable cumulative impacts to special-status species, habitat, and disruption of movement corridors from implementation of planned land use activities (Yolo County 2009).

The nine development agreement projects identified in Section 4.1.2, “Cumulative Setting,” could contribute to cumulative biological resource impacts from construction of new cannabis uses.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. As described in Impact BIO-1 through BIO-4, this ancillary use of the parcel would not result in biological resource impacts that could contribute to cumulative impacts.

As described further below, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would not result in a cumulatively considerable contribution to cumulative biological resource impacts.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

As identified in Impact BIO-1 through BIO-4, Alternative 1 assumed cannabis cultivation relocation activities involving 18 acres could result in potential special-status species and habitat impacts. The CLUO includes performance standards (including participation in the Yolo Habitat Conservation Plan/Natural Community Conservation Plan [HCP/NCCP]) that address special-status species, habitat impacts, and invasive plants in CLUO Sections 8-2.1408(A), 8-2.1408(D), 8-2.1408(OO), and 8-2.1408(RR). Operation of the cultivation sites are also subject to compliances with Terms 4, 10, 27, and 37 of Attachment A (General Requirements and Prohibitions) of State Water Resources Control Board (SWRCB) Order WQ 2019-0001-DWQ that also provide special-status species and habitat protection requirements. Implementation of the these requirements and Mitigation Measure BIO-1 would offset impacts to special-status species because it would require reconnaissance-level surveys of the activity footprint; identification of special-status species, sensitive communities, and special-status species habitat within the activity footprint; and protection, avoidance, and compensation for impacts on these species, habitats, and movement corridors in a manner

consistent with the Yolo HCP/NCCP as well as state and federal law. Cannabis uses fall within the categories of agricultural uses and supporting agricultural uses consistent with the General Plan and evaluated in the General Plan EIR. After implementation of Mitigation Measure BIO-1, the contribution to significant cumulative impacts to biological resources **would not be cumulatively considerable** under Alternative 1.

Alternative 2: All License Types with Moderate Limits

As identified in Impact BIO-1 through BIO-4, Alternative 2 assumed cannabis cultivation relocation activities and new cannabis uses that would involve approximately 164 acres could result in potential special-status species and habitat impacts. Similar to Alternative 1, compliance with CLUO performance standards and Mitigation Measure BIO-1 would offset Alternative 2's cumulative impacts to biological resources. Therefore, the contribution to significant cumulative impacts to biological resources **would not be cumulatively considerable** under Alternative 2.

Alternative 3: All License Types with High Limits

As identified in Impact BIO-1 through BIO-4, Alternative 3 assumed cannabis cultivation relocation activities and new cannabis uses that would involve approximately 379 acres could result in potential special-status species and habitat impacts. Similar to Alternative 1, compliance with CLUO performance standards and Mitigation Measure BIO-1 would offset Alternative 3's cumulative impacts to biological resources. Therefore, the contribution to significant cumulative impacts to biological resources **would not be cumulatively considerable** under Alternative 3.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

As identified in Impact BIO-1 through BIO-4, Alternative 4 assumed cannabis cultivation relocation activities and new cannabis uses that would involve approximately 122 acres could result in potential special-status species and habitat impacts. Similar to Alternative 1, compliance with CLUO performance standards and Mitigation Measure BIO-1 would offset Alternative 4's cumulative impacts to biological resources. Therefore, the contribution to significant cumulative impacts to biological resources **would not be cumulatively considerable** under Alternative 4.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

As identified in Impact BIO-1 through BIO-4, Alternative 5 assumed cannabis cultivation relocation activities and new cannabis uses that would involve approximately 163 acres could result in potential special-status species and habitat impacts. Similar to Alternative 1, compliance with CLUO performance standards and Mitigation Measure BIO-1 would offset Alternative 5's cumulative impacts to biological resources. Therefore, the contribution to significant cumulative impacts to biological resources **would not be cumulatively considerable** under Alternative 5.

IMPACT CUM-5: CONTRIBUTION TO CUMULATIVE CULTURAL RESOURCE IMPACTS

While some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site are generally not made worse by impacts from another project to a cultural resource at another site. Rather the resources and the effects upon them are generally independent. A possible exception to this would be a cultural resource that represents the last known example of its kind. However, as discussed below, the proposed CLUO and other applicable requirements would ensure disclosure, analysis, and avoidance or mitigation through a discretionary use permit process.

The nine development agreement projects identified in Section 4.1.2, "Cumulative Setting," could contribute to cumulative cultural resource impacts from the development of new cannabis uses. The General Plan EIR identified that implementation of the General Plan would not result in cumulative considerable impacts to cultural resources (Yolo County 2009).

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. As described in Impacts CULT-1 through CULT-3, this ancillary use of the parcel would not result in cultural resource impacts that could contribute to cumulative impacts.

As described further below, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would not result in a cumulatively considerable contribution to cumulative cultural resource impacts.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Relocation of cannabis cultivation sites under Alternative 1 could disturb 18 acres that may contain cultural resources. As identified in CULT-1 through CULT-4, existing and relocated cultivation sites would be subject to CLUO Sections 8-2.1408(H), 8-2.1408(OO), and 8-2.14010(C)(1) that would require site assessments to determine potential cultural resources in the area and site plans may be required to move or be redesigned to protect the resource consistent with General Plan policies CO-4.12 and CO-4.13 and actions CO-A63 through CO-A66. In addition to the CLUO, cannabis cultivation sites are required to comply with the SWRCB Attachment A (General Requirements and Prohibitions) of Order WQ 2019-0001-DWQ. Term 21 of the General Requirements and Prohibitions requires that records searches be performed through the applicable CHRIS information center before land-disturbing activities for cultivation operations. Any positive results identified in the records search would need to be further evaluated. Term 22 requires documentation and protection of any discovered archaeological resources during cultivation operations. These requirements would offset contributions to the cumulative loss of cultural resources consistent with the General Plan. The contribution to significant cumulative impacts to cultural resources **would not be cumulatively considerable** under Alternative 1.

Alternative 2: All License Types with Moderate Limits

Cannabis uses under Alternative 2 could disturb 164 acres that may contain cultural resources. Similar to Alternative 1, compliance with CLUO performance standards and the requirements of SWRCB Order WQ 2019-0001-DWQ would offset Alternative 2's cumulative impacts to cultural resources. Therefore, the contribution to significant cumulative impacts to cultural resources **would not be cumulatively considerable** under Alternative 2.

Alternative 3: All License Types with High Limits

Cannabis uses under Alternative 3 could disturb 379 acres that may contain cultural resources. Similar to Alternative 1, compliance with CLUO performance standards and the requirements of SWRCB Order WQ 2019-0001-DWQ would offset Alternative 3's cumulative impacts to cultural resources. Therefore, the contribution to significant cumulative impacts to cultural resources **would not be cumulatively considerable** under Alternative 3.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Cannabis uses under Alternative 4 could disturb 122 acres that may contain cultural resources. Similar to Alternative 1, compliance with CLUO performance standards and the requirements of SWRCB Order WQ 2019-0001-DWQ would offset Alternative 4's cumulative impacts to cultural resources. Therefore, the contribution to significant cumulative impacts to cultural resources **would not be cumulatively considerable** under Alternative 4.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

Cannabis uses under Alternative 5 could disturb 163 acres that may contain cultural resources. Similar to Alternative 1, compliance with CLUO performance standards and the requirements of SWRCB Order WQ 2019-0001-DWQ would offset Alternative 5's cumulative impacts to cultural resources. Therefore, the contribution to significant cumulative impacts to cultural resources **would not be cumulatively considerable** under Alternative 5.

IMPACT CUM-6: CONTRIBUTION TO CUMULATIVE ENERGY IMPACTS

The geographic area considered for cumulative impacts related to energy use includes the service area for PG&E and Valley Clean Energy. As noted in Section 3.6, “Energy,” PG&E provides the physical infrastructure in the region that is utilized by Western Area Power Authority. PG&E employs various programs and mechanisms to support provision of these services to new development; various utilities charge connection fees and re-coup costs of new infrastructure through standard billings for services. The project, in combination with other development in Yolo and Solano Counties, would contribute to the increased demand for energy, however, service providers PG&E and Valley Clean Energy are anticipated to have adequate energy capacity to serve these land uses.

The nine development agreement projects identified in Section 4.1.2, “Cumulative Setting,” would contribute to cumulative energy demands from new cannabis uses. The General Plan EIR identified that planned land use activities would result in significant and unavoidable cumulative impacts to energy use (Yolo County 2009).

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. As described in Impact ENE-1, this ancillary use of the parcel would not result in energy impacts that could contribute to cumulative impacts.

As described further below, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would not result in a cumulatively considerable contribution to cumulative energy impacts.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Alternative 1 would not create new energy demands that could contribute to cumulative energy impacts. The CLUO requires all cultivation sites to procure at least 50 percent of their energy demand from renewable sources. This can be achieved through on-site renewable energy systems or enrollment in the Valley Clean Energy Alliance as described in Section 8-2.140(O) of the CLUO. Further, as described in Section 3.6.2, “Regulatory Setting,” CCR Sections 8203 and 8305 set forth renewable energy requirement for new and relicensed sites. Under these requirements, all sites seeking license renewals must meet the average electricity greenhouse gas emissions intensity required of their local utility provider pursuant to the California Renewables Portfolio Standard. Table 4-12 provides estimates of Alternative 1’s energy demands from operation of existing and eligible cultivation sites.

Table 4-12 Cumulative Construction and Operational Energy Consumption– Alternative 1

Cannabis Use	Construction	Operation			
	Gasoline (gallons)	Diesel (gallons)	Electricity (megawatt-hours/year)	Natural Gas (million British thermal units/year)	Diesel (gallons/year)
Cultivation					
Outdoor	5,791	44,621	12,476	0	34,988
Mixed Light	18,141	76,198	11,768	0	37,234
Indoor	0	0	700	0	4,618
Total	23,932	120,819	24,943	0	76,839

Notes: Diesel use associated with off-road equipment and back-up generator use.

Source: Calculations by Ascent Environmental in 2019

Cleaner vehicles that rely on alternative fuels are increasing throughout Yolo County and California, and through the state's Advanced Clean Car Program, more zero emission and electric vehicles are anticipated to become available. Additionally, the Low Carbon Fuel Standard is a state regulation that reduces the carbon intensity of fuels used in vehicles. Therefore, the impact on energy **would not be cumulatively considerable** under Alternative 1.

Alternative 2: All License Types with Moderate Limits

Table 4-13 provide estimates of energy demands from operation of assumed cannabis uses under Alternative 2.

Table 4-13 Cumulative Construction and Operational Energy Consumption– Alternative 2

Cannabis Use	Construction	Operation			
	Gasoline (gallons)	Diesel (gallons)	Electricity (megawatt-hours/year)	Natural Gas (million British thermal units/year)	Diesel (gallons/year)
Cultivation					
Outdoor	21,718	167,329	12,674	0	35,543
Mixed Light	19,955	83,818	12,673	0	40,098
Indoor	0	0	700	0	4,618
Noncultivation					
Nursery	12,552	49,456	5,619	0	4,165
Processing	700	14,185	150	139	4,165
Manufacturing	2,141	52,804	458	706	16,661
Testing	371	13,666	116	183	4,165
Distribution	412	26,402	82	131	8,330
Retail	214	5,466	55	40	1,666
Microbusiness	371	13,601	66	98	4,165
Total	58,432	426,728	32,592	1,296	123,577
Notes: Diesel use associated with off-road equipment and back-up generator use.					
Source: Calculations by Ascent Environmental in 2019					

The CLUO and state regulations identified above under Alternative 1 include renewable energy requirements that would apply to cultivation and noncultivation uses under this alternative as well. State vehicle regulations discussed under Alternative 1 would also reduce vehicle energy use for Alternative 2.

Based on the above, potential energy consumption under Alternative 2 would not contribute to cumulative impacts associated with the wasteful, inefficient, or unnecessary consumption of energy. This alternative would also not result in energy impacts greater than considered in the General Plan EIR because it would commit use to renewable energy sources under CLUO Section 8-2.1408(O). The impact on energy **would not be cumulatively considerable** under Alternative 2.

Alternative 3: All License Types with High Limits

Table 4-14 provides estimates of energy demand under Alternative 3 from assumed operation of cultivation and noncultivation uses.

Table 4-14 Cumulative Construction and Operational Energy Consumption– Alternative 3

Cannabis Use	Construction		Operation		
	Gasoline (gallons)	Diesel (gallons)	Electricity (megawatt-hours/year)	Natural Gas (million British thermal units/year)	Diesel (gallons/year)
Cultivation					
Outdoor	52,847	407,167	25,347	0	71,086
Mixed Light	43,538	182,876	24,440	0	77,332
Indoor	2,059	17,147	1,750	0	11,544
Noncultivation					
Nursery	25,104	98,912	11,238	0	8,330
Processing	1,400	28,370	299	278	8,330
Manufacturing	4,282	105,608	915	1,411	33,322
Testing	741	27,332	231	366	8,330
Distribution	823	52,805	165	261	16,661
Retail	428	10,933	111	80	3,332
Microbusiness	741	27,203	132	196	8,330
Total	131,963	958,351	64,628	2,592	246,599

Notes: Diesel use associated with off-road equipment and back-up generator use.

Source: Calculations by Ascent Environmental in 2019

The CLUO and state regulations identified above under Alternative 1 include renewable energy requirements that would apply to cultivation and noncultivation uses under this alternative as well. State vehicle regulations discussed under Alternative 1 would also reduce vehicle energy use for Alternative 3.

Based on the above, potential energy consumption under Alternative 3 would not contribute to cumulative impacts associated with the wasteful, inefficient, or unnecessary consumption of energy. This alternative would also not result in energy impacts greater than considered in the General Plan EIR because it would commit use to renewable energy sources under CLUO Section 8-2.1408(O). The impact on energy **would not be cumulatively considerable** under Alternative 3.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Table 4-15 provides estimates of energy demand under Alternative 4 from assumed operation of cultivation and noncultivation uses.

Table 4-15 Cumulative Construction and Operational Energy Consumption– Alternative 4

Cannabis Use	Construction	Operation			
	Gasoline (gallons)	Diesel (gallons)	Electricity (megawatt-hours/year)	Natural Gas (million British thermal units/year)	Diesel (gallons/year)
Cultivation					
Mixed Light	117,917	495,289	61,554	0	194,763
Indoor	8,237	68,587	4,200	0	27,706
Noncultivation					
Nursery	12,552	49,456	5,619	0	4,165
Processing	700	14,185	150	139	4,165
Manufacturing	2,141	52,804	458	706	16,661

Table 4-15 Cumulative Construction and Operational Energy Consumption– Alternative 4

Cannabis Use	Construction	Operation			
	Gasoline (gallons)	Diesel (gallons)	Electricity (megawatt-hours/year)	Natural Gas (million British thermal units/year)	Diesel (gallons/year)
Testing	371	13,666	116	183	4,165
Distribution	412	26,402	82	131	8,330
Retail	214	5,466	55	40	1,666
Microbusiness	371	13,601	66	98	4,165
Total	142,913	739,456	72,233	1,198	261,621

Notes: Diesel use associated with off-road equipment and back-up generator use.

Source: Calculations by Ascent Environmental in 2019

The CLUO and state regulations identified above under Alternative 1 include renewable energy requirements that would apply to cultivation and noncultivation uses under this alternative as well. State vehicle regulations discussed under Alternative 1 would also reduce vehicle energy use for Alternative 4.

Based on the above, potential energy consumption under Alternative 4 would not contribute to cumulative impacts associated with the wasteful, inefficient, or unnecessary consumption of energy. This alternative would also not result in energy impacts greater than considered in the General Plan EIR because it would commit use to renewable energy sources under CLUO Section 8-2.1408(O).

The impact on energy **would not be cumulatively considerable** under Alternative 4.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

Table 4-16 provides estimates of energy demand under Alternative 5 from assumed operation of cultivation and noncultivation uses.

Table 4-16 Cumulative Construction and Operational Energy Consumption– Alternative 5

Cannabis Use	Construction	Operation			
	Gasoline (gallons)	Diesel (gallons)	Electricity (megawatt-hours/year)	Natural Gas (million British thermal units/year)	Diesel (gallons/year)
Cultivation					
Outdoor	21,718	167,329	12,674	0	35,543
Mixed Light	19,955	83,818	12,673	0	40,098
Indoor	0	0	700	0	4,618
Noncultivation					
Nursery	12,552	49,456	5,619	0	4,165
Processing	700	14,185	150	139	4,165
Manufacturing	2,141	52,804	458	706	16,661
Testing	371	13,666	116	183	4,165
Distribution	412	26,402	82	131	8,330
Microbusiness	371	13,601	66	98	4,165
Total	58,218	421,261	32,536	1,256	121,911

Notes: Diesel use associated with off-road equipment and back-up generator use.

