

Section 4

Effects on Agricultural Lands

This section describes how development associated with the *City of Modesto Urban Area General Plan* (UAGP) would affect agricultural lands, including by converting unique and prime farmland.

A. ENVIRONMENTAL SETTING

The following information is provided in accordance with Section 15125 of the California Environmental Quality Act (CEQA) Guidelines. This environmental setting is the baseline for determining whether an impact of the UAGP is significant.

1. Study Area for Direct Impacts

The study area for direct impacts on agricultural lands is the UAGP planning area.

2. Study Area for Cumulative Impacts

This analysis will be based on the plan or projection approach to examining cumulative impacts, as provided under State CEQA Guidelines Section 15130(b)(1)(B). Pertinent plans and projections to be used for this purpose are the general plans of Stanislaus County (County) and the City of Modesto (City), as well as the projections of the state Farmland Mapping and Monitoring Program (FMMP). The study area for cumulative impacts on agricultural lands includes all of Stanislaus County.

3. Existing Physical Conditions in the Study Areas

a. Overview

Agriculture is a leading industry in Stanislaus County; the value of the County's agricultural commodities totaled approximately \$3.9 billion in 2015 (California Department of Food and Agriculture 2016). Stanislaus County consistently ranks among the top ten most agriculturally productive counties in California, based on the value of agricultural products sold (California Department of Food and Agriculture 2016). Stanislaus County's flat land, excellent soil quality, favorable climate, and availability of water favor agriculture. In addition, the region possesses low-cost power and a good transportation system.

Modesto (both the present community and its planning area) is generally located on prime farmland, among other soil classifications (see Figure V-4-1), and is surrounded by active agricultural operations. The conditions for agricultural production on lands west and north of Modesto are unique: The soil quality is excellent, water rights are secure, water quality is

high, and there are relatively few drainage problems. Such conditions allow the production of orchard and vine crops, including almonds, walnuts, grapes, and peaches, which require well-drained soils and irrigation.

b. Description of Agricultural Lands within the City of Modesto Urban Area General Plan Study Area

The Natural Resources Conservation Service (NRCS, previously called the Soil Conservation Service) describes these soils as follows (Natural Resources Conservation Service 2007). (Note that the soil associations of Hanford, Dinuba / Hanford, and Modesto / Chualar are associated with prime agricultural lands.)

(1) Chualar Series

These soils are moderately well-drained and moderately coarse-textured. They are smooth and very gently sloping to nearly level. Many areas of these soils are located in the vicinity of Modesto, especially to the north and northwest. They are important for growing a wide variety of orchard, vineyard, field, and forage crops; yields are good to excellent.

(2) Dinuba Series

These soils are imperfectly drained and moderately coarse-textured. They are very gently sloping to nearly level. These soils are located north and northwest of Modesto. They are largely cultivated, primarily for irrigated pasture and grain and vine crops.

(3) Hanford Series

These soils are well-drained and moderately coarse-textured. They have smooth, very gentle slopes. These soils are found along the Stanislaus and Tuolumne Rivers and on broad alluvial fans in the Modesto vicinity. They are important for a wide variety of irrigated orchards and field and truck crops.

(4) Modesto Series

These soils are moderately well-drained, medium, and moderately fine-textured. They occur on nearly level areas where runoff is very slow. These soils are found north and northwest of Modesto. They are used for a wide variety of field crops and for orchards and vineyards.

c. Operational Characteristics of Existing Agricultural Practices

This section describes some of the general operations undertaken in commercial agricultural production as they relate to the natural environment.

(1) Use of Chemicals

Several types of chemicals are used often on agricultural lands to increase yields. The use and type of chemicals depend on such factors as the time of year, the weather, and pest populations. All chemicals used in California have undergone the California Department of Food and Agriculture pesticide registration process, which requires information on toxicology, water solubility, skin contact, and other related information. All pesticides must be applied according to manufacturers' label instructions to ensure safe use. Most chemicals are applied by spraying by hand, tractor, or airplane. Aerial spraying of chemicals in agricultural areas located adjacent to residential development can be considered a health hazard because the chemicals might drift onto nontarget areas. The Stanislaus County Agricultural Commissioner enforces state regulations relating to agricultural pesticide application, issuing permits with conditions limiting the effects from pesticide application on human health.

(2) Water Use

To supplement an average annual rainfall of only 11 to 15 inches (California Department of Water Resources 2003), local agriculture relies on irrigation to sustain its broad diversity of crops. The Modesto Irrigation District receives water from local reservoirs, the Tuolumne River, and groundwater. Groundwater is the major source of domestic and industrial water. The area is experiencing a dropping water table because of a depletion of groundwater supplies (City of Modesto 2014). Therefore, competition for water supplies has increased among urban and agricultural users.

Stanislaus County used approximately 41.1 acre-feet of water per acre in 2003 (California Department of Water Resources 2014).

d. Air Quality

San Joaquin Valley air quality is declining as the valley's population and industry increase. The California Air Resources Board estimates that annual ozone-related crop losses in the valley exceed \$150 million. Studies have shown that grape, cotton, orange, alfalfa, and tomato yields are up to 20% below potential yields because of ozone damage to these crops (San Joaquin Valley Air Pollution Control District 2003).

4. Existing Policies Applying to the Study Area

Below is a comprehensive list of major federal, state, county, and city policies in effect that apply to the study area for direct impacts. This list provides the full range of applicable policies that a project within the study area potentially would need to comply with, including policies beyond the jurisdiction of the City. This list of laws, regulations, and programs also serves to describe the circumstances under which this master environmental impact report (Master EIR) analyzed this environmental topic.

A discrete reference number, following the initials of the resource topic, is assigned to each policy or policy summary listed to facilitate its identification elsewhere in this Master EIR or, where appropriate, its incorporation as a mitigation measure into subsequent projects analyzed under this Master EIR (e.g., Agricultural Lands policies are designated AL-X where X is the discrete number).

a. Federal Regulations

There are no applicable federal policies or regulations. Federal policies apply primarily to federal projects. Federal agencies, in considering projects requiring federal permits (such as the filling of wetlands) or relying on federal funding (such as Community Development Block Grants), are required to examine whether their action will result in the loss of important farmland.

b. State Policies

The California Department of Conservation's (DOC) Division of Land Resource Protection administers state programs relating to agricultural conservation. The FMMP tracks agricultural land conversion statewide. The California Land Conservation Act of 1965 (Government Code Section 51200 et seq.), or Williamson Act, establishes incentives for property owners to retain agricultural use on their land.

The FMMP has identified important farmland in most of California's agricultural areas. Figure V-4-1, Important Farmland Map, illustrates farmland by classification within the Modesto urban area. Much of the land adjacent to the developed portion of the City, especially to the north, west, and south, is prime farmland. The land immediately northeast and east of Modesto is a mixture of prime farmland, unique farmland, and farmland of local importance. Conditions for agricultural production on the lands east and west of Modesto are unique: excellent soil quality, secure water rights, good water quality, and relatively few drainage problems (Perry pers. comm.).

The FMMP maps five (5) categories of farmland as well as urban and other land. Definitions for each farmland type are listed below.

1. Prime Farmland: lands with the best combination of physical and chemical features able to sustain long-term production of crops. The land must be cropped and supported by a developed irrigation water supply that is dependable and of adequate quality during the growing season, and the land must have been used for production during the previous four (4) years.



MODESTO
CALIFORNIA

GENERAL PLAN PROGRAM

FIGURE V-4-1

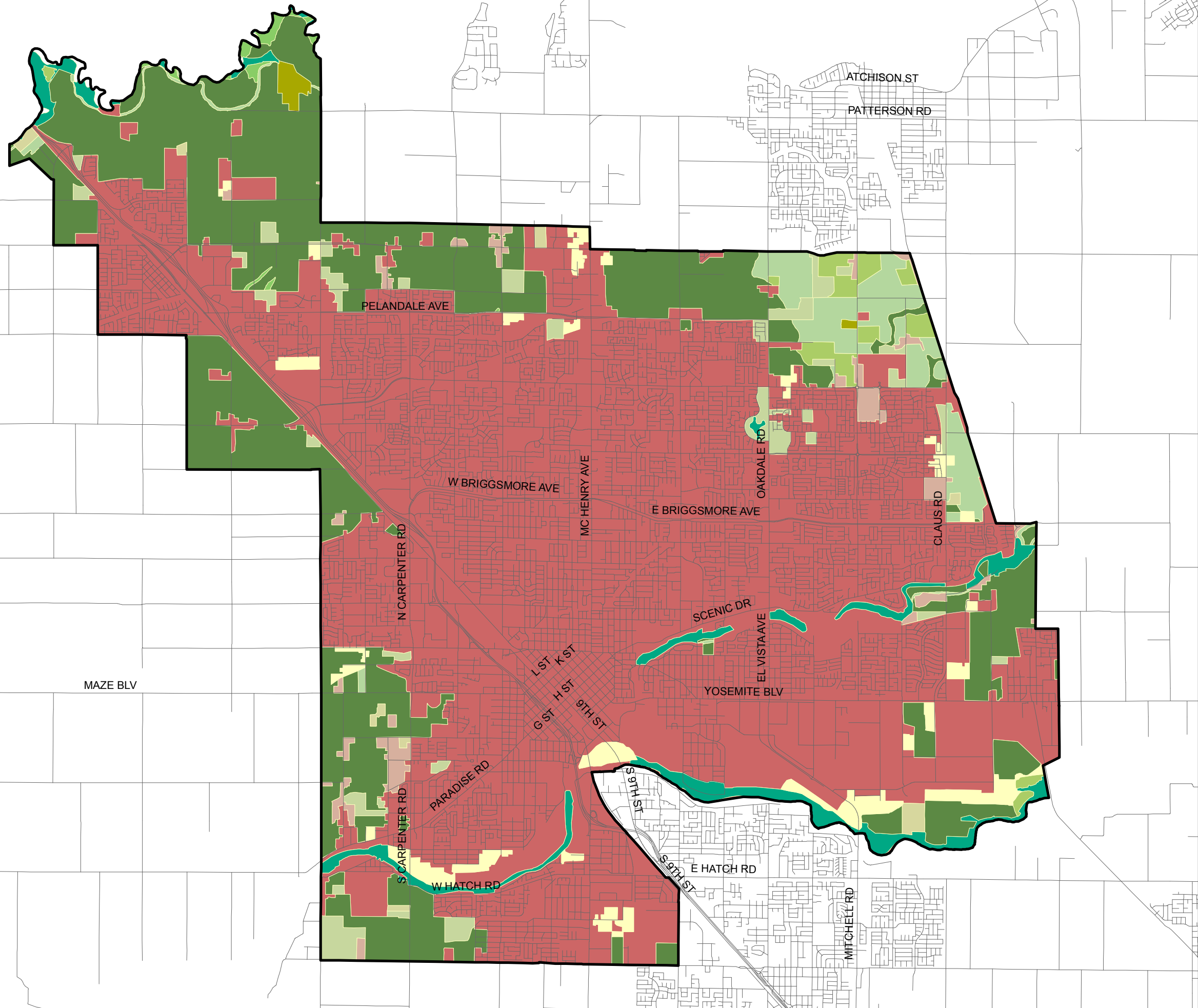
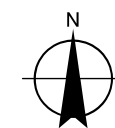
**Important Farmland Within
City of Modesto
Planning Areas**

LEGEND

General Plan Boundary

Important Farmland

- Prime Farmland
- Statewide Importance
- Local Importance
- Unique Farmland
- Semi-Agricultural and Rural Commercial Land
- Grazing Land
- Confined Animal Agriculture
- Urban and Built-Up Land
- Rural Residential Land
- Vacant or Disturbed Land
- Nonagricultural and Natural Vegetation



2. Farmland of Statewide Importance: lands similar to Prime Farmland but with minor shortcomings, such as greater slope or less ability to store moisture. These lands have the same reliable source of adequate-quality irrigation water available during the growing season.
3. Unique Farmland: lesser-quality soils used for producing California's leading agricultural crops. These lands are usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones of California.
4. Farmland of Local Importance: dryland grains and irrigated pastures not considered Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.
5. Grazing Land: land on which the existing vegetation is suited to the grazing of livestock.

The information gathered by the FMMP is not used for regulatory purposes; rather, it advises the government and public about the rate of agricultural land conversion.

The Williamson Act restricts development on land for which the landowner has entered into a contract with the respective county to limit land uses to agriculture, open space/recreation, or grazing. This legislation is intended to discourage the conversion of agricultural land to other uses. Typically, the landowner agrees to keep the land in a restricted use for at least ten (10) years in return for a preferential property tax assessment based on the value of the commodity rather than the value of the land. Within the current City sphere of influence, the main areas subject to Williamson Act contracts are outside the city limits, including west of Carpenter Road and 9th Street, north of Pelandale Avenue and Claratina Avenue, south of Scenic Drive, and south of Yosemite Boulevard near the sphere-of-influence line. Most of the land immediately outside the current sphere of influence is subject to Williamson Act contracts (County of Stanislaus 2014).

c. Stanislaus Local Agency Formation Commission Policies

The Cortese-Knox-Hertzberg Local Government Reorganization Act (Government Code Section 56000 et seq.) empowers each Local Area Formation Commission (LAFCo) to consider the incorporation of new cities, the annexation of lands to existing cities and special districts, and other changes to city and district boundaries. Through its responsibilities to govern the approval of annexations and the establishment of spheres of influence, the LAFCo considers soil quality and the availability of irrigation water when assessing the impacts of annexation on agricultural land.

AL-1: LAFCo policies direct that the development or use of land for uses other than open space will be guided away from existing prime agricultural lands, unless such action would not promote the planned, orderly, efficient development of an area (Government Code 56377).

AL-2: “LAFCo policy requires that proposals for annexation and/or sphere of influence expansion be subject to a Plan for Agricultural Preservation. The Plan for Agricultural Preservation must specify the method or strategy proposed to minimize the loss of agricultural lands. The policy then provides a menu of commonly-used strategies that are encouraged. Purchase of conservation easement, payment of in-lieu fees or

municipal adoption of an urban growth boundary are examples of these commonly-used strategies, and other methods may also prove viable on a case-by-case basis.”

d. Stanislaus County Policies

The *Stanislaus County General Plan* (County General Plan) has the following applicable policies.

(1) Land Use Element

- AL-3:** Agriculture, as the primary industry of the County, shall be promoted and protected. (County General Plan, Land Use Element, Goal 3, Policy 17)
- AL-4:** Whenever an application is to be considered which includes property within the sphere of influence of a city or special district (e.g., sewer, water, community services) or areas of specific designation created by agreement between County and City, the following procedures should be followed:
1. Development, other than agricultural uses and churches, which requires discretionary approval shall be referred to that city for preliminary approval. The project shall not be approved by the County unless written communication is received from the city memorializing their approval. If approved by the city, the city should specify what conditions are necessary to ensure that development will comply with city development standards. Requested conditions for such things as sewer service in an area where none is available shall not be imposed. Approval from a city does not preclude the County decision-making body from exercising discretion, and it may either approve or deny the project.
 2. Agricultural uses and churches which require discretionary approval should be referred to that city for comment. The County Planning Commission and Board of Supervisors shall consider the responses of the cities in the permit process. If the County finds that a project is inconsistent with the city's general plan designation, it shall not be approved. Agricultural use and churches shall not be considered inconsistent if the only inconsistency is with a statement that a development within the urban transition area or sphere of influence shall be discouraged (or similar sweeping statement). The city shall be asked to respond to the following questions:
 - A. Is the proposed project inconsistent with the land use designation on the city's general plan? If so, please include a copy of the map (or that portion which includes the subject property) and the text describing uses permitted for the general plan designation. All findings of inconsistency must include supporting documentation.
 - B. If the project is approved, specifically what type of conditions would be necessary to ensure the development will comply with city development standards such as street improvements, setbacks and landscaping? (County General Plan, Land Use Element, Spheres of Influence Policy)

(2) Agricultural Element

- AL-5:** The County shall continue to implement its Right-to-Farm Ordinance. (County General Plan, Agricultural Element, Policy 1.9, Implementation Measure 1)
- AL-6:** The County shall protect agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural operations. (County General Plan, Agricultural Element, Policy 1.10)
- AL-7:** The County shall require buffers and setbacks for all discretionary projects introducing or expanding non-agricultural uses in or adjacent to an agricultural area consistent with the guidelines presented in Appendix “A” of the Agricultural Element. (County General Plan, Agricultural Element, Policy 1.10, Implementation Measure 1)
- AL-8:** To reduce development pressures on agricultural lands, higher density development and infilling shall be encouraged (County General Plan, Ag Element, Policy 2.4)
- AL-9:** The County recognizes the desire of cities and unincorporated communities to grow and prosper and shall not oppose reasonable requests consistent with city and county agreements to expand, providing the resultant growth minimizes impacts to adjacent agricultural land. (County General Plan, Agricultural Element, Policy 2.11)
- AL-10:** In recognition that unincorporated land within sphere of influence of cities or community services districts and sanitary districts serving unincorporated communities ultimately will be urbanized, the County shall cooperate with cities and unincorporated communities in managing development in sphere of influence areas. (County General Plan, Agricultural Element, Policy 2.13)
- AL-11:** The County shall work cooperatively with the nine cities within the County and to encourage them to adopt agricultural conservation policies or ordinances which are consistent with County policies or ordinances in order to undertake an integrated, comprehensive Countywide approach to farmland conservation. It is the ultimate goal of the County to have all nine cities participate in or adopt an agricultural mitigation ordinance that is the same as or substantially similar. (County General Plan, Agricultural Element, Policy 2.17)

e. City of Modesto Policies

The City’s UAGP provides the following policies related to agricultural land.

(1) Baseline Developed Area

- AL-12:** If a subsequent project is within the Baseline Developed Area or Downtown Area as identified on the Urban Area General Plan Growth Strategy Diagram [Figure II-1], consider the project to have minimal effect on the conversion of agricultural lands, and no mitigation for that impact will be required. (UAGP Policy VII-D.3[a])
- AL-13:** Facilitate infill development through active leadership and strategic provision of infrastructure and services, and supporting land uses. Provide incentives for infill development, redevelopment and growth in existing urbanized areas to enhance community character, optimize infrastructure investments, support increased transit use, promote non-motorized transportation, increase housing diversity and enhance commercial viability. Structure fee programs so that infill development is “priced”

according to its relative infrastructure efficiencies and the community-wide benefits to be realized. (UAGP Policy III.B.1)

AL-14: To maximize economic and social benefits, and resource efficiencies, prioritize and focus new development within the existing City limits. This will strengthen existing neighborhoods and maximize efficiencies of utility and infrastructure systems. New development should be accessible via all modes of transportation, both motorized and non-motorized, with an emphasis on availability of public services. (UAGP Policy III.B.2)

AL-15: Implement higher density, mixed-use development to create a balanced, vibrant downtown and active neighborhood centers by streamlining development processing, offering public parking for projects with parking structures (in lieu of the provision of private parking), reducing fees and providing for deferral of fees. (UAGP Policy III.F.1)

(2) Planned Urbanizing Area

AL-16: Do not annex agricultural land unless urban development consistent with the General Plan has been approved by the City. (UAGP Policy VII-D.4[a])

AL-17: Support the continuation of agricultural uses on lands designated for urban uses until urban development is imminent. (UAGP Policy VII-D.4[b])

AL-18: Encourage the County to retain agricultural uses on land surrounding the General Plan area and on lands within the General Plan area pending their annexation to the city or development by mutual agreement with the County. (UAGP Policy VII-D.4[c])

AL-19: Where necessary to promote planned City growth, encourage development of those agricultural lands that are already compromised by adjacent urban development or contain property required for the extension of infrastructure or other public facilities, before considering urban development on agricultural lands that are not subject to such urban pressures. (UAGP Policy VII-D.4[d])

AL-20: For any subsequent project that is adjacent to an existing agricultural use, the project proponent may incorporate measures to reduce the potential for conflicts with the agricultural use. Potential measures to be implemented may include the following:

- 1) Include a buffer zone of sufficient width between the proposed residences and the agricultural use.
- 2) Inform residents about the possible exposure to agricultural chemicals. (UAGP Policy VII-D.4[e])

AL-21: Require development projects to comply with current LAFCo policy(ies) regarding preservation of agricultural resources. (UAGP Policy VII-D.4[f])

5. Policies That Reduce Impacts

The following City policies are in effect and have been determined to reduce, avoid, or mitigate environmental impacts within the existing city limits and within the Planned Urbanizing Area as they annex and develop. LAFCo and County policies are included because they reduce or avoid cumulative impacts. The policy reference numbers are listed. The full text of these policies is found in Section A-4, above, *Existing Policies Applying to the Study Area*.

a. Stanislaus Local Agency Formation Commission Policies

Annexation of land to the City is under LAFCo jurisdiction. The Stanislaus County LAFCo has the following applicable policies as described in Section A-4 above, which, when applied to subsequent projects, would avoid or reduce impacts: AL-1, AL-2.

b. Stanislaus County Policies

The territory outside the city limits is under County jurisdiction. The County General Plan has the following applicable policies as described in Section A-4 above, which, when applied to subsequent projects, would avoid or reduce impacts: AL-3 through AL-11.

c. City of Modesto Policies

The City's UAGP provides the following policies as described in Section A-4 above, related to agricultural land, which, when incorporated into subsequent projects, would avoid or reduce impacts: AL-12 through AL-21.

B. CONSIDERATION AND DISCUSSION OF SIGNIFICANT IMPACTS

The following information is provided in accordance with State CEQA Guidelines Section 15126.2.

1. Thresholds of Significance

The proposed General Plan amendment project would have a significant impact on agricultural land if it would:

- a. convert areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses, impair the agricultural productivity of prime agricultural land, or result in substantial pesticide overspray, dust, or noise at urban uses;
- b. conflict with existing zoning for agricultural use, or a Williamson Act contract;
- c. conflict with existing zoning for, or cause rezoning of, forest land or timberland;
- d. result in the loss of forest land or conversion of forest land to non-forest use; or,
- e. involve other changes to the environment that could result in conversion of farmland or forest land.

2. Significant Direct Impacts

a. Baseline Developed Area and Downtown Area

The Baseline Developed Area and Downtown Area are already developed. The impacts of new development in these areas on agricultural lands would be less than significant, per AL-12, above, because no prime farmland, unique farmland or farmland of statewide importance would be converted as a result of said new development.

There are a small single-digit number of Williamson Act contracts (contracts) within the Dry Creek CPD, toward the east side of the UAGP planning area. The applicable Open Space land use designation results in any potential impact(s) related to these contracts being less than significant.

There is no forest land or timberland. There would be no impacts as compared to the relevant thresholds of significance described above.

b. Planned Urbanizing Area

From 2014 to 2040, development under the UAGP could convert approximately 9,000 acres of Prime Farmland, approximately 1,100 acres of Unique Farmland, approximately 100 acres of Farmland of Statewide Importance and approximately 400 acres of Farmland of Local Importance to urban uses within the Planned Urbanizing Area.

The UAGP would place urban uses in proximity to existing agricultural activities. These urban uses would be subject to noise, dust, and potential chemical overspray from agricultural uses, which could result in complaints, especially from residential areas. The UAGP results in an approximately 26-mile-long boundary between these uses. Therefore, approximately 1,100 acres of urban uses (within a 350-foot zone from the boundary) could be affected adversely. If agricultural activities are not conducted within a 350-foot zone of those uses, the efficiency of up to 1,100 acres of agricultural lands would be reduced.

LAFCo (AL-1, AL-2) and City (AL-13 through AL-21) policies would result in the orderly conversion of agricultural land as available developable land within the City is improved. To reduce the conversion of agricultural land for non-agricultural uses, the City allows development of detached single-family residences on lots smaller than the R-1 minimum standard of 5,000 square feet for interior lots and 5,500 square feet for corner lots in the Planned Urbanizing Area. Single-family residences have been built on lots of approximately 2,100 square feet, resulting in houses consuming less than half the typical land area, resulting in further reduction of agricultural land conversion to urban uses. Proposed General Plan amendment policies AL-13 through AL-21 listed above would further reduce (but not eliminate) the impact. These policies would reduce the severity of the impact through requiring thoughtful and deliberate planning processes prior to conversion of agricultural land, and by promoting continued agricultural activities on developable land. General Plan policies would also promote higher-density infill development within the existing City, further reducing development pressure on greenfield areas. However, because areas of Farmland as described under Thresholds of Significance, above, would be converted to non-agricultural uses, the resulting impact(s) would be significant and unavoidable.

There are approximately 60 Williamson Act contracts in the Planned Urbanizing Area. The properties that are subject to these contracts are designated for future conversion to non-agricultural uses, which results in a conflict with the contracts. Based on the applicable threshold of significance, the resulting impact(s) would be significant and unavoidable.

There is no forest land or timberland. There would be no impacts as compared to the relevant thresholds of significance described above.

3. Significant Cumulative Impacts

CEQA and the State CEQA Guidelines require the disclosure of the significant cumulative environmental impacts; whether the UAGP Amendment (the proposed project) will make a cumulatively considerable contribution to any such impacts; and, if so, mitigation measures intended to reduce the project's contribution (CEQA Guidelines Section 15130). A cumulative effect is one that results from past, present, and probable future projects. A project that has a less than significant direct effect on the environment may nonetheless make a considerable contribution to a cumulative effect.

A cumulative impact analysis first identifies whether a cumulatively significant effect exists in the given resource area. If so, it determines whether the project will make a considerable contribution to that effect. Where a cumulative impact is severe, even a small contribution may be considerable. Where a project is required to implement or fund its fair share of a mitigation measure designed to alleviate the cumulative impact, its contribution will be rendered less than considerable (CEQA Guidelines Section 15130[a]).

Development in Stanislaus County, including that within both unincorporated areas and cities, and some of the development envisioned in the UAGP, would result in cumulative impacts related to the conversion of agricultural land. Modesto, as the largest city in the county, is expected to and planned to accommodate a substantial share of Stanislaus County's projected population growth. Although policies in the UAGP and County General Plan encourage efficient land use and minimize agricultural conversion (as described under Direct Impacts, above), the loss of agricultural land from projected regional population growth is inevitable. Accordingly, growth within Modesto's planning area would contribute considerably to this loss. This impact(s) is considered significant and unavoidable.

C. POLICIES ADOPTED TO MINIMIZE SIGNIFICANT EFFECTS

The following information is provided in accordance with CEQA Guidelines Section 15126.4.

1. Policies That Reduce Direct Impacts

UAGP policies AL-12 through AL-21 serve to minimize direct impacts to agricultural resources by promoting continued agricultural activities on developable parcels, thoughtful and deliberate annexation and development processes & requirements, promoting new development at increased densities to occur within the existing City, and by supporting LAFCo's policy to require that annexation projects preserve agricultural land that is of equal or better quality elsewhere in the County.

2. Policies That Reduce Cumulative Impacts

General Plan policies AL-12 through AL-21 would reduce (but not eliminate) cumulative impacts by encouraging infill development and discouraging development in unincorporated, nonurbanized areas. The other outcomes related to Direct Impacts, described above, would also occur in the Cumulative Impact context.

D. MONITORING POLICIES THAT REDUCE IMPACTS

The following information is provided in accordance with PRC Section 211081.6. The policies identified in this Master EIR have been drawn from the proposed UAGP amendment, and they are implemented by that plan. City staff provides the City Council with an annual report on UAGP implementation; therefore, no separate mitigation monitoring program is required for the UAGP Master EIR.