

EXHIBIT B

**CEQA FINDINGS OF FACT
AND
STATEMENT OF OVERRIDING CONSIDERATIONS
OF THE
MERCED COUNTY BOARD OF SUPERVISORS
FOR THE
2030 MERCED COUNTY GENERAL PLAN
PROGRAM ENVIRONMENTAL IMPACT REPORT**

DECEMBER 2013

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I. INTRODUCTION

The 2030 General Plan project (the “Project”) consists of a comprehensive update of the County’s current General Plan, including the continuation of many existing policies, the modifications of others, and the addition of new policies. The 2030 General Plan includes all actions necessary to update the 2000 Merced County General Plan (2000 Plan), including reorganizing and updating the existing Plan’s eight chapters, which together address the seven mandatory General Plan elements required by state planning laws. The 2030 Merced County General Plan (2030 General Plan) project includes three additional chapters on economic development, air quality, and water, as well as revised Land Use and Circulation Diagrams. The 2030 General Plan Housing Element was previously updated in 2010 in compliance with state deadlines. The 2030 General Plan is a legal document that serves as Merced County’s “blueprint” or “constitution” for all future land use, development, preservation, and resource conservation decisions.

The Environmental Impact Report (“EIR”) prepared for the 2030 General Plan project addresses the potential environmental effects associated with the adoption and implementation of the 2030 General Plan. These findings have been prepared to comply with requirements of the California Environmental Quality Act (“CEQA”) (Public Resources Code Section 21000 *et seq.*) and the CEQA Guidelines (Cal. Code Regs., tit. 14, Section 15000 *et seq.*). The EIR for this Project was prepared by the Merced County Department of Community and Economic Development (Planning Department) as the “lead agency” in accordance with CEQA and has been prepared to identify and assess the anticipated effects of the Project.

These findings refer to the Notice of Preparation (“NOP”) or Program EIR (“PEIR”) where the material appears in either of those documents. Where appropriate, references are to the Draft Program EIR (“Draft PEIR”), the Recirculated Draft PEIR (“RDPEIR”) or Final PEIR (“FPEIR”) where the information cited appears specifically in one of those documents. The PEIR consists of the Draft PEIR, the RDPEIR, and the Final PEIR. The PEIR is an informational document that must be considered and certified by the lead agency prior to considering approval of the 2030 Merced County General Plan project.

CEQA generally requires that a lead agency must take reasonable efforts to mitigate or avoid significant environmental impacts when approving a project. The preparation of an EIR serves as a medium for identifying possible methods of mitigating any significant effects and assessing and describing reasonable alternatives to the project.

II. TERMINOLOGY OF FINDINGS

PRC 21081 and Section 15091 of the CEQA Guidelines require that, for each significant environmental effect identified in an EIR for a proposed project, the approving agency must issue a written finding reaching one or more of three allowable conclusions. Once an EIR has been completed which identifies one or more potentially significant environmental impacts, the approving agency must make one or more of the following findings for each identified area of impact:

1. Changes or alterations which avoid or mitigate the significant environmental effects as identified in the EIR have been required or incorporated into the project; or,

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency; or,
3. Specific economic, legal, social, technological, or other considerations, including consideration for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EIR.

For purposes of these findings, the terms listed below have the following definitions:

- The term “mitigation measures” shall constitute the “changes or alterations” discussed above.
- The term “avoid or substantially lessen” refers to the effectiveness of one or more of the mitigation measures or alternatives to reduce the severity of an environmental effect.
- The term “feasible,” pursuant to the CEQA Guidelines, means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

When the Merced County Board of Supervisors (“Board”) finds a measure is not feasible, it will provide evidence for its decision and may adopt substitute mitigation that is feasible, and designed to reduce the magnitude of the impact. In other cases, the Board may decide to modify the proposed mitigation. Modifications generally update, clarify, streamline, or revise the measure to comport with current engineering practices, budget conditions, market conditions or existing Merced County policies, practices, and/or goals. Modifications achieve the intent of the proposed mitigation without reducing the level of protection. In many instances, the modifications actually improve the effectiveness of the mitigation. Thus, the County may have modified the language of some of the mitigation measures set forth herein for purposes of clarification and consistency, to enhance enforceability, to defer more to the expertise of agencies with jurisdiction over the affected resources, to summarize or strengthen their provisions, and/or make the mitigation measures more precise and effective, all without making any substantive changes to the mitigation measures. These modifications and clarifications do not require recirculation under CEQA Guidelines Section 15088.5.

III. DEFINITIONS

“Board of Supervisors” refers to the Merced County Board of Supervisors

“CEQA” means California Environmental Quality Act

“Commission” or “Planning Commission” refers to the Merced County Planning Commission

“CDFW” means California Department of Fish and Wildlife, previously California Department of Fish and Game

“CO” means carbon monoxide

“CO₂” means carbon dioxide

“CVRWQCB” means Central Valley Regional Water Quality Control Board

“DEH” means Merced County Division of Environmental Health

“DEIR” or “Draft PEIR” means Draft Program Environmental Impact Report for the 2030 Merced County General Plan project, dated November 2012

“District” means San Joaquin Valley Air Pollution Control District

“EIR” or “PEIR” means Program Environmental Impact Report for the 2030 Merced County General Plan project, including the Draft Program EIR, the Recirculated Draft PEIR, and the Final Program EIR

“EPA” means U.S. Environmental Protection Agency

“FPEIR” or “Final PEIR” means Final Program Environmental Impact Report for the 2030 Merced County General Plan project, dated October 2013

“GHG” means Greenhouse Gas

“MMRP” means Mitigation Monitoring and Reporting Program for the 2030 Merced County General Plan project, dated November 2013

“NOP” means Notice of Preparation

“NO_x” means nitrogen oxides

“PEIR” means the Program Environmental Impact Report for the 2030 Merced County General Plan project, including the Draft PEIR, Recirculated Draft PEIR, and the Final PEIR

“Planning Commission” or “Commission” means the Merced County Planning Commission

“PM₁₀” means particulate matter with a diameter of 10 microns or less

“PM_{2.5}” means particulate matter with a diameter of 2.5 microns or less

“RDPEIR” means Recirculated Draft Program Environmental Impact Report

“ROG” means reactive organic gases

“SJVAPCD” means the San Joaquin Valley Air Pollution Control District

“SWRCB” means State Water Resources Control Board

“USFWS” means United States Fish and Wildlife Service

IV. PROJECT DESCRIPTION

A. PROJECT LOCATION AND ENVIRONMENTAL SETTING

Merced County comprises 1.2655 million acres, and is located in the heart of California's San Joaquin Valley, the world's most productive agricultural region (see Draft PEIR and RDPEIR Figure 3-1). The county, extending from the Coast Ranges to the foothills of the Sierra Nevada, is bordered by Stanislaus County to the north, Fresno and Madera Counties to the south, Mariposa County to the east, and Santa Clara and San Benito Counties to the west.

The county is served by Interstate 5, which runs north/south through the western portion of the county, and Highway 99, which runs north/south through the eastern area of the county. The county is also served by State Routes (SR) 140 and 152, both of which run east/west through the county, and State Routes 33, 59, and 165, which run north/south (Draft PEIR and RDPEIR, p. 3-2).

Agricultural uses (including cultivated agriculture, grazing, dairy, and poultry) account for the single largest existing use of land, with approximately 1.16 million acres (92 percent of the total land area) within the county. The county consistently ranks as one of California's top five producers of milk and cream, chickens, almonds, alfalfa, cattle and calves, silage, and tomatoes.

In western Merced County, about 87,500 acres of grassland marsh provide valuable wetland habitat, combining marsh, open water, and grasslands in a mix of characteristics especially important for migratory waterfowl. This area represents approximately 27 percent of the inland freshwater marsh area in the state of California, and 6.9 percent of the total area within Merced County (Draft PEIR, pps. 3-2 to 3-3; RDPEIR, p. 3-4).

B. PROJECT AREA

The 2030 General Plan Planning Area (Planning Area) contains all land within the county outside of the six incorporated cities (Atwater, Dos Palos, Gustine, Livingston, Los Banos, and Merced). The county encompasses approximately 1.2655 million acres, of which 1.2 million acres or 98.1 percent is unincorporated. Approximately 24,128 acres, or 1.9 percent of the total land area, lies within one of the six incorporated cities. All lands outside the jurisdictional boundaries of the six incorporated cities comprise unincorporated Merced County, and constitute the geography of the 2030 General Plan.

Land inside the city limits of incorporated municipalities is not under Merced County's jurisdiction, nor is land managed by federal or state agencies. Therefore, the Draft PEIR focuses on the analysis of potential environmental impacts on lands only within unincorporated Merced County, including land inside each municipality's Sphere of Influence (SOI), but not inside municipal (city) limits. This area is referred to as "Merced County" or the "Planning Area" in this document, and is shown in Draft PEIR Figure 3-2 (Draft PEIR, pps. 3-5 to 3-7; RDPEIR, pps. 3-5 to 3-6).

C. SUMMARY OF THE 2030 GENERAL PLAN

The 2030 General Plan is defined to include all actions necessary to provide a comprehensive update of the existing 2000 Merced County General Plan (adopted in 1990). The purpose of the proposed 2030 General Plan is to revise and replace the existing General Plan, including all of the elements¹, the Land Use and Circulation Diagrams, and other existing goals, policies, and implementation plans as needed to reflect current law and the changing matters of public interest and concern. The 2030 General Plan establishes and implements new goals and policies for regulating development projects and for balancing population growth with infrastructure availability, agricultural preservation, and natural resource protection. Other goals and policies are directed to resource protection, ensuring the timely availability of public infrastructure and services, and encouraging a well-balanced economy. The plan will also integrate new planning concepts endorsed by the County Board of Supervisors, and translate the updated goals and policies into implementation programs (such as amendments to the County's code, zoning ordinance, and subdivision regulations) to assure that the County's vision is implemented.

The 2030 General Plan consists of two major parts – the policy document and the Background Report. For purposes of the 2030 General Plan EIR, the project under review consists of the 2030 General Plan policy document and the associated Land Use and Circulation Diagrams. The 2030 General Plan addresses seven required topics (referred to as “elements”): land use, circulation, housing, open space, conservation, safety, and noise. The cities and counties within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD) must address air quality in their General Plans. To comply with this requirement, the 2030 General Plan includes an air quality element. In addition to the mandatory elements, the Merced County General Plan addresses five additional topics: economic development, agriculture, public facilities and services, recreation and cultural resources, and water.

The contents of the 2030 General Plan are grouped into five major divisions:

- Part I includes an overview of the role and purpose of the 2030 General Plan, discusses how key issues were identified and the Plan has been prepared, summarizes public participation in the planning process, sets forth the County's vision of itself and common values, identifies opportunities for action, and sets forth the uses and organization of the 2030 General Plan.
- Part II identifies countywide goals, policies and programs. Because Part II contains the 2030 General Plan policies, the Land Use Diagram, and the Circulation Diagram, it is the primary focus of the environmental evaluation documented in the PEIR.
- Part III includes adopted Community Plans for each Urban Center in the unincorporated parts of Merced County. These Community Plans provide specific policy direction for their area, together with a Community Plan Land Use Map and Circulation Diagram. Community-specific policies supplement the countywide goals and policies contained in Part II of the 2030 General Plan. The 2030 General Plan does not include

¹ Except for the Housing Element, which has already been revised and adopted in 2010 as a separate project in accordance with state requirements. On June 22, 2010, a Negative Declaration and the updated Housing Element were adopted by the Merced County Board of Supervisors. Because the Housing Element was updated and adopted in 2010 as a separate project, it is not part of the 2030 General Plan project evaluated in the PEIR.

updates to the County's adopted Community Plans, nor does it propose any modifications of land uses or policies within areas subject to the Community Plans. In addition to the adopted Community Plans, contemporaneously with the 2030 General Plan, the County is updating several Community Plans, under separate processes from the General Plan update. The PEIR for the 2030 General Plan does not evaluate any changes to land uses or policies related to these Community Plans that are currently in progress. The potential environmental effects of any updated Community Plans will be evaluated in environmental documents prepared for those plans; however, any environmental impacts related to the buildout of community plan areas under existing Community Plans is evaluated in the PEIR.

- Part IV includes an outline of the process for reviewing and updating the 2030 General Plan and programs for monitoring its implementation. This part also outlines requirements for implementing the County's 2030 General Plan consistent with its goals, policies, standards, and programs; it provides an overview of the types of actions or tools the County will use to implement the 2030 General Plan. This Part concludes with tables that list specific implementation programs, broken down by 2030 General Plan element.
- Part V of the 2030 General Plan text concludes with a glossary of terms used within the Plan.

As identified above, Part II includes all of the State required elements of the 2030 General Plan, as well as optional elements which are new or updated from the existing General Plan. Goals and policies within the various elements flow directly from the vision and guiding principles that were developed during the 2030 General Plan update process. They address a broad range of topics required by state law, and those that address unique local concerns. The 2030 General Plan is described in detail in Chapter 3, *Project Description*, of the Draft PEIR and the RDPEIR.

D. COUNTY OBJECTIVES IN PREPARING THE 2030 GENERAL PLAN

The primary objective of the updated 2030 General Plan is to provide new policy guidelines for future physical development, preservation of agricultural lands, and conservation of natural resources in Merced County, and to reflect new issues that have emerged since the preparation of the previous document. The objectives of the 2030 General Plan, based upon regulatory requirements, the vision established within the community workshops, and the County's guiding principles as set forth in the 2030 General Plan, are as follows:

1. Adopt a General Plan that complies with state law;
2. Promote a development strategy for city- and unincorporated community-centered growth that locates urban growth in the incorporated cities and unincorporated communities with existing urban services, and allows for consideration for new towns;
3. Protect and support agriculture as an integral component to the County's economic vitality and quality of life;
4. Sustain and enhance the County's natural environment, including all critical habitat areas, watersheds, wildlife corridors, and other natural communities;
5. Identify methods to expand and diversify the County's local economy in order to create and sustain employment and business opportunities that enable existing and future residents to improve their quality of life;

6. Protect the County's natural resources, including air, water, energy, wildlife, and scenery, to ensure a high quality of life for current and future residents;
7. Require new growth and development to have adequate access to all essential public facilities and services, including water, sewer, storm water drainage, roadways, schools, government centers, and recreation; and
8. Coordinate, network, and maintain a multi-modal countywide transportation system, including freeways, highways, streets, bicycle and pedestrian pathways, mass transit, airports, and rail to meet the needs of residents and businesses. (Draft PEIR, pps. 3-8 to 3-9; RDPEIR, pps. 3-9 to 3-10).

E. DISCRETIONARY ACTIONS

In order to approve the 2030 General Plan project, the Board must:

- Certify the Environmental Impact Report;
- Adopt the Mitigation Monitoring and Reporting Program;
- Adopt Findings of Fact and Statement of Overriding Considerations; and
- Adopt the 2030 Merced County General Plan.

V. BACKGROUND

COMMUNITY OUTREACH AND PUBLIC HEARINGS

Since Merced County initiated the comprehensive General Plan update in 2006, public participation has played an important role in the preparation of the Draft General Plan. Citizen input has been essential to identify issues and formulate goals. Community outreach and involvement during the General Plan update process has been extensive, and has included numerous opportunities for the public to participate, including the following outreach efforts:

- In June 2006, the County conducted 25 interviews with several key stakeholders. These interviews helped the County gain perspectives and insights into the issues to be addressed during the General Plan update process.
- Forty-five community workshops held across the county have provided a public forum for discussion of various visions for the future in the County.
- Four rounds of six Focus Group meetings were attended by agency representatives and members of community organizations that have expertise and background on the topical areas organized for discussion. Focus Groups discussed and commented on agriculture, open space/habitat, public infrastructure, circulation, economic development, and water resources policy issues.
- Joint General Plan Study Sessions of the County Board of Supervisors (BOS) and the Planning Commission (PC). Study sessions began in June 2007 and a total of nine sessions were held. These public BOS/PC meetings involve discussions on issues and opportunities, existing conditions, the vision, and goal, policy, and land use alternatives.
- A series of newsletters prepared during the General Plan preparation process to provide an overview of the progress being made and the direction being pursued by the County.

- Local Municipal Advisory Council (MAC) advisory meetings held during the General Plan preparation process to gain input from the various MACs on General Plan documents and proposals with respect to communities within the county.
- General Plan documents, including meeting agendas and summaries, background reports, draft goals and policies, draft alternatives reports and revised draft land use alternatives posted since 2006 for public access on the Merced County General Plan website at <http://www.co.merced.ca.us/gpu>.
- Upon completion of the Final PEIR, the County held formal public hearings with the Planning Commission (November 6, 2013) and Board of Supervisors (December 10, 2013) to consider the General Plan and the PEIR. (Draft PEIR, pps. 3-9 to 3-10; RDPEIR pps. 3-11 to 3-12)

ENVIRONMENTAL REVIEW AND PUBLIC PARTICIPATION

In accordance with Section 15082(a) of the State CEQA Guidelines, the County prepared and circulated a NOP of a Draft PEIR for the Project. The Notice of Preparation for the 2030 General Plan Draft PEIR was published on April 21, 2011 (State Clearinghouse No. 2011041067). The NOP and Project Description were circulated to the public, local and state agencies, and other interested parties to solicit comments on the 2030 General Plan. After several extensions of the NOP review period, the County held two scoping meetings for the Draft PEIR consistent with State CEQA Guidelines Section 15082(c), and closed the period for public comment on the NOP on October 7, 2011. Environmental issues and alternatives raised by comments received on the NOP during the 169-day public review period for the NOP were considered for inclusion in the Draft PEIR (see Draft PEIR Appendices A and B). Pursuant to the State CEQA Guidelines, the focus of the EIR includes the specific issues identified in the NOP, as well as concerns identified in the responses to the NOP.

The Draft PEIR for the 2030 Merced County General Plan project was circulated locally and with the State Clearinghouse for review and comment for a 60-day review period from November 30, 2012 to January 29, 2013. Public review copies of the Draft PEIR were made available to the public at the Merced County Planning and Community Development Department² and on the Department's website. During circulation of the Draft PEIR, Merced County received 19 comments on the Draft PEIR, and an additional 37 comments from residents of the unincorporated community of Santa Nella regarding communitywide policies and services. Additionally, Merced County received five comments on the Draft PEIR after the close of the 60-day public and agency review period.

The County reviewed those comments to identify specific environmental concerns and determine whether any additional environmental analysis would be required to respond to issues raised in the comments. No issues raised by the comments on the Draft PEIR resulted in the addition of significant new information to the EIR. However, during review of the public comments, the County realized that the Draft PEIR assessed a version of the 2030 General Plan that had inadvertently excluded an alternative policy regarding the minimum allowable parcel size in the Foothill Pasture and Agricultural

² The Department has been renamed the Department of Community and Economic Development.

land use designations as set forth in Policy AG-2.13 of the Agricultural Element of the 2030 General Plan. That alternative policy was identified as Policy AG-2.13a.

Because the addition of Policy AG-2.13a revised the description of the Project assessed in the PEIR, implementation of the revised 2030 General Plan could result in an increase in the magnitude of previously identified impacts regarding agricultural resources. Therefore, the County recirculated the Agricultural and Forestry Resources chapter of the Draft PEIR and related sections (e.g., Alternatives) for public review. These revised chapters were presented in a Recirculated Draft PEIR.

Additionally, the County’s review of comments received on the Draft PEIR resulted in minor corrections of the environmental setting, clarification of impact statements, and modification of mitigation measures for the environmental topics of air quality, biological resources, and hazards and hazardous materials. These changes were also presented in the Recirculated Draft PEIR. In all such cases, the changes merely clarify or expand upon the setting, impact assessments, or mitigation measures presented in the Draft PEIR, and no substantial new information was presented.

The RDPEIR was circulated for a 45-day period from July 26 to September 9, 2013. During circulation of the RDPEIR, Merced County received 15 comments on the RDPEIR, and an additional 15 comments from persons urging the County to adopt a 20-acre minimum parcel size in areas designated for Agricultural uses by the Merced County 2030 General Plan. Several of these comments were received after the close of the review period, but the County accepted them.

Subsequent to the receipt of comments on the Draft PEIR and the RDPEIR, the County prepared a Final PEIR that responded to all comments related to environmental issues received on the Draft PEIR and RDPEIR. This Final PEIR, which incorporates all of the environmental analyses contained in the Draft PEIR and the RDPEIR (as modified in response to comments) was circulated to commenting agencies and made available to the public in October 2013.

Together, the following documents compose the EIR for the 2030 General Plan project:

- Draft PEIR (November 2012)
- Recirculated Draft PEIR (July 2013)
- Final PEIR (October 2013)

Section 15132 of the CEQA Guidelines governs the contents of a Final PEIR. As required by Section 15132, this Final PEIR consists of the DEIR or a revision to the draft; comments and recommendations received on the DEIR; a list of those commenting on the DEIR; and the responses of the lead agency to significant environmental points raised in the comments. For the 2030 General Plan project EIR, these requirements may be found in the following documents:

Guidelines Section 15132 Content Requirement	Draft PEIR (11/2012)	Recirculated Draft PEIR (7/2013)	Final PEIR (10/2013)
Draft PEIR	X		
Revisions to Draft PEIR		X	X
Comments Received on Draft PEIR and RDPEIR			X
List of Commentors			X
Responses to Comments			X

The PEIR and the Project were reviewed by the Planning Commission in a public hearing held on November 6, 2013. At this hearing, the Planning Commission recommended the Board of Supervisors certify the PEIR and adopt the Project as modified in the Final PEIR with two specific preferred policy alternatives: Policy AG-2.13a and Policy AG-2.15 (Planning Commission Minutes dated November 6, 2013). Subsequent to the Planning Commission hearing, the Board of Supervisors reviewed the PEIR, the Project, and the recommendation of the Planning Commission at a noticed public hearing(s) on December 10, 2013.

The Board's actions are final unless appealed to the courts.

VI. RECORD OF PROCEEDINGS

For purposes of CEQA and these Findings, the Record of Proceedings for the Project consists of the following documents, at a minimum:

- The General Plan Background Report (June 2007, revised in 2012);
- The Notice of Preparation (April 21, 2011) and all other public notices issued by the County in conjunction with the Project, including the Notices of Completion and of Availability issued on or about November 30, 2012, providing notice that the Draft PEIR had been completed and was available for public review and comment, and Notices of Completion and of Availability issued on or about July 26, 2013, providing notice that the RDPEIR had been completed and was available for public review and comment;
- Comments received on the Notice of Preparation issued by the County;
- The Draft 2030 Merced County General Plan (November 2012);
- The EIR for the 2030 General Plan project, including the Draft PEIR, the RDPEIR, and the Final PEIR, and including all documents referred to or relied upon therein, and documents relied upon or referenced in these findings, which include, but are not limited to the following:
 - All timely comments received on the Draft PEIR and the RDPEIR, and responses to those comments;
 - Technical appendices;
- All comments submitted by agencies or members of the public during the 60-day public comment period on the Draft PEIR and the 45-day public review period on the RDPEIR;
- All comments and correspondence submitted to the County with respect to the Project, including timely comments on the Draft PEIR and RDPEIR;
- The Mitigation Monitoring and Reporting Program for the Project;
- All findings and resolutions adopted by County decision makers in connection with the Project, and all documents cited or referred to therein;
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project prepared by the County, consultants to the County, and responsible or trustee agencies with respect to the County's compliance with the requirements of CEQA and with respect to the County's actions on the Project;

- All documents submitted to the County by other public agencies or members of the public in connection with the Project, up through the close of the public hearing on the Final PEIR on December 10, 2013;
- Notice of Public Hearing issued in connection with the Board hearing on the Project, which was issued on November 29 and 30, 2013;
- Minutes and/or verbatim transcripts of all public meetings and public hearings held by the County in connection with the Project;
- Any documentary or other evidence submitted to the County at such public meetings and public hearings;
- The relevant files of the County for the Project;
- Matters of common knowledge to the County, including, but not limited to federal, state, and local laws and regulations;
- Any documents expressly cited in these findings, in addition to those cited above; and,
- Any other materials required to be in the record of proceedings by Public Resources Code section 21167.6, subdivision (e).

The custodian of the documents comprising the record of proceedings is the Assistant Director of the Merced County Department of Community and Economic Development, located at 2222 M Street, Merced, California, 95340.

The Board has relied on all of the documents listed above in reaching its decision on the 2030 General Plan project, even if not every document was formally presented to the Board or County Staff as part of the County files generated in connection with the Project. Without exception, any documents set forth above not found in the Project files fall into one of two categories. Many of them reflect prior planning or legislative decisions with which the Board was aware in approving the 2030 General Plan project (see City of Santa Cruz v. Local Agency Formation Commission (1978) 76 Cal.App.3d 381, 391-392; Dominey v. Department of Personnel Administration (1988) 205 Cal.App.3d 729, 738, fn. 6). Other documents influenced the expert advice provided to County Staff or consultants, who then provided advice to the Board. For that reason, such documents form part of the underlying factual basis for the Board's decisions relating to the approval of the 2030 General Plan project (see Public Resources Code Section 21167.6, subd. (e)(10); Browning-Ferris Industries v. City Council of City of San Jose (1986) 181 Cal.App.3d 852, 866; Stanislaus Audubon Society, Inc. v. City of Stanislaus (1995) 33 Cal.App.4th 144, 153, 155).

VII. FINDINGS REQUIRED UNDER CEQA

Public Resources Code Section 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such projects” (emphasis added). The procedures required by CEQA “are intended to assist public agencies in systematically identifying both the significant effects of projects and the feasible alternatives or feasible mitigation measures which will *avoid* or *substantially lessen* such significant effects” (emphasis added). Section 21002 goes on to state that “in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.”

The mandate and principles announced in Public Resources Code Section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required (see Public Resources Code Section 21081, subd. (a); CEQA Guidelines Section 15091, subd. (a)). For each significant environmental effect identified in an EIR for a proposed project, the approving agency must issue a written finding reaching one or more of three permissible conclusions. The first such finding is that “[c]hanges or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR” (CEQA Guidelines Section 15091, subd. (a)(1)). The second permissible finding is that “[s]uch changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency” (CEQA Guidelines Section 15091, subd. (a)(2)). The third potential conclusion is that “[s]pecific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR” (CEQA Guidelines Section 15091, subd. (a)(3)). Public Resources Code Section 21061.1 defines “feasible” to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.” CEQA Guidelines Section 15364 adds another factor: “legal” considerations (see also Citizens of Goleta Valley v. Board of Supervisors (“Goleta II”) (1990) 52 Cal.3d 553, 565).

The concept of “feasibility” also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project (City of Del Mar v. City of San Diego (1982) 133 Cal.App.3d 410, 417). “[F]easibility’ under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors” (Ibid.; see also Sequoyah Hills Homeowners Assn. v. City of Oakland (1993) 23 Cal.App.4th 704, 715). Further, alternatives are to be selected based on the “rule of reason”, and there is not an established directive that dictates the scope or nature of the alternative (Citizens for Open Government v. City of Lodi (2012) 205 Cal.App.4th 296).

The CEQA Guidelines do not define the difference between “avoiding” a significant environmental effect and merely “substantially lessening” such an effect. The County must therefore glean the meaning of these terms from the other contexts in which the terms are used. Public Resources Code Section 21081, on which CEQA Guidelines Section 15091 is based, uses the term “mitigate” rather than “substantially lessen.” The CEQA Guidelines therefore equate “mitigating” with “substantially lessening.” Such an understanding of the statutory term is consistent with the policies underlying CEQA, which include the policy that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such projects” (Public Resources Code Section 21002, emphasis added).

For purposes of these findings, the term “avoid” refers to the effectiveness of one or more mitigation measures to reduce an otherwise significant effect to a less-than-significant level. In contrast, the term “substantially lessen” refers to the effectiveness of such measure or measures to substantially reduce the severity of a significant effect, but not to reduce that effect to a less-than-significant level. These interpretations appear to be mandated by the holding in Laurel Hills Homeowners Association v. City Council (1978) 83 Cal.App.3d 515, 519-527, in which the Court of Appeal held that an agency had satisfied its obligation to substantially lessen or avoid significant

effects by adopting numerous mitigation measures, not all of which rendered the significant impacts in question less than significant.

Although CEQA Guidelines Section 15091 requires only that approving agencies specify that a particular significant effect is “avoid[ed] or substantially lessen[ed],” these findings, for purposes of clarity, in each case will specify whether the effect in question has been reduced to a less-than-significant level, or has simply been substantially lessened but remains significant.

Moreover, although Section 15091 of the CEQA Guidelines, read literally, does not require findings to address environmental effects that an EIR identifies as merely “potentially significant,” these findings will nevertheless fully account for all such effects identified in the EIR.

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modification or alternatives are not required, however, where such changes are infeasible or where the responsibility for modifying the project lies with some other agency (CEQA Guidelines Section 15091, subd. (a), (b)).

With respect to a project for which significant impacts are not avoided or substantially lessened either through the adoption of feasible mitigation measures or feasible environmentally superior alternative, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the project’s “benefits” rendered “acceptable” its “unavoidable adverse environmental effects” (CEQA Guidelines Section Section 15093, 15043, subd. (b); see also Public Resources Code Section 21081, subd. (b)). The California Supreme Court has stated that, “[t]he wisdom of approving . . . any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced” (*Goleta II*, 52 Cal.3d 553, 576).

The findings set forth herein reflect the independent judgment of the Board of Supervisors and constitute its best efforts to set forth the rationales and support for its decision under the requirements of CEQA.

VIII. LEGAL EFFECTS OF FINDINGS

To the extent that these findings conclude that various proposed mitigation measures outlined in the Final PEIR are feasible and have not been modified, superseded or withdrawn, the County hereby commits itself to require their implementation by formally modifying the 2030 General Plan to include these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the Board approves the Project.

The mitigation measures are referred to in the Mitigation Monitoring and Reporting Program (MMRP) adopted concurrently with these findings, and will be effectuated through the process of implementing the Project. All of the feasible mitigation measures that will avoid or substantially lessen the significant effects of the 2030 General Plan project are binding upon the County at the time of approval of the 2030 General Plan project.

IX. MITIGATION MONITORING AND REPORTING PROGRAM

A MMRP has been prepared for the Project and has been adopted concurrently with these Findings (see Public Resources Code Section 21081.6, subd. (a)(1)). The County will use the MMRP to track compliance with Project mitigation measures.

X. LESS THAN SIGNIFICANT ENVIRONMENTAL IMPACTS

The issues identified below were analyzed in the EIR. Based on the Final PEIR and the information contained in the record, the Board finds that the following impacts associated with the Project would be less than significant and therefore do not require mitigation:

1. *Less-than-Significant Impact AES-1: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.* Implementation of the proposed 2030 General Plan could lead to urban development and other activities that could damage scenic resources, including trees, rock outcroppings, and historic buildings within a state scenic highway. Because the 2030 General Plan contains goals, policies, and implementation programs that would preserve the viewsheds within state scenic highway corridors, and because approved and existing urban communities adjacent to scenic highways contain design guidelines, setback standards, and open space buffers to minimize visual changes, this would be a less-than-significant impact (Draft PEIR, pps. 5-8 to 5-11).
2. *Less-than-Significant Impact AES-2: Substantially degrade the existing visual character or quality of scenic resources or vistas.* Implementation of the proposed 2030 General Plan would lead to urban development and other activities that could substantially degrade the existing visual character or quality of the scenic resources or vistas within Merced County. Because the 2030 General Plan would set a framework of goals and policies that aims to balance agricultural and open space preservation with new development, and ensure that new development preserves and protects the aesthetic rural character of Merced County, and because the 2030 General Plan proposes that less than two percent of the existing rural and agricultural land be developed through buildout, this would be a less-than-significant impact (Draft PEIR, pps. 5-11 to 5-16).
3. *Less-than-Significant Impact AG-4: Conflict with zoning for forest land or timberland, result in the loss of forest land or cause other changes that could convert forest land to non-forest uses.* Implementation of the proposed 2030 General Plan would not lead to urban development and other construction activities that could conflict with the zoning for forest land or timberland, result in the loss of forest land, or cause other changes that could convert forest land to non-forest uses. Because no forest land, timberland, or timberland production areas, as zoned by applicable state regulations, exist within Merced County, the proposed 2030 General Plan would not conflict with forest land zoning, and impacts related to forest land resources would not occur (Draft PEIR, p. 6-47; RDPEIR, pps. 6-48 to 6-49).
4. *Less-than-Significant Impact AG-6: Involve other land use changes that would result in conversion of farmland to non-agricultural uses due to the Minor Subdivision of Rural Parcels and resultant changes in water use.* The minor subdivision of rural parcels into four or fewer lots as permitted

with the implementation of the proposed 2030 General Plan could lead to the conversion of important farmlands to non-agricultural uses, or otherwise conflict with continued agricultural operations by increasing the demand for groundwater or surface water in rural areas of Merced County. Because the potential water use from rural residences within minor subdivisions would approximately equal or be less than the current crop usage for the same area, this would be a less-than-significant impact (Draft PEIR, pps. 6-65 to 6-70; RDPEIR, pps. 6-66 to 6-71).

5. *Less-than-Significant Impact AQ-1: Increase in construction emissions associated with General Plan buildout.* Buildout of the 2030 General Plan would generate short-term or temporary air emissions during construction of both urban and rural uses, and during the construction of infrastructure necessary to serve these uses. The extensive regulation of air emissions from construction sources, combined with policies contained within the 2030 General Plan, would make this potential impact less than significant (Draft PEIR, pps. 7-10 to 7-12; RDPEIR, pps. 7-10 to 7-12).
6. *Less-than-Significant Impact AQ-2: Increase in operational emissions of ROG, NO_x, CO, and SO_x associated with General Plan buildout.* Buildout of the Merced County General Plan would generate long-term operational emissions of ROG, NO_x, CO, and SO_x from on-road vehicles, agricultural sources, and area sources. Due to existing and expected improvements in emission control technology, these emissions would be less than significant (Draft PEIR, pps. 7-13 to 7-17; RDPEIR, pps. 7-13 to 7-17).
7. *Less-than-Significant Impact AQ-4: Increase in carbon monoxide concentrations at congested intersections.* Buildout of the 2030 General Plan, despite increasing Vehicle Miles Traveled and area source activity level, would not increase overall CO emissions due to decreasing emissions rates per vehicle. The decrease in CO emissions would outweigh the increase in VMT, resulting in a net reduction in countywide CO emissions from vehicles. Buildout of the 2030 General Plan is not expected to result in violations of the state or federal CO standards because of the general downward trend in CO emissions from vehicles, and because no CO violations have been recorded in Merced County in over 20 years. Consequently, CO impacts would be less than significant (Draft PEIR, pps. 7-19 to 7-20; RDPEIR, pp. 7-20).
8. *Less-than-Significant Impact AQ-6: Increase in health risks associated with locating sensitive receptors near sources of odors and/or toxic air contaminants emitted by industrial, commercial, and agricultural land uses.* The 2030 General Plan has the potential to expose sensitive receptors to substantial concentrations of Toxic Air Contaminants (TAC) and odors because it could allow such receptors to be located in close proximity to sources of TACs and odors. Because of the proposed 2030 General Plan policies and existing programs that would avoid exposure to odors and TACs, this would be a less-than-significant impact (Draft PEIR, p. 7-22 to 7-24; RDPEIR, pps. 7-22 to 7-25).
9. *Less-than-Significant Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.* Merced County has no adopted ordinances or programs for the protection of biological resources in the unincorporated areas of the county. Because no locally adopted ordinances or programs exist, there would be no potential for implementation of the 2030 General Plan to conflict with such regulations; thus, there would be no impact (Draft PEIR, p. 8-39; RDPEIR, pp. 8-44).

10. *Less-than-Significant Impact BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.* Other than one 120-acre Habitat Conservation Plan for the San Joaquin kit fox in the Santa Nella community in western Merced County, there are no adopted Habitat Conservation Plans or Natural Community Conservation Plans with coverage for any area or activity in Merced County. The proposed land use pattern and policies of the 2030 General Plan would be consistent with the provisions of this HCP. Additionally, proposed 2030 General Plan policies set forth the County's support for the conservation programs of other resource-management agencies. For these reasons, this would be a less-than-significant impact (Draft PEIR, pps. 8-40 to 8-41; RDPEIR, pps. 8-44 to 8-45).
11. *Less-than-Significant Impact GEO-1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: (1) rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, (2) strong seismic ground shaking or seismic-related ground failure including liquefaction, (3) landslides or dam failure.* Future large earthquakes could cause damage, particularly to developed areas within the county. Implementation of the proposed 2030 General Plan would lead to increased urban development, expanding the type and number of structures and associated persons exposed to potential seismic hazards. Because of a comprehensive body of construction requirements enforced by the County, and the goals and policies set forth in the 2030 General Plan that would avoid or reduce the effect of seismic hazards, this impact would be less than significant (Draft PEIR, pps. 10-14 to 10-17).
12. *Less-than-Significant Impact GEO-2: Result in substantial soil erosion or topsoil loss from heightened exposure to wind or water erosion, or result in a substantial loss of valuable mineral resources within the county.* Implementation of the proposed 2030 General Plan would lead to continued urban development with an increased potential for soil erosion and loss during construction related soil disturbance activities. The 2030 General Plan also encourages the preservation and continuation of productive agricultural lands and practices, which currently cover one million county acres and can sometimes lead to increased topsoil loss from wind and water erosion of tilled soils and unplanted fields. Because of a comprehensive body of federal, state, and County requirements, and the goals and policies set forth in the 2030 General Plan that would avoid or reduce the effect of erosion hazards and the loss of mineral resources, this impact would be less than significant (Draft PEIR, pps. 10-17 to 10-21).
13. *Less-than-Significant Impact GEO-3: Locate development or structures on unstable soils or expansive soils (as defined in Table 18-1-B of the 1994 Uniform Building Code) that may result in excessive damage to building structure or foundation or significant hazard to persons or property due to on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.* Implementation of the proposed 2030 General Plan could lead to the construction and operation of urban development and infrastructure that could be located on unstable or expansive soils, or exposed to geologic hazards. Because of a comprehensive body of construction requirements enforced by the County, and the goals and policies set forth in the 2030 General Plan that would avoid or reduce the effects of unstable soils and other types of geologic hazards, this impact would be less than significant (Draft PEIR, pps. 10-21 to 10-22).

14. *Less-than-Significant Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through accident conditions involving the release of hazardous materials into the environment.* Implementation of the proposed 2030 General Plan would lead to urban development and other land use activities that would require the routine transport, use, or disposal of hazardous materials and wastes within Merced County, and that could result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Because General Plan policies, and existing state and County regulatory programs are in place to reduce potential hazards and would continue in the future, even with increasing commercial and industrial land uses proposed under the 2030 General Plan, this would be a less-than-significant impact (Draft PEIR, pps. 12-12 to 12-16; RDPEIR, pps. 12-14 to 12-17).
15. *Less-than-Significant Impact HAZ-2: Emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.* Implementation of the proposed 2030 General Plan would lead to urban development and the intensification of land uses that could emit hazardous emissions or result in the handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Because the 2030 General Plan has incorporated policies that limit the use of hazardous materials near school sites and limit the development of proposed schools near existing contamination, this would be a less-than-significant impact (Draft PEIR, pps. 12-16 to 12-18; RDPEIR, pps. 12-18 to 12-19).
16. *Less-than-Significant Impact HAZ-5: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.* Implementation of the proposed 2030 General Plan would lead to urban development and other activities that would increase the need to expand existing fire protection services, and could expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Because the 2030 General Plan contains specific goals and policies designed to prevent wildfire hazards related to wildland fuel reduction, emergency response, and design solutions, this would be a less-than-significant impact (Draft PEIR, pps. 12-25 to 12-28; RDPEIR, pps. 12-27 to 12-30).
17. *Less-than-Significant Impact HYD-1: Violate water quality standards or waste discharge requirements, or otherwise substantially degrade water quality.* Implementation of the 2030 General Plan would lead to future urban development and other developed land uses that could result in discharges of contaminated water to surface water bodies and groundwater. Because of extensive state and local regulation of discharges, and the goals and policies set forth in the 2030 General Plan that would minimize the potential for the release of urban pollutants, this impact would be less than significant (Draft PEIR, pps. 13-26 to 13-30).

18. *Less-than-Significant Impact HYD-4: Significantly increase the rate or amount of storm water runoff which would exceed the capacity of existing or planned storm water drainage systems or facilities resulting in increased sources of polluted runoff or detrimental flooding to property or infrastructure.* The development or expansion of urban uses consistent with the 2030 General Plan could result in increases in the rate or amount of stormwater runoff. However, the continued application of existing state and local regulations regarding stormwater management, coupled with implementation of the policies of the 2030 General Plan, would result in a less-than-significant impact (Draft PEIR, pps. 13-37 to 13-39).
19. *Less-than-Significant Impact HYD-5: Allow new development to proceed within a 100-year flood hazard area as mapped on the FEMA Flood Insurance Rate Map without adequate protection measures or which might impede or redirect flood flows resulting in hazards elsewhere.* Implementation of the 2030 General Plan may lead to urban or other development within regulatory floodplains. Because Merced County would continue to enforce FEMA standards and the requirements of the Flood Ordinance, and the policies of the 2030 General Plan would result in more stringent land use controls to reduce or prevent exposing future development to the risk of flooding, this would be a less-than-significant impact (Draft PEIR, pps. 13-40 to 13-42).
20. *Less-than-Significant Impact HYD-6: Diverge from current state flood legislation or allow new development to proceed within a 200-year flood hazard as identified by DWR Best Available Maps without adequate planning or protection measures in place.* Implementation of the 2030 General Plan would lead to urban or other development that could be inconsistent with state flood control programs and regulations if it is located in areas subject to a 200-year flood event. Because the 2030 General Plan requires consistency with state requirements for flood control and management planning, and the policies of the 2030 General Plan would result in more stringent land use controls to reduce or prevent exposing future development to the risk of flooding, this would be a less-than-significant impact (Draft PEIR, pps. 13-42 to 13-45).
21. *Less-than-Significant Impact HYD-7: Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.* Future development under the 2030 General Plan could result in an increase in the number of persons and property potentially at risk from flooding due to a catastrophic levee or dam failure. Compliance with the requirements of existing emergency management plans and the CVFPA, coupled with implementation of 2030 General Plan policies, would reduce this potential effect to less than significant (Draft PEIR, pps. 13-45 to 13-46).
22. *Less-than-Significant Impact LU-2: Conflict with any applicable plan, policy, or regulation of a government agency with jurisdiction over land in unincorporated Merced County that has been adopted for the purpose of avoiding or mitigating an environmental effect.* Implementation of the proposed 2030 General Plan could lead to land use inconsistencies that would conflict with applicable plans, policies, or regulations that have jurisdiction over land use within unincorporated Merced County. Because the proposed 2030 General Plan was designed specifically to achieve and promote consistency with the planning documents of other neighboring cities and counties, and with the requirements of other land management agencies within Merced County, this impact would be less than significant (Draft PEIR, pps. 14-26 to 14-32).

23. *Less-than-Significant Impact NSE-1: Exposure of persons to, or generation of, noise levels in excess of standards established in the local General Plan, noise ordinance, or applicable standards of other agencies.* Implementation of the proposed 2030 General Plan would result in changes in County noise policies used to evaluate project noise impacts. Because the 2030 General Plan contains goals, policies, and implementation programs that are considerably more comprehensive than the County's current Noise Policies and provide a considerably greater degree of noise protection to citizens and business/industry within the county than currently exists, implementation of the proposed 2030 General Plan would result in a less-than-significant impact (Draft PEIR, pps. 15-12 to 15-16).
24. *Less-than-Significant Impact NSE-2: A substantial permanent, temporary, or periodic increase in ambient noise levels in the project vicinity above levels without the project - Development of new noise-sensitive land uses within areas subject to noise impacts, including within noise impacted areas adjacent to public and private airports.* Future development of new noise-sensitive land uses would occur under the 2030 General Plan within areas that are either currently affected by noise from both transportation and non-transportation noise sources, or would be affected in the future. However, the 2030 General Plan also includes policies as shown in Draft PEIR Tables HS-1 and HS-2 that would ensure that no future land uses would be exposed to noise levels in excess of County standards. This impact would be less than significant (Draft PEIR, pps. 15-16 to 15-17).
25. *Less-than-Significant Impact NSE-3: A substantial permanent, temporary, or periodic increase in ambient noise levels in the project vicinity above levels without the project - Development of noise-producing uses near existing sensitive land uses.* Under the 2030 General Plan, future development of new noise-generating land uses could occur within areas containing noise-sensitive land uses. However, the 2030 General Plan includes policies that would ensure that no noise-sensitive land uses would be exposed to noise levels generated by new noise-producing uses in excess of County standards as shown in Draft PEIR Table HS-2. Because of this comprehensive regulation of potential noise effects by the operation of 2030 General Plan policies, this impact would be less than significant (Draft PEIR, p. 15-17).
26. *Less-than-Significant Impact POP-2: Displace substantial amounts of population and housing units, necessitating the construction of replacement housing elsewhere.* Although implementation of the proposed 2030 General Plan could lead to urban development that could displace people and existing housing units, necessitating the construction of replacement housing elsewhere, the proposed 2030 General Plan would allow for a net increase of housing, and contains goals and policies to preserve existing neighborhoods and housing. For these reasons, the proposed project would not displace population or housing without providing replacement housing resources, resulting in a less-than-significant impact (Draft PEIR, pps. 16-25 to 16-30).

27. *Less-than-Significant Impact PS-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection and emergency response facilities, or the need for new or physically altered fire protection and emergency response facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.* Implementation of the proposed 2030 General Plan would result in urban development and the construction of infrastructure that could increase the demand for fire protection and emergency response services within the unincorporated county. Because of proposed 2030 General Plan policies, and the requirement for the project-level environmental review for any individual facility, this would be a less-than-significant impact (Draft PEIR, pps. 17-16 to 17-22).
28. *Less-than-Significant Impact PS-2: Result in substantial adverse physical impacts associated with the provision of new or physically altered police protection and law enforcement facilities, or the need for new or physically altered police protection and law enforcement facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.* Implementation of the proposed 2030 General Plan would generate increases in population and employment and urban development in unincorporated Merced County, thereby resulting in the potential need to construct new facilities to provide police protection services. Because of proposed 2030 General Plan policies, and the requirement for the project-level environmental review for any individual facility, this would be a less-than-significant impact (Draft PEIR, pps. 17-22 to 17-26).
29. *Less-than-Significant Impact PS-3: Result in substantial adverse physical impacts associated with the provision of new or physically altered school and library facilities, or the need for new or physically altered school and library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.* Implementation of the proposed 2030 General Plan would lead to population increases in the unincorporated areas of Merced County. This would increase the number of school-aged children requiring educational services, as well as the number of people using libraries. The increased demand for public educational services could result in the need to construct new and expanded school facilities and libraries, the construction of which may cause environmental impacts. Because of proposed 2030 General Plan policies, and the requirement for the project-level environmental review for any individual facility, this would be a less-than-significant impact (Draft PEIR, pps. 17-27 to 17-30).
30. *Less-than-Significant Impact REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.* Implementation of the proposed 2030 General Plan would lead to urban development and population growth that would increase the use of and overall demand for park and recreation facilities within the county such that existing recreational conditions would deteriorate and new recreational amenities would be needed. The increased demand would not impact specific facilities, and costs would be offset by increased revenues and fees generated by new development. Because the proposed 2030 General Plan contains goals and policies to adequately maintain existing facilities and fund the development of new park facilities to serve new residents and visitors, this would be a less-than-significant impact (Draft PEIR, pps. 18-11 to 18-21).

31. *Less-than-Significant Impact REC-2: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.* Implementation of the proposed 2030 General Plan would lead to urban development and population growth that could increase the demand and use of existing recreational facilities and park lands within the county. This would likely result in the need for new or expanded park facilities. Because it is not known where new or expanded facilities would be needed, it cannot be determined what, if any, project-specific environmental impacts would occur from the construction and operation of the facilities. Further, the 2030 General Plan includes goals and policies that are intended to reduce impacts associated with the construction and expansion of recreational facilities, making any impacts associated with the need to construct new facilities less than significant (Draft PEIR, p. 18-21).
32. *Less-than-Significant Impact TRF-4: Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.* Implementation of the proposed 2030 General Plan would not conflict with any adopted congestion management plan, as no congestion management plan has been adopted for Merced County. This would be a less-than-significant impact (Draft PEIR, p. 19-48).
33. *Less-than-Significant Impact TRF-5: Result in changes to air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks.* The policies of the 2030 General Plan (Draft PEIR Table 19-20) would continue the operation of Merced County's airports as general aviation facilities. Additionally, the policies and land uses set forth in the 2030 General Plan are consistent with the adopted Airport Land Use Compatibility Plans for general aviation airports in the county. Because of this, implementation of the proposed 2030 General Plan would not result in a change in air traffic patterns that would result in a substantial safety risk. This would be a less-than-significant impact (Draft PEIR, pps. 19-48 to 19-50).
34. *Less-than-Significant Impact USS-2: Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.* Implementation of the proposed 2030 General Plan would lead to demands for increased potable water and wastewater treatment services from future urban development. The majority of existing water and wastewater facilities in the county meet current demand, but would be unable to service future growth without expanding or building new water and wastewater treatment and distribution, collection, and disposal facilities. Because 2030 General Plan policies require that new development be served by adequate water and wastewater facilities without adverse effects to existing customers, and the programmatic environmental effects of constructing and operating such uses are set forth in Chapters 5 through 22 of the Draft PEIR, this would be a less-than-significant impact (Draft PEIR, pps. 20-37 to 20-40).

35. *Less-than-Significant Impact USS-3: Adequate wastewater treatment capacity, including that necessary to meet the wastewater treatment requirements of the RWQCB, to serve the projected demand without disrupting existing commitments as determined by the wastewater treatment provider, and new construction or facility expansion to serve future demand.* Implementation of the proposed 2030 General Plan would lead to increased demand to collect, treat, and dispose of wastewater from urban development. The majority of existing wastewater treatment facilities in the county meet current demand, but would be unable to service future growth without expanding or building new collection, treatment, or disposal facilities. Because 2030 General Plan policies require that new development be served by adequate wastewater treatment facilities without adverse effects to existing customers, and the programmatic environmental effects of constructing and operating such uses are set forth in Chapters 5 through 22 of the Draft PEIR, this would be a less-than-significant impact (Draft PEIR, pps. 20-40 to 20-44).
36. *Less-than-Significant Impact USS-4: Require new or substantial alteration of existing solid waste disposal facilities, and comply with federal, State, and local statutes and regulations related to solid waste.* Implementation of the 2030 General Plan could result in an increased demand for solid waste handling and disposal facilities. Because both landfills in the county have adequate capacity through the year 2050 to accommodate planned growth, and both facilities are operating within their regulatory requirements, this would be a less-than-significant impact (Draft PEIR, pps. 20-44 to 20-45).
37. *Less-than-Significant Cumulative Impact: Soils and Geological Resources.* No potentially significant adverse effects were identified following implementation of 2030 General Plan goals and policies. Geologic conditions are highly localized. Because the geological hazard effects of the 2030 General Plan would be less than significant, implementation of the plan would not make a cumulatively considerable contribution to this less-than-significant cumulative effect (Draft PEIR, p. 22-10).
38. *Less-than-Significant Cumulative Impact: Hazards and Hazardous Materials.* No potentially significant adverse effects were identified following implementation of 2030 General Plan goals and policies as amended by mitigation set forth in the Draft PEIR. With the implementation of policies designed to reduce impact on emergency response services, development resulting from implementation of the 2030 General Plan would not result in traffic and congestion on roadways that would substantially increase the response times for emergency vehicles within the county, and in adjacent areas on roadways that serve Merced County traffic. New growth and development would not substantially delay emergency response or impair the implementation of an adopted emergency response plan. All impacts due to hazards are considered less than significant. Hazardous materials and other public health and safety issues are generally site-specific, and would not be significantly affected by other development in the region. Therefore, the 2030 General Plan's contribution to regionally significant cumulative impacts related to hazards and hazardous materials would be less than cumulatively considerable (Draft PEIR, p. 22-10).

39. *Less-than-Significant Cumulative Impact: Land Use.* No potentially significant adverse effects were identified following implementation of 2030 General Plan goals and policies as amended by mitigation set forth in the Draft PEIR. Buildout of the 2030 General Plan and the development projected for the county's incorporated cities and the surrounding counties would result in substantial land use changes on the regional level, including the physical division of communities within Merced County and adjacent counties with construction and operation of High Speed Rail. However, the proposed 2030 General Plan was designed specifically to achieve and promote consistency with the planning policies of other neighboring cities and counties. Therefore, the 2030 General Plan would make a less than cumulatively considerable contribution to this potentially cumulative land use compatibility impact (Draft PEIR, pps. 22-11 to 22-12).
40. *Less-than-Significant Cumulative Impact: Population and Housing.* No potentially significant adverse effects were identified following implementation of 2030 General Plan goals and policies. The purpose of the 2030 General Plan is to provide a framework to guide land use development and conservation within the unincorporated portion of Merced County to provide for the employment and housing needs of the county based on forecasts set forth by the Merced County Association of Governments (MCAG). After the implementation of 2030 General Plan policies and mitigation identified in the Draft PEIR, because the 2030 General Plan at buildout would not accommodate greater population and employment beyond that projected by MCAG forecasts, the 2030 General Plan would not be considered growth-inducing. When viewed with the more substantial growth projected to occur in the cities and the surrounding counties, the 2030 General Plan's incremental effects on growth and population would not make a cumulatively considerable contribution to this cumulative effect (Draft PEIR, p. 22-12).
41. *Less-than-Significant Cumulative Impact: Public Services.* No potentially significant adverse effects were identified following implementation of 2030 General Plan goals and policies. While growth under buildout conditions of the 2030 General Plan would result in increases in demand for public services, implementation of the 2030 General Plan goals and policies would ensure that the provision of appropriately timed and sized services to serve new urban development would not result in adverse environmental effects beyond those described in Chapters 5-20 of the Draft PEIR. Because the public services effects of the 2030 General Plan would be less than significant, implementation of the plan would not make a cumulatively considerable contribution to this less-than-significant cumulative effect (Draft PEIR, p. 22-13).
42. *Less-than-Significant Cumulative Impact: Recreation.* No potentially significant adverse effects were identified following implementation of 2030 General Plan goals and policies. The proposed 2030 General Plan contains goals and policies to adequately maintain existing facilities, and fund the development of new park facilities, to serve new residents and visitors, in addition to goals and policies intended to reduce impacts associated with the construction and expansion of recreational facilities. Because the effects to recreation resources with implementation of the 2030 General Plan would be less than significant, implementation of the plan would not make a cumulatively considerable contribution to this less-than-significant cumulative effect (Draft PEIR, p. 22-13).

43. *Less-than-Significant ENER-1: Inefficient, wasteful, or unnecessary consumption of energy with General Plan buildout.* Buildout of the 2030 General Plan would increase energy consumption in Merced County. Implementation of the 2030 General Plan would result in measurable anticipated energy and fuel savings, and the 2030 General Plan's policies would reduce inefficient, wasteful, and unnecessary use of energy. Because policies contained within the 2030 General Plan would promote smart energy use and efficiency and would reduce adverse environmental impacts associated with increased energy consumption, this would be a less-than-significant impact (Draft PEIR, pps. 22-21 to 22-25).
44. *Less-than-Significant Impact: Irreversible Commitment of Resources.* The demand for renewable and non-renewable resources is expected to increase regardless of whether or not the project is developed. As discussed in the cumulative evaluation and set forth in Draft PEIR Table 22-1, urban development and other organized activities in the San Joaquin Valley are expected to increase. Therefore, if not consumed by this project, these resources would likely be committed to other projects in the region intended to meet this anticipated growth. The investment of additional resources in the project would be typical of the level of investment normally required for urbanization and development at the scale of Merced County. Mitigation measures have been included in the Draft PEIR to reduce and minimize the impact to renewable and non-renewable resources (Draft PEIR, p. 22-30).
45. *Less-than-Significant Impact: Potential Environmental Damage from Accidents.* The 2030 General Plan proposes no uniquely hazardous uses, and its implementation would not be expected to cause environmental accidents that would affect other areas (Draft PEIR, p. 22-31).

XI. SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The PEIR identified several significant environmental effects (or “impacts”) that adoption and implementation of the 2030 General Plan project could cause. Many significant effects were avoided altogether because the proposed Project (the 2030 General Plan), as adopted, contains goals, policies, and implementation programs that prevent the occurrence of significant effects in the first place. For other effects, additional mitigation beyond that existing in the policies of the 2030 General Plan is identified in the PEIR. Some significant impacts of implementation of the Project, however, cannot be avoided by the adoption of feasible mitigation measures or feasible alternatives; these effects are outweighed by overriding considerations set forth in Section XIII below. This Section XI presents in greater detail the Board's findings with respect to the environmental effects of the Project.

A. AESTHETICS AND VISUAL RESOURCES

Aesthetics and Visual Resources setting information for the 2030 General Plan project is set forth in pages 5-1 through 5-7 of the Draft PEIR, and Final PEIR pages 4-27 through 4-28. The impact evaluation criteria and analysis methodology used in assessing impacts on visual resources as a result of implementing the Project are set forth in the Draft PEIR on pages 5-7 through 5-8. This information is incorporated into these findings as though fully set forth herein. Considering the

above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

Impact AES-3: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the county (Draft PEIR, pps. 5-17 to 5-18)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

The development proposed under the 2030 General Plan could increase the amount of light and glare through the installation of exterior lighting within areas proposed for new residential and commercial development. Existing sources of light and glare primarily occur within the county's six incorporated cities, their spheres of influence, and designated Urban Communities. It is expected that the new sources of light and glare would be associated with the buildout of the land uses designated in the 2030 General Plan Land Use Diagram, many of which would continue to occur in existing urbanized areas, such as cities and designated Urban Communities. However, some new development would result in scattered growth that would increase the amount of light and glare that occurs outside urban boundary areas. Because the majority of the county consists primarily of agricultural uses or areas that currently have no light or minimal amounts of light and glare, it is expected that new sources of light and glare at such locations could negatively affect these rural uses and could contribute to new substantial sources of light pollution (Draft PEIR, p. 5-17).

As set forth in Draft PEIR Table 5-3, Natural Resources Element Goal NR-4, Policy NR-4.5 requires good lighting practice, such as the use of specific light fixtures that reduce light pollution, minimize light impacts, and preserve views of the night sky. As discussed in Draft PEIR Section 5.1.2, the California Building Code also regulates lighting intensity, efficiency, and shielding. It requires that lighting fixtures be designed to minimize light pollution and glare. Further, Title 18 of the County Code (Chapter 18.41 Performance Standards, Section 060 Lighting) requires all exterior lighting to be designed and maintained so that glare and reflections are contained within the boundaries of the parcel. The code also requires that light fixtures be hooded and directed downward and away from adjoining properties and public rights-of-way. However, new development impacts still have the potential to substantially increase the amount of nighttime light and glare in the county, permanently obscuring nighttime views of the sky. Light and glare are also likely to have a greater effect on sensitive uses, such as rural residential and agricultural uses, recreation and open space areas, and wildlife refuges (Draft PEIR, pps. 5-17 to 5-18).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that while both the County Zoning Code Performance Standards and the California Building Code requirements, in combination with the 2030 General Plan Policy NR-4.5, would limit light trespass and reduce light pollution, new development particularly within rural areas could still increase the amount of light and glare that spills onto nearby sensitive land uses, resulting in a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure AES-3:

Amend Policy NR-4.5: Light Pollution Reduction, as follows:

The County shall develop and implement a lighting ordinance to require good lighting practices, such as the use of specific light fixtures that reduce light pollution, minimize light impacts, and preserve views of the night sky. The ordinance shall contain standards to avoid light trespass, particularly from developed uses, to sensitive wildlife corridors and refuges.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measure is incorporated into the 2030 General Plan. The Board further finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by amending a policy to reduce the potential for nighttime light pollution related to spillover light and glare, especially with respect to sensitive uses and activities. The above-stated measure would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

B. AGRICULTURAL AND FORESTRY RESOURCES

Agricultural Resources setting information for the 2030 General Plan project is set forth in pages 6-1 through 6-14 of the Draft PEIR and pages 6-1 through 14 of the RDEIR. The impact evaluation criteria and analysis methodology used in assessing impacts on agricultural resources as a result of implementing the Project are set forth in the Draft PEIR on pages 6-14 through 6-15 and on pages 6-14 through 6-15 of the RDEIR. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft PEIR, RDPEIR, and Final PEIR, the findings of the Board are as follows.

Impact AG-1: Convert Important Farmland as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use – Development of Urban and Other Non-Agricultural Uses (Draft PEIR, pps. 6-16 to 6-30; RDPEIR, pps. 6-16 to 6-31; Final PEIR, pps. 4-31 to 4-46)

Finding: This would be a significant and unavoidable impact

Explanation:

Implementation of the proposed 2030 General Plan would lead to urban development and other developed land uses, such as energy facilities, surface mining, the construction of infrastructure, and scattered rural residences, that could convert prime farmland, unique farmland, farmland of statewide importance, farmland of local importance, and confined animal agriculture to non-agricultural uses.

According to the County Agricultural Commissioner's 2010 Report on Agriculture, Merced County contains approximately 1.16 million acres in agriculture, which cover 92 percent of the county's total

land area. In 2010, the state FMMP categorized 610,866 acres of the total farmland as prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and confined animal agriculture in Merced County. This important farmland represents approximately 48 percent of all land in the county. According to the FMMP as shown in Draft PEIR Table 6-3, over an 18-year period ending in 2010, total agricultural land within Merced County decreased by 21,400 acres to 1.16 million acres. Within this overall loss, the area of important farmlands decreased countywide by 2,063 acres from 1992-2010. During the same period, urban and built-up land increased from 28,326 to 33,376 acres (an increase of 10,050 acres). Although there are indications that farmland loss, specifically in the prime and grazing categories, has accelerated in recent years, much of the loss can be attributed to fallowing of prime or statewide import farmlands, or the conversion of grazing land to more important farmland types due to the availability of irrigation and subsequent cultivation (Draft PEIR and RDPEIR, p. 6-16).

Future growth resulting from the implementation of the proposed 2030 General Plan would result in both direct and indirect conversion of important farmlands to urban or non-agricultural uses. This conversion would be primarily due to urban development and the construction of infrastructure, such as roadways and utility improvements. Total buildout of urban land uses designated by the 2030 General Plan could result in the new development of up to 14,683 acres by 2030³. As a result, such development has the potential to occur on important farmlands within the county (Draft PEIR, p. 6-17; and RDPEIR, pps. 6-16 to 6-17).

The 2030 General Plan Land Use Diagram was designed to direct urban growth into the incorporated cities and unincorporated urban planning areas. While one of the primary objectives of the 2030 General Plan is to direct growth to designated urban areas, many of these urban designated areas contain important farmlands that would be converted to non-agricultural uses to provide the estimated 14,683 acres of new development that could occur within designated urban areas, according to the total acreage designated in the approved 2000 General Plan for urban areas. Draft PEIR and RDPEIR Table 6-6 sets forth the total acres of developable land, developed land, remaining undeveloped land, and important farmland types within each designated urban area. The table includes only the designated urban areas, where the majority of new growth would occur within the county. The table also summarizes the total amount of important farmlands within each urban area that have the potential to be converted to urban uses under the proposed 2030 General Plan (Draft PEIR and RDPEIR, p. 6-17).

While the 2030 General Plan would limit new development in unincorporated rural areas outside of urban area boundaries, important farmlands scattered among parcels within existing unincorporated rural communities, including Rural Centers and Highway Interchange Centers that have not yet been built out and on existing and future rural subdivided parcels, could also be converted to urban or developed uses (RDPEIR, p. 6-18).

A key goal of the 2030 General Plan is to protect farmlands and agricultural activities in the county through the Agricultural and Foothill Pasture land use designations, and through goals and policies designed to protect the conversion of agricultural lands to urban uses. The Agricultural and Foothill Pasture land use designations under the General Plan protect farmland and related open space uses

³ Note, however, that the 2030 General Plan does not propose any changes in land use designations as compared to the 2000 General Plan.

from the conversion to non-agricultural or urban uses because they would limit such uses, except under specific conditions when the uses are accessory to support agricultural operations (Draft PEIR and RDPEIR, p. 6-20).

Goals and policies outlined under the 2030 General Plan that would provide protective measures to prevent the conversion of agricultural lands designated as important farmland to non-agricultural uses are listed in Draft PEIR and RDPEIR Table 6-7 (Draft PEIR, pps. 6-20 to 6-26; and RDPEIR, pps. 6-20 to 6-27). The following summarizes the key goals and associated policies that protect agricultural lands:

- Goal AG-2 and its supporting policies in the Agricultural Element ensure the long-term preservation and conservation of land used for productive agriculture, potentially-productive agricultural land, and agricultural-support facilities.
- Goal LU-1 and its supporting policies aim to create a countywide land use pattern that enhances the integrity of both urban and rural areas by focusing urban growth towards existing or suitably located new communities.
- Goal LU-2 and its policies would preserve, promote, and expand the agricultural industry in Merced County, apply the Agricultural and Foothill Pasture land use designations as the primary designations in the county, limit allowable land uses in these designations to crop production, farm operations, and grazing and open spaces uses, and only allow commercial and industrial uses in rural areas under limited conditions.
- Goal LU-5.A would preserve and enhance the character of Merced County by focusing future unincorporated development towards Urban Communities.
- Goal LU-7 would reduce impacts related to the conversion of agricultural lands by directing development to areas that are adequately serviced by public facilities and infrastructure, rather than to rural areas where the majority of the agricultural uses are located.
- Goal NR-3 would limit impacts on agricultural resources by promoting orderly development and restricting the extraction of mineral resources that would impact open space, natural resources, or soil resources.

However, buildout of the 2030 General Plan would lead to the conversion of some important farmlands to non-agricultural uses, regardless of the General Plan's goals and policies. Agricultural parcels located near existing urban uses, specifically suburban areas, may have limited long-term viability for active agricultural activities due to urban edge conflicts. Nuisance complaints from surrounding neighbors, including but not limited to vandalism, traffic, and limitations on spraying pesticides and herbicides near sensitive receptors, can reduce the viability of productive agricultural operations that are too close to existing urban development. In addition, because many agricultural parcels have grown smaller through subdivision, small agricultural parcels may no longer be viable to pursue future agricultural operations. As a result, keeping agricultural land use designations on these scattered parcels, particularly if they are situated near urban uses, would not ensure ongoing agricultural use (Draft PEIR and RPEIR, p. 6-28).

Overall, the 2030 General Plan recognizes agriculture as the primary land use in the county. The Plan recognizes the continued preservation of agricultural lands through numerous policies that are intended to protect agricultural values and productivity, and to mitigate for their loss. However, the purpose of the 2030 General Plan is also to develop a framework to guide future land use

development. As a result, it is inevitable that some farmland conversion would occur to accommodate long-term development needs. Proposed policies would permit the loss of farmland to urban development both within designated urban areas and as a result of the growth of developed uses at scattered locations outside designated communities. While some proposed policies would fully protect the amount of farmland equal to that removed, no policy would prohibit urban development of farmlands or result in an increase in the acreage of protected agricultural land. Although the Agricultural Land Mitigation Program (Program AG-B) would mitigate the loss of productive agricultural land, the actual viability of such a program remains unknown because the program has not yet been developed or adopted. Until the details of the mitigation land management program that would oversee and monitor the mitigated land is developed and approved, the proposed 2030 General Plan is assumed to continue to lead to the conversion of agricultural uses to non-agricultural uses and result in a net loss of important farmland over time (Draft PEIR and RDPEIR, p. 6-28).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR, RDPEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that while the 2030 General Plan would protect the majority of important farmlands, specifically under the Agricultural land use designation and via the Agricultural Element goals and policies, because the 2030 General Plan would allow for some conversion of farmlands to non-agricultural use to accommodate future urban development, infrastructure necessary to serve such development, and developed rural land uses (energy facilities, agriculturally related industries, mining, scattered rural residences) located on farmlands, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure AG-1a:

Amend Policy AG-2.2: Agricultural Land Mitigation, as follows:

Protect productive agricultural areas from conversion to non-agricultural and urban uses by establishing and implementing an agricultural mitigation program that matches acres converted with farmland acres of similar quality to those converted preserved at a 1:1 ratio. Coordinate with the six cities in Merced County and the Merced Local Agency Formation Commission (LAFCo), consistent with LAFCo's statutory mission to preserve agricultural land and open space, to establish consistent standards and mitigation for the loss of farmland. In addition, the Land Evaluation and Site Assessment Model (LESA model) may be used to determine whether the conservation land is of equal or greater value than the land being converted.

Mitigation Measure AG-1b:

Add the following program:

Implementation Program AG-J: Agricultural Conservation Easement Program

In conjunction with the Policies AG-2.2, AG 2.4, and AG 2.8 and Program AG-B, the County shall develop and adopt an Agricultural Land Mitigation Program ordinance. The ordinance shall ensure that agricultural mitigation is required for the conversion or change from an agricultural use to a predominantly non-agricultural use prior to, or concurrently with, approval

of a zone change from agricultural to non-agricultural zoning designation, or other discretionary action by the County. Additionally, the ordinance shall require that for each acre of agricultural land changed or converted, one acre of equivalent agricultural land shall be preserved (1:1 ratio). The ordinance shall define the term “equivalent agricultural land.” The ordinance shall provide for mitigation via a conservation easement. The ordinance shall outline that where a conservation easement is funded or dedicated, an endowment for the on-going monitoring and maintenance of the agricultural conservation easement must also be required. Finally, the ordinance shall require that prior to the approval of a final subdivision map, or issuance of the first building permit, whichever comes first, a project proponent shall provide written evidence to the County that a conservation easement and endowment has been secured (by the County or other qualifying entity) to mitigate for the permanent loss of agricultural land.

Mitigation Measure AG-1c:

Amend Policy NR-3.13: Agricultural Land Disturbance, as follows:

Require mining projects to obtain agricultural conservation easements consistent with Implementation Program AG-J at a minimum of 1:1 ratio for each acre of productive agricultural land converted as a result of mining and not returned to agricultural production.

Mitigation Measure AG-1d:

Amend Policy AG-3.11, Solar and Wind Energy Production Facilities, as follows:

Encourage the installation of solar and wind energy production facilities in agricultural areas so long as they do not result in a tax burden to the County, do not result in permanent water transfers off of productive agricultural land, ~~or~~ do not require cancellation of Williamson Act contracts, and do not conflict with sensitive habitats or other biological resources. In addition, approval of such facilities shall require dedications of agricultural land and habitat mitigation when impacts to these resources have been determined to be significant pursuant to CEQA, and measures to control erosion, and assurances for financing decommissioning activities.

Mitigation Measure AG-1e:

Amend Policy NR-2.3, Biomass-to-Energy Production, as follows:

Encourage the use of biomass facilities to capture untapped local energy sources from dairies, farmland, and other industrial sources, provided that such uses do not interfere with agricultural practices, or conflict with sensitive habitats or other biological resources consistent with Policies AG-3.11 and LU-2.7.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by amending existing policies and adding a new program that would promote the preservation of agricultural lands. However, the agricultural land use designations and the policies would not prevent the overall net loss of important farmlands within the county associated with future urban and rural development within agricultural areas. There are no additional or technically feasible mitigation measures available to reduce the net loss of farmland and reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict

its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact AG-2: *Conflict with existing zoning for agricultural use, or the provisions of Williamson Act contracts (Draft PEIR, pps. 6-30 to 6-36; RDPEIR, pps. 6-31 to 6-36)*

Finding: *This would be a less-than-significant impact after mitigation*

Explanation:

Implementation of the proposed 2030 General Plan could lead to urban development and other activities that could conflict with existing zoning for agricultural uses, or could affect lands subject to Williamson Act contracts.

Agricultural zoning categories in Merced County, including the principal agricultural zones A-1 (General Agricultural) and A-2 (Exclusive Agriculture), accommodate a variety of agricultural uses in order to conserve farmland. The two zoning districts are consistent with the Agricultural and Foothill Pasture land use designations as shown in the proposed 2030 General Plan Land Use Diagram. The Agricultural land use designation covers the majority of the county's valley floor, and is made up primarily of areas of good soil quality, adequate water supply, and minimal slopes. The Foothill Pasture land use designation is applied to foothills areas in the Sierra Nevada and Diablo Ranges on the east and west side of the County that require larger areas of land for successful agricultural operations due to poor soil quality, limited water availability, and steeper slopes (Draft PEIR, p. 6-30; RDPEIR, p. 6-31).

Various state and local programs are also in place to conserve farmland, including the Williamson Act program and the Farmland Security Act (FSA). The Williamson Act conserves agricultural land and open space lands through property tax incentives and voluntary restrictive use contracts administered by the County according to state regulations. The program allows landowners to restrict their land to agricultural and open space uses under minimum nine-year rolling term contracts, and receive property tax assessments according to their actual uses versus the potential market value. The program also functions to discourage premature development on agricultural lands under contract. The Williamson Act requires that all contract lands be located within an Agricultural Preserve of no less than 100 acres. The purpose of the Agricultural Preserve is to protect Williamson Act contracts from nearby incompatible uses. Almost all rural land in the county is included in an Agricultural Preserve (Draft PEIR, pps. 6-30 to 6-31; RDPEIR, p. 6-31).

Because of the loss of state tax subvention payments, Merced County has suspended accepting applications to enter into new Williamson Act contracts, but has not placed current contracts into non-renewal. Merced County participates in the standard Williamson Act program, but does not participate in the FSA program. As of 2009, Merced County had 467,679 acres enrolled in the Williamson Act, or 40 percent of all agricultural land (see Draft PEIR Figure 6-1). The program involves approximately 1,100 landowners and 3,649 parcels. Approximately 6,100 acres are in non-renewal. Nonrenewals are often filed by landowners who anticipate converting their farmland to other uses (Draft PEIR, p. 6-31; RDPEIR, p. 6-32).

Land uses designated under the proposed 2030 General Plan could conflict with the provisions of the Williamson Act if the General Plan would result in urban development that would occur on lands subject to Williamson Act contracts. The Plan could also result in indirect conflicts due to the removal of parcels not under Williamson Act contracts from the Agricultural Preserve. Removal of non-contracted lands from the Agricultural Preserve would result in the concentration of enrolled land into the remaining 467,679-acre preserve, reflecting lands still under contract. The removal of non-contracted lands from the Agricultural Preserve could also inadvertently cause the parcels no longer eligible for contracts to be converted to incompatible land uses. As a result, the agricultural resources that remain within the preserve would be impacted by an indirect conversion of nearby agricultural uses to non-agricultural uses that are no longer fully protected from nearby urban development pressure. This is possible because the list of land uses compatible with the Agricultural Preserve is more limited than the list of uses allowed on agriculturally zoned parcels in the County Zoning Code. Therefore, while Williamson Act contracted land would be consolidated within the Agricultural Preserve, the removal of non-contracted parcels could indirectly result in land use conflicts due to the location of non-agricultural land uses or redesignation of property for urban development where property could become subject to development pressures (Draft PEIR, pps. 6-31 to 6-32; RDPEIR, p. 6-32).

A key goal of the 2030 General Plan is to direct future development to specific growth areas (i.e. cities, cities' spheres of influence, designated urban communities), and protect the majority of farmlands and the agricultural industry in the county. The 2030 General Plan contains policies under Goal AG-2 in the Agricultural Element to protect farmlands. Some policies are specifically designed to minimize conflicts among agricultural uses, and others seek to preserve lands under Williamson Act contracts. These goals and policies are listed in Draft PEIR and RDPEIR Table 6-8 (Draft PEIR, p. 6-32 to 6-33; RDPEIR, pps. 6-33 to 6-34). The following summarizes the key policies that protect agricultural lands:

- Policy AG-2.1 listed above would minimize conflicts with agriculturally-zoned uses and parcels under the Williamson Act by ensuring the long-term preservation of land used for productive agriculture, potentially-productive agricultural land, and agricultural-support facilities.
- Policy AG-2.4 would encourage participation in programs such as the Williamson Act to preserve the county's farmland.
- Policy AG-2.5 would encourage larger parcel size minimums (40 or more acres) and/or evidence of commercial agricultural use for entering new Williamson Act contracts. This policy would discourage land owners from enrolling smaller parcels in the Williamson Act program, which could reduce the total acreage enrolled under the program.
- Policy LU-2.6 would remove (non-renew) current Williamson Act contracts on small parcels not devoted to commercial agriculture.
- Policy LU-2.7 would remove land not under Williamson Act contracts from the Merced County Agriculture Preserve by redrawing the current boundary of the Agricultural Preserve to create one or a series of smaller preserves aligned with contracted land.
- Policy AG-2.15 would modify the County's Agricultural Preserve Rules and Procedures to allow smaller parcel sizes consistent with state standards. This would encourage participation in the Williamson Act by an expanding the list of eligible farms, thereby minimizing the loss of agricultural land.

Some indirect conversion of agricultural uses may occur by limiting smaller parcels from participating in the Williamson Act program, and from the removal of existing small parcels. Implementation of other proposed goals and policies cited above would encourage participation in the Williamson Act program, and avoid conflicts with existing agricultural uses and lands. Additionally, the majority of future urban development would be directed to designated growth areas within cities, cities' spheres of influence, and designated urban communities; limited growth would be expected to occur on agricultural lands outside designated communities, or on lands subject to Williamson Act contracts. On balance, implementation of proposed policies AG-2.5, AG-2.6, and AG-2.7 would result in less likelihood that farmlands would be protected from urban encroachment or conversion to other non-agricultural uses, and lead to a potential increase in land use conflicts between such uses and agricultural activities (Draft PEIR, p. 6-35; RDPEIR, pps. 6-35 to 6-36).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that while the 2030 General Plan contains various goals and policies that support consistency with the Williamson Act program, it also contains policies for the administration of the Williamson Act that could act to decrease the amount of agricultural land protected from conversion to other uses. This would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure AG-2a:

Amend Policy AG-2.5: Williamson Act Minimum Parcel Size, as follows:

Modify the Agricultural Preserve Rules and Procedures to reduce the Williamson Act minimum required parcel size to 10 acres, consistent with State law. For parcels not operated as part of a larger farming operation, encourage larger parcel size minimums (40 or more acres) and/or evidence of commercial agricultural use for entering new Williamson Act contracts.

Mitigation Measure AG-2b:

Amend Policy AG-2.6: Williamson Act Contracts Non-Renewal on Small Parcels, as follows:

Remove (non-renew) current Williamson Act contracts on small parcels not devoted to commercial agriculture and not operated as part of a larger farming operation.

Mitigation Measure AG-2c:

Delete Policy AG-2.7: Merced County Agricultural Preserve Consolidation, and adopt the following alternative policy as set forth in Table 6-9:

Policy AG-2.7: Modify Merced County Agricultural Preserve Rules

Modify the Agricultural Preserve Rules and Procedures to allow parcels smaller than 10 acres for a limited number of circumstances authorized as exceptions in the County Zoning Code and consistent with State law.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by increasing the amount of farmland that could be preserved within Merced County. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

Impact AG-3: *Involve other land use changes that would result in conversion of farmland to non-agricultural uses from urban development (Draft PEIR, pps. 6-36 to 6-47; RDPEIR, pps. 6-37 to 6-48)*

Finding: *This would be a significant and unavoidable impact*

Explanation:

Implementation of the proposed 2030 General Plan would lead to urban development that would result in direct impacts to agricultural resources, including the conversion of important farmland to non-agricultural uses as evaluated in Impact AG-1.

As described in Impact AG-1, the 2030 General Plan would result in direct conversion of important farmlands to urban uses, primarily within designated urban areas established under the proposed 2030 General Plan. Implementation of the 2030 General Plan could also result in the conversion of agricultural lands from scattered residential development outside designated communities, often due to minor subdivision activity and the creation of “rural ranchettes.” Additionally, as described in Impact AG-2, administrative changes proposed in the County’s Williamson Act program could result in diminishing the number of acres of farmland that would be eligible to be enrolled in the Williamson Act program, thereby reducing the amount of protected farmland (Draft PEIR, p. 6-36; RDPEIR, p. 6-37).

According to the 2000 Merced County General Plan, there has been a history of incompatible land uses and conflicts due to nuisances along the residential-agricultural “edge,” because the county’s agricultural operations can occur adjacent to or near residential development. Indirect changes caused by urban development may include a variety of nuisance effects due to the expansion of the urban fringe, resulting in “urban-edge” conflicts. Agricultural operators may experience vandalism, pilferage of crops, dog attacks on livestock, restrictions on pesticide use and other practices, congested local roads, and other impacts that reduce productivity and income. Residential neighbors, for their part, are often sensitive to dust, noise, odors, early morning or nighttime operations, traffic, pesticide and herbicide use, perceived health problems, and other effects on their quality of life. These conflicts may increase costs to the agricultural operations, and, combined with rising land values for residential development, encourage the conversion of farmland to urban or other non-agricultural uses (Draft PEIR, p. 6-36; RDPEIR, p. 6-37).

These potential “urban-edge” effects may be greater near the various unincorporated urban communities in the county where growth would be directed, including Delhi, Hilmar, Planada, Santa Nella, and Winton. However, these effects may also occur to some degree near smaller unincorporated rural communities, or Rural Centers, that lack sewer and water infrastructure, such as Volta, El Nido, Cressey, and Ballico. While the uses near Rural Centers were designed to provide basic support services to the agricultural industry, new urban uses at these locations may still result in urban-edge land use conflicts (Draft PEIR, p. 6-37; RDPEIR, pps. 6-37 to 6-38).

The 2030 General Plan contains numerous policies in the Agricultural and Land Use Elements that are intended to minimize land use changes that would convert important farmlands to non-agricultural uses as shown in in Draft PEIR and RDPEIR Table 6-10 (Draft PEIR, p. 6-37 to 6-45; RDPEIR, pps. 6-38 to 6-46).

The Agricultural Element contains various policies that seek to preserve agricultural land and the agricultural industry. These include several policies that outline conservation strategies and mitigation requirements, such as the Williamson Act program and farmland conservation easements. The Agricultural Element also includes various policies that seek to reduce urban and agricultural land use conflicts. Because the expansion of urban uses onto adjacent farmland has been a major issue in Merced County, specific policies are set forth in the proposed 2030 General Plan to minimize such effects. Specific policies that would reduce urban and agricultural land use conflicts include the Right-to-Farm Ordinance, as well as policies that would limit the parcelization of farmland, and require the establishment of adequate buffers between agricultural and urban uses (Draft PEIR, p. 6-45; RDPEIR, p. 6-46).

However, as described under Impact AG-1, the purpose of the 2030 General Plan is also to develop a framework to guide future land use development. As a result, it is inevitable that some farmland conversion would occur to accommodate long-term development needs. Proposed policies would permit the loss of farmland to urban development within designated urban areas, and would continue to permit new rural housing and agricultural-commercial and industrial development at scattered locations outside designated communities, as well as permit the expansion of Rural Residential Centers. The 2030 General Plan would directly result in the conversion of farmland due to urban development, indirectly result in the conversion of farmland due to the removal of smaller parcels from farming at the urban fringe, and additionally result in urban edge patterns that would increase nuisances among incompatible land uses (Draft PEIR, p. 6-46; RDPEIR, p. 6-47).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the proposed project would involve direct and indirect land use changes that could convert farmland to non-agricultural uses, this would be a potentially significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure AG-3a:

Implement Mitigation Measure AG-1a, Amend Policy AG-2.2: Agricultural Land Mitigation; Mitigation Measure AG-1b, create an Agricultural Conservation Easement Program; Mitigation

Measure AG-1c, Amend Policy NR-3.13: Agricultural Land Disturbance; Mitigation Measure AG-1d, Amend Policy AG-3.11 Solar and Wind Energy Production Facilities; and Mitigation Measure AG-1e, Amend Policy NR-2.3, Biomass-to-Energy Production.

Mitigation Measure AG-3b:

Amend Policy AG-3.4: Residential Buffers from Agriculture, as follows:

Require a minimum 200-foot buffer between new residential development within designated urban areas and existing agricultural operations, and establish design/maintenance guidelines for developers and property owners.

Mitigation Measure AG-3c:

Amend Policy LU-3.4: New Rural Residential Center Prohibition, as follows:

Prohibit the creation of any new, or the expansion of any existing, Rural Residential Centers in the unincorporated county.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by amending existing policies that would minimize farmland conversion to non-agricultural uses. However, agricultural land use designations and policies would not prevent the conversion of farmlands within the county associated with direct impacts due to future urban development and indirect impacts due to nuisance effects from land use conflicts along the expanding urban-edge. There are no additional or technically feasible mitigation measures available to reduce the net loss of farmland and reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact AG-5: *Involve other land use changes that would result in conversion of farmland to non-agricultural uses due to the Minor Subdivision of Rural Parcels (Draft PEIR, pps. 6-48 to 6-64; RDPEIR, pps. 6-49 to 6-66; Final PEIR, pps. 4-46 to 4-63)*

Finding: *This would be a significant and unavoidable impact*

Explanation:

The minor subdivision of rural parcels into four or fewer lots as permitted with the implementation of the proposed 2030 General Plan could lead to the conversion of important farmlands to non-agricultural uses, or otherwise conflict with continued agricultural operations.

Pages 6-48 to 6-50 of the Draft PEIR (RDPEIR, pps. 6-49 to 6-51; FPEIR, pps. 4-46 to 4-48) discuss minor subdivision activity on agricultural land in the county and the occurrence of ranchettes, which are typically defined as a smaller rural parcel where the main use and value of the property is for residential purposes rather than agricultural production. The Merced County Zoning Code further regulates allowable uses in areas zoned for A-1, A-1-40, and A-2, agricultural uses (Section 18.02.020 A). Chapter 18.02 of the Zoning Code sets forth considerations for subdivision within agricultural zones, and minimum parcel size requirements. Section 18.02.030 A establishes minimum parcel sizes in the agricultural zones, and Section 18.02.030 C sets forth exceptions to the application of the minimum parcel size requirement under specific circumstances. Of the 691 resulting parcels recorded from minor subdivision activity in the county, there were a total of 228 parcels (170 in A-1 and 58 in A-2) that were created below the 20-acre A-1 zone minimum and 160-acre A-2 zone minimum. Many of these parcels were approved under the “exemption” provisions and were otherwise in compliance with the County’s Zoning Code (Draft PEIR, pps. 6-48 to 6-51; RDPEIR, pps. 6-49 to 6-52; FPEIR, pps. 4-46 to 4-49).

Until 2008, standard FMMP data did not accurately document the impact of single family, low-density rural residential and commercial development on farmland. Because the FMMP has since been modified to classify additional land use categories to determine the impacts of urban conversion on agriculture, it is possible to better understand the impacts minor subdivision activity has on agricultural and open space resources. Draft PEIR, RDPEIR, and FPEIR Table 6-15 show the amount of minor subdivision activity that occurred from 1998 to 2008 within important farmlands and other categories as documented by the FMMP in 2010 (Draft PEIR, pps. 6-51 to 6-52; RDPEIR, p. 6-53; FPEIR, p. 4-50). Between 1998 and 2008, minor subdivision activity occurred on 29,739 acres of land in Merced County that has been classified by the FMMP. Using 2010 FMMP data, approximately 22,268 acres, or 75 percent occurred within important farmlands as defined in this EIR. 6,338 acres, or 21 percent, of minor subdivisions occurred on grazing lands (Draft PEIR, p. 6-52; RDPEIR, p. 6-53; FPEIR, p. 4-50).

In drafting the Animal Confinement Ordinance (ACO) in 2002, Merced County recognized that confined animal facilities such as dairies create a number of effects that could be perceived as nuisances to nearby residents. These effects included the generation of flies and mosquitoes, and odors. To avoid potential nuisance effects, new dairies are prohibited by the ACO from locating the active areas of the dairy (i.e. cattle housing, waste management facilities, etc.) within 1,000 feet of an existing residence. Similarly, existing dairies are prohibited from expanding their active facilities if such facilities would encroach into the 1,000-foot setback from an existing residence. The ACO additionally prohibits owners of adjacent property, not owned by the dairy operator, from constructing a residence without the written permission of the dairy operator if the residence was proposed to be sited within 1,000 feet of an active dairy facility. These setback requirements are codified in Section 18.48.040 of the Zoning Code and proposed within Policies AG-3.9 and AG-3.10 of the 2030 General Plan.

Additionally, dairies are known to be sources of toxic air contaminants, and thus subject to regulation by the San Joaquin Valley Air Pollution Control District. For each new or expanded dairy, the SJVAPCD requires that a Health Risk Assessment (HRA) be prepared. This HRA evaluates the potential health risk effects of operating a new or expanded dairy from toxic air contaminants and several criteria air pollutants. Based on the County’s experience in preparing environmental documents for new and expanding dairies within the county, these potential effects are typically limited to the dairy itself. However, it is worth noting that for new dairies, many

operators now seek to site the new facility within the middle of their owned parcel to avoid any potential impacts at their property line, one of the thresholds the SJVAPCD uses to determine significant effects.

According to GIS analysis, 118 parcels were created by minor subdivision within the 1,000-foot setback surrounding the active areas of dairies. While it cannot be determined whether many or most of these new parcels were actually within the larger dairy farm operation, there is the potential that future residential development of these parcels could be prohibited if such parcels are not on the owned dairy site, but are within 1,000 feet of active dairy facilities (Draft PEIR, p. 6-52; RDPEIR, pps. 6-53 to 6-54; FPEIR, pps. 4-50 to 5-51).

Pesticide regulation in California and in Merced County is described in the Draft PEIR on page 6-53 (RDPEIR, pps. 6-54 to 6-55; FPEIR, pps. 4-51 to 4-52). When issuing permits for pesticide use, the County Agricultural Commissioners (CAC) consider the need for the pesticide, whether a safer pesticide is available, and whether a better application method can be used. Most importantly, CACs determine environmental and health risks associated with the pesticide application to prevent the misapplication of the chemicals and possible contamination of persons, surface and groundwater, and other environmental receptors. As more residents move to rural portions of Merced County, the potential pesticide exposure risks increase. To avoid or minimize such risks, the CAC may condition a proposed application to use a less toxic chemical, or modify the application method to accommodate required setbacks from adjacent residences. Thus, the siting of a residence within an active agricultural district where pesticides are used and regulated may act as a sort of reverse land use control on the actions of adjacent agricultural operators. Additionally, to the extent that increases in minor subdivision activity in agricultural zones may result in the construction of new residences, urban-edge conflicts between residences and agricultural operations due to nuisances, odors, and possible health concerns would be increased (Draft PEIR, p. 6-53; RDPEIR, pps. 6-54 to 6-55; FPEIR, pps. 4-51 to 4-52).

Draft PEIR, RDPEIR and Final PEIR Table 6-16 outline the top twelve pesticide active ingredients used in the county and the corresponding amounts of active ingredients. Restricted materials are conditioned for use and require a notice of intent before application. Non-restricted materials do not require a notice of intent and cannot be conditioned before use. Draft PEIR pages 6-55 to 6-59 (RDPEIR, pps. 6-55 to 6-60; FPEIR, pps. 4-52 to 4-57) include a discussion of the properties of identified pesticide active ingredients, pesticides of special concern, and the common pesticide applications and permit conditions by crop type.

The 2030 General Plan sets forth several policies to promote compatibility between agricultural operations and residential land uses that may be located in productive agricultural areas. As shown in Draft PEIR, RDPEIR, and Final PEIR Table 6-18, these policies seek to buffer agricultural activities from other, sensitive land uses (Draft PEIR, pps. 6-59 to 6-61; RDPEIR, pps. 6-60 to 6-63; FPEIR, pps. 4-58 to 4-60).

Regarding effects to agricultural resources and production, there are several sources of good data for use at a planning level, including the FMMP and information available from the County Agricultural Commissioner's office. Based on this information, minor subdivision activity has predominantly occurred on important farmlands, and more specifically, preponderantly on Prime Farmlands as identified by the FMMP (Draft PEIR, p. 6-62; RDPEIR, p. 6-63; FPEIR, p. 4-60).

Although minor subdivision and subsequent residential development may directly result in the loss of important farmlands, a more profound, though indirect, effect is the influence that residential uses in active agricultural areas have on adjacent agricultural practices, especially the use of pesticides. Based on information obtained from the MCAC, required setbacks for pesticide applications vary by the type of adjacent use, but for the top ten commodities listed in Draft PEIR, RDPEIR, and Final PEIR Table 6-17, the buffers can range from as little as 25 feet to more than 6,000 feet depending upon many variables, including chemical type and application method. Buffer restrictions mandated by state and federal regulations, and imposed by the MCAC, can directly influence the types of pesticides used by an individual farmer and their application method, and may indirectly affect cropping decisions by restricting crop choice to those that require pesticides with minimal required buffers. This potential effect will tend to worsen over time as more stringent pesticide application requirements are implemented and the number of rural residences increases.

Pesticide regulations are continually becoming stricter, and cropping patterns could change over the long term in response to market conditions and such outside influences as global climate change and water availability. Although growers of row crops have the ability to change their crops from year to year, growers of tree crops and operators of confined animal facilities have made a long-term financial commitment to their operations. The presence of residences within predominantly agricultural areas will result in long-term constraints on agricultural operations. If constraints become too great, it may eventually cause decreases in agricultural productivity as lower value crops with fewer pesticide requirements are substituted, or farmlands are fallowed.

Neither the Zoning Code, as applied, nor the proposed policies of the 2030 General Plan fully mitigate this issue. Rather, the Zoning Code permits one permanent residence and one “guest house” per parcel within agricultural zones by right, and permits the creation of parcels below the typical minimum parcel size of the various zones through a list of “exceptions” in order to host residential and agricultural commercial uses. The 2030 General Plan, while proposing several policies that would result in buffers between agriculture and other sensitive land uses, focuses primarily on the urban edge and the effects of urban development on agricultural activities. While urban edge effects have a large influence on adjacent agricultural activities, the effect of scattered residences within active agricultural districts can have a significant countywide effect throughout the larger agricultural region of the county (Draft PEIR, p. 6-62; RDPEIR, pps. 6-63 to 6-64; FPEIR, pps. 4-60 to 4-61).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR, RDPEIR, and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that the 2030 General Plan, while proposing several policies that would result in buffers between agriculture and other sensitive land uses, focuses primarily on the urban edge and the effects of urban development on agricultural activities, and the effect of scattered residences within active agricultural districts can have a significant countywide effect throughout the larger agricultural region of the county. This would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure AG-5a:

Amend Policy AG-3.1: Right-to-Farm Ordinance, as follows:

Continue to implement the Right-to-Farm Ordinance to define and limit instances where agricultural operations may be considered a nuisance to surrounding rural residential, residential or urban development.

Mitigation Measure AG-5b:

Amend Policy AG-3.2: Agricultural Buffer, as follows:

In consultation with the MCAC, rRequire buffers between proposed non-agricultural uses and adjacent productive agricultural operations to protect farms, dairies, and agricultural-related production facilities from conflicts with non-agricultural uses, specifically rural residences and urban area residential development.

Mitigation Measure AG-5c:

Amend Policy AG-3.3: Agricultural Buffer Standards, as follows:

In consultation with the MCAC, eEstablish agricultural buffer standards based on the type of agricultural operation, and historic cropping and pesticide application patterns, to be applied to rural residences and urban area residential development proposals adjacent to productive agricultural land and agricultural-related facilities.

Mitigation Measure AG-5d:

Amend Policy LU-2.4: Secondary Uses in Agricultural Areas, as follows:

Except as otherwise provided by law, limit ancillary uses in Agricultural and Foothill Pasture areas to include secondary single-family residences, farm worker housing, agricultural tourism related uses, and agricultural support services, provided that such uses do not interfere with historic agricultural practices, result in adverse health risks, or conflict with sensitive habitats or other biological resources.

Mitigation Measure AG-5e:

Add the following policy:

Policy AG-3.12: Subdivision and Residential Uses in Agricultural Areas

Revise the Merced County Zoning Code, Section 18.02.02, Table 4, to allow for two classes of minor subdivisions within the A-1, A-1-40, and A-2 zones: one that would conditionally waive the right to construct residences on resulting parcels by placement of a note on the face of the recorded map; and one that would permit the construction of residences on the resulting parcels subject to a conditional use permit.

Mitigation Measure AG-5f:

Add the following program:

Program AG-K: MCAC Consultation to Establish Residential Setbacks

Establish a process to consult with the Merced County Agricultural Commissioner during the discretionary review of minor subdivisions or other urban development where the right to construct residences has not been waived within or adjacent to agriculturally zoned areas to determine the historic cropping and pesticide application patterns on the affected parcel and adjacent parcels. Establish residential setbacks from onsite and adjacent farming operations sufficient to minimize health risks and maintain historic farming practices and cropping patterns, including the application of pesticides.

Mitigation Measure AG-5g:

Add the following program:

Program AG-L: Program to Permit the Construction of Residences on Non-Residential Minor Subdivisions

Establish a process to consider permitting the construction of residences consistent with the requirements of Section 18.02.020 A of the Merced County Code for parcels within subdivisions where the right to construct residences has previously been waived. The process shall include provisions to consult with the MCAC and establish any required residential setbacks as set forth in Program AG-K.

Mitigation Measure AG-5h:

Implement Mitigation Measure AQ-3a, Amend Policy AQ-2.2: Development Review Process, and Mitigation Measure AQ-5b, Amend Policy AG-5.1: Residential Buffers.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by amending existing policies and adding new programs that would minimize farmland conversion to non-agricultural uses, reduce potential interference with continued agricultural operations, and reduce health risks to future residents within productive agricultural areas. However, even with implementation of all identified mitigation measures, single-family residences would be permitted by right on existing minor subdivision parcels within areas designated for agricultural uses. Even with the implementation of buffer requirements identified in Mitigation Measure AG-5c, the dimensions of existing small parcels could preclude buffers of an adequate size to meet pesticide application requirements, both now and in the future, thereby constraining continued crop production. There are no additional or technically feasible mitigation measures available to reduce the potential effects to continued agricultural production and health risks posed by rural minor subdivisions and reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact AG-7: *Involve other land use changes that would result in conversion of farmland to non-agricultural uses due to inadequate parcel sizes. (Draft PEIR, pps. 6-70 to 6-73; RDPEIR, pps 6-71 to 6-79)*

Finding: *This would be a less-than-significant impact*

Explanation:

Minimum agricultural parcels sizes with the implementation of the proposed 2030 General Plan could be insufficient to support continued agricultural operations, and thereby lead to the conversion of important farmlands to non-agricultural uses, or otherwise conflict with continued agricultural operations.

The minimum parcel size established by the 2000 General Plan for areas designated as Agricultural is 20 acres. The Zoning Code additionally permits parcels less than 20 acres under certain circumstances. The 2030 General Plan sets forth several alternative policies with respect to minimum parcel size in areas designated as Agricultural.

Policy AG-2.13: Minimum Agricultural Parcel Size Requirement, establishes the following standard:

Require 40 acre minimum permitted parcel size in areas designated Agricultural to discourage land divisions for rural residential purposes and maintain parcels large enough for efficient commercial agriculture production. Require 160 acre minimum permitted parcel size in areas designated Foothill Pasture and in grassland areas.

Policy AG-2.13a: Minimum Agricultural Parcel Size Requirement, establishes the following standard:

Require 20 acre minimum permitted parcel size in areas designated Agricultural to discourage land divisions for rural residential purposes and maintain parcels large enough for efficient commercial agriculture production. Require 160 acre minimum permitted parcel size in areas designated Foothill Pasture and in grassland areas.

Additionally, Policy AG-2.14: Viability of Smaller Parcels, would establish the following requirement of those seeking to subdivide lots smaller than 40 acres in agricultural areas:

Require applicants seeking to divide agriculturally-zoned parcels to demonstrate the continued viability of lots less than 40 acres for commercial agriculture, using specific standards (i.e., access to agricultural water, joint farm management, access for aerial spraying, size viability for specific commodities) and farm management plans.

The Merced County Board of Supervisors could adopt one or several of these policies, including:

- Policy AG-2.13 and Policy AG-2.14
- Policy AG-2.13 alone
- Policy AG-2.13a and Policy AG-2.14
- Policy AG-2.13a alone (RDPEIR, pps. 6-71 to 6-73)

Each of these policy combinations would have differing environmental effects as discussed in the RDPEIR (pps. (6-76 through 6-78). The Board of Supervisors has chosen to adopt the combination of policies Policy AG-2.13a and Policy AG-2.14; therefore the remainder of this finding sets forth

the reasoning of the Board in reaching its environmental conclusion with respect to this set of policies.

Pages 6-73 through 6-76 of the RDPEIR set forth agricultural facility and production information derived from review of the U.S. Department of Agriculture's Agricultural Census, consultation with the Merced County Agricultural Commissioner, and review of records of minor subdivision activity in agricultural areas provided by the Merced County Community and Economic Development Department. The results of this review are set forth below.

The most relevant statistics from the Census of Agriculture for the evaluation of minimum parcel sizes and their effect on continued agricultural operations are the following:

- The median farm size in 2007 in Merced County was 40 acres;
- Over 44 percent of all farms in the county were larger than 50 acres in size; 12.9 percent were less than 10 acres. If the acreage of farms within the 10 to 49 acre size class were evenly distributed, 616 farms (23.6 percent) would be less than 20 acres in size. Using the same assumption, 55 percent of all farms were 40 acres or larger in size; 60 percent would be 35 acres or larger.
- As shown in Table 6-9, approximately 56 percent of all farms were less than 50 acres in size; almost 13 percent were less than 10 acres in area. Making the same assumptions as above, 45 percent of all farms were less than 40 acres in size.
- The gross sales of 51 percent of farms within the county in 2007 were greater than \$50,000.
- Almost 60 percent of farm operators relied upon the farm as their primary occupation.
- Assuming that operators for whom the farm was their primary occupation were also those with the highest sales, and assuming that sales are evenly spread within sales categories, then approximately 60 percent of operators had 2007 sales of \$30,000 or more.
- Assuming a linear relationship between sales and size of farm, then the size of farm necessary to permit a farm operator to rely upon the farm as a primary source of income was greater than 50 acres (RDPEIR, pps. 6-73 to 6-74).

The most relevant statistics from information provided by the Merced County Agricultural Commissioner for the evaluation of minimum parcel sizes and their effect on continued agricultural operations are the following:

- Except for cherries, peaches, rye, sweet potatoes and walnuts, the median field size for all crops is greater than 35 acres in size. From this, it may be assumed that the median field sizes listed above are the most efficient and effective sizes for management of each crop.
- The median parcel size for all crops is 37.00 acres; approximately equal to, but less than, the 2030 General Plan 40 acre minimum proposed under Policy AG-2.13.
- A random sample of the 12,090 permits indicates that the field size and area planted were the same in 99 percent of the permits. Only very rarely is the area planted smaller than the field size. This also suggests that fields are sized to maximize the efficiency of agricultural operations (RDPEIR, pps. 6-74 to 6-75).

Another indicator of agricultural viability is offered by an evaluation of parcel sizes resulting from the minor subdivision activity evaluated in Impact AG-5. Of the 267 recorded minor subdivision maps recorded over the period 1998-2008 that were located in areas designated by the 2000 General Plan and Zoning Code for agricultural uses, 109 resulted in at least one parcel of less than 20 acres in size. The majority (94 percent) of these 109 minor subdivision maps divided a property into two parcels. Since the purpose of many of the minor subdivisions was to divide a homesite from the remainder of an active farming operation, the maps identified one very small parcel (on the order of 1 to 5 acres), and one much larger parcel, presumed to be used for continued agricultural operations.

Thus, the size of the larger parcel would tend to identify the minimum size believed to be necessary by the parcel applicant to maintain an agriculturally viable parcel. An evaluation of the data collected by Merced County on minor subdivisions indicates that the average size of these larger, remainder parcels was 52.48 acres (mean), and 37.68 acres (median). These average sizes correspond closely to the mean and median parcel sizes identified in RDPEIR Table 6-25. (RDPEIR, p. 6-76)

For purposes of the PEIR, the question revolves around whether any policy of the 2030 General Plan regarding minimum parcel sizes and agricultural viability would so interfere with continued agricultural production that landowners would seek non-agricultural, alternative uses of their lands. These alternative uses could range from letting fields go fallow to development of energy facilities, agricultural support industries, or other developed rural land uses. (RDPEIR, p. 6-77)

The 2030 General Plan contains numerous policies in the Agricultural and Land Use Elements that are intended to minimize land use changes that would cause the conversion of important farmlands to non-agricultural uses as shown in Table 6-10. However, even within this policy context, the 2030 General Plan could interfere with agricultural production by encouraging or permitting parcels in agricultural areas to become configured in ways that make farming inefficient or less viable. Based on information from the Census of Agriculture, the County Agricultural Commissioner, and an analysis of data collected by Merced County regarding minor subdivisions (as shown in Tables 6-24, 5-25, and discussed above), most farming operations tend to be operated using individual fields of 37 acres or larger. This holds true even when agricultural operators are presented with a choice of modifying field sizes, as during a minor subdivision. Policies that encourage and protect parcels of this size would thereby encourage efficient and viable farming operations that would in turn act to maintain important farmlands in agricultural production. (RDPEIR, p. 6-77)

Policy AG-2.13a and Policy AG-2.14 - This combination of policies would offer mixed levels of protection for farmlands by establishing parcel sizes less likely to result in efficient and viable farming operations. Policy AG-2.13a would establish minimum agricultural parcel sizes of 20 acres in the Agricultural designated areas and 160 acres in areas designated Foothill Pasture that appear to be smaller than the predominant parcel sizes used for the growth of commodity crops in the county. Because Policy AG-2.13a could discourage efficient and viable agricultural operation, this would be a significant impact. The adoption of Policy AG-2.14 would act to mitigate the effects of Policy AG-2.13a by operating to maintain agricultural production for all parcels subject to minor subdivision that resulted in any parcel less than 40 acres in size. With implementation of Policy AG-2.13a, the requirement of Policy AG-2.14 would apply to all parcels proposed to be less than 40 acres. Proposed Policy AG-2.14 would encourage continued agricultural production for sub-40 acre parcels by requiring that applicants demonstrate the agricultural viability of such parcels prior to the County considering a minor subdivision request.

Finding on Significance of Impact

Based on the analysis contained within the RDPEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that the combination of Policy AG-2.13a and AG-2.14 would encourage continued agricultural production, even though the minimum parcel size would be less than optimal for maintaining agricultural production for most commercial crops grown in the county. Because no such protective policies exist in the 2000 General Plan, the adoption of the combination of Policies AG-2.13a and AG-2.14 in the 2030 General Plan would result in a less-than-significant environmental effect. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Because the impact is less than significant, no mitigation is required.

C. AIR RESOURCES

Air Resources setting information for the 2030 General Plan project is set forth in pages 7-1 through 7-7 of the Draft PEIR and the RDPEIR. The impact evaluation criteria and analysis methodology used in assessing impacts on air resources as a result of implementing the Project are set forth in the Draft PEIR and RDPEIR on pages 7-8 through 7-9. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft PEIR, RDPEIR, and Final PEIR, the findings of the Board are as follows.

Impact AQ-3: Increase in operational emissions of PM₁₀ and PM_{2.5} associated with General Plan buildout (Draft PEIR, pps. 7-17 to 7-19; RDPEIR, pps. 7-17 to 7-20; Final PEIR, pps 4-63 to 4-65)

Finding: This would be a significant and unavoidable impact

Explanation:

As Draft PEIR and RDPEIR Table 7-5 shows, implementation of the proposed 2030 General Plan would result in a net increase in PM₁₀ and PM_{2.5} in 2030 as compared to existing conditions (2010). This net increase would substantially exceed the SJVAPCD's 15 tons per year threshold for PM₁₀ and PM_{2.5}. The emission increase is primarily due to the increase in VMT and area source emissions. Agricultural emissions of PM₁₀ and PM_{2.5} are projected to decrease. The increase in area source-related PM₁₀/PM_{2.5} is primarily due to emissions from wood stoves.

To minimize PM₁₀ and PM_{2.5} emissions from wood stoves, the SJVAPCD has adopted Rule 4901, Wood Burning Fireplaces and Wood Burning Heaters. This measure prohibits the installation of wood stoves and heaters in residences when the residential density equals or exceeds two units per acre. Rule 4901 also requires that all new wood stoves meet EPA certified Phase II emission standards. Although Rule 4901 reduces emissions in urban areas, it has less effect in less densely developed rural areas (Draft PEIR, RDPEIR, p. 7-17; FPEIR, p 4-63).

The Merced County Air Quality Element includes several policies to reduce fugitive dust emissions from motor vehicles and unpaved roadways, and from agricultural and industrial operations (see Draft PEIR and RDPEIR Table 7-6). Implementation of the measures summarized in Draft PEIR and

RDPEIR Table 7-6, along with the new air quality policies proposed for wood stoves, would reduce PM₁₀ and PM_{2.5} emissions. Draft PEIR, RDPEIR, and Final PEIR Table 7-7 shows the mitigated 2030 PM₁₀ and PM_{2.5} emissions, and Draft PEIR, RDPEIR, and Final PEIR Table 7-8 shows the net increase of PM₁₀ and PM_{2.5} in 2030 (Draft PEIR and RDEIR, p. 7-18; FPEIR, p. 6-64).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR, RDPEIR, and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that while PM_{2.5} emissions would not exceed SJVAPCD significance criteria and would be considered less than significant, because the increase in emissions of PM₁₀ would exceed SJVAPCD significance criteria, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure AQ-3a:

Amend Policy AQ-2.2: Development Review Process, as follows:

Use the development review process to achieve measurable reductions in criteria pollutants, toxic air contaminants, and greenhouse gas emissions.

Mitigation Measure AQ-3b:

Add the following policy:

Policy AQ-6.6: Prohibition on Wood Stoves

Prohibit wood stoves and wood burning heaters in all newly constructed residences in unincorporated Merced County that have access to natural gas. Natural gas stoves have substantially lower PM₁₀ and PM_{2.5} emissions as compared to wood stoves.

Mitigation Measure AQ-3c:

Add the following policy:

Policy AQ-6.7: Stove Replacement

Require owners of residences with existing wood stoves, or wood burning heaters or fireplaces to remove such wood appliances, upgrade existing stoves to meet EPA certified Phase II emission standards, or replace existing wood stoves with natural gas fired stoves upon sale, or major reconstruction of the residence that exceeds 75 percent of the assessed value of the structure prior to reconstruction, if the residence has access to natural gas. Merced County shall establish a program to collect and destroy any existing wood stoves that have been removed by residents.

Mitigation Measure AQ-3d:

Add the following policy:

AQ-6.8: Voluntary Emissions Reduction Agreement

Require all project applicants, where project emissions for any criteria pollutant have been evaluated to exceed SJVAPCD significance thresholds, to consult with the SJVAPCD regarding the establishment of a Voluntary Emissions Reduction Agreement between the applicant and the SJVAPCD. Support the SJVAPCD in its efforts to fund the Emission Reduction Incentive Program.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by amending existing policies that would further reduce PM_{2.5} emissions. Even with implementation of these measures however, the net increase in 2030 PM₁₀ emissions as shown in Draft PEIR, RDPEIR, and Final PEIR Tables 7-7 and 7-8 would still exceed the SJVAPCD's PM₁₀ significance threshold of 15 tons per year (primarily from increased PM₁₀ emissions from increased travel by on-road vehicles whose control measures are outside of the jurisdiction of Merced County). There are no additional or technically feasible mitigation measures available to reduce the PM₁₀ impact and reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact AQ-5: Increase in health risks associated with locating sensitive receptors near high volume roads (Draft PEIR, pps. 7-20 to 7-22; RDPEIR, pps 7-20 to 7-22)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

The 2030 General Plan has the potential to expose sensitive receptors to substantial concentrations of toxic air contaminants (TAC) because it allows residences to be built near high volume roads.

As set forth above, the California Air Resources Board (ARB) research has substantiated that exposure to high levels of TACs poses health risks to sensitive populations. Air toxics sources include: high traffic freeways and roads, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and large gas dispensing facilities. Air toxic sources generate high levels of diesel particulate matter emissions and other cancer causing chemicals. ARB recommends that local jurisdictions adopt land use policies so that sensitive land uses are located a minimum of 500 to 1,000 feet from sources of TACs. Where this minimum separation is not achievable, ARB recommends that local jurisdictions perform health risk assessments to determine the cancer risk potential of individual land use proposals locating an air toxics source (e.g., high volume freeway) close to a sensitive land use (e.g., residential uses).

ARB has developed guidance recommending that sensitive land uses such as residences, daycare centers, and schools be located 500 feet or more from any roads with traffic volumes exceeding 50,000 vehicles/day. In Merced County, Interstate 5 and State Route 99 are the two roads with average daily traffic near or exceeding these volumes.

Several areas within unincorporated Merced County were identified as having proposed residential land use designations adjacent to these roads. They include:

- Atwater City Planning Area
- Delhi Urban Community
- Fox Hills Urban Community
- Franklin-Beachwood Urban Community
- Santa Nella Urban Community
- Delhi Rural Residential Center
- Franklin-Beachwood Rural Residential Center
- McSwain Rural Residential Center

The Merced County Air Quality Element includes several policies designed to limit human exposure from sources of hazardous air emissions as indicated in Table 7-9 (Draft PEIR, pps. 7-20 to 7-21; DPEIR, pps. 7-21 to 7-22). These policies would act to reduce the potential that residences and other sensitive uses could be sited in areas affected by TACs (Draft PEIR, p. 7-21; RDPEIR, p. 7-22).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR, RDPEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the implementation of the proposed 2030 General Plan could result in the construction of residences and other sensitive land uses near high volume roadways that would be a source of hazardous air pollutants, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure AQ-5a:

Implement Mitigation Measure AQ-3a: Amend Policy AQ-2.2: Development Review Process.

Mitigation Measure AQ-5b:

Amend Policy AQ-5.1: Residential Buffers, as follows:

Require effective buffers between residential and other sensitive land uses, and non-residential land uses that generate hazardous air emissions such as highways (e.g., I-5 and SR-99), trucking centers, gasoline dispensing facilities, and dry cleaners. Effective buffers shall be determined by requiring consultation with the SJVAPCD for any project that may have a health risk impact, including those projects that would otherwise appear to be exempt from CEQA requirements.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by requiring residential buffers, prohibiting sensitive uses from locating near generators of TACs, and requiring that development review, evaluate, and mitigate any adverse effects, which would reduce health risks to sensitive receptors that could potentially be located near high volume roads. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

D. BIOLOGICAL RESOURCES

Biological Resources setting information for the 2030 General Plan project is set forth in pages 8-1 through 8-13 of the Draft PEIR and the RDPEIR. The impact evaluation criteria and analysis methodology used in assessing impacts on biological resources as a result of implementing the Project are set forth in the Draft PEIR and RDPEIR on pages 8-13 through 8-14. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft PEIR, RDPEIR, and Final PEIR, the findings of the Board are as follows.

Impact BIO-1: Adverse effects to special status species and sensitive habitats due to the conversion of farmlands and open space (Draft PEIR, pps. 8-15 to 8-27; RDPEIR, pps. 8-15 to 8-30; Final PEIR, pps 4-66 to 4-81)

Finding: This would be a significant and unavoidable impact

Explanation:

Land uses and development consistent with the proposed 2030 General Plan could result in adverse effects, either directly or indirectly, on special status plant and animal species, and sensitive and critical habitats in Merced County. As indicated in Draft PEIR, RDPEIR, and Final PEIR Table 8-1, numerous special status species are known to occur within or near areas planned for development. Any development within areas that are currently allocated for developed uses, such as the designated urban areas identified for new growth in the 2030 General Plan, could result in impacts to special status species. Additionally, the development of scattered rural residential uses, agriculturally-related industries, energy facilities and surface mines could also result in unquantifiable biological resource impacts. Where there are direct impacts to special status species, indirect impacts would occur as well. Indirect impacts may include habitat modification, increased human/wildlife interactions, habitat fragmentation, encroachment by exotic weeds, and area-wide changes in surface water flows and general hydrology due to the development of previously undeveloped areas (Draft PEIR and RDPEIR, p. 8-15; FPEIR, p. 4-66).

Implementation of the proposed 2030 General Plan could result in the disturbance, degradation, and removal of grassland, wetland, woodland, and riparian habitat, which are defined as critical and/or sensitive habitat. Draft PEIR, RDPEIR, and Final PEIR Table 8-1 identify the extent of sensitive

biological communities that could be converted or disturbed by designated urban area development. Riparian habitats and waters of the U.S., including wetlands, are considered to be sensitive natural communities by CDFW. In addition, the Corps and CDFW have a “no net loss” policy for jurisdictional wetland features (Draft PEIR and RDPEIR, p. 8-15; FPEIR, p. 4-66). Pages 8-15 to 8-17 of the Draft PEIR and RDPEIR, and Final PEIR pages 4-66 to 4-68 include a discussion of the various types of habitat modification that may occur with implementation of the 20130 General Plan and impacts to sensitive biological resources. Draft PEIR, RDPEIR, and Final PEIR Table 8-2 summarize broad habitat categories subject to development in terms of current acreage and acreage that is preserved within government lands (e.g., wildlife refuges, state parks, etc.).

Development of residential and non-residential uses, and the splitting of agricultural parcels would result in increased human presence in areas formerly uninhabited by humans. Additionally, development for residential uses of previously undeveloped land can expose species to impacts from feral and unconfined pets (Draft PEIR and RDPEIR, p. 8-18; FPEIR, p. 4-69).

As shown in Draft PEIR, RDPEIR, and Final PEIR Table 8-2, only a small portion (18 percent of vernal pool grassland and riparian areas) of the habitat within the 2030 General Plan planning area that may support or is occupied by special-status species is currently preserved within state and federal wildlife refuges, or under perpetual conservation easement. These and other important habitat areas are currently interconnected with areas of open space, and rural and agricultural uses that generally have limited impacts on plant and wildlife species in Merced County. Development within these areas could fragment available habitat, potentially leading to an increased concentration of wildlife and a concurrent increase in disease. Development in designated urban area boundaries consistent with the 2030 General Plan could result in pockets of conserved habitat that are no longer connected by streams and open space, resulting in indirect impacts for species diversity and movement within the county (Draft PEIR and RDPEIR, p. 8-18; FPEIR, p. 4-69).

Generally, landscaping installed as part of development in Merced County has relied heavily on exotic, non-native plant species (ornamentals) for decoration. However, some of these species can spread to natural areas, causing native plant life to be replaced by exotic species. Construction activities, grading, and other ground or vegetation-clearing disturbances can eliminate the native plant population and allow invasive non-native species to become established. As native plants are replaced by exotic species, indirect impacts to the habitat of listed species would occur, such as modification or degradation of habitat (Draft PEIR and RDPEIR, p. 8-18; FPEIR, p. 4-69).

As development occurs, surface water flows and overall hydrology in creeks, rivers, and other waterways are altered due to an increase in impermeable surfaces through, for example, the placement of building materials and paving over permeable surfaces. In addition, surface water flows could be modified by changes in surface flow due to the installation of point source stormwater discharge infrastructure, as well as from the introduction of drainage flows during seasons when waterways and wetland features are typically dry. Some biological communities that contain habitat for special-status species could be indirectly impacted by such changes (Draft PEIR, p. 8-18; RDPEIR, p. 8-19; FPEIR, p. 4-70).

Mercury and other heavy metals were used to extract gold during the dredging processes used during the Gold Rush. As a result, residual mercury has been found within dredge tailings in mined areas in several areas of central and northern California, including along the Merced River in the vicinity of Snelling. According to sampling studies assessing the distribution of mercury in the Merced River,

there was significant residual mercury in the sampled dredged tailings as compared to background levels in undredged sites. However, while mercury levels in fine sediments were below or within the range of the natural background levels for the Central Valley, the residual mercury could be released into the environment during mining operations or the development of urban uses and supporting infrastructure. This released mercury may impact exposure and bioaccumulation levels in the lower Merced River's aquatic food web, including within special status fish species (Draft PEIR, pps. 8-18 to 8-19; RDPEIR, p. 8-19; FPEIR, p. 4-70).

The federal government, the State of California, and Merced County all have programs intended to protect rare, threatened, and endangered species. Merced County has proposed new and additional policies that would protect sensitive habitat in the 2030 General Plan. Goals and policies from the 2030 General Plan that state the County's intent to minimize impact to sensitive species and critical habitat are shown in Draft PEIR, RDPEIR, and Final PEIR Table 8-3. However, there are several policies in the 2030 General Plan that have the potential to result in the loss of habitat (Draft PEIR, RDPEIR, and Final PEIR Table 8-4). (Draft PEIR, pps. 8-19 to 8-23; RDPEIR, pps. 8-19 to 8-24; FPEIR, pps. 4-70 to 4-75).

As set forth in Draft PEIR, RDPEIR, and Final PEIR Table 8-3, the proposed 2030 General Plan provides numerous policies that are intended to protect biological resources by directing future development to existing urban areas in the cities and the unincorporated county, by increasing the density of development permissible in existing unincorporated urban areas (thereby reducing pressure to expand urban boundaries), and by establishing buffer and other requirements to avoid the habitats of special status species. However, proposed policies would still permit the loss of significant amounts of undeveloped and rural land to developed uses within existing unincorporated urban areas and potential new towns, and in rural areas developed with scattered rural residential uses, agriculturally related industries, and surface mines. Since the effect of the new town policies would protect only an amount of rural land equal to that lost, and no policy would result in an increase of rural or undeveloped land, proposed 2030 General Plan policies that would permit land conversion as indicated in Draft PEIR, RDPEIR, and Final PEIR Table 8-4 may result in the loss of habitat. Although Policies LU-10.12 and NR-1.17 require consultation with state and federal resource protection agencies, no requirement of these policies would ensure that project-related biological impacts would be evaluated and mitigated consistent with state and federal guidance and regulations, including compliance with the existing "no net loss" of acreage and values policies of the state and federal agencies (Draft PEIR and RDPEIR, p. 8-24; FPEIR, p. 4-75).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR, RDPEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that even though the proposed policies would reduce much of the 2030 General Plan's adverse impact to sensitive species and habitats, because the County has not adopted any mitigation standards and could permit the development of new towns, scattered rural residential uses, energy facilities, agriculturally related industries, and surface mines in rural areas, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure BIO-1a:

Add the following policy:

Policy NR-1.21: Special Status Species Surveys and Mitigation

Incorporate the survey standards and mitigation requirements of state and federal resource management agencies for use in the County's review processes for both private and public projects.

Mitigation Measure BIO-1b:

Add the following program:

Program NR-E: Biological Resources Review Requirements

County biological resources review requirements should identify state and federal biological significance thresholds and species-specific survey guidelines, and should include types of survey reports, surveyor qualifications, countywide habitat classifications, foraging crop habitat values, approved mitigation banks, and procedures to facilitate pre-consultation with state and federal agencies. State and federal mitigation standards should be considered as minimum County standards.

Submit results of biological resources assessments, surveys and proposed mitigation measures to the appropriate state and federal agency as early in the review process as practicable, to expedite and ensure regulatory consistency among local, regional, state, and federal agencies with jurisdiction over such resources.

Mitigation Measure BIO-1c:

Add the following program:

Program NR-F: Ongoing Inventory of Open Space Resources

The County shall maintain an open space and conservation inventory to delineate those areas that have significant open space or conservation value. Those areas include agricultural lands, native pasture lands, parks and recreation areas, historic resources, scenic highways, wetland, wildlife and vegetation habitat resources, mineral and energy resource areas, fire hazard areas, geologic and flood hazard areas, noise impacted areas and other resource and hazard areas.

Mitigation Measure BIO-1d:

Add the following program:

Program NR-G: Open Space Development Review System (OSDRS)

The Open Space Development Review System (OSDRS) is one of the primary implementing tools of the County's Open Space Action Plan. Through such a review system, daily planning and permit approval decisions should reflect and implement the adopted policies and development standards of the 2030 General Plan.

Other federal, state and local agencies also have responsibility for the protection, maintenance and development of Open Space resources. The referral of projects and consultation with appropriate responsible and trustee agencies is part of the program.

The system is intended for utilization both by developers in the design and building of projects, and by planners and decision makers in review of projects for conformance with County policy. The system is basically a process for assessing the appropriateness of proposed developments, including their compatibility with surrounding environmental constraints and resources. The general review system will be organized in a five step process. This process will be implemented in conformance with the Sensitive Habitat Guidelines developed under Implementation Program NR-D of this Element.

This system of review will be required of all projects for which a building permit or other entitlement is necessary such as a land division or use permit, as well as during policy and ordinance amendment. The Community and Economic Development Department has developed a five-step process consisting of:

- 1) Basic Land Use Category, Zone Code Consistency, and Community Service Availability Determination
- 2) Open Space Inventory Map and Data Base Review
- 3) Demonstration by the permit applicant of consultation with the California Department of Fish and Wildlife, the Central Valley Regional Water Quality Control Board, the State Water Resources Control Board, the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and/or the Army Corps of Engineers, and any water purveyor serving the project area, as appropriate, to evaluate resources that could be affected by the proposed action; and proof of issuance of permits by these agencies, as required
- 4) Environmental Determination
- 5) Land Use and Sensitive Resource Compatibility Determination

Mitigation Measure BIO-1e:

Add the following program:

Program NR-H: Open Space Acquisition Consideration as Part of the County Annual Capital Improvement Program

The County annually prepares a Capital Improvement Program (CIP) as part of the budgetary process. Under the Government Code, the Planning Commission is required to determine if the CIP is consistent with the County General Plan, including the Open Space related policies. As a component of this process, acquisition of open space lands and resources will be considered.

The final approval of the CIP is by the Board of Supervisors.

Mitigation Measure BIO-1f:

Add the following policy:

Policy NR-3.14: Residual Mercury Survey and Mitigation Requirement

Require the evaluation of existing mercury deposits within dredge tailings for mining, urban development, and infrastructure projects located in the historic dredger tailings

along the Merced River or elsewhere in the county, and identify adequate mitigation necessary to prevent the migration of mercury-containing sediments or fines to the Merced River or its tributary waterways, or result in the contamination of adjacent properties as a result of the construction process by severing all exposure pathways that could result in the release of mercury into the aquatic environment.

Mitigation Measure BIO-1g:

Add the following policy:

Program NR-I: Agricultural Education Program

In a coordinated effort between the County Community and Economic Development Department and the County Agricultural Commissioner, the County shall produce a brochure or publication outlining the responsibilities of landowners in managing and preserving sensitive environmental resources on their properties. The brochure shall set forth state and federal regulatory requirements and permitting procedures, state and federal agency contact information, and statutory penalties for noncompliance, including the loss of commodity support and other assistance offered through the USDA. The brochures will be made available at the offices of the County departments cited above, the County Building Division counter, posted on the County's website, and provided to the various Resource Conservation Districts throughout the county for additional distribution.

Mitigation Measure BIO-1h:

Amend Policy LU-2.7, Rural Energy Production, as follows:

Allow the development of ethanol production, co-generation, solar, and wind facilities in Agricultural and Foothill Pasture areas that produce renewable energy, support agricultural-related industries, and/or use agricultural waste, provided that such uses do not interfere with agricultural practices or conflict with sensitive habitats or other biological resources.

Mitigation Measure BIO-1i:

Amend Policy NR-2.4, Solar Power, as follows:

Encourage on-site solar power use in residential, commercial, and industrial buildings, and utility-scale solar power projects in rural locations that do not harm ~~long-term~~ agricultural productivity and habitat values consistent with Policies AG-3.11 and LU-2.7.

Mitigation Measure BIO-1j:

Amend Program NR-C, GIS Mapping, as follows:

Update the existing Geographical Information System to include current protected or designated habitat spatial information, including wildlife refuges, Grasslands Focus Area (GFA) and Grasslands Ecological Area (GEA) boundaries, mitigation banks, Williamson Act parcels, Habitat Connectivity Corridors, priority riparian corridors, and habitat preserves.

Mitigation Measure BIO-1k:

Amend Program NR-D, Sensitive Habitat Guidelines, as follows:

Prepare and adopt guidelines and thresholds of significance pursuant to State CEQA Guidelines Section 15064.7 for evaluating project impacts to identified sensitive habitat, including a significance criterion for potential effects on habitat values within Grasslands Focus Area (GFA) boundaries. The guidelines shall be made available for public comment prior to final adoption.

For discretionary projects within the boundaries of the GFA, the guidelines shall require the preparation of an appropriate project-level CEQA document with a review and evaluation of biological resources impacts at a level of detail commensurate with the proposed project’s effects to such resources in addition to implementation of the Open Space Development Review System. For non-discretionary or ministerial projects within the GFA boundaries, the Guidelines shall require the County to implement the Open Space Development Review System, including referral to GRRWG as appropriate. The guidelines shall recommend measures such as buffers, clustered development, project design alterations, and transferable development rights, sufficient to protect sensitive habitats from encroachment.

Mitigation Measure BIO-1l:

Amend Policy LU-4.7, ~~Wildlife Refuge~~ Wetland Habitat Area Separation, as follows:

Do not allow rural commercial and industrial uses, secondary residences, and ancillary agricultural uses within a half mile of either State or Federal wildlife refuges, or managed wetlands within the Grasslands Ecological Area when it is determined by the County that there could be an unmitigated impact to natural resources or habitat.

Mitigation Measure BIO-1m:

Add the following policy:

Policy LU-1.13, Wetland Habitat Area Separation

Do not allow rural commercial and industrial uses, secondary residences, and ancillary agricultural uses within a half mile of either State or Federal wildlife refuges, or managed wetlands with the Grasslands Ecological Area when it is determined by the County that there could be an unmitigated impact to natural resources or habitat.

Mitigation Measure BIO-1n:

Add the following policy:

Policy LU-10.14: Consultation with Grassland Resources Regional Working Group

Consult with the Grasslands Resources Regional Working Group during project review and conservation planning efforts for projects within the boundaries of the Grasslands Focus Area.

Mitigation Measure BIO-1o:

Amend Policy NR-1.7, Agricultural Practices, as follows:

Encourage agricultural, commercial, and industrial uses and other related activities to ~~coordinate~~ consult with environmental groups in order to minimize adverse effects to important or sensitive biological resources.

Mitigation Measure BIO-1p:

Amend Policy NR-1.17, Agency ~~Coordination~~-Consultation, as follows:

~~Coordinate~~ Consult with private, local, State, and Federal agencies to assist in the protection of biological resources and prevention of degradation, encroachment, or loss of resources managed by these agencies.

Mitigation Measure BIO-1q:

Amend Policy NR-3.9, Riparian and Critical Habitat Protection, as follows:

Protect or mitigate, in compliance with local, State, and Federal requirements, areas of riparian vegetation along rivers, streams, and other habitats that support threatened, endangered, or otherwise sensitive species. This shall include:

- a) Requiring mining operators that propose mining operations that will have a significant adverse impact on these resources to mitigate to the fullest extent that the California Environmental Quality Act (CEQA) requires for such impacts and obtain the necessary State and Federal permits prior to operation.
- b) Encouraging mining operators that impact natural resources to propose an end use that will result in minimal loss of resources.
- c) Referring all surface mining applications to the appropriate local, State, and Federal agencies to ~~coordinate~~ consult with the agencies regarding project design, mitigation, and reclamation efforts.

Mitigation Measure BIO-1r:

Amend Policy LU-10.12, ~~Coordination~~-Consultation with State and Federal Agencies, as follows:

Continue to ~~coordinate~~ consult with applicable State and Federal regulatory agencies during project review and permitting activities ~~with applicable State and Federal regulatory agencies.~~

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by amending existing policies or adding policies and programs that would further reduce adverse biological effects by:

- Aligning the County’s standards and requirements with those of state and federal resource management agencies

- Reestablishing the policies that support the County’s Open Space Development Review System
- Addressing mercury issues associated with past mining activities
- Establishing a program to educate land owners regarding their responsibilities under state and federal environmental laws
- Strengthening resource protection by limiting potential land uses in sensitive habitat areas or requiring full mitigation for potential effects to biological or other open space resources
- Amending County procedures to ensure that sensitive biological and other open space resources are considered in the County’s project review processes
- Increasing habitat protection by limiting developed land uses in the vicinity of sensitive habitats
- Clarifying the County’s obligation to consult with state and federal regulatory agencies in assessing effects to biological resources and the development of mitigation for any adverse effects

However, because proposed policies would still permit the loss of significant amounts of undeveloped and rural land to developed uses within new towns, and from scattered rural residential uses, agriculturally related industries, energy facilities, and surface mines, and because the effect of proposed policies would protect only an amount of rural land equal to that lost, implementation of the 2030 General Plan may result in the unmitigated loss of habitat. There are no additional or technically feasible mitigation measures available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact BIO-2: Adverse effect on wetlands, riparian habitat, and other sensitive natural communities (Draft PEIR, pps. 8-27 to 8-33; RDPEIR, pps. 8-31 to 8-37)

Finding: This would be a significant and unavoidable impact

Explanation:

Implementation of the proposed 2030 General Plan would lead to land conversion that could result in the loss or degradation of wetlands and riparian habitats. Well-developed riparian forests and vegetation areas may be found on all perennial waterways of the Central Valley floor. Large-scale restoration projects have been planned and partially implemented on the Merced River and the San Joaquin River through Merced County. Actions related to these projects are subject to their own environmental documents. Projects that result in the removal of or disturbance to riparian habitat can cause substantial erosion and have deleterious impacts to wildlife resources. A major cause of erosion within the riparian zone is equipment operation and storage too close to the wetted channel. The area of habitat loss from urban development within designated urban areas is set forth in Draft PEIR and RDPEIR Table 8-1. Additional losses of wetlands, riparian habitat, and other sensitive natural communities could occur from the development of scattered rural residential uses,

agriculturally related industries, energy facilities, and surface mines (Draft PEIR, p. 8-27; RDPEIR, p. 8-31).

Although impacts to riparian habitat may be small for individual projects, the incremental impacts from grading and other construction activities that decrease habitat quality near waterways may become significant when viewed on a countywide basis. The loss and/or degradation of riparian habitat would be considered potentially significant on project-specific and cumulative levels. However, measures may be incorporated into individual projects to reduce this impact.

Among other highly valuable and sensitive habitat resources, Merced County has a total of over 25,000 acres of mapped vernal pools, mostly within vernal pool grasslands in the center and the eastern edge of the county. Much of this habitat is federally designated as Critical Habitat for vernal pool ecosystems (Draft PEIR, p. 8-27; RDPEIR, p. 8-31).

The federal government, the State of California, and Merced County all have programs intended to protect wildlife habitat, and to prevent the conversion of sensitive habitat. Merced County has proposed new and additional policies that would protect sensitive habitat in the 2030 General Plan. Draft PEIR and RDPEIR Table 8-5 includes goals and policies from the 2030 General Plan that state the County's desire to maintain open space and wetlands, riparian habitat, and other sensitive natural communities (Draft PEIR, pps. 8-27 to 8-32; RDPEIR, p. 8-31 to 8-36).

While multiple policies in the proposed 2030 General Plan related to wildlife habitat and open space are intended to preserve biological resources in the county, the plan also includes policies that could increase the loss of habitat. Draft PEIR and RDPEIR Table 8-4 includes the 2030 General Plan policies likely to reduce habitat resources within the county.

As set forth in Draft PEIR and RDPEIR Table 8-5, the proposed 2030 General Plan provides numerous policies that are intended to protect biological resources by directing future development to existing urban areas in the cities and the unincorporated county, by increasing the density of development permissible in existing unincorporated urban areas (thereby reducing pressure to expand urban boundaries), and by establishing buffer and other requirements to avoid wetland and riparian habitats. However, proposed policies would still permit the loss of significant amounts of undeveloped and rural land to developed uses within existing unincorporated urban areas, and from the development of new towns, scattered rural residential uses, agriculturally related industries, and surface mines. Since the effect of the policies would protect only an amount of rural land equal to that lost, and no policy would result in an increase of rural or undeveloped land, proposed 2030 General Plan policies that would permit land conversion as indicated in Draft PEIR and RDPEIR Table 8-4 may result in the loss of riparian and other sensitive habitats.

Although Policies LU-10.12 and NR-1.17 require consultation with state and federal resource protection agencies, no requirement of these policies would ensure that project-related biological impacts would be evaluated and mitigated consistent with state and federal guidance and regulations, including compliance with the existing "no net loss" of acreage and values policies of the state and federal agencies (Draft PEIR, p. 8-32; RDPEIR, p. 36).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR, RDPEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that even though the proposed policies would reduce much of the 2030 General Plan's adverse impact to sensitive habitats, because the County has not adopted a no net-loss requirement or other mitigation standards, and could permit the development of new towns, scattered rural residential uses, agriculturally related industries, energy facilities, and surface mines in rural areas, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure BIO-2:

Implement Mitigation Measures BIO-1a through BIO-1r.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by amending existing policies or adding policies and programs that would further reduce adverse effects to wetlands, riparian habitat, and other sensitive natural communities by:

- Aligning the County's standards and requirements with those of state and federal resource management agencies
- Reestablishing the policies that support the County's Open Space Development Review System
- Addressing mercury issues associated with past mining activities
- Establishing a program to educate land owners regarding their responsibilities under state and federal environmental laws
- Strengthening resource protection by limiting potential land uses in sensitive habitat areas or requiring full mitigation for potential effects to biological or other open space resources
- Amending County procedures to ensure that sensitive biological and other open space resources are considered in the County's project review processes
- Increasing habitat protection by limiting developed land uses in the vicinity of sensitive habitats
- Clarifying the County's obligation to consult with state and federal regulatory agencies in assessing effects to biological resources and the development of mitigation for any adverse effects

While impacts to vernal pools and other water bodies may be mitigated to a less-than-significant level with the acquisition of permits and the implementation of mitigation required by federal Clean Water Act Sections 401 and 404 and California Fish and Game Code Section 1601, there is no guarantee that riparian or other "sensitive" habitats such as grasslands would similarly be mitigated to a less-than-significant level since there are no such permits required for those resources, and no 2030 General Plan policies would require no net loss for such resources. Because proposed policies

would still permit the loss of significant amounts of undeveloped and rural land to developed uses within designated urban areas, and from scattered rural residential uses, agriculturally related industries, energy facilities, and surface mines, and the effect of proposed policies would protect only an amount of rural land equal to that lost, implementation of the 2030 General Plan may result in the unmitigated loss of habitat within riparian and grassland habitats. There are no additional or technically feasible mitigation measures available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact BIO-3: Substantial loss and/or modification of federally protected wetlands (Draft PEIR, pps. 8-33 to 8-37; RDPEIR, p. 8-38 to 8-41)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

As discussed in Impact BIO-2, the 2030 General Plan includes many policies designed to minimize loss or modification of wetlands. Nevertheless, federally protected wetlands and jurisdictional Waters of the U.S. occur throughout the county, and not all have been comprehensively mapped. Land conversion in Merced County has the potential to destroy or degrade wetlands, including vernal pools.

Grading and other construction activities are likely to cause erosion into or otherwise result in fill of jurisdictional wetlands. Practices such as deep-ripping and coverage of land surfaces with materials such as concrete may occur during facility improvements. These practices can permanently alter the hydrology of vernal pools, changing their critical function. In addition, erosion associated with grading can contaminate vernal habitat through the transport and deposition of sediments into these areas. Extant populations of sensitive species exist in pastures and rangelands, including wetlands that may lie therein. Alteration of these native or naturalized sites as a result would permanently damage critical sensitive wetland species habitat (Draft PEIR, p. 8-33; RDPEIR p. 8-38).

Vernal pools are considered jurisdictional wetlands; a net loss is federally prohibited under Section 404 of the Clean Water Act. Any loss or degradation of jurisdictional wetlands would be considered potentially significant. Mitigation measures, however, can be incorporated into individual projects to reduce this impact. Additionally, although no actual fill may occur, construction adjacent to vernal pools designated for avoidance may still suffer impacts due to erosion impacts from equipment traffic. Incremental impacts may occur, resulting in a significant countywide impact; mitigation measures may be incorporated into project requirements (Draft PEIR, pps. 8-33 to 8-34; RDPEIR, p. 8-38).

The federal government, the State of California, and Merced County all have programs intended to protect wetlands and to regulate projects that would fill or destroy wetlands. Merced County has proposed new and additional policies that would protect wetlands in the 2030 General Plan. Draft PEIR and RDPEIR Table 8-6 include goals and policies from the 2030 General Plan that state the County's desire to preserve wetlands. However, there are several policies in the 2030 General Plan

that have the potential to result in the loss of wetlands (Draft PEIR, p. 8-34 to 8-36; RDPEIR, pps. 8-38 to 8-40).

As set forth in Draft PEIR and RDPEIR Table 8-6, the proposed 2030 General Plan provides numerous policies that are related to wildlife habitat and open space that act to preserve wetlands in the county by directing future development to existing urban areas in the cities and the unincorporated county, by increasing the density of development permissible in existing unincorporated urban areas (thereby reducing pressure to expand urban boundaries), and by establishing buffer and other requirements to avoid protected wetland habitats. Policies NR-1.12 and NR-1.13 specifically seek to avoid adverse impact to wetlands, and to require setbacks from wetlands. However, proposed policies would still permit the loss of significant amounts of undeveloped and rural land to developed uses within existing unincorporated urban areas and from potential new towns, scattered residences, agriculturally related industrial uses, energy facilities, and surface mines. Since the effect of the policies would protect only an amount of rural land equal to that lost, and no policy would result in an increase of rural or undeveloped land, proposed 2030 General Plan policies that would permit land conversion as indicated in Draft PEIR and RDPEIR Table 8-4 may result in the loss or degradation of protected wetland habitats.

Although Policies LU-10.12 and NR-1.17 require consultation with state and federal resource protection agencies, no requirement of these policies would ensure that project-related biological impacts would be evaluated and mitigated consistent with state and federal guidance and regulations, including compliance with the existing “no net loss” of acreage and values policies of the state and federal agencies (Draft PEIR, p. 8-36; RDPEIR, p. 8-41).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR, RDPEIR, and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the implementation of the proposed 2030 General Plan could result in land conversion in Merced County that has the potential to destroy or degrade wetlands, including vernal pools, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure BIO-3:

Implement Mitigation Measures BIO-1a through BIO-1r.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are made conditions of approval of the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by requiring identification, evaluation, and protection of federally protected wetland habitat, consistent with federal no-net loss requirements. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

Impact BIO-4: Potential interference with animal movement/migration patterns (Draft PEIR, pps. 8-37 to 8-39; RDPEIR, pps. 8-42 to 8-43)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

Construction and operation of unincorporated urban development, new towns, scattered rural residential uses, agriculturally related industries, energy facilities, and surface mines, and supporting infrastructure such as roads and canals, consistent with the proposed 2030 General Plan could act to block or constrict daily and seasonal wildlife movement corridors. Disruption of migratory corridors could occur both directly and indirectly via establishing a physical barrier such as a developed use, a road, or a canal, or by changing the nature or function of a natural feature used in migration such as by dewatering a wetland.

Merced County is within the Pacific Flyway for waterfowl. Dewatering areas that support waterfowl and shorebirds during migration would disrupt migration. Appropriately, 2030 General Plan Policy NR-1.10: Aquatic and Waterfowl Habitat Protection states: “Cooperate with local, State, and Federal water agencies in their efforts to protect significant aquatic and waterfowl habitats against excessive water withdrawals or other activities that would endanger or interrupt normal migratory patterns or aquatic habitats.” Implementation of this policy would reduce the potential that important aquatic habitats could be dewatered by actions undertaken or permitted by Merced County (Draft PEIR, p. 8-37; RDPEIR, p. 8-42).

Several special status species are known to move among population sites within the county, and between state and federal wildlife refuges. These species include the San Joaquin kit fox. Establishment of physical barriers or developed uses within the migratory routes of this species could adversely affect breeding, foraging, and dispersal. Merced 2030 General Plan Policy NR-1.6: Terrestrial Wildlife Mobility states: “Encourage property owners within or adjacent to designated habitat connectivity corridors that have been mapped or otherwise identified by the California Department of Fish and Game or U.S. Fish and Wildlife Service to manage their lands in accordance with such mapping programs.” However, proposed policies would still permit the loss of significant amounts of undeveloped and rural land to developed uses within existing unincorporated urban areas, and from potential new towns, scattered rural residential uses, agriculturally related industries, surface mines, and supporting infrastructure. Since the effect of the policies would protect only an amount of rural land equal to that lost, and no policy would result in an increase of rural or undeveloped land, proposed 2030 General Plan policies that would permit land conversion as indicated in Draft PEIR and RDPEIR Table 8-4 may result in the loss of or interference with animal movement or migration (Draft PEIR, pps. 8-37 to 8-38; RDPEIR, p. 8-42).

Although Policies LU-10.12 and NR-1.17 require consultation with state and federal resource protection agencies, no requirement of these policies would ensure that project-related impacts on animal movement/migration patterns would be evaluated and mitigated consistent with state and federal guidance and regulations, including compliance with the existing Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (Draft PEIR, p. 8-38; RDPEIR, p. 8-42).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR; RDPEIR, and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the implementation of the proposed 2030 General Plan could act to block or constrict daily and seasonal wildlife movement corridors, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure BIO-4a:

Implement Mitigation Measures BIO-1a through BIO-1r.

Mitigation Measure BIO-4b:

Amend Policy NR-1.1: Habitat Protection, as follows:

Identify areas that have significant long-term habitat and wetland values including riparian corridors, wetlands, grasslands, rivers and waterways, oak woodlands, ~~and~~ vernal pools, and wildlife movement and migration corridors, and provide information to landowners.

Mitigation Measure BIO-4c:

Amend Policy NR-1.2: Protected Natural Lands, as follows:

Identify and support methods to increase the acreage of protected natural lands and special habitats, including but not limited to, wetlands, grasslands, ~~and~~ vernal pools, and wildlife movement and migration corridors, potentially through the use of conservation easements.

Mitigation Measure BIO-4d:

Amend Policy NR-1.6: Terrestrial Wildlife Mobility, as follows:

Encourage property owners within or adjacent to designated habitat connectivity corridors that have been mapped or otherwise identified by the California Department of Fish and Game or U.S. Fish and Wildlife Service to manage their lands in accordance with such mapping programs. In the planning and development of public works projects that could physically interfere with wildlife mobility, the County shall consult with the California Department of Fish and Game or U.S. Fish and Wildlife Service to determine the potential for such effects and implement any feasible mitigation measures.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by:

- Aligning the County's standards and requirements with those of state and federal resource management agencies

- Reestablishing the policies that support the County’s Open Space Development Review System
- Strengthening resource protection by limiting potential land uses in sensitive habitat areas or requiring full mitigation for potential effects to biological or other open space resources
- Amending County procedures to ensure that sensitive biological and other open space resources are considered in the County’s project review processes
- Increasing habitat protection by limiting developed land uses in the vicinity of sensitive habitats
- Clarifying the County’s obligation to consult with state and federal regulatory agencies in assessing effects to biological resources and the development of mitigation for any adverse effects
- Elevating wildlife movement and migration corridors to the level of an important biological resource in the protective policies of the 2030 General Plan.

The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

E. HISTORICAL AND CULTURAL RESOURCES

Historical and Cultural Resources setting information for the 2030 General Plan project is set forth in pages 9-1 through 9-8 of the Draft PEIR. The impact evaluation criteria and analysis methodology used in assessing impacts on historical and cultural resources as a result of implementing the Project are set forth in the Draft PEIR on pages 9-8 through 9-9. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource (Draft PEIR, pps. 9-9 to 9-13)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

Implementation of the proposed 2030 General Plan would involve future population growth within the unincorporated county that could result in substantial changes to significant identified historical resources, or those resources considered eligible for National Register or California Register listing. According to the State CEQA Guidelines Section 15064.5 (b)(1), a substantial adverse change in the significance of a historical resource involves the “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.” Data obtained from the CCIC indicates that approximately 77,626 acres in Merced County have been surveyed for historical and cultural resources. This area represents approximately six percent of the total county land area, making it likely that many historic sites, found both on the surface and in subsurface contexts, remain to be discovered (Draft PEIR, pps. 9-9 to 9-10).

Urban and rural development, and the construction of infrastructure that would be allowed under total buildout of the 2030 General Plan could cause substantial adverse changes to significant historical resources that remain to be discovered. Potential adverse changes could be due to ground disturbance related to construction activities (i.e. excavation, grading, trenching) and from alterations of potentially historic buildings or structures that could impair the physical characteristics of a resource that convey its historical significance. Urbanized areas that have been developed are unlikely to contain significant sub-surface historical resources due to previous development activity. However, redevelopment activities within existing urbanized areas that contain known historical resources, some that date between the late 1800s and the early 1900s, such as resources listed in Draft PEIR Table 9-1 within the cities of Merced, Los Banos, and Gustine and the communities of Snelling, Le Grand, and Winton, could be altered due to physical changes to a structure. Similarly, agricultural and open space lands that have not been developed for urban uses at the time of the Draft PEIR could contain historical resources. For example, studies indicate that significant, unique historic remains can exist below the plow zone in Merced County. Future development in these undeveloped areas could unearth and potentially damage historical resources (Draft PEIR, p. 9-10).

During the development of the 2030 General Plan, the County designed specific goals and policies intended to preserve and protect significant cultural and historical resources within the county. There are several proposed goals and policies under the 2030 General Plan contained in the Natural Resources and Recreation and Cultural Resources Elements that would minimize potential impacts to historical resources. Draft PEIR Table 9-2 lists goals and policies that support historical resource protection (Draft PEIR, pps. 9-10 to 9-11).

The Natural Resources Element contains Goal NR-4 that explains that one overall goal for the County is to protect scenic resources and vistas. As an overarching goal, this measure reduces potential impacts to historical resources by limiting development at locations that contain recreation or open space lands that would protect valuable scenic resources, thereby also protecting significant historical and cultural resources in the area. This goal contains various policies designed to encourage and support the restoration and protection of historical and cultural resources, particularly in agricultural and open space areas, where evidence has shown many of the undiscovered historical and cultural resources may remain (Draft PEIR, p. 9-12).

A similar goal and several policies in the Recreation and Cultural Resources Element are designed to protect historic resources and preserve the county's historical character and heritage. The Recreation and Cultural Resources Element contains Goal RCR-2 to protect and preserve the cultural, archeological, and historic resources of the county in order to maintain its unique character. This goal contains eight policies, seven of which would specifically avoid and minimize impacts to significant historical resources by supporting the preservation of historical structures and areas, and by encouraging the official designation of eligible and historical significant sites (Draft PEIR, p. 9-12).

Together, the goals and policies outlined under both the Natural Resources and Recreation and Cultural Resources Elements in the 2030 General Plan would reduce potential historical resource impacts. However, even with the implementation of these policies, additional project-specific measures need to be implemented to further reduce impacts to historical resources. Even if all resources are carefully recorded and formally documented during a discretionary approval process for development projects, permanent removal and destruction of the location from which historical resources originated could reduce their value and integrity (Draft PEIR, p. 9-12).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the implementation of the proposed 2030 General Plan could affect known and unknown historical sites within the county during ground-disturbing activities, or destroy or alter historic buildings or structures, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure CUL-1a:

Add the following policy:

Policy RCR-2.9: Historical and Cultural Resources Investigation, Assessment, and Mitigation Guidelines

Establish and adopt mandatory guidelines for use during the environmental review processes for private and public projects to identify and protect historical, cultural, archaeological, and paleontological resources, and unique geologic features.

Mitigation Measure CUL-1b:

Add the following program:

Program RCR-B: Historic and Cultural Resources Investigation, Assessment and Mitigation Guidelines

Prepare and formally adopt guidelines and standards for the preparation of assessments of historical, cultural, archaeological, and paleontological resources, and unique geologic features prepared pursuant to Policy RCR-2.9. At a minimum, the guidelines shall include resource survey guidelines covering personnel qualifications, research and field techniques, investigation and documentation, data collection and recordation, and resource preservation, avoidance, minimization, and mitigation strategies. The guidelines shall specify broad categories of acceptable mitigation consistent with Public Resources Code Section 21083.2 and State CEQA Guidelines Section 15126.4(b), as they may be amended for any identified adverse effects to historic and cultural resources, paleontological resources, or unique geologic features.

Mitigation Measure CUL-1c:

Amend Policy RCR-2.6: Historic Buildings and Areas as follows:

Identify ~~and preserve~~ buildings and areas with special and recognized historic, architectural, or aesthetic value ~~to be preserved and rehabilitated~~ during the Community Plan update process. New development should respect architecturally and historically significant buildings and areas, and conform to the current Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, and incorporate adaptive reuse practices, where feasible, to preserve the County's historical heritage and rural character.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by ensuring that the County applies a variety of protective measures and preservation efforts towards all future development and infrastructure projects to minimize impacts to historical resources. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

Impact CUL-2: Cause a substantial adverse change in the significance of archaeological resources, paleontological resources, unique geologic features, or disturbances to human remains (Draft PEIR, pps. 9-13 to 9-15)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

Future development would not impact identified archaeological sites within the county that are currently under protection through state or local programs, nor any formal cemeteries or known burial areas outside formal cemeteries. However, recent studies focused on the relative probability of finding buried archaeological deposits in the San Joaquin Valley and adjacent foothills, including Merced County, determined that Merced County had a moderate to very high potential for discovering buried archaeological sites. Thus, it is likely that potentially significant archaeological resources may be discovered due to excavation activities related to future development and construction. Most of the development projected to occur by 2030 would be directed towards incorporated cities, cities' spheres of influence (SOI), and designated urbanized communities within the unincorporated county that may have already undergone some development activity and excavation. Still, some development could occur on previously undeveloped sites, or sites such as agricultural and open space lands that have not had sub-surface soil removal below the plow line. Studies indicate that significant, unique cultural remains can exist below the plow zone in Merced County. Further, evidence suggests that paleontological resources may be encountered virtually anywhere within Merced County, including the valley floor and particularly in formations in the Coast Range (Draft PEIR, pps. 9-13 to 9-14).

For these reasons, development impacts due to construction and other ground-disturbing activities, vandalism, or the collection of archaeological, paleontological or geological specimens could cause substantial adverse changes to cultural resources. However, a variety of proposed goals and policies in the Recreation and Cultural Resource Element under the 2030 General Plan would minimize the potential for development anticipated under total buildout to cause a substantial adverse change in the significance of cultural resources. Draft PEIR Table 9-3 lists goals and policies that support archaeological and paleontological resource protection (Draft PEIR, p. 9-14).

The Recreation and Cultural Resources Element contains Goal RCR-2 designed to protect and preserve the cultural, archeological, and historic resources of the county in order to maintain its

unique character. This goal contains several policies, several of which would avoid and minimize substantial adverse changes to significant archaeological resources by requiring development projects that affect archeological sites and artifacts to avoid disturbance or damage to these sites; and requiring all work to cease if archaeological resources, including human remains, are discovered during construction activities. Specifically, Policy RCR-2.5 requires that all work in the vicinity of the find shall cease and the County Coroner and Native American Heritage Commission must be consulted prior to resuming any work. Further, state legislation, specifically the California Health and Safety Code Sections 7050.5 – 7055 require that construction or excavation must be suspended in the vicinity of the discovery of human remains until the County Coroner can determine whether the remains are those of a Native American (Draft PEIR, p. 9-15).

Together, these goals and policies would reduce but not avoid potential effects to archaeological resources. Additionally, no policies expressly seek to study or preserve paleontological resources or unique geologic features. While the combination of the goals and policies and state requirements would reduce impacts to known cultural resources, additional mitigating policies would be required as part of the planning process for future project-specific development proposals to ensure that archaeological, paleontological resource, or unique geologic features impacts, and disturbances to undiscovered human remains are minimized (Draft PEIR, p. 9-15).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the implementation of the proposed 2030 General Plan could cause a substantial adverse change in archaeological and paleontological resources, unique geologic features, or disturbance of human remains, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure CUL-2:

Implement Mitigation Measures CUL-1a and CUL-1b.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by reducing the potential that new development and related infrastructure projects within the unincorporated portion of Merced County would substantially damage or permanently destroy significant known or unknown archaeological and paleontological resources, unique geologic features, or undiscovered human remains. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

Impact CUL-3: Result in the degradation or loss of traditional cultural properties where Native American customs and traditions are practiced (Draft PEIR, pps. 9-16 to 9-17)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

Written notification and consultation with Native Americans was conducted during the Draft PEIR preparation process. There were no responses received, and no sacred lands sites were identified as areas of concern with implementation of the 2030 General Plan. However, development impacts due to construction and other ground-disturbing activities could cause substantial adverse changes to traditional cultural properties that have not been identified in the consultation process. Draft PEIR Table 9-4 lists 2030 General Plan goals and policies that support Native American traditional customs and areas where such customs are practiced (Draft PEIR, p. 9-16).

The Recreation and Cultural Resources Element contains Goal RCR-2 designed to protect cultural, archaeological, and historic resources in the County. This goal contains several policies that could minimize adverse changes to significant Native American cultural customs and traditions. While Planning and Zoning Law at Government Code Section 65351, and the OPR Tribal Consultation Guidelines (2005) specify steps to be taken to ensure that Native American consultation takes place regarding activities related to the adoption or amendment of the General Plan in order to better protect tribal resources, the 2030 General Plan does not contain any policies to ensure these actions take place.

With implementation of proposed 2030 General Plan policies and state regulations, there would be little potential that traditional cultural properties or practices would be inadvertently impacted due to nearby urban development. However, while the 2030 General Plan contains goals and specific policies to protect cultural resources, including Native American customs and traditions, specific measures are necessary to ensure the protection of traditional cultural resource properties (Draft PEIR, p. 9-17).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the implementation of the proposed 2030 General Plan would lead to construction activities such as grading and sub-surface excavation due to urban or rural development, or the construction of infrastructure that could occur where Native American customs and traditions are practiced, resulting in the degradation of traditional cultural resource properties, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure CUL-3:

Add the following policy:

Policy RCR-2.10: Tribal Consultation

Consult with Native American tribes regarding proposed development projects and land use policy changes consistent with Planning and Zoning Law at Government Code Section 65351, and the OPR Tribal Consultation Guidelines (2005).

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measure is incorporated