Source: Calculations by Ascent Environmental in 2019

The CLUO and state regulations identified above under Alternative 1 include renewable energy requirements that would apply to cultivation and noncultivation uses under this alternative as well. State vehicle regulations discussed under Alternative 1 would also reduce vehicle energy use for Alternative 5.

Based on the above, potential energy consumption under Alternative 5 would not contribute to cumulative impacts associated with the wasteful, inefficient, or unnecessary consumption of energy. This alternative would also not result in energy impacts greater than considered in the General Plan EIR because it would commit use to renewable energy sources under CLUO Section 8-2.1408(O). The impact on energy **would not be cumulatively considerable** under Alternative 5.

IMPACT CUM-7: CONTRIBUTION TO CUMULATIVE GEOLOGY AND SOIL IMPACTS

Geology and mineral resource impacts are generally site specific rather than cumulative in nature. Each site would be subject to site development standards, construction standards, and CLUO requirements (Section 8-2.1408[V]) regarding grading and clearing. This is discussed in detail in Section 3.7, “Geology and Soils.” As identified in GEO-4, none of the CLUO alternatives would result in loss of access to known mineral resources in the County.

While some paleontological resources could have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a paleontological find at one project site are generally not made worse by impacts from another project to a paleontological resource at another site. Rather the resources and the effects upon them are generally independent. As discussed below, the proposed CLUO and other applicable requirements would ensure disclosure, analysis, and avoidance or mitigation through a discretionary use permit process.

The nine development agreement projects identified in Section 4.1.2, “Cumulative Setting,” could contribute to potential cumulative paleontological resource impacts from development of new cannabis uses. The General Plan EIR identified no cumulative considerable impacts to paleontological resources from planned land use activities (Yolo County 2009).

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. As described in Impact GEO-3, this ancillary use of the parcel would not result in paleontological impacts that could contribute to cumulative impacts.

As described further below, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would not result in a cumulatively considerable contribution to cumulative geology or soil impacts.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Relocation activities would include closure and restoration of the existing cultivation sites and construction of new cultivation sites that is assumed to disturb approximately 18 acres that may contain paleontological resources. Cannabis cultivation operators would be required to comply with Sections 8-2.1408(H)(1), 8-2.1408(OO), and 8-2.1410(C)(1) of the CLUO, which requires a site survey to determine the potential for paleontological resources and development of a mitigation plan if merited, to protect identified paleontological resources. This would offset contributions to cumulative impacts on paleontological resources. Thus, paleontological resource impacts **would not be cumulatively considerable** under Alternative 1.

Alternative 2: All License Types with Moderate Limits

Alternative 2 assumed cannabis uses could disturb approximately 164 acres that may contain paleontological resources. Compliance with CLUO performance standards identified in Alternative 1 above would offset cumulative impacts to paleontological resources for this alternative as well. Therefore, the contribution to significant cumulative impacts to paleontological resources **would not be cumulatively considerable** under Alternative 2.

Alternative 3: All License Types with High Limits

Alternative 3 assumed cannabis uses could disturb approximately 379 acres that may contain paleontological resources. Compliance with CLUO performance standards identified in Alternative 1 above would offset cumulative impacts to paleontological resources for this alternative as well. Therefore, the contribution to significant cumulative impacts to paleontological resources **would not be cumulatively considerable** under Alternative 3.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Alternative 4 assumed cannabis uses could disturb approximately 122 acres that may contain paleontological resources. Compliance with CLUO performance standards identified in Alternative 1 above would offset cumulative impacts to paleontological resources for this alternative as well. Therefore, the contribution to significant cumulative impacts to paleontological resources **would not be cumulatively considerable** under Alternative 4.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

Alternative 5 assumed cannabis uses could disturb approximately 163 acres that may contain paleontological resources. Compliance with CLUO performance standards identified in Alternative 1 above would offset cumulative impacts to paleontological resources for this alternative as well. Therefore, the contribution to significant cumulative impacts to paleontological resources **would not be cumulatively considerable** under Alternative 5.

IMPACT CUM-8: CONTRIBUTION TO CUMULATIVE GREENHOUSE GASES AND CLIMATE CHANGE IMPACTS

The discussions of GHG emissions generated from implementation of the CLUO for each of the five alternatives under Impact GHG-1 in Section 3.8, “Greenhouse Gas Emissions and Climate Change,” is inherently a cumulative impact discussion. GHG emissions from one project cannot, on their own, result in changes in climatic conditions; therefore, the emissions from one project must be considered in the context of their contribution to cumulative global emissions, which is a significant cumulative impact. The nine development agreement projects identified in Section 4.1.2, “Cumulative Setting,” would contribute to greenhouse gas emissions. The General Plan EIR identified significant and unavoidable cumulative impacts associated with GHG emissions (Yolo County 2009).

As discussed under Impact GHG-1, the CLUO includes requirements for renewable energy procurement, energy-efficient lighting, water conservation, and drought tolerant landscaping. Implementation of Mitigation Measure GHG-1 would ensure compliance with the Yolo County CAP, resulting in required reduction of GHG emissions. With this mitigation measure, all alternatives under the CLUO would align with the Yolo County CAP and 2017 Scoping Plan, the applicable plans and policies adopted for the purpose of reducing GHG emissions.

Adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, **would not result in a cumulatively considerable contribution** to cumulative GHG emissions or climate change.

IMPACT CUM-9: CONTRIBUTION TO CUMULATIVE HAZARDS AND HAZARDOUS MATERIAL IMPACTS

Although some hazardous materials releases can cover a large area and interact with other releases (e.g., atmospheric contamination, contamination of groundwater aquifers), incidents of hazardous materials contamination are more typically isolated to a small area, such as leaking underground storage tank sites or release at individual businesses. These relatively isolated areas of contamination typically do not interact in a cumulative manner with other sites of hazardous materials contamination. Impacts related to emergency vehicle access and evacuation are considered site specific and are not cumulative. The potential for airport hazards are associated with site specific conditions in relation to particular airports and are not considered cumulative impacts.

No significant cumulative wildfire or fire protection service impacts from implementation of the General Plan were identified in the General Plan EIR (Yolo County 2009). As shown in Exhibits 3.9-8 through 3.9-12, cannabis uses assumed under the CLUO alternatives that are located in moderate fire hazard severity hazards consist of agricultural and rural land uses that would not contribute significantly to cumulative wildfire risk. As identified in Impact HAZ-6, cannabis uses under all alternatives would be required to comply with PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Manufacturing uses would be required to comply with CCR Title 17, Division 1, Chapter 13, Sections 40223(b), 40225(b), 40225(d), and 40280(a), which require fire control measures that include proper handling of flammable materials to avoid fire hazards. Compliance with these requirements would offset contributions to potential wildfire hazards.

The nine development agreement projects identified in Section 4.1.2, “Cumulative Setting,” could contribute to potential cumulative hazards or hazardous materials impacts from development of new cannabis uses. The General Plan EIR identified no cumulative considerable impacts to hazards or hazardous materials from planned land use activities (Yolo County 2009).

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. For the same reasons given in Section 3.9, this ancillary use of the parcel would not result in hazards or hazardous materials impacts that could contribute to cumulative impacts.

Therefore, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, **would not result in a cumulatively considerable** contribution to cumulative hazards or hazardous materials impacts.

IMPACT CUM-10: CONTRIBUTION TO CUMULATIVE HYDROLOGY AND WATER QUALITY IMPACTS

The cumulative context for hydrologic impacts is the unincorporated area of Yolo County and the regional groundwater basins. CLUO impacts to hydrology and water quality are addressed in Section 3.10, “Hydrology and Water Quality.” There are potential cumulative impacts to water quality, groundwater resources, and flooding in the County and associated watersheds and groundwater subbasins to which implementation of the CLUO could contribute. These topics are addressed separately below and are based on the project impact analysis provided in Impact HYDRO-1, HYDRO-2, and HYDRO-3.

The nine development agreement projects identified in Section 4.1.2, “Cumulative Setting,” would contribute to cumulative hydrologic impacts from the new cannabis uses. The General Plan EIR identified significant and unavoidable cumulative impacts to hydrology and water quality (Yolo County 2009).

As described further below, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would not result in a cumulatively considerable contribution to cumulative hydrology or water quality impacts.

Water Quality

As described in Section 3.10, “Hydrology and Water Quality,” there are waterways in the County listed on the 303(d) list are reported to contain excessive levels of various pesticides and herbicide, such as group A pesticides, malathion, chlordane, DDT, and dieldrin (see Table 3.10-1 and Exhibit 3.10-2).¹ Past and on-going agricultural practices have likely contributed to this contamination. Future land use activities have the potential to contribute to this cumulative impact.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. As described in Impact HYDRO-1, this ancillary use of the parcel would not result in water quality impacts that could contribute to cumulative impacts.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

As identified in Impact HYDRO-1, Alternative 1 assumed cannabis cultivation relocation activities involving 18 acres could result in construction and operational water quality impacts that could contribute to cumulative water quality impacts in impaired waterways identified in Table 3.10-1. These potential impacts would be offset through compliance requirements of SWRCB Order WQ 2019-0001-DWQ, and Sections 8-2.1408(J) and 8-2.1408(V) of the CLUO, the Yolo County ILRP, and the County’s Stormwater Management and Discharge Ordinance and Code. These standards would require on-site erosion control, use of construction and operational BMPs, and to route discharge drainage and stormwater into a County-approved on-site stormwater management system. Compliance with these requirements would offset project contributions to water quality impacts. Thus, this impact **would not be cumulatively considerable** under Alternative 1.

Alternative 2: All License Types with Moderate Limits

As identified in Impact HYDRO-1, Alternative 2 assumed cannabis uses involving 164 acres could result in construction and operational water quality impacts that could contribute to cumulative water quality impacts in impaired waterways identified in Table 3.10-1. Compliance with SWRCB Order WQ 2019-0001-DWQ, CLUO performance standards, and other County standards identified under Alternative 1 would offset cumulative contributions to water quality impacts for this alternative as well. Thus, this impact **would not be cumulatively considerable** under Alternative 2.

Alternative 3: All License Types with High Limits

As identified in Impact HYDRO-1, Alternative 3 assumed cannabis uses involving 379 acres could result in construction and operational water quality impacts that could contribute to cumulative water quality impacts in impaired waterways identified in Table 3.10-1. Compliance with SWRCB Order WQ 2019-0001-DWQ, CLUO performance standards, and other County standards identified under Alternative 1 would offset cumulative contributions to water quality impacts for this alternative as well. Thus, this impact **would not be cumulatively considerable** under Alternative 3.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

As identified in Impact HYDRO-1, Alternative 4 assumed cannabis uses involving 122 acres could result in construction and operational water quality impacts that could contribute to cumulative water quality impacts in impaired waterways identified in Table 3.10-1. Compliance with SWRCB Order WQ 2019-0001-DWQ, CLUO performance standards, and other County standards identified under Alternative 1 would offset

¹ Section 303(d) of the CWA requires the identification of water bodies that do not meet, or are not expected to meet, water quality standards (i.e., impaired water bodies), and requires development of a total maximum daily load (TMDL) for each listing.

cumulative contributions to water quality impacts for this alternative as well. Thus, this impact **would not be cumulatively considerable** under Alternative 4.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

As identified in Impact HYDRO-1, Alternative 5 assumed cannabis uses involving 163 acres could result in construction and operational water quality impacts that could contribute to cumulative water quality impacts in impaired waterways identified in Table 3.10-1. Compliance with SWRCB Order WQ 2019-0001-DWQ, CLUO performance standards, and other County standards identified under Alternative 1 would offset cumulative contributions to water quality impacts for this alternative as well. Thus, this impact **would not be cumulatively considerable** under Alternative 5.

Groundwater

Urban, rural, and agricultural land uses in the County depend upon a reliable water supply, a combination of both groundwater and surface water. Farmers rely on groundwater for approximately 40 percent of their supply in a normal year but rely more heavily on groundwater during drought years. Future growth of the cities and rural communities and changes in crops grown in the County that have higher irrigation demands than existing agricultural operations could result in cumulative impacts on groundwater resources. Aquifer overdraft (or overpumping) can cause permanent damage to an aquifer if the aquifer materials settle, reducing its future storage capacity. In addition, overdraft can cause, and in the past in Yolo County has caused, land subsidence at the ground surface. It is unknown if the deep aquifers in Yolo County are able to sustain anticipated groundwater pumping demands. The best available information related to groundwater supplies consists of records of groundwater elevation in the County, which are available beginning in 1953 (see Exhibit 3.10-4). A groundwater sustainability plan is currently under preparation by the Yolo Subbasin Groundwater Agency.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. As described in Impact HYDRO-2, this ancillary use of the parcel would not result in groundwater impacts that could contribute to cumulative impacts.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

As described in HYDRO-2, Alternative 1 assumes no new cannabis cultivation sites in the County and thus no increase in existing groundwater demands. Existing and eligible cannabis cultivation water demand is estimated to be 132 acre-feet per year (afy) as shown in Table 3.10-10. Total cultivation water demand is 1.69 afy per acre of cultivation area. This groundwater demand per acre of cultivation area is below the countywide agricultural per acre water demands that have ranged 2.35 to 3.05 afy per acre of cropland (see Table 3.10-3) and would be within the cumulative groundwater impact analysis in the General Plan EIR. This impact **would not be cumulatively considerable** under Alternative 1.

Alternative 2: All License Types with Moderate Limits

Table 3.10-11 estimates total water demand for cannabis uses under Alternative 2 at 211 afy. It is assumed that new cannabis uses would be located on farmlands that already use groundwater and have existing irrigation demands within the range of crop uses identified in Table 3.10-3. Total water demand for assumed cultivation uses is 1.70 afy per acre and 0.75 afy per acre for noncultivation uses. This groundwater demand per acre is below the County's typical agricultural per acre water demands identified in Table 3.10-3 and would be within the cumulative groundwater impact analysis in the General Plan EIR. Alternative 2 could create approximately 123 acres of impervious surfaces associated with buildings for cultivation and noncultivation uses. This increase in impervious surface is not large enough to substantially interfere with countywide groundwater infiltration that occurs over approximately 545,000 acres of land designated as Agriculture under the General Plan.

Thus, Alternative 2 would result in reduced water demands per acre as compared to existing agricultural operations and would not result in a contribution to a decrease groundwater supplies or interfere substantially with groundwater recharge under cumulative conditions. This impact **would not be cumulatively considerable** under Alternative 2.

Alternative 3: All License Types with High Limits

Table 3.10-12 estimates total water demand under Alternative 3 at 424 afy. It is assumed that new cannabis uses would be located on farmlands that already use groundwater and have existing irrigation demands within the range of crop uses identified in Table 3.10-3. Total water demand for assumed cultivation uses is 1.71 afy per acre and 0.76 afy per acre for noncultivation uses. This groundwater demand per acre is below the County's typical agricultural per acre water demands identified in Table 3.10-3 and would be within the cumulative groundwater impact analysis in the General Plan EIR. Alternative 3 could create approximately 244 acres of impervious surfaces associated with buildings for cultivation and noncultivation uses. This increase in impervious surface is not large enough to substantially interfere with countywide groundwater infiltration that occurs over approximately 545,000 acres of land designated as Agriculture under the General Plan.

Thus, Alternative 3 would result in reduced water demands per acre as compared to existing agricultural operations and would not result in a contribution to a decrease groundwater supplies or interfere substantially with groundwater recharge under cumulative conditions. This impact **would not be cumulatively considerable** under Alternative 3.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Table 3.10-13 estimates total water demand under Alternative 4 (including water demand from existing cultivation sites and the conversion to mixed-light or indoor cultivation operations) at 314 afy. It is assumed that new cannabis uses would be located on farmlands that already use groundwater and have existing irrigation demands within the range of crop uses identified in Table 3.10-3 and would be within the cumulative groundwater impact analysis in the General Plan EIR. Total water demand for assumed cultivation uses is 2.99 afy per acre and 0.75 afy per acre for noncultivation uses. This groundwater demand per acre is below the County's typical agricultural per acre water demands identified in Table 3.10-3 and would be within the cumulative groundwater impact analysis in the General Plan EIR. Alternative 4 could create approximately 209 acres of impervious surfaces associated with buildings for cultivation and noncultivation uses. This increase in impervious surface is not large enough to substantially interfere with countywide groundwater infiltration that occurs approximately 545,000 acres of land designated as Agriculture under the General Plan.

Thus, Alternative 4 would result in reduced water demands per acre as compared to existing agricultural operations and would not result in a contribution to a decrease groundwater supplies or interfere substantially with groundwater recharge under cumulative conditions. This impact **would not be cumulatively considerable** under Alternative 4.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

Table 3.10-14 estimates total water demand under Alternative 5 (including water demand from existing cultivation sites) at 208 afy. It is assumed that new cannabis uses would be located on farmlands that already use groundwater and have existing irrigation demands within the range of crop uses identified in Table 3.10-3 and would be within the cumulative groundwater impact analysis in the General Plan EIR. Total water demand for assumed cultivation uses is 1.70 afy per acre and 0.73 afy per acre for noncultivation uses. This groundwater demand per acre is below the County's typical agricultural per acre water demands identified in Table 3.10-3 and would be within the cumulative groundwater impact analysis in the General Plan EIR. Alternative 5 could create approximately 123 acres of impervious surfaces associated with buildings for cultivation and noncultivation uses. This increase in impervious surface is not large enough to substantially interfere with countywide groundwater infiltration that occurs over approximately 545,000 acres of land designated as Agriculture under the General Plan.

Thus, Alternative 5 would result in reduced water demands per acre as compared to existing agricultural operations and would not result in a contribution to a decrease groundwater supplies or interfere substantially with groundwater recharge under cumulative conditions. This impact **would not be cumulatively considerable** under Alternative 5.

Flooding

Exhibit 3.10-6 shows the extent of floodplain conditions in the unincorporated area of the County that includes most of the agricultural areas. Future land use activities and agricultural operations could create new impervious surfaces, buildings, and other improvements that could affect drainage flows that could alter and increase the extent of flooding conditions under cumulative conditions.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. As described in Impact HYDRO-3, this ancillary use of the parcel would not result in drainage or flooding impacts that could contribute to cumulative impacts.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Alternative 1 is assumed to retain the existing and eligible cannabis cultivation in the County (nine cultivation sites are assumed to relocate) and would not expand cannabis uses. Cultivation sites would be subject to the requirements of Yolo County Code Sections 8-4.501, 8-4.502 and 8-4.506 (as required under CLUO Sections 8-2.1408[F] and 8-2.1408[OO] regarding building and site design). In addition, Section 8-4.506 of the Yolo County Improvement Standard the flood protection ordinance, prohibits any development that would increase the base flood elevation over 1 foot. Section 8-2.1408(J) of the CLUO also requires that site drainage be accommodated in an approved on-site storm management system. Compliance with these standards would offset drainage impacts by ensuring that drainage is managed on each cannabis site and avoid contributing to cumulative drainage and flooding impacts in the County. This impact **would not be cumulatively considerable** under Alternative 1.

Alternative 2: All License Types with Moderate Limits

As shown in Exhibits 2-5 and 3.10-6, approximately 20 new cannabis sites would be located near floodplain areas. Compliance with CLUO performance standards and other County standards identified under Alternative 1 would offset cumulative contributions to flooding impacts for this alternative as well. This impact **would not be cumulatively considerable** under Alternative 2.

Alternative 3: All License Types with High Limits

As shown in Exhibits 2-6 and 3.10-6, approximately 55 new cannabis sites would be located near floodplain areas. Compliance with CLUO performance standards and other County standards identified under Alternative 1 would offset cumulative contributions to flooding impacts for this alternative as well. This impact **would not be cumulatively considerable** under Alternative 3.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

As shown in Exhibits 2-7 and 3.10-6, approximately 45 new cannabis sites and new buildings associated with the conversion of outdoor cultivation to mixed-light or indoor operations would be located near floodplain areas. Compliance with CLUO performance standards and other County standards identified under Alternative 1 would offset cumulative contributions to flooding impacts for this alternative as well. This impact **would not be cumulatively considerable** under Alternative 4.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

As shown in Exhibits 2-8 and 3.10-6, approximately 22 new cannabis sites would be located near floodplain areas. Compliance with CLUO performance standards and other County standards identified under Alternative 1 would offset cumulative contributions to flooding impacts for this alternative as well. This impact **would not be cumulatively considerable** under Alternative 5.

IMPACT CUM-11: CONTRIBUTION TO CUMULATIVE LAND USE AND PLANNING IMPACTS

The cumulative context for land use impacts is the unincorporated area of Yolo County. Most land use impacts are localized impacts that affect individual communities, neighborhoods, and specific sites, and are not generally considered cumulative in nature. Impacts related to dividing a community are an example of this. The potential for growth inducement impacts as a result of adoption and implementation of the proposed CLUO are addressed in Chapter 6, "Other CEQA-Mandated Sections."

The nine development agreement projects identified in Section 4.1.2, "Cumulative Setting," would contribute to employment growth in the County from the new cannabis uses. The General Plan EIR identified significant and unavoidable cumulative land use and growth impacts from implementation of the General Plan.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. Personal use outdoor cultivation would be an ancillary use to the residential parcel maintained by the residence. No additional employment would be generated that would contribute to cumulative impacts.

As shown in Table 3.11-1, Yolo, Sacramento, and Solano Counties combined have approximately 63,000 unoccupied dwelling units. SACOG estimates that the region's dwelling units will increase to 1,188,347 units by 2036 along with population (3,078,772), and employees (1,327,323) that may place housing pressure on cultivation conditions (Sacramento Area Council of Governments 2016). Depending on the alternative, this analysis assumes that implementation of the CLUO could generate up to 2,136 new permanent employees (Alternative 3). It is anticipated that these new jobs would come on-line at the end of 2022 based on review of cultivation activities and permit interest in the County. Based on current vacancy rates and anticipated extent of new dwelling units by 2036, there would be adequate housing opportunities in the region to accommodate employment generated under the CLUO and would not trigger the cumulative need to develop new housing beyond growth projections or what was evaluated in the General Plan EIR. This growth impact **would not be cumulatively considerable** under all the alternatives.

IMPACT CUM-12: CONTRIBUTION TO CUMULATIVE NOISE IMPACTS

Noise and vibration impacts are generally experienced locally and are not cumulative in nature. Stationary noise sources attenuate (reduce) over distance from the source. Increases in vehicle traffic could contribute cumulative traffic noise along roadways within the County.

The nine development agreement projects identified in Section 4.1.2, "Cumulative Setting," would contribute to cumulative traffic noise conditions from the new cannabis uses in the County. The General Plan EIR identified significant and unavoidable cumulative traffic noise impacts along the County roadway network (Yolo County 2009 and 2019).

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. Personal use outdoor cultivation would be an

ancillary use to the residential parcel maintained by the residence. No additional traffic noise would be generated that could contribute to cumulative impacts.

CLUO traffic noise impacts for the five alternatives are discussed under Impact NOI-2 and were based on noise modeling conducted for 119 roadway segments countywide. Available traffic data was for the cumulative no project and cumulative plus the five CLUO alternatives (see Appendix G). The traffic data also included the nine implementation development agreements and nursery and processing pilot program cannabis projects summarized in Table 4-2. As identified in NOI-2, no increases in cannabis operations would occur under Alternative 1, and therefore, there would be no long-term increases in traffic noise and contribution to cumulative traffic noise impacts would occur. Alternatives 2, 4, and 5 would not result in audible increases in noise on any roadway (i.e., less than 3 dB increases) under cumulative conditions. Alternative 3 could result in a potentially audible increases in noise (i.e., 4 dB) under cumulative conditions that would not exceed County noise standards. Therefore, the contribution of cumulative traffic noise **would not be cumulatively considerable** under all the alternatives.

IMPACT CUM-13: CONTRIBUTION TO CUMULATIVE PUBLIC SERVICE IMPACTS

The cumulative context for public services impacts is the unincorporated area of Yolo County and the individual fire protection districts. The nine development agreement projects identified in Section 4.1.2, “Cumulative Setting,” would contribute to cumulative public service demands from the new cannabis uses. The General Plan EIR identified no significant cumulative public service or recreation impacts (Yolo County 2009).

As identified in Impact PS-1 through PS-3, implementation of the CLUO under each of the five alternatives would not increase the demand for public services that would require the construction of new or expanded facilities that could result in environmental impacts. Cannabis uses would be subject to PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Manufacturing uses would be required to comply with CCR Title 17, Division 1, Chapter 13, Sections 40223(b), 40225(b), 40225(d), and 40280(a), which require fire control measures that include proper handling of flammable materials to avoid fire hazards and engineering of the closed loop extraction systems to avoid accidental fire events. They would also be subject to security measures in the CLUO set forth in Section 8-2.1408(LL) and Section 8-2.1410(D) would ensure that law enforcement and safety measures are incorporated into each site. CCR Sections 5042, 5043, 5046, 5047, 40200, and 40205 require on-site security measures. These standards would minimize the potential for criminal activities through controlled access for authorized personnel and locked door requirements at noncultivation sites (CCR Sections 5042 and 5043), security measures that include video surveillance, security personnel, lock and alarm system requirements (CCR Sections 5044, 5045, 5046, and 5047). Manufacturing sites are required to provide a security plan that implements access controls to the building, alarm system requirements and video surveillance (CCR Sections 40200 and 40205). Construction of cannabis-related buildings under all of the CLUO alternatives would be required to pay the County Facilities and Services Development Fee at the building permit issuance that would provide funding for facility improvements or new government service facilities the timing of which would be determined by County as part of facilities planning.

It should also be noted that cannabis uses would pay additional taxes that would be used by the County for a variety of related uses including potentially improved law enforcement and other services.

The contribution of cumulative public service impacts **would not be cumulatively considerable** under any of the alternatives.

IMPACT CUM-14: CONTRIBUTION TO CUMULATIVE TRANSPORTATION AND CIRCULATION IMPACTS

The cumulative context for transportation impacts is Yolo County and the region. Appendix G provides estimates of traffic conditions for the cumulative base condition and with anticipated traffic from CLUO alternatives. The General Plan EIR identified significant and unavoidable cumulative impacts associated with vehicle miles traveled (VMT) and level of service (LOS) standards (Yolo County 2009). The traffic analysis provided in Appendix G includes the traffic impacts of the nine development agreement projects identified in Section 4.1.2, “Cumulative Setting.”

As discussed further below, adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO, would not result in a cumulatively considerable contribution to cumulative transportation or circulation impacts.

Traffic Operations and Conflicts with the General Plan Circulation Element

As shown in Table 7 in Appendix G, the following County roadway segments are anticipated to operate at LOS D, which is below LOS C standards set forth under General Plan Policy CI-3.1 under cumulative base conditions:²

- County Road 29 (between State Route 113 and County Road 102)
- County Road 31 (between County 93A and County Road 98)
- County Road 102 (between Covell Boulevard to Gibson Road)
- County Road 102 (between County Road 17 and State Route 113)
- Harbor Boulevard (between US 50 and Reed Avenue)
- Russell Boulevard (between I-505 and County Road 31)

Table 7 in Appendix G identifies that assumed cannabis uses under CLUO alternatives 2 through 5 would add traffic to these segments but would not result in a further deterioration of LOS. Alternative 3 would contribute to deficient LOS D operations to the following additional roadway segments:

- Chiles Road/County Road 32B (between Mace Boulevard and Webster Road)
- County Road 98 (between County Road 24 and State Route 16)

As described in Impact TRANS-1, the primary function of the County roadway network is to provide for the efficient transport of agricultural goods and equipment as detailed in the General Plan. Policy CI-3.1 of the General Plan states that the goal of the service thresholds is to balance the preservation of community and rural values with a safe and efficient circulation system, and that LOS thresholds are intended to limit the planned capacity of the County’s roadways. Therefore, the LOS standards and policies are in place to retain adequate roadway capacity for agricultural purposes. Additionally, Policy CI-3.1 (X) of the General Plan states that exceptions to the LOS thresholds may be allowed in order to preserve agriculture or open space land, enhance the agricultural economy, and preserve the rural character of the County. Cannabis is defined by the state and is proposed to be defined in the CLUO as an agricultural land use. Cannabis activities would fall within the exceptions to the LOS standards identified in General Plan Policy CI-3.1(X). In addition, all alternatives would be subject to CLUO Section 8-2.1408(N) and 8-2.1408(JJ) requirements that promote the reduction of vehicle travel.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel developed with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas of parcels developed with residences. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. Given that personal outdoor

² As identified in Appendix G, the cumulative base condition includes the 78 existing and eligible cannabis cultivation sites under Alternative 1.

cultivation would be an ancillary use to the residential parcel, no considerable contribution to vehicle travel to support the cultivation is expected.

Implementation of the CLUO would not result in greater cumulative traffic operational impacts than were disclosed in the General Plan EIR because cannabis uses would be consistent with the General Plan Agriculture land use designation that was factored in the EIR analysis. The contribution of cumulative traffic impacts **would not be cumulatively considerable** under any of the alternatives.

Vehicle Miles Traveled

The cumulative VMT impact analysis considers the net effect of the CLUO in terms of total daily VMT under the five alternatives. As discussed in Impact TRANS-2, the placement of new cannabis uses (including noncultivation uses) in the unincorporated area of the County near existing and future cultivation uses would allow cultivators to avoid transporting cannabis to more distant locations where these facilities currently exist (e.g., existing testing facilities are located in the cities of Davis and Sacramento). Therefore, allowing for new cannabis uses to be located in close proximity to cultivation operations could potentially reduce VMT. Additionally, many of the sites where cannabis operations could occur are currently occupied by VMT-generating land uses (i.e., agricultural, industrial, commercial). Implementation of CLUO under any of the alternatives would not alter the land use traffic generation of the sites in a manner that could substantially change VMT base conditions because cannabis uses operate similar to Agricultural, Industrial, and Commercial designated land uses. All cannabis uses would be subject to the requirements of CLUO Section 8-2.1408(N) and 8-2.1408(JJ) that include vehicle trip reduction measures.

Implementation of the CLUO would not result in greater cumulative VMT impacts than were disclosed in the General Plan EIR because cannabis uses would be consistent with the General Plan Agriculture land use designation that was factored in the EIR analysis. The contribution to cumulative VMT **would not be cumulatively considerable** under any of the alternatives.

IMPACT CUM-15: CONTRIBUTION TO CUMULATIVE UTILITIES AND SERVICE SYSTEM IMPACTS

Public utilities (water supply and wastewater services) provided by community service districts (CSDs) and other local service providers are limited to the local service districts and are generally not considered a cumulative impact. Solid waste services are provided countywide and CLUO contributions could create cumulative impacts. The nine development agreement projects identified in Section 4.1.2, "Cumulative Setting," would contribute to cumulative public service demands from the new cannabis uses. The General Plan EIR identified significant and unavoidable cumulative public water supply impacts and no significant cumulative impacts related to wastewater service and solid waste (Yolo County 2009).

As addressed in Impact UTIL-1 and UTIL-2, CLUO potential impacts to public water and wastewater systems for Esparto CSD, City of Woodland, and Cachville CSD could occur under the assumptions of CLUO alternatives 2, 3, and 4 (see Exhibits 3.15-2 through 3.15-6). No public water or wastewater systems are assumed to be used by cannabis operations under CLUO alternatives 1 and 5. Implementation of Mitigation Measure HYDRO-4 and CLUO Section 8-2.1408(TT) regarding confirmation of adequate wastewater services, and CLUO Section 8-2.1408(VV) regarding water service verification would serve to mitigate impacts to cumulative water service and wastewater service because Cannabis Use Permits would not be issued if services are not available.

As addressed in Impact UTIL-3, CCR Sections 8108 and 8308 require cultivation, nurseries, and processing facilities to have a cannabis waste management plan that identifies methods for managing cannabis waste, including on-premises composting, collection and processing by an agency, or self-hauling to a permitted facility. The Yolo County Division of Integrated Waste Management has also prepared internal procedures for the disposal of waste generated from cannabis operations. As identified in Table 315-1, the Yolo County Central Landfill is anticipated to have adequate capacity for the foreseeable future (2081) to accommodate cannabis related waste in addition to other solid waste accepted.

Based on the above, the CLUO and would not trigger new cumulative utility impacts beyond what was evaluated General Plan EIR. This impact **would not be cumulatively considerable** under all the alternatives.

4.2 OVERCONCENTRATION

4.2.1 Overview

Sections 3.1 through 3.15 of this EIR evaluate the anticipated environmental impacts from adoption and implementation of the proposed CLUO under each of the five alternatives, including issuance of subsequent cannabis use permits under the adopted CLUO. Section 4.1 evaluates cumulative effects of implementation of the CLUO which examines the potential for the effects assessed in Sections 3.1 through 3.15 to compound or increase when considered together.

This section on overconcentration evaluates the environmental impacts that may occur from the effect of multiple cannabis uses in distinct subregions of the County. The analysis is provided by environmental issue area and is based on the impact analyses provided in Sections 3.1 through 3.15, and Section 4.1, of this EIR.

There are 78 existing and eligible cannabis cultivation sites that currently exist in the County. Based on an assessment of geographic proximity of these sites, there are four visibly recognizable clusters or concentrations of sites. These are shown in Exhibit 4-1. These clusters each occupy an area approximately six-miles in diameter. Concentrations clearly dissipate outside of the identified cluster areas. Based on the densities shown, for the purposes of this analysis, these four clusters represent areas of the County experiencing potential over-concentration of cannabis activities. The four geographic areas of concern are as follows:

- Cluster #1, Guinda/Rumsey – This area actually represents two overlapping clusters of sites. This area is treated as one cluster for purposes of analysis. There are 23 cultivation sites that fall within Cluster #1.
- Cluster #2, Willow Oaks/Monument Hills – There are 13 cultivation sites that fall within Cluster #2.
- Cluster #3, Dunnigan Area – There are nine cultivation sites that fall within Cluster #3.
- Cluster #4, Esparto Area – There are eight cultivation sites that fall within Cluster #4

Of these four areas, the Guinda/Rumsey Cluster (Cluster #1) exhibits a density of cannabis uses almost two to three times greater than the others and contains 30 percent of all the cannabis sites in the County. For these reasons, this cluster is determined to be “over-concentrated” for the purposes of this analysis.

The remaining three clusters (Willow Oaks/Monument Hills Cluster #2, Dunnigan Area Cluster #3, and Esparto Area Cluster #4), which have a density of greater than five sites within a six-mile diameter analysis area, but comparatively less than the Guinda/Rumsey area, are considered “potentially over-concentrated” for the purposes of this analysis.

There are 25 cannabis sites that fall outside of the cluster areas identified above and that do not fall within identifiable areas of concern. None of these remaining sites form clusters of greater than five sites within a six-mile diameter analysis area within the unincorporated area. For the purposes of this analysis is this remainder area is considered “not over-concentrated”.

As supported by this analysis, five or fewer sites within a six-mile diameter area is not considered over-concentration, and 23 or more sites is considered over-concentrated. The range between six and 22 sites is considered potentially overconcentrated. The determination of the exact point in this range where overconcentration clearly occurs is not further informed by this environmental review. This assessment acknowledges that that determination is a matter of policy rather than science and will be made by decision of the Board of Supervisors based on considerations that fall outside the purview of CEQA.

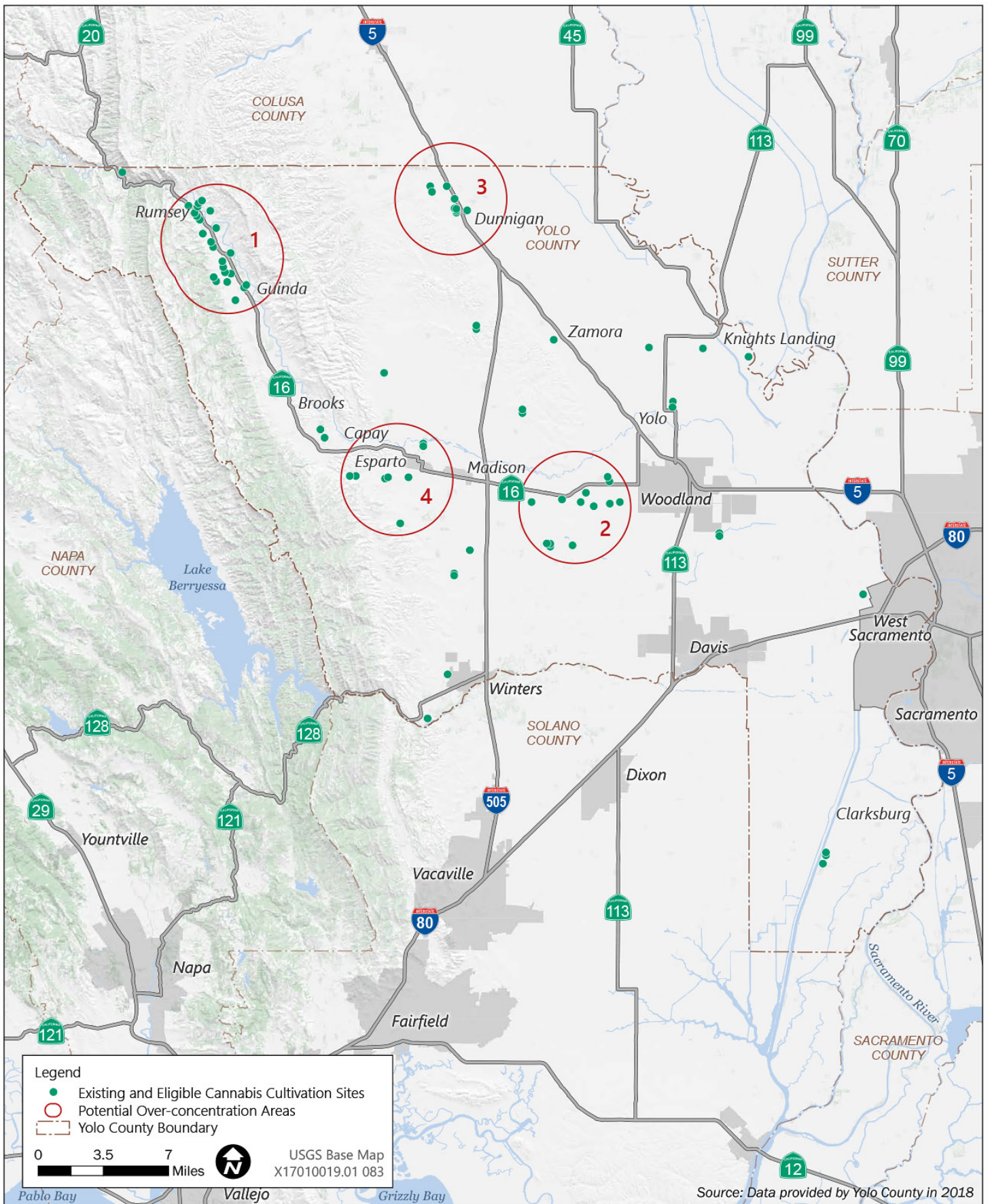


Exhibit 4-1

Cluster Map of Existing and Eligible Cannabis Cultivation Sites

CLUO Section 8-2.1406(H) allows the Board of Supervisors to establish limitations on the number of cannabis operations that may be approved in distinct subregions of the County. This Section states as follows:

Section 8-2.1406 (H) Over-Concentration – By resolution adopted concurrently with, or subsequent to, this article, as may be amended from time to time, the Board of Supervisors may establish limitations on the number of cannabis operations that may be approved in distinct subregions of the County. The subregions correspond with the jurisdictional boundaries of local General Plan Citizens' Advisory Committees. Note: Limitations or "caps" on the number of allowed cannabis operations in various County sub-regions have not yet been determined but are expected to be based primarily on population size and density in each subregion, with higher caps in less populated, less dense subregions. For purposes of applying any limitations set forth in such resolution, multiple licenses/permits (including permitted co-locations) at a single address shall count as one operation. Subject to this limitation, each operation covered by a development agreement approved through the "early" development agreement process that predated this article shall also count against the limitation.

If any combination of the number of approved use permits, "early" development agreements, or pending permit applications exceeds the limitation within a subregion, the Board of Supervisors shall be the final decision-making authority on any use permit application. The Board may approve a use permit if the approval would create or add to an over-concentration only upon finding that denial of the application would unduly limit development of the legal market so as to perpetuate the illegal market for cannabis and related products, and that the approval would not cause or contribute to a cannabis-related law enforcement problem or other public nuisance in the affected subregion and any surrounding affected areas.

As defined for purposes of the CEQA analysis, Alternatives 2, 3, and 4 assume the overconcentration controls stated above, whereas Alternatives 1 and 5 do not.

In addition to Section 8-2.1406(H) there are a number of other controls built into the County's existing and proposed cannabis program that could affect the number of cannabis use permits allowed within a given geographic area. These include (in no order):

- State licensing (existing)
- County licensing (existing)
- Overall license cap of 78 licenses (various options to modify this are under consideration)
- Zoning (proposed)
- Buffers (various options are under consideration)
- Canopy size limits (existing)
- Cannabis Use Permit process (proposed)
- Other proposed regulations in the CLUO

4.2.2 Impact Analysis

This section includes an analysis by environmental issue area and is based on the impact analyses in Sections 3.1 through 3.15 and Section 4.1 of this EIR.

IMPACT OVC-1: AESTHETIC IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Impacts AES-1 through AES-4 provide a detailed analysis of aesthetics. Impacts AES-1, AES-2, and AES-4 are less-than-significant for all alternatives. Impact AES-3 (visual character) and Impact CUM-1 (cumulative visual character) conclude that aesthetic impacts related to visual character would be significant and unavoidable for all alternatives. The analysis below examines the potential for aesthetic impacts resulting

from clusters of cannabis uses in four geographic areas of the County that have been identified as being over-concentrated or potentially over-concentrated with cannabis uses (see Exhibit 4-1).

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Alternative 1 is assumed to retain the existing concentration of existing and eligible cultivation sites shown in Exhibit 4-1. Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under this alternative based on zoning constraints proposed in the CLUO. The assumed nine relocations could result in a further concentration of cannabis uses in one of the four clusters identified in Exhibit 4-1.

By definition, this alternative does not assume implementation of CLUO Section 8-2.1406(H) which would potentially impose caps and other limitations on the number of cannabis operations that may be approved in distinct subregions of the County. Implementation of the CLUO would require approval of a Cannabis Use Permit and compliance with CLUO Sections 8-2.1408(B) (maintenance of the agricultural land not in use that include weed abatement and pest management), 8-2.1408(F) (compliance with applicable building design standards and policies of the County), 8-2.1408(X) (prohibition of hoop house lighting), 8-2.1408(Z) (lighting requirements to minimize glare and off-site impacts), 8-2.1408(KK) (screening of outdoor cannabis uses from public right-of-way), 8-2.1408(OO) (compliance with applicable site design standards and policies of the County), 8-2.1408(RR) (tree retention and protection standards), and 8-2.1412(C) (restoration of cultivation sites not in use). Implementation the CLUO requirements in Sections 8-2.1408(B), 8-2.1408(F), 8-2.1408(X), 8-2.1408(Z), 8-2.1408(KK), 8-2.1408(OO), 8-2.1408(RR), and 8-2.1412(C) would ensure that the visual character and lighting conditions of the area are controlled/maintained to an acceptable level at individual sites and cumulatively over the entire County.

While cannabis cultivation uses overall are not substantively different from other allowed agricultural uses in terms of size and massing, there are visual characteristics unique to cannabis cultivation that are different aesthetically from agricultural and rural land uses. For example, cannabis cultivation activities are often organized on a small portion of a larger site, with the supporting buildings and greenhouses located close to each other, as differentiated from other County agricultural operations such as row crops, orchards and vineyards, and pastureland that more commonly use the entire parcel area for a range of operations and activities. Also, for security purposes, cannabis cultivation often includes solid fencing that obstructs views of the site, and may block open public views across agricultural fields from some vantage points. Other features that differ from existing agricultural operations include security features (e.g., gates, security personnel, and guard dogs) and in some cases, the lack of maintenance of the remaining land areas of the parcel that are not used as part of the cultivation operation.

These differences, when clustered in the four geographic areas of the County identified as over-concentrated or potentially over-concentrated, are conservatively considered **significant** for aesthetic impacts for the reasons stated above.

Alternative 2: All License Types with Moderate Limits

Thirty of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under Alternative 2 as part of compliance with the CLUO (zoning and buffer). This alternative assumes development of 30 relocated sites and 54 new cultivation and noncultivation cannabis uses. As shown in Exhibit 2-5, based on existing operations and assumptions used to define this alternative, the majority of these new cannabis uses are assumed to be located along the SR 16 corridor and near the community of Dunnigan. The following analysis focuses on the potential for aesthetic impacts within the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. There are currently limited commercial and production agricultural operations in this area including Cache Creek Lavender Farm and Casa Rosa Farms. This alternative assumes that seven new cannabis uses

(distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 30 sites (30 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Willow Oaks/Monument Hills Cluster currently contains residential, recreational (golf course), airport, and production agricultural operations. This alternative assumes that five new cannabis uses (distribution, nursery, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 18 sites (38 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Dunnigan area currently contains several commercial and production agricultural operations. This alternative assumes that eight new cannabis uses (cultivation, distribution, nurseries, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 17 sites (88 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Esparto Area currently consists of residential and commercial uses that are surrounded by agricultural operations of varying sizes. This alternative assumes that four new cannabis uses (distribution, microbusiness, retail, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 12 (50 percent increase).

While cannabis operations overall are not substantively different from other allowed agricultural uses in terms of size and massing, as described above under Alternative 1, there are visual characteristics unique to cannabis uses that are arguably different aesthetically from other typical agricultural activities in the County. These unique visual characteristics, when concentrated in/near a small community or cluster of other non-agricultural or “traditional” agricultural uses, become more recognizable and arguably potentially adverse to the views of others. For this reason, conservatively, concentrations of cannabis uses in these four identified geographic areas, are potentially significant with respect to aesthetical impacts.

Implementation of the CLUO requirements in Sections 8-2.1408(B) (maintenance of the agricultural land not in use that includes weed abatement and pest management), 8-2.1408(F) (compliance with applicable building design standards and policies of the County), 8-2.1408(X) (prohibition of hoop house lighting), 8-2.1408(Z) (lighting requirements to minimize glare and off-site impacts), 8-2.1408(KK) (screening of outdoor cannabis uses from public right-of-way), 8-2.1408(OO) (compliance with applicable site design standards and policies of the County), 8-2.1408(RR) (tree retention and protection standards), and 8-2.1412(C) (restoration of cultivation sites not in use) would ensure that the visual character and lighting conditions of the area are controlled/maintained to an acceptable level at individual sites and cumulatively over the entire County.

Notwithstanding these proposed regulations, this effect, when concentrated in a smaller, geographic, subregion of the County is conservatively identified as **significant** for aesthetic impacts under Alternative 2 because there are visual characteristics unique to cannabis cultivation described herein that are different aesthetically from other agricultural uses.

Alternative 3: All License Types with High Limits

This alternative would include the largest extent of new cannabis uses in the County from the assumed development of nine relocated sites due to zoning restrictions under the CLUO and the addition of 186 new cultivation and noncultivation cannabis uses. As shown in Exhibit 2-6, based on existing operations and assumptions used to define this alternative, it is assumed to result in the greatest concentration of new

cannabis uses of all the alternatives along the SR 16 corridor and along portions of the I-5 corridor. The following analysis focuses on the potential aesthetic impacts within the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]). The effect of a smaller buffer, such as this, would be to allow more uses within a given area resulting in greater density. This contrasts with the effect of a larger buffer (such as 1,000 feet) which serves to space out cannabis sites resulting in lower density. There are currently limited commercial and production agricultural operations in this area including Cache Creek Lavender Farm and Casa Rosa Farms. This alternative assumes that 16 new cannabis uses (cultivation, nursery, retail, processing, distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 39 sites (70 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. The Willow Oaks/Monument Hills Cluster currently contains residential, recreational (golf course), airport, and production agricultural operations. This alternative assumes that 10 new cannabis uses (cultivation, distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 23 sites (77 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. The Dunnigan area currently contains several commercial and production agricultural operations. This alternative assumes that 15 new cannabis uses (cultivation, distribution, nurseries, testing, microbusiness, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 24 sites (166 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. The Esparto Area currently consists of residential and commercial uses that are surrounded by agricultural operations of varying sizes. This alternative assumes that 11 new cannabis uses (cultivation, distribution, microbusiness, retail, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 19 (138 percent increase).

While cannabis operations overall are not substantively different from other allowed agricultural uses in terms of size and massing, as described above under Alternative 1, there are visual characteristics unique to cannabis uses that are arguably different aesthetically from other typical agricultural activities in the County. These unique visual characteristics, when concentrated in/near a small community or cluster of other non-agricultural or “traditional” agricultural uses, become more recognizable and arguably potentially adverse to the views of others. For this reason, conservatively, concentrations of cannabis uses in these four identified geographic areas, are potentially significant with respect to aesthetical impacts.

Implementation of the CLUO requirements in Sections 8-2.1408(B) (maintenance of the agricultural land not in use that includes weed abatement and pest management), 8-2.1408(F) (compliance with applicable building design standards and policies of the County), 8-2.1408(X) (prohibition of hoop house lighting), 8-2.1408(Z) (lighting requirements to minimize glare and off-site impacts), 8-2.1408(KK) (screening of outdoor cannabis uses from public right-of-way), 8-2.1408(OO) (compliance with applicable site design standards and policies of the County), 8-2.1408(RR) (tree retention and protection standards), and 8-2.1412(C) (restoration of cultivation sites not in use) would ensure that the visual character and lighting conditions of the area are controlled/maintained to an acceptable level at individual sites and cumulatively over the entire County.

Notwithstanding these proposed regulations, this effect, when concentrated in a smaller, geographic, subregion of the County is conservatively identified as **significant** for aesthetic impacts under Alternative 3 because there are visual characteristics unique to cannabis cultivation described herein that are different aesthetically from other agricultural uses.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Alternative 4 assumes the relocation of nine of the 78 existing and eligible cannabis cultivation sites. This alternative also assumes that 75 of the existing and eligible outdoor cannabis cultivation sites would convert entirely to indoor or mixed-light (greenhouse) cultivation. It also assumes the development of 54 new cannabis cultivation and noncultivation uses. As shown in Exhibit 2-7, based on existing operations and assumptions used to define this alternative, the majority of these new cannabis uses would be located along the SR 16 corridor and near the Dunnigan area further concentrating the density of cannabis uses in these areas of the County. The following analysis focuses on the potential aesthetic impacts within the four cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. Because all uses are required to be conducted indoors, Alternative 4 does not assume buffers. There are currently limited commercial and production agricultural operations in this area including Cache Creek Lavender Farm and Casa Rosa Farms. This alternative assumes that seven new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 30 sites (30 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. Because all uses are required to be conducted indoors, Alternative 4 does not assume buffers. The Willow Oaks/Monument Hills Cluster currently contains residential, recreational (golf course), airport, and production agricultural operations. This alternative assumes that six new cannabis uses (distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 19 sites (46 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. The Dunnigan area currently contains several commercial and production agricultural operations. This alternative assumes that seven new cannabis uses (distribution, nurseries, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 16 sites (78 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. The Esparto Area currently consists of residential and commercial uses that are surrounded by agricultural operations of varying sizes. This alternative assumes that five new cannabis uses (distribution, microbusiness, retail, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 13 (63 percent increase).

While cannabis operations overall are not substantively different from other allowed agricultural uses in terms of size and massing, as described above under Alternative 1, there are visual characteristics unique to cannabis uses that are arguably different aesthetically from other typical agricultural activities in the County. These unique visual characteristics, when concentrated in/near a small community or cluster of other non-

agricultural or “traditional” agricultural uses, become more recognizable and arguably potentially adverse to the views of others. For this reason, conservatively, concentrations of cannabis uses in these four identified geographic areas, are potentially significant with respect to aesthetical impacts.

Implementation of the CLUO requirements in Sections 8-2.1408(B) (maintenance of the agricultural land not in use that includes weed abatement and pest management), 8-2.1408(F) (compliance with applicable building design standards and policies of the County), 8-2.1408(X) (prohibition of hoop house lighting), 8-2.1408(Z) (lighting requirements to minimize glare and off-site impacts), 8-2.1408(KK) (screening of outdoor cannabis uses from public right-of-way), 8-2.1408(OO) (compliance with applicable site design standards and policies of the County), 8-2.1408(RR) (tree retention and protection standards), and 8-2.1412(C) (restoration of cultivation sites not in use) would ensure that the visual character and lighting conditions of the area are controlled/maintained to an acceptable level at individual sites and cumulatively over the entire County.

Notwithstanding these proposed regulations, this effect, when concentrated in a smaller, geographic, subregion of the County is conservatively identified as **significant** for aesthetic impacts under Alternative 4 because there are visual characteristics unique to cannabis cultivation described herein that are different aesthetically from other agricultural uses.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

This alternative assumes the development of 30 relocated sites as part of compliance with the CLUO and 50 new cultivation and noncultivation cannabis uses. As shown in Exhibit 2-8, based on existing operations and assumptions used to define this alternative, the majority of these new cannabis uses would be located along the SR 16 corridor and near the Dunnigan area. The following analysis focuses on the potential aesthetic impacts within the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. There are currently limited commercial and production agricultural operations in this area including Cache Creek Lavender Farm and Casa Rosa Farms. This alternative assumes that seven new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 30 sites (30 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Willow Oaks/Monument Hills Cluster currently contains residential, recreational (golf course), airport, and production agricultural operations. This alternative assumes that six new cannabis uses (distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 19 sites (46 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Dunnigan area currently contains several commercial and production agricultural operations. This alternative assumes that eight new cannabis uses (cultivation, distribution, nurseries, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 17 sites (88 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Esparto Area currently consists of residential and commercial uses that are surrounded by agricultural operations of varying sizes. This alternative assumes that three new cannabis uses (distribution,

microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 11 (38 percent increase).

While cannabis operations overall are not substantively different from other allowed agricultural uses in terms of size and massing, as described above under Alternative 1, there are visual characteristics unique to cannabis uses that are arguably different aesthetically from other typical agricultural activities in the County. These unique visual characteristics, when concentrated in/near a small community or cluster of other non-agricultural or “traditional” agricultural uses, become more recognizable and arguably potentially adverse to the views of others. For this reason, conservatively, concentrations of cannabis uses in these four identified geographic areas, are potentially significant with respect to aesthetical impacts.

By definition, this alternative does not assume implementation of CLUO Section 8-2.1406(H) which would potentially impose caps and other limitations on the number of cannabis operations that may be approved in distinct subregions of the County. Implementation of the CLUO requirements in Sections 8-2.1408(B) (maintenance of the agricultural land not in use that includes weed abatement and pest management), 8-2.1408(F) (compliance with applicable building design standards and policies of the County), 8-2.1408(X) (prohibition of hoop house lighting), 8-2.1408(Z) (lighting requirements to minimize glare and off-site impacts), 8-2.1408(KK) (screening of outdoor cannabis uses from public right-of-way), 8-2.1408(OO) (compliance with applicable site design standards and policies of the County), 8-2.1408(RR) (tree retention and protection standards), and 8-2.1412(C) (restoration of cultivation sites not in use) would ensure that the visual character and lighting conditions of the area are controlled/maintained to an acceptable level at individual sites and cumulatively over the entire County.

Notwithstanding these proposed regulations, this effect, when concentrated in a smaller, geographic, subregion of the County is conservatively identified as **significant** for aesthetic impacts under Alternative 5 because there are visual characteristics unique to cannabis cultivation described herein that are different aesthetically from other agricultural uses.

MITIGATION MEASURES

Mitigation Measure OVC-1a: Modify CLUO Section 8-2.1406(H) (Alternative 1-5)

Establish and implement detailed procedures for implementing Section 8-2.1406(H) of the proposed CLUO for all Alternatives 1 through 5 to include the following:

- I. Establish a threshold for the number of sites within a six-mile diameter area that would not constitute over-concentration. Based on the EIR analysis, the threshold is five or fewer sites.
- II. Establish a threshold for the number of sites within a six-mile diameter area that constitutes over-concentration. Based on the EIR analysis, the threshold falls between six and 22 sites which is the identified range of potential overconcentration. The Board of Supervisors will identify a specific threshold for over-concentration as a matter of policy and this threshold will be included in the adopted CLUO as reflected in VI below.
- III. Prohibit the issuance of any Cannabis Use Permits in any identified or future six-mile diameter area in excess of the threshold established in II above, unless special findings described in VI below are made.
- IV. The Board of Supervisors shall have final decision-making authority over Cannabis Use Permits in areas of potential over-concentration and over-concentration. In other areas, the Planning Commission will be the decision-making authority, and would only go before the Board of Supervisors on appeal.
- V. The County shall establish a procedure and appropriate resources for processing use permit applications under the adopted CLUO such that all sites within each of the four identified clusters will be processed simultaneously to enable consideration of community specific issues and to facilitate

community involvement. Use permit applications for the 78 existing and eligible licensees will be processed prior to acceptance of subsequent applications.

- VI. To satisfy Mitigation Measure OVC-1a through c, the proposed language for Section 8-2.1406(H) shall be modified as follows:

Section 8-2.1406 (H) Over-Concentration – Five or less cannabis use permits in any area of the County with a diameter of six-miles shall not be considered over-concentrated. Six to XX cannabis use permits in any area of the County with a diameter of six-miles shall be considered potentially over-concentrated. More than XX cannabis use permits in any area of the County with a diameter of six miles shall be considered over-concentrated, and shall not be allowed unless special findings are made as described further below.³

By resolution adopted concurrently with, or subsequent to, this article, as may be amended from time to time, the Board of Supervisors shall establish procedures and commit resources to implement this section and ensure processing of cannabis use permits in areas of potential over-concentration and over-concentration, consistent with the adopted CLUO.

~~By resolution adopted concurrently with, or subsequent to, this article, as may be amended from time to time, the Board of Supervisors may establish limitations on the number of cannabis operations that may be approved in distinct subregions of the County. The subregions correspond with the jurisdictional boundaries of local General Plan Citizens' Advisory Committees. Note: Limitations or "caps" on the number of allowed cannabis operations in various County sub regions have not yet been determined but are expected to be based primarily on population size and density in each subregion, with higher caps in less populated, less dense subregions. For purposes of applying any limitations set forth in such resolution,~~

Multiple licenses/permits (including permitted co-locations) at a single address shall count as one operation. Subject to this limitation, each operation covered by a development agreement approved through the "early" development agreement process that predated this article shall also count against the limitation.

~~If any combination of the number of approved use permits, "early" development agreements, or pending permit applications exceeds the limitation within a subregion, The Board of Supervisors shall be the final decision-making authority on any use permit application within an area of potential over-concentration or over-concentration.~~

The Board may approve a use permit in an area of ~~if the approval would create or add to an~~ over-concentration only upon making special findings that denial of the application would unduly limit development of the legal market so as to perpetuate the illegal market for cannabis and related products, ~~and that the approval would not cause or contribute to a cannabis-related law enforcement problem or other public nuisance in the affected subregion and any surrounding affected areas.~~

Mitigation Measure OVC-1b: Establish Priority Processing for Cannabis Use Permits in Cluster Areas (Alternatives 1-5)

Adopt procedures pursuant to Mitigation Measure OVC-1a V to ensure that Cannabis Use Permits for existing cannabis cultivation sites in the Guinda/Rumsey Cluster #1, Willow Oaks/Monument Hills Cluster #2, Dunnigan Area Cluster #3, and Esparto Area Cluster #4 are processed prior to the consideration of new cannabis uses under any alternative.

³ This will be replaced with the threshold determined by the Board of Supervisors pursuant to Mitigation Measure OVC-1a(II)

Mitigation Measure OVC-1c: Expand Cannabis Use Permit Issuance Findings (Alternatives 1-5)

Modify CLUO Section 8-2.1406(L) to add the following community considerations in addition to the those already identified in the CLUO for determining whether to grant a Cannabis Use Permit:

- Number of cannabis operations in area
- Proximity of cannabis operations (e.g. to each other/and/or to other identified sensitive uses)
- Adjoining/nearby land uses
- Population in area
- Crime rate in area
- Compliance history of the applicant and/or operator
- Nuisance abatements in area
- Community character
- Community support
- Parcels size and proposed uses on non-cannabis portion of parcel
- Subject matter input relevant to the specific location or proposed project from County department and division heads
- Other cultural, social, equity, and environmental justice concerns deemed applicable by the County

Significance after Mitigation

These Mitigation Measures would ensure, among other things, that overconcentration is regulated under any alternative. Implementation of Mitigation Measures OVC-1a through OVC-1c would ensure that the unique setting of those subregions of the County where overconcentration is projected to potentially occur, is considered in issuing Cannabis Use Permits and establishing regionally-based caps on cannabis activities. These measures would also establish consistent thresholds to guide processing of all future Cannabis Use Permits to ensure the same considerations of overconcentration are implemented over time as cannabis operations are established and removed under the program. Notwithstanding implementation of these mitigation measures, it is acknowledged that the visual character of identified subareas of the County will be altered as a result of continued and possible expanded cannabis activities. Therefore, aesthetic impacts due to overconcentration in identified areas would be **significant and unavoidable** for all alternatives.

IMPACT OVC-2: AGRICULTURAL RESOURCE IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Agricultural resource impacts for the CLUO under the five alternatives are addressed in Section 3.2, "Agricultural Resources." Impacts AG-1 and AG-3 identify no significant impacts associated with the loss of farmland or conflicts with existing agricultural uses under any of the alternatives. Pursuant to California Health and Safety Code Section 11362.777(a) and Business and Profession Code Section 26067(a) the state has defined medical and adult-use cannabis as agricultural products. Section 8-2.1404(E) of the proposed CLUO identifies cannabis cultivation and related activities as agricultural land uses. Section 8-2.1404(E) states:

Cannabis Cultivation and Related Activities are Agricultural Land Uses – Legal cultivation of cannabis is an agricultural use.

The cultivation and commerce process for cannabis involves largely same practices as other agricultural products currently generated in the County. These similar practices include:

- cultivation of the crop through a growth medium (soil), light, water, and nutrients;
- harvesting and processing of the crop for sale;
- industrial activities that create products from the crop; and
- sales of crop and/or products created from the crop.

However, there are differences in how cannabis cultivation is conducted as compared to other agricultural operations. Operations dedicated to cannabis cultivation are generally concentrated near the permitted grow area and the remaining land areas of the parcel may not be used as part of the cultivation operation. This differs from other County agricultural operations such as row crops, orchards and vineyards, and pastureland that typically use the entire parcel area. The potential uses of these remaining lands on cultivation sites are governed by the requirements of the General Plan and County Zoning Regulations.

The CLUO includes Section 8-2.1408(B) which would require maintenance of cannabis sites (including land areas of parcels not in use) to avoid nuisances and pest issues that could result in impacts to adjoining agricultural uses. Section 8-2.1408(B) includes proposed standards for agricultural applications (e.g., pesticides) that are designed to protect public health and adjoining agricultural uses.

Implementation of the CLUO would allow for the continued operation of the 78 existing and eligible cannabis cultivation uses in the County subject to obtaining approval of a Cannabis Use Permit. Implementation of Alternatives 2, 3, 4, and 5 assume additional cannabis cultivation uses and new noncultivation cannabis uses (manufacturing, distribution, retail, testing, microbusinesses, processing, and nurseries) within the County's agricultural zones as well as commercial and industrial zones. Noncultivation cannabis uses would support the success of cannabis cultivation consistent with General Plan policies AG-3.2, AG-3.4, AG-3.7, ED-1.3 that allow for uses that support agriculture including commercial uses, product sales, processing, and distribution of locally produced crops. Noncultivation cannabis uses are considered by the County as compatible with farmland and are similar to agricultural land uses currently allowed under the Zoning Regulations. Section 8-2.303 of the Yolo County Code allows agricultural land uses and operations that include processing of agricultural products, accessory uses such as greenhouses, commercial uses such as, agricultural chemical/fertilizer sales, wineries, breweries, and industrial uses such as regional processing facilities (e.g., wine, beer, spirit, olive oil production, canneries, and commercial composting) (Zoning Regulation Tables 8-2.304[a], 8-2.304[c], and 8-2.304[d]).

While assumed cannabis uses under the alternatives could concentrate cannabis uses in the four cluster areas identified in Exhibit 4-1, no significant agricultural land conversion or conflicts would occur as a result. Thus, agricultural resource impacts associated with concentration of cannabis uses would be **less than significant** under all alternatives.

IMPACT OVC-3: AIR QUALITY AND ODOR IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

The following analysis is based on the impact analysis provided in Section 3.3, "Air Quality and Odors." The reader is referred to impacts AQ-1 through AQ-4 for detailed analysis of impacts under each of the alternatives.

Impact AQ-1 related to conflicts with air quality policies and regulations was found to be less than significant for all alternatives based on compliance with standard requirements of the YSAQMD and the CLUO. Impacts AQ-2 and AQ-3 address air pollutant emissions that are anticipated to result from cannabis uses assumed under each of the five alternatives. These air pollutant emissions include ozone precursors (ROG and NO_x) and particulate matter (PM₁₀ and PM_{2.5}). As shown in Table 3.3-5 and 3.3-6, emissions for individual cannabis sites would be below YSAQMD thresholds of significance. As described in Section 3.3, "Air Quality and Odors," these air pollutants are regional in nature and would disperse throughout the County and the Sacramento Valley Air Basin. As discussed under Impact AQ-2, all individual sites that are permitted under

the CLUO would be required to control dust emissions in accordance with YSAQMD's rules, as described in Section 8-2.140(L). Cannabis uses are also required to generate 50 percent of their energy demand from renewable sources under the CLUO Section 8-2.1408(O). Section 8-2.1408(T) of the CLUO requires compliance of generators with YSAQMD and CCR Section 8306. These emissions are similar to existing agricultural uses in the area and would not create a localized air quality impact as a result of the concentration of cannabis uses in subregions of the County.

Impact AQ-4 addresses odor and concludes that impacts related to odor, for all alternatives, is significant and unavoidable for implementation of the CLUO, including issuance of subsequent Cannabis Use Permits. Impact CUM-3 addressing cumulative odor impacts makes a similar determination, concluding that cumulative odor impacts would be significant and unavoidable for all alternatives. The analysis below examines the potential for odor impacts resulting from clusters of cannabis uses in four geographic areas of the County that have been identified as being potentially over-concentrated with cannabis uses (see Exhibit

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) With Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Alternative 1 is assumed to retain the existing concentration of existing and eligible cultivation sites shown in Exhibit 4-1. Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under this alternative based on zoning constraints proposed in the CLUO. The assumed nine relocations could result in a further concentration of cannabis uses in one of the four clusters identified in Exhibit 4-1.

By definition, this alternative does not assume implementation of CLUO Section 8-2.1406(H) which would potentially impose caps and other limitations on the number of cannabis operations that may be approved in distinct subregions of the County.

Implementation of the CLUO would require approval of a Cannabis Use Permit and compliance with CLUO Section 8-2.1408(E) which proposes buffers for this Alternative of 75 feet from cannabis uses for individual residences and 1,000 feet for other defined sensitive receptors). The CLUO would establish odor control regulations that require odor management and set thresholds for acceptable vs nuisance odor. Odors must be controlled at the property line of the site to a dilution-to-threshold ratio (D/T) of seven parts clean or filtered air to one part odorous air (7 D/T) or less. The proposed CLUO requires the development of an Odor Control Plan (CLUO Section 8-2.1410[D][2]) for each operation and identifies a process of corrective actions for nuisance odor conditions (CLUO Section 8-2.1408[CC] and 8-2.1408[DD]).

Notwithstanding the implementation of these regulations, the potential for impacts to occur is conservatively identified as significant and unavoidable because:

- Cannabis remains a controversial activity.
- Some neighbors have expressed that they are very sensitive to the odor and find it to be highly objectionable.
- The proposed regulatory threshold is not zero-detect which means that some odor will be detectable and will be considered acceptable under the regulations.
- Odor exceedances in excess of the allowable level may be higher in early years as the industry and technology evolve despite the fact that enforcement will occur under the ordinance.

These concerns, when examined within the four geographic areas of the County identified as potentially over-concentrated, are conservatively considered **significant** for odor impacts under Alternative 1.

Alternative 2: All Licenses Types with Moderate Limits

Thirty of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under Alternative 2 as part of compliance with the CLUO. This alternative assumes development of 30 relocated sites and 54 new cultivation and noncultivation cannabis uses. As shown in Exhibit 2-5, based on existing operations and assumptions used to define this alternative, the majority of these new cannabis uses are assumed to be located along the SR 16 corridor and near the Dunnigan area. The following analysis focuses on the potential for odor impacts within the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. This alternative assumes that seven new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 30 sites (30 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. This alternative assumes that five new cannabis uses (distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 18 sites (38 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. This alternative assumes that eight new cannabis uses (cultivation, distribution, nurseries, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 17 sites (88 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. This alternative assumes that four new cannabis uses (distribution, microbusiness, retail, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 12 (50 percent increase).

As discussed above under Alternative 1, the CLUO establishes land use restrictions, buffers, odor control, and corrective actions to address potential odor nuisance impacts. Notwithstanding the implementation of these regulations, the potential for odor impacts to occur in a smaller, geographic subregion of the County is conservatively identified as **significant** because some neighbors are very sensitive to the odor and find it to be highly objectionable, the proposed regulatory threshold is not zero-detect which means that some odor will be detectable and will be considered acceptable under the regulations, and in recognition that odor exceedances in excess of the acceptable level may be higher in early years as the industry and technology evolve despite the fact that enforcement will occur under the ordinance.

These concerns, when examined within the four geographic areas of the County identified as potentially over-concentrated, are conservatively considered **significant** for odor impacts under Alternative 2.

Alternative 3: All License Types with High Limits

This alternative would include the largest extent of new cannabis uses in the County from the assumed development of nine relocated sites and the addition of 186 new cultivation and noncultivation cannabis uses. As shown in Exhibit 2-6, based on existing operations and assumptions used to define this alternative, it is assumed to result in the greatest concentration of new cannabis uses of all the alternatives along the

SR 16 corridor and along portions of the I-5 corridor. The following analysis focuses on the potential for odor impacts within the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. This alternative assumes that 16 new cannabis uses (cultivation, nursery, distribution, microbusiness, retail, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 39 sites (70 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. This alternative assumes that 10 new cannabis uses (cultivation, distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster 23 sites (77 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. This alternative assumes that 15 new cannabis uses (cultivation, distribution, nurseries, testing, microbusiness, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 24 sites (166 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. This alternative assumes that 11 new cannabis uses (cultivation, distribution, microbusiness, retail, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 19 (138 percent increase).

As discussed above under Alternative 1, the CLUO establishes land use restrictions, buffers, odor control, and corrective actions to address potential odor nuisance impacts. Notwithstanding the implementation of these regulations, the potential for odor impacts to occur in a smaller, geographic subregion of the County is conservatively identified as **significant** because some neighbors are very sensitive to the odor and find it to be highly objectionable, the proposed regulatory threshold is not zero-detect which means that some odor will be detectable and will be considered acceptable under the regulations, and in recognition that odor exceedances in excess of the allowable level may be higher in early years as the industry and technology evolve despite the fact that enforcement will occur under the ordinance.

These concerns, when examined within the four geographic areas of the County identified as potentially over-concentrated, are conservatively considered **significant** for odor impacts under Alternative 3.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Alternative 4 assumes the relocation of nine of the 78 existing and eligible cannabis cultivation sites. This alternative also assumes that 75 of the existing and eligible outdoor cannabis cultivation sites would convert entirely to indoor or mixed-light (greenhouse) cultivation. It also assumes the development of 54 new cannabis cultivation and noncultivation uses. As shown in Exhibit 2-7, based on existing operations and assumptions used to define this alternative, the majority of these new cannabis uses would be located along the SR 16 corridor and near the Dunnigan area further concentrating the density of cannabis uses in these areas of the County. The following analysis focuses on the potential for odor impacts within the four cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. Because all uses are required to be conducted indoors, Alternative 4 does not assume buffers. This alternative assumes that seven new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 30 sites (30 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. Because all uses are required to be conducted indoors, Alternative 4 does not assume buffers. This alternative assumes that six new cannabis uses (distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster 19 sites (46 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. This alternative assumes that seven new cannabis uses (distribution, nurseries, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 16 sites (78 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. This alternative assumes that five new cannabis uses (distribution, microbusiness, retail, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 13 (63 percent increase).

As discussed above under Alternative 1, the CLUO establishes land use restrictions, buffers, odor control, and corrective actions to address potential odor nuisance impacts. Notwithstanding the implementation of these regulations, the potential for odor impacts to occur in a smaller, geographic subregion of the County is conservatively identified as **significant** because some neighbors are very sensitive to the odor and find it to be highly objectionable, the proposed regulatory threshold is not zero-detect which means that some odor will be detectable and will be considered acceptable under the regulations, and in recognition that odor exceedances in excess of the allowable level may be higher in early years as the industry and technology evolve despite the fact that enforcement will occur under the ordinance.

Because Alternative 4 assumes all cannabis activities are conducted within structures, this Alternative is likely to have lower odor impacts overall than Alternatives 1, 2, 3, and 5. Nevertheless, while the assumptions of this Alternative and the identified odor control measures would minimize the likelihood of nuisance odors, the potential for odor emissions to occur remains. These concerns, when examined within the four geographic areas of the County identified as potentially over-concentrated, are conservatively considered **significant** for odor impacts under Alternative 4.

Alternative 5: All License Types with Moderate Limits, Within Agricultural Zones Only, No Retail

This alternative assumes the development of 30 relocated sites as part of compliance with the CLUO and 50 new cultivation and noncultivation cannabis uses. As shown in Exhibit 2-8, based on existing operations and assumptions used to define this alternative, the majority of these new cannabis uses would be located along the SR 16 corridor and near the Dunnigan area. The following analysis focuses on the potential for odor impacts within the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. This alternative assumes that seven new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 30 sites (30 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. This alternative assumes that six new cannabis uses (distribution, nursery, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster 19 sites (46 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. This alternative assumes that eight new cannabis uses (cultivation, distribution, nurseries, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 17 sites (88 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. This alternative assumes that three new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 11 (38 percent increase).

As discussed above under Alternative 1, the CLUO establishes land use restrictions, buffers, odor control, and corrective actions to address potential odor nuisance impacts. Notwithstanding the implementation of these regulations, the potential for odor impacts to occur in a smaller, geographic subregion of the County is conservatively identified as **significant** because some neighbors are very sensitive to the odor and find it to be highly objectionable, the proposed regulatory threshold is not zero-detect which means that some odor will be detectable and will be considered acceptable under the regulations, and in recognition that odor exceedances in excess of the allowable level may be higher in early years as the industry and technology evolve despite the fact that enforcement will occur under the ordinance.

These concerns, when examined within the four geographic areas of the County identified as potentially over-concentrated, are conservatively considered **significant** for odor impacts under Alternative 5.

Mitigation Measures

Mitigation Measure OVC-1a: Modify CLUO Section 8-2.1406(H) (Alternative 1-5)

Mitigation Measure OVC-1b: Establish Priority Processing for Cannabis Use Permits in Cluster Areas (Alternatives 1-5)

Mitigation Measure OVC-1c: Expand Cannabis Use Permit Issuance Findings (Alternatives 1-5)

Significance after Mitigation

These Mitigation Measures would ensure, among other things, that overconcentration is regulated under any alternative. Implementation of Mitigation Measures OVC-1a through OVC-1c would ensure that the unique setting of those subregions of the County where overconcentration is projected to potentially occur, is

considered in issuing Cannabis Use Permits and establishing regionally-based caps on cannabis activities. These measures would also establish consistent thresholds to guide processing of all future Cannabis Use Permits to ensure the same considerations of overconcentration over time as cannabis operations are established and removed under the program. Notwithstanding implementation of these mitigation measures, it is acknowledged that because, some neighbors are very sensitive to the odor and find it to be highly objectionable, the proposed regulatory threshold is not zero-detect which means that some odor will be detectable and will be considered acceptable under the regulations, and in recognition that odor exceedances in excess of the allowable level may be higher in early years as the industry and technology evolve despite the fact that enforcement will occur under the ordinance. Therefore, odor impacts due to overconcentration in identified areas would be **significant and unavoidable** for all alternatives.

IMPACT OVC-4: BIOLOGICAL RESOURCE IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Biological resource impacts of the CLUO under all five alternatives are addressed in Section 3.4, “Biological Resources.” Impacts BIO-1 through BIO-7 address biological resources under each of the five alternatives. The five alternatives are assumed to result in the use of 18 to 379 acres of land for new cannabis uses. Development and operation of relocated cultivation sites and new cannabis uses may result in adverse effects on special-status species, sensitive natural communities and riparian habitat, state and federally protected wetlands, and resident or migratory wildlife corridors or wildlife nursery sites.

The CLUO includes performance standards (including participation in the Yolo Habitat Conservation Plan/Natural Community Conservation Plan [HCP/NCCP]) that address special-status species, habitat impacts, and invasive plants in CLUO Sections 8-2.1408(A), 8-2.1408(D), 8-2.1408(OO), and 8-2.1408(RR). Operation of the cultivation sites are also subject to compliances with Terms 4, 10, 27, and 37 of Attachment A (General Requirements and Prohibitions) of State Water Resources Control Board (SWRCB) Order WQ 2019-0001-DWQ that also provide special-status species and habitat protection requirements.

Implementation of the these requirements and Mitigation Measure BIO-1 would offset impacts to special-status species countywide because these measures would require: reconnaissance-level surveys of the activity footprint; identification of special-status species, sensitive communities, and special-status species habitat within the activity footprint; and protection, avoidance, and compensation for impacts on these species, habitats, and movement corridors in a manner consistent with the Yolo HCP/NCCP as well as state and federal law.

While assumed cannabis uses under the alternatives could concentrate cannabis uses in the four cluster areas identified in Exhibit 4-1, no significant impacts to biological resources would occur that are not addressed in Section 3.4, “Biological Resources.” Thus, biological resource impacts associated with concentration of cannabis uses within smaller geographic areas would be **less than significant** under all alternatives.

IMPACT OVC-5: CULTURAL RESOURCE IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Cultural resource impacts of the CLUO under the five alternatives are addressed in Section 3.5, “Cultural Resources.” Impacts CULT-1 through CULT-4 address cultural resources under each of the five alternatives.

Cannabis uses would be subject to CLUO Sections 8-2.1408(H), 8-2.1408(OO), and 8-2.14010(C)(1) that would require site assessments to determine potential cultural resources on the project site and site plans may be required to be modified to protect the resource. In addition to the CLUO, cannabis cultivation sites are required to comply with the SWRCB Attachment A (General Requirements and Prohibitions) of Order WQ 2019-0001-DWQ. Term 21 of the General Requirements and Prohibitions requires that records searches be performed through the applicable CHRIS information center before land-disturbing activities for cultivation operations. Positive results identified in the records search would require further evaluation. Term 22

requires documentation and protection of any discovered archaeological resources during cultivation operations.

While assumed cannabis uses under the alternatives could concentrate cannabis uses in the four cluster areas identified in Exhibit 4-1, no significant impacts to cultural resources would occur that are not addressed in Section 3.5. Thus, cultural resource impacts associated with concentration of cannabis uses within smaller geographic areas would be **less than significant** under all alternatives.

IMPACT OVC-6: ENERGY IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Energy impacts of the CLUO under the five alternatives are addressed in Section 3.6, “Energy.” Impacts ENE-1 and ENE-2 address energy impacts under each of the five alternatives. As discussed in Section 3.6 and Section 3.15, “Utility and Service Systems,” electric and natural gas services in Yolo County are provided by the Pacific Gas and Electric Company (PG&E). PG&E operates electricity and natural gas infrastructure in the County and throughout northern California, including power lines, power plants, pipelines, and substations. Private companies provide service for some of the unincorporated areas of the County not covered by PG&E. As of 2017, PG&E procured 33 percent of its electricity from renewable sources. Additionally, PG&E customers in unincorporated Yolo County can opt into Valley Clean Energy (VCE), a community choice aggregator that offers electricity at higher renewable rates than PG&E. VCE offers two levels of electricity service: Standard Green, which procures 42 percent of its electricity from renewables; and UltraGreen, which offers 100 percent renewable electricity. These services and associated infrastructure is provided countywide and is not limited to a single subregion.

As identified in Impact ENE-1, Section 8-2.1408(O) of the CLUO includes a renewable energy requirement of at least 50 percent for all cultivation and noncultivation sites. CCR Sections 8203 and 8305 set forth renewable energy requirement for new and relicensed sites. Under these requirements, all sites seeking license renewals must meet the average electricity greenhouse gas emissions intensity required of their local utility provider pursuant to the California Renewables Portfolio Standard.

While assumed cannabis uses under the alternatives could concentrate cannabis uses in the four cluster areas identified in Exhibit 4-1, no significant energy impacts would occur that are not addressed in Section 3.6, “Energy.” Thus, energy impacts associated with concentration of cannabis uses within smaller geographic areas would be **less than significant** under all alternatives.

IMPACT OVC-7: GEOLOGY AND SOIL IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Geology and soil impacts of the CLUO under the five alternatives are addressed in Section 3.7, “Geology and Soils.” Impact GEO-1 through GEO-4 address geology and soil impacts.

As identified in Impact GEO-1 and GEO-2, cultivation sites would be subject to the requirements of SWRCB Order WQ 2019-0001-DWQ and CLUO Sections 8-2.1408(F) and 8-2.1408(V) which would require that cultivation sites maintain soil and slope stability. While noncultivation sites would not be subject to SWRCB Order WQ 2019-0001-DWQ, these sites would be subject to CLUO Sections 8-2.1408(F) and 8-2.1408(V) that would require grading and drainage improvements to be implemented in a manner that prevent geologic and soil stability issues. Impact GEO-3 identifies that cannabis uses would be required to comply Sections 8-2.1408(H)(1), 8-2.1408(OO), and 8-2.1410(C)(1) of the CLUO, which requires a site survey to determine the potential for paleontological resources and development of a mitigation plan if merited, to protect identified paleontological resources. Impact GEO-4 identified that none of the alternatives would obstruct continued aggregate mining of the 20,000-acre CCAP area.

While assumed cannabis uses under the alternatives could concentrate cannabis uses in the four cluster areas identified in Exhibit 4-1, no significant geology or soils impacts would occur that are not addressed in Section 3.7, “Geology and Soils.” Thus, geology and soil impacts associated with concentration of cannabis uses within smaller geographic areas would be **less than significant** under all alternatives.

IMPACT OVC-8: GREENHOUSE GASES AND CLIMATE CHANGE IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Greenhouse gas emissions (GHG) impacts of the CLUO under the five alternatives are addressed in Section 3.8, “Greenhouse Gases and Climate Change.” As discussed in Section 3.8, climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have long atmospheric lifetimes (1 to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Thus, GHG emissions and the associated impact of climate change are not affected by concentration of cannabis uses in a subregion of the County.

As discussed under Impact GHG-1, the CLUO would align with both the Yolo County Climate Action Plan (CAP) and the local actions identified in the California 2017 Scoping Plan through its requirements of renewable energy procurement, energy-efficient lighting, water conservation, and drought tolerant landscaping. In instances where the CLUO would not align with these applicable plans adopted for the purposes of reducing greenhouse gas emissions, mitigation measures are recommended. Implementation of Mitigation Measure GHG-1 would ensure compliance all Yolo County CAP measures that are intended to reduce GHG emissions. With this mitigation measure, all alternatives under the CLUO would align with the Yolo County CAP and 2017 Scoping Plan, the applicable plans and policies adopted for the purpose of reducing GHG emissions.

While assumed cannabis uses under the alternatives could concentrate cannabis uses in the four cluster areas identified in Exhibit 4-1, no significant GHG or climate change impacts would occur that are not addressed in Section 3.8, “Greenhouse Gases and Climate Change.” Thus, GHG and climate change impacts associated with concentration of cannabis uses within smaller geographic areas would be **less than significant** under all alternatives.

IMPACT OVC-9: HAZARDS AND HAZARDOUS MATERIAL IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Hazard impacts of the CLUO under all five alternatives are addressed in Section 3.9, “Hazards and Hazardous Materials.” Impacts HAZ-1 through HAZ-6 address impacts associated with hazards and hazardous materials.

Compliance with CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), would require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety. Cannabis uses and the associated use of pesticides and other hazardous materials would be regulated under the state requirements, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of CLUO Sections 8-2.1408(CC), 8-2.1408(OO), and 8-2.1410(C)(3) would require further evaluation of potential on-site contamination issues and require remediation of any contamination that presents a public safety issue.

Implementation of the CLUO could concentrate cannabis uses in a fire hazard severity zone that may lead to a wildfire hazard impact. Further analysis is provided below by alternative. The Guinda/Rumsey Cluster #1 and the Esparto Area Cluster #4 are located within a State Responsibility Area (SRA) and fire hazard severity zones.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Alternative 1 is assumed to retain the 78 existing and eligible cannabis cultivation sites, and nine of the 78 sites are assumed to relocate under Alternative 1 as part of compliance with the CLUO. Exhibit 3.9-8 shows the extent of existing and eligible cultivation sites within the fire hazard severity zones. Impact HAZ-6 identifies that cultivation sites would be required to comply with PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Compliance with these standards would ensure that relocated cultivation uses do not create or increase wildfire hazards to residents or buildings. Impacts associated with the concentration of cannabis uses (including the Guinda/Rumsey Cluster #1 and Esparto Area Cluster #4) related to wildfire hazards would be **less than significant**.

Alternative 2: All License Types with Moderate Limits

Thirty of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under Alternative 2 as part of compliance with the CLUO. This alternative would consist of the development of 30 relocated sites and 54 new cultivation and noncultivation cannabis uses. As shown in Exhibit 3.9-9, based on existing operations and assumptions used to define this alternative, it is assumed that this alternative would result in 20 new cannabis uses within the moderate fire hazard fire severity zone, of which seven could be located in or near the Guinda/Rumsey Cluster #1 and three in or near the Esparto Area Cluster #4. As described in Impact HAZ-6, cannabis uses would be required to comply with PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Manufacturing uses would be required to comply with fire protection standards provided in CCR Title 17, Division 1, Chapter 13, Sections 40223(b), 40225(b), 40225(d), and 40280(a), which require fire control measures that include proper handling of flammable materials to avoid fire hazards and engineering of the closed loop extraction systems to avoid accidental fire events. Compliance with these standards would ensure that cannabis uses do not create or increase wildfire hazards to residents or buildings. Alternative 2 wildfire hazard impacts associated with the concentration of cannabis uses (including the cluster areas identified in Exhibit 4-1) would be **less than significant**.

Alternative 3: All License Types with High Limits

Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under Alternative 3 as part of compliance with the CLUO. This alternative would consist of the development of nine relocated sites and 186 new cultivation and noncultivation cannabis uses. As shown in Exhibit 3.9-10, based on existing operations and assumptions used to define this alternative, it is assumed that this alternative would result in 35 new cannabis uses within the moderate fire hazard fire severity zone, of which 16 could be located in or near the Guinda/Rumsey Cluster #1 and two in or near the Esparto Area Cluster #4. As described under Alternative 2, cannabis uses under this alternative would be subject to state wildfire standards, state cannabis regulations for fire protection of manufacturing uses, and CLUO fire and emergency access requirements. Compliance with these standards would ensure that cannabis uses do not create or increase wildfire hazards to residents or buildings. Alternative 3 wildfire hazard impacts associated with the concentration of cannabis uses (including the cluster areas identified in Exhibit 4-1) would be **less than significant**.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Alternative 4 assumes the relocation of nine of the 78 existing and eligible cannabis cultivation sites. This alternative also assumes that 75 of the existing and eligible outdoor cannabis cultivation sites would convert entirely to indoor or mixed-light (greenhouse) cultivation. It also assumes the development of 54 new cannabis cultivation and noncultivation uses. As shown in Exhibit 3.9-11, based on existing operations and assumptions used to define this alternative, it is assumed that this alternative would result in 20 new cannabis uses within the moderate fire hazard fire severity zone, of which seven could be located in or near

the Guinda/Rumsey Cluster #1 and three in or near the Esparto Area Cluster #2. As described under Alternative 2, cannabis uses under this alternative would be subject to state wildfire standards, state cannabis regulations for fire protection of manufacturing uses, and CLUO fire and emergency access requirements. Compliance with these standards would ensure that cannabis uses do not create or increase wildfire hazards to residents or buildings. Alternative 4 wildfire hazard impacts associated with the concentration of cannabis uses (including the cluster areas identified in Exhibit 4-1) would be **less than significant**.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

Thirty of the 78 existing and eligible cannabis cultivation sites are assumed to relocate as part of compliance with the CLUO and 52 new cannabis operations would be developed under Alternative 5. As shown in Exhibit 3.9-12, based on existing operations and assumptions used to define this alternative, it is assumed that this alternative would result in 21 new cannabis uses within the moderate fire hazard fire severity zone, of which seven could be located in or near the Guinda/Rumsey Cluster #1 and three in or near the Esparto Area Cluster #4. As described under Alternative 2, cannabis uses under this alternative would be subject to state wildfire standards, state cannabis regulations for fire protection of manufacturing uses, and CLUO fire and emergency access requirements. Compliance with these standards would ensure that cannabis uses do not create or increase wildfire hazards to residents or buildings. Alternative 5 wildfire hazard impacts associated with the concentration of cannabis uses (including the cluster areas identified in Exhibit 4-1) would be **less than significant**.

IMPACT OVC-10: HYDROLOGY AND WATER QUALITY IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Hydrology and water quality impacts of the CLUO under the five alternatives are addressed in Section 3.10, "Hydrology and Water Quality." Impact HYDRO-1 through HYDRO-4 address impacts associated with hydrology and water quality.

As identified in Impact HYDRO-1, cannabis uses would be required to comply with the water quality control requirements of SWRCB Order WQ 2019-0001-DWQ, and Sections 8-2.1408(J) and 8-2.1408(V) of the CLUO, the Yolo County ILRP, and the County's Stormwater Management and Discharge Ordinance and Code. This would be accomplished through on-site erosion control, use of construction and operational BMPs, and to route discharge drainage and stormwater into a County-approved on-site stormwater management system. Compliance with these standards would ensure that cannabis uses do not create surface or groundwater quality impacts in any subregion of the County regardless of concentration of cannabis sites.

Impact HYDRO-2 identifies that total water demand for assumed cultivation uses under the CLUO alternatives would range from 1.69 to 2.99 afy per acre for cultivation uses (depending on the alternative) and 0.73 to 0.76 afy per acre for noncultivation uses. This groundwater demand per acre is below the County's typical agricultural per acre water demands, which range from 2.35 to 3.05 afy per acre of cropland (see Table 3.10-3). This change in agricultural water demand would not result in substantial groundwater resource impacts in subregions of the County or countywide. The CLUO alternatives would not create substantial impervious surfaces large enough to substantially interfere with countywide groundwater infiltration that occurs over approximately 545,000 acres of land designated as Agriculture under the General Plan.

As discussed in Impact HYDRO-3, cannabis uses would be subject to the requirements of Yolo County Code Sections 8-4.501, 8-4.502 and 8-4.506 (as required under CLUO Sections 8-2.1408[F] and 8-2.1408[OO] regarding building and site design). In addition, Section 8-4.506 of the Yolo County Improvement Standard the flood protection ordinance, prohibits any development that would increase the base flood elevation over 1 foot. Section 8-2.1408(J) of the CLUO also requires that site drainage be accommodated in an approved on-site storm management system. Compliance with these standards would offset drainage impacts for each cannabis site by ensuring that drainage is managed on each cannabis site and avoid contributing to local or regional drainage and flooding impacts in the County.

While assumed cannabis uses under the alternatives could concentrate cannabis uses in the four cluster areas identified in Exhibit 4-1, no significant hydrology or water quality impacts would occur that are not addressed in Section 3.10, “Hydrology and Water Quality.” Thus, hydrology and water quality impacts associated with concentration of cannabis uses within smaller geographic areas would be **less than significant** under all alternatives.

IMPACT OVC-11: LAND USE AND PLANNING IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Land use and planning impacts of the CLUO under all five alternatives are analyzed in Section 3.11, “Land Use and Planning.” Impacts LU-1 through LU-3 address impacts associated with land use and planning.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under Alternative 1 due to compliance with the CLUO but no expansion of the total number of cannabis cultivation sites would occur.

As identified in Impact LU-1, existing and relocated cultivation sites would be subject to CLUO standards that are expected to result in improved land use conditions as compared to existing conditions through required site maintenance and good neighbor communication that would avoid nuisance issues (Sections 8-2.1408[U], 8-2.1408[CC], and 8-2.1408[PP]). Cultivation site features would not create new barriers or physical features (e.g., new highways or land use types that would obstruct existing public access and movement) that could physically divide an established community because construction and operation would be contained on parcels permitted for cannabis uses.

Land use and planning impacts associated with the concentration of cannabis uses in any of the four identified areas of potential over-concentration would be **less than significant** under Alternative 1.

Alternative 2: All License Types with Moderate Limits

Thirty of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under Alternative 2 as part of compliance with the CLUO. This alternative assumes the development of 30 relocated sites and 54 new cultivation and noncultivation cannabis uses. As shown in Exhibit 2-5, based on existing operations and assumptions made to define this alternative, the majority of these new cannabis uses are assumed to be located along the SR 16 corridor and near the community of Dunnigan. The following analysis focuses on the potential land use and planning impacts to the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. There are currently limited commercial and production agricultural operations in this area including Cache Creek Lavender Farm and Casa Rosa Farms. This alternative assumes that seven new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 30 sites (30 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Willow Oaks/Monument Hills Cluster currently contains residential, recreational (golf course), airport, and production agricultural operations. This alternative assumes that five new cannabis uses (distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 18 sites (38 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Dunnigan area currently contains several commercial and production agricultural operations. This alternative assumes that eight new cannabis uses (cultivation, distribution, nurseries, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 17 sites (88 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 2 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Esparto Area currently consists of residential and commercial uses that are surrounded by agricultural operations of varying sizes. This alternative assumes that four new cannabis uses (distribution, microbusiness, retail, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 12 (50 percent increase).

As discussed in LU-1, all cannabis uses seeking a Cannabis Use Permit would be subject to CLUO standards that require buffers (Section 8-2.1408[E]), implement good neighbor communication (Section 8-2.1408[U]), reduce public nuisance issues (Section 8-2.1408[CC]), and maintain sites (Section 8-2.1408[PP]) that would address potential nuisance and compatibility concerns that could be perceived as physical divisions within a community. Cannabis site features would not create new barriers or physical features (e.g., new highways or land use types that would obstruct existing public access and movement) that could physically divide an established community because construction and operation would be contained on parcels permitted for cannabis uses. As noted in Impact LU-3, this alternative assumes that new employees would be able to seek housing in the region without necessitating the construction of unplanned housing in this cluster.

Land use and planning impacts associated with the concentration of cannabis uses in any of the four identified areas of potential over-concentration would be **less than significant** under Alternative 2.

Alternative 3: All License Types with High Limits

This alternative would have the largest number of new cannabis uses in the County from the assumed development of nine relocated sites and the additional 186 new cultivation and noncultivation cannabis uses. As shown in Exhibit 2-6, based on existing operations and assumptions made to define this alternative, Alternative 3 is assumed to result in the greatest concentration of new cannabis uses of all the alternatives along the SR 16 corridor and along portions of the I-5 corridor. The following analysis focuses on the potential land use and planning impacts to the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. There are currently limited commercial and production agricultural operations in this area including Cache Creek Lavender Farm and Casa Rosa Farms. This alternative assumes that 16 new cannabis uses (cultivation, nursery, retail, processing, distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 39 sites (70 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. The Willow Oaks/Monument Hills Cluster currently contains residential, recreational (golf course), airport, and production agricultural operations. This alternative assumes that 10 new cannabis uses (cultivation, distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 23 sites (77 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. The Dunnigan area currently contains several commercial and production agricultural operations. This alternative assumes that 15 new cannabis uses (cultivation, distribution, nurseries, testing, microbusiness, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 24 sites (166 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 3 assumes 75-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which is unlikely to substantively affect the density of cannabis uses in the cluster. The Esparto Area currently consists of residential and commercial uses that are surrounded by agricultural operations of varying sizes. This alternative assumes that 11 new cannabis uses (nursery, distribution, microbusiness, retail, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 19 (138 percent increase).

As discussed under Alternative 2, cannabis uses seeking a Cannabis Use Permit would be subject to CLUO standards that require buffers, good neighbor communication, nuisance correction processes, and site maintenance requirements that would address potential nuisance and compatibility concerns that could be perceived as physical divisions within a community. Cannabis site features would not create new barriers that could physically divide an established community. It is assumed that new employees would be able to seek housing in the region without necessitating the construction of unplanned housing in this cluster.

Land use and planning impacts associated with the concentration of cannabis uses in any of the four identified areas of potential over-concentration would be **less than significant** under Alternative 3.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Alternative 4 assumes the relocation of nine of the 78 existing and eligible cannabis cultivation sites. This alternative also assumes that 75 of the existing and eligible outdoor cannabis cultivation sites would convert entirely to indoor or mixed-light (greenhouse) cultivation. It also assumes the development of 54 new cannabis cultivation and noncultivation uses. As shown in Exhibit 2-7, based on existing operations and assumptions used to define this alternative, the majority of these new cannabis uses would be located along the SR 16 corridor and near the Dunnigan area further concentrating the density of cannabis uses in these areas of the County. The following analysis focuses on the potential land use and planning impacts within the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. Because all uses are required to be conducted indoors, Alternative 4 does not assume buffers. There are currently limited commercial and production agricultural operations in this area including Cache Creek Lavender Farm and Casa Rosa Farms. This alternative assumes that seven new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 30 sites (30 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 4 would result in the conversion of all of these existing cannabis sites to mixed-light or indoor cultivation that would involve the construction of greenhouse buildings in this cluster. Because all uses are required to be conducted indoors, Alternative 4 does not assume buffers. The Willow Oaks/Monument Hills Cluster currently contains residential, recreational (golf course), airport, and production agricultural operations. This alternative assumes that six new cannabis uses (distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 19 sites (46 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. The Dunnigan area currently contains several commercial and production agricultural operations. This alternative assumes that seven new cannabis uses (distribution, nurseries, testing, processing, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 16 sites (78 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 4 would result in the conversion of existing outdoor cannabis sites to mixed-light (greenhouses) or indoor cultivation that would involve the construction of new structures in this cluster. The Esparto Area currently consists of residential and commercial uses that are surrounded by agricultural operations of varying sizes. This alternative assumes that five new cannabis uses (distribution, microbusiness, retail, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 13 (63 percent increase).

Land use and planning impacts associated with the concentration of cannabis uses in any of the four identified areas of potential over-concentration would be **less than significant** under Alternative 4.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

This alternative assumes the development of 30 relocated sites as part of compliance with the CLUO and 50 new cultivation and noncultivation cannabis uses. As shown in Exhibit 2-8, based on existing operations and assumptions used to define this alternative, the majority of these new cannabis uses would be located along the SR 16 corridor and near the Dunnigan area. The following analysis focuses on the potential land use and planning impacts within the four identified cluster areas.

There are currently 23 existing and eligible cannabis uses in the Guinda/Rumsey Cluster #1 (see Exhibit 4-1). Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. There are currently limited commercial and production agricultural operations in this area including Cache Creek Lavender Farm and Casa Rosa Farms. This alternative assumes that seven new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 30 sites (30 percent increase).

There are currently 13 existing and eligible cannabis uses in the Willow Oaks/Monument Hills Cluster #2. Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Willow Oaks/Monument Hills Cluster currently contains residential, recreational (golf course), airport, and production agricultural operations. This alternative assumes that six new cannabis uses (distribution, nursery, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 19 sites (46 percent increase).

There are currently nine existing and eligible cannabis uses in the Dunnigan Area Cluster #3. Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Dunnigan area currently contains several commercial and production agricultural operations. This alternative assumes that eight new cannabis uses (cultivation, distribution, nurseries, testing, processing and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 17 sites (88 percent increase).

There are currently eight existing and eligible cannabis uses in the Esparto Area Cluster #4. Alternative 5 assumes 1,000-foot buffers between outdoor cannabis uses and defined sensitive uses (CLUO Section 8-2.1408[E]) which would have the effect of decreasing the density of cannabis uses in the cluster. The Esparto Area currently consists of residential and commercial uses that are surrounded by agricultural

operations of varying sizes. This alternative assumes that three new cannabis uses (distribution, microbusiness, and manufacturing) could be located in or near this cluster. These uses would potentially increase the total number of cannabis uses in this cluster to 11 (38 percent increase).

Land use and planning impacts associated with the concentration of cannabis uses in any of the four identified areas of potential over-concentration would be **less than significant** under Alternative 5.

IMPACT OVC-12: NOISE IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Noise impacts of the CLUO under the five alternatives are addressed in Section 3.12, “Noise.” Impact NOI-1 through NOIS-3 address noise impacts.

While assumed cannabis uses under the alternatives could concentrate cannabis uses in the four cluster areas identified in Exhibit 4-1, no significant noise impacts would occur that are not addressed in Section 3.12. Thus, noise impacts associated with concentration of cannabis uses within smaller geographic areas would be **less than significant** under all alternatives.

Traffic noise was addressed in Impact NOI-3 that factored the concentration of cannabis uses in subregions of the County for each of the five alternatives. As identified in Impact NOI-3, no significant traffic noise impacts would occur on any of the roadway segments evaluated. Therefore, this impact analysis below focusses on construction and operational stationary noise only.

Given the anticipated low intensity, short-term nature, sporadic/intermittent, and mobile nature of construction activities, development associated with construction activities from adjacent new cannabis uses would not likely combine to affect any one receptor. In addition, Mitigation Measure NOI-1 would require all construction activity to occur during daytime hours; thus, not exposing receptors to substantial noise during sensitive times of the day.

New cannabis uses could use on-site diesel generators, fans, or refrigerated storage units. If new cannabis uses were located next to each other, noise could combine resulting in increased levels at offsite receptors. However, the CLUO would require all cannabis uses to comply with adopted General Plan Noise Compatibility Guidelines and demonstrate compliance in building and site design (Sections 8-2.1408[F], 8-2.1408[BB], and 8-2.1408[NN]). Compliance may consist of placement of noise barriers around generators, fans, and externally-mounted air conditioning units.

Noise impacts associated with the concentration of cannabis uses in any of the four identified areas of potential over-concentration would be **less than significant** under all alternatives.

IMPACT OVC-13: PUBLIC SERVICE IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

Section 3.13, “Public Services,” describes the public services provided in the County. Public services and recreation are provided by the County and service districts in the County that provide services within defined service areas as well as countywide. Law enforcement and recreation services and facilities are countywide and are not focused in a specific subregion of the County. As identified in Impact PS-1 and PS-2, implementation of the CLUO under each of the five alternatives would not increase the demand for public services that would require the construction of new or expanded facilities that could result in environmental impacts.

Impact PS-2 addresses law enforcement and concludes that impacts are less than significant based of existing requirements and provisions proposed as part of the CLUO. To address law enforcement service demands, cannabis sites would be subject to security measures in the CLUO set forth in Section 8-2.1408(LL) and Section 8-2.1410(D) would ensure that law enforcement and safety measures are incorporated into each site. CCR Sections 5042, 5043, 5046, 5047, 40200, and 40205 require on-site security measures. These standards would minimize the potential for criminal activities through controlled

access for authorized personnel and locked door requirements at noncultivation sites (CCR Sections 5042 and 5043), security measures that include video surveillance, security personnel, lock and alarm system requirements (CCR Sections 5044, 5045, 5046, and 5047). Manufacturing sites are required to provide a security plan that implements access controls to the building, alarm system requirements and video surveillance (CCR Sections 40200 and 40205). Construction of cannabis-related buildings under all of the CLUO alternatives would be required to pay the County Facilities and Services Development Fee at the building permit issuance that would provide funding for facility improvements or new government service facilities whose timing would be determined by County as part of facilities planning.

Implementation of the CLUO is not expected to result in a direct loss of park and recreational facilities as cannabis uses are not permitted in public and open space zones. All cannabis sites would be required to demonstrate compliance with the CLUO nuisance standards (Sections 8-2.1408[E], 8-2.1408[U], 8-2.1408[BB], 8-2.1408[CC], 8-2.1408[DD], and 8-2.1408[OO]). These standards would ensure that noise, odor, and other activities at cultivation sites do not create public nuisances that would adversely affect park and recreation facility users.

Implementation of the CLUO could concentrate cannabis uses in fire protection districts that may lead to fire protection service impacts. Further analysis is provided below by alternative. Overall, public service impacts associated with the concentration of cannabis uses in any of the four identified areas of potential over-concentration would be **less than significant** under all alternatives.

Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)

Alternative 1 is assumed to retain the existing concentration of existing and eligible cultivation sites shown in Exhibit 4-1. Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under this alternative based on zoning constraints proposed in the CLUO. The assumed nine relocations could result in a further concentration of cannabis uses in one of the four clusters identified in Exhibit 4-1.

Impact PS-1 identifies that cultivation sites would be required to comply with CLUO Sections 8-2.1408(F) that requires compliance with building, electrical, and fire codes as well as provision of fire breaks, Section 8-2.1408(K) that requires provision of a rapid entry system for emergency personnel, Section 8-2.1408(FF) provision of parking that does not obstruct fire access, and Section 8-2.1408(OO) that requires demonstration of required fire standards in site design details. Cultivation sites would also be subject to requirements under CCR Title 24, Part 2, Chapter 7A, which requires buildings to be fire resistant (roof material, decking material, accessory structures, and venting to resist the intrusion of flame and ember); PRC Section 4291, which addresses defensible space and fuel modification standards; and provision of sufficient fire equipment and emergency access standards. Compliance with these standards would ensure that relocated cultivation uses do not create or increase fire protection services that necessitate new or expanded fire facilities. Cannabis use concentration impacts related to fire protection services would be **less than significant**.

Alternative 2: All License Types with Moderate Limits

Thirty of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under Alternative 2 as part of compliance with the CLUO. This alternative would consist of the development of 30 relocated sites and 54 new cultivation and noncultivation cannabis uses. As shown in Exhibit 3.13-3, based on existing operations and assumptions made to define this alternative, this alternative assumes new cannabis uses in the following fire protection districts (FPDs):

- Capay Valley FPD: 13 new cannabis uses in addition to the 25 existing and eligible cultivation sites (the Guinda/Rumsey Cluster is located in this FPD)
- Dunnigan FPD: seven new cannabis uses in addition to the 10 existing and eligible cultivation sites (the Dunnigan Cluster is located in this FPD)

- Yolo FPD: seven new cannabis uses in addition to the four existing and eligible cultivation sites
- Winters FPD: seven new cannabis uses in addition to the two existing and eligible cultivation sites
- Willow Oak FPD: five new cannabis uses in addition to the 12 existing and eligible cultivation sites (the Willow Oaks/Monument Hills Cluster is located in this FPD)
- Esparto FPD: six new cannabis uses in addition to the seven existing and eligible cultivation sites (the Esparto Area Cluster is located in this FPD)

As identified in Impact PS-1, implementation of the CLUO would not increase the demand for fire protection services in a manner that would require the construction of new or expanded facilities that could result in environmental impacts. Cannabis uses would be subject to PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Manufacturing uses would be required to comply with CCR Title 17, Division 1, Chapter 13, Sections 40223(b), 40225(b), 40225(d), and 40280(a), which require fire control measures that include proper handling of flammable materials to avoid fire hazards and engineering of the closed loop extraction systems to avoid accidental fire events. Compliance with these standards would ensure that relocated cultivation uses do not create or increase fire protection services that necessitate new or expanded fire facilities.

Impacts to fire protection services related to concentration of cannabis uses would be **less than significant**.

Alternative 3: All License Types with High Limits

Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under Alternative 3 as part of compliance with the CLUO. This alternative would consist of the development of nine relocated sites and 186 new cultivation and noncultivation cannabis uses. As shown in Exhibit 3.13-4, based on existing operations and assumptions made to define this alternative, this alternative assumes new cannabis uses in the following fire protection districts (FPDs):

- Capay Valley FPD: 29 new cannabis uses in addition to the 25 existing and eligible cultivation sites (the Guinda/Rumsey Cluster is located in this FPD)
- Dunnigan FPD: 22 new cannabis uses in addition to the 10 existing and eligible cultivation sites (the Dunnigan Cluster is located in this FPD)
- Yolo FPD: six new cannabis uses in addition to the four existing and eligible cultivation sites
- Springlake FPD: 10 new cannabis uses in addition to the one existing and eligible cultivation site
- Winters FPD: 10 new cannabis uses in addition to the two existing and eligible cultivation sites
- Willow Oak FPD: nine new cannabis uses in addition to the 12 existing and eligible cultivation sites (the Willow Oaks/Monument Hills Cluster is located in this FPD)
- Madison FPD: nine new cannabis uses in addition to the five existing and eligible cultivation sites
- Esparto FPD: 10 new cannabis uses in addition to the seven existing and eligible cultivation sites (the Esparto Area Cluster is located in this FPD)

As identified in Impact PS-1, implementation of the CLUO would not increase the demand for fire protection services in a manner that would require the construction of new or expanded facilities. As described under Alternative 2, cannabis uses would be required to comply with state and CLUO fire protection and emergency access requirements, including specific requirements for cannabis manufacturing uses. Compliance with

these standards would ensure that relocated cultivation uses do not create or increase fire protection services that necessitate new or expanded fire facilities.

Impacts to fire protection services related to concentration of cannabis uses would be **less than significant**.

Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types

Alternative 4 assumes the relocation of nine of the 78 existing and eligible cannabis cultivation sites. This alternative also assumes that 75 of the existing and eligible outdoor cannabis cultivation sites would convert entirely to indoor or mixed-light (greenhouse) cultivation. It also assumes the development of 54 new cannabis cultivation and noncultivation uses. As shown in Exhibit 3.13-5, based on existing operations and assumptions made to define this alternative, this alternative assumes new cannabis uses in the following fire protection districts (FPDs):

- Capay Valley FPD: 13 new cannabis uses in addition to the 25 existing and eligible cultivation sites (the Guinda/Rumsey Cluster is located in this FPD)
- Dunnigan FPD: seven new cannabis uses in addition to the 10 existing and eligible cultivation sites (the Dunnigan Cluster is located in this FPD)
- Yolo FPD: 10 new cannabis uses in addition to the four existing and eligible cultivation sites
- Winters FPD: seven new cannabis uses in addition to the two existing and eligible cultivation sites
- Willow Oak FPD: six new cannabis uses in addition to the 12 existing and eligible cultivation sites (the Willow Oaks/Monument Hills Cluster is located in this FPD)
- Esparto FPD: seven new cannabis uses in addition to the seven existing and eligible cultivation sites (the Esparto Area Cluster is located in this FPD)

As identified in Impact PS-1, implementation of the CLUO would not increase the demand for fire protection services in a manner that would require the construction of new or expanded facilities. As described under Alternative 2, cannabis uses would be required to comply with state and CLUO fire protection and emergency access requirements, including specific requirements for cannabis manufacturing uses. Compliance with these standards would ensure that relocated cultivation uses do not create or increase fire protection services that necessitate new or expanded fire facilities.

Impacts to fire protection services related to concentration of cannabis uses would be **less than significant**.

Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail

Thirty of the 78 existing and eligible cannabis cultivation sites are assumed to relocate as part of compliance with the CLUO and 52 new cannabis operations would be developed under Alternative 5. As shown in Exhibit 3.13-6, based on existing operations and assumptions made to define this alternative, this alternative assumes new cannabis uses in the following fire protection districts (FPDs):

- Capay Valley FPD: 14 new cannabis uses in addition to the 25 existing and eligible cultivation sites (the Guinda/Rumsey Cluster is located in this FPD)
- Dunnigan FPD: eight new cannabis uses in addition to the 10 existing and eligible cultivation sites (the Dunnigan Cluster is located in this FPD)
- Yolo FPD: eight new cannabis uses in addition to the four existing and eligible cultivation sites
- Winters FPD: seven new cannabis uses in addition to the two existing and eligible cultivation sites

- Willow Oak FPD: six new cannabis uses in addition to the 12 existing and eligible cultivation sites (the Willow Oaks/Monument Hills Cluster is located in this FPD)
- Esparto FPD: four cannabis uses in addition to the seven existing and eligible cultivation sites (the Esparto Area Cluster is located in this FPD)

As identified in Impact PS-1, implementation of the CLUO would not increase the demand for fire protection services in a manner that would require the construction of new or expanded facilities. As described under Alternative 2, cannabis uses would be required to comply with state and CLUO fire protection and emergency access requirements, including specific requirements for cannabis manufacturing uses. Compliance with these standards would ensure that relocated cultivation uses do not create or increase fire protection services that necessitate new or expanded fire facilities.

Impacts to fire protection services related to concentration of cannabis uses would be **less than significant**.

IMPACT OVC-14: TRANSPORTATION AND CIRCULATION IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

The following analysis is based on the impact analysis provided in Section 3.14, "Transportation and Circulation." The reader is referred to Impacts TRANS-1 and TRANS-2 for detailed analysis of alternative impacts as well as Section 3.0, "Approach to the Environmental Analysis," regarding impacts to alternative forms of transportation including bicycle, pedestrian, and transit uses as well as impacts regarding to safety and emergency access.

The transportation network in the unincorporated area of the County is rural in nature and transit service is minimal. The concentration of cannabis uses located in distinct subregions of the County under the five alternatives would not result in changes to the rural nature of the transportation network or the provision of transit service in the area. Therefore, the concentration of cannabis uses would not result in changes to the transportation network, travel characteristics, or mix in land use types and the associated land use relationships such that the demand for transit, bike, or pedestrian would be affected. Additionally, the concentration of cannabis uses in subregions of the County would not conflict with a program, plan, ordinance or policy addressing pedestrian, bicycle, and transit facilities or otherwise decrease the performance or safety of such facilities.

The CLUO provides specific requirements and performance standards for driveways accessing County-maintained roads, as well as for the design of individual sites. Specifically, CLUO Section 8-2.1408(K) requires that driveway approaches meet current County and/or Caltrans standards as well as adequate emergency access that includes an all-weather surface road base. CLUO Section 8-2.1408(JJ) requires permittees to conduct appropriate roadway improvements to address operational and safety needs. Compliance with these performance standards would serve to mitigate each individual cannabis site's impact on access and roadway conditions regardless of the concentration of cannabis uses in a subregion.

Traffic operations and consistency with policies of the General Plan Circulation Element are addressed in Impact TRANS-1. The operational analysis provided in Tables 6 and 7 of Appendix G assumes the locations and concentration of cannabis uses in the subregions of the County under each alternative. No significant operational impacts or conflict with the General Plan Circulation Element would occur from a concentration of cannabis uses in any particular subregion.

The VMT analysis addressed in Impact TRANS-2 factors the assumed locations of and concentration of cannabis uses in subregions of the County under each alternative. No significant VMT impacts would occur for any of the alternatives.

Therefore, transportation impacts associated with the concentration of cannabis uses in the four areas of potential over-concentration would be **less than significant** under all alternatives.

IMPACT OVC-15: UTILITIES AND SERVICE SYSTEM IMPACTS FROM OVERCONCENTRATION OF CANNABIS USES

As addressed in Impact UTIL-1 and UTIL-2, CLUO potential impacts to public water and wastewater systems would be less than significant under all alternatives. Implementation of Mitigation Measure HYDRO-4, and proposed CLUO Sections 8-2.1408(TT) addressing wastewater services and Section 8-2.1408(VV) addressing water service verification would mitigate impacts to services, including potential impacts from concentrations of cannabis uses near these service providers.

Solid waste services is a provided countywide. As addressed in Impact UTIL-3, CCR Sections 8108 and 8308 require cultivation, nurseries, and processing facilities to have a cannabis waste management plan that identifies methods for managing cannabis waste, including on-premises composting, collection and processing by an agency, or self-hauling to a permitted facility. The Yolo County Division of Integrated Waste Management has also prepared internal procedures for the disposal of waste generated from cannabis operations. As identified in Table 315-1, the Yolo County Central Landfill is anticipated to have adequate capacity for the foreseeable future (2081) to accommodate cannabis related waste in addition to other solid waste accepted for all alternatives. No solid waste service impacts associated with the concentration of cannabis uses in subregions of the County are expected.

Based on the above, utility service impacts associated with the concentration of cannabis uses in any of the four identified areas of potential overconcentration would be **less than significant** under all alternatives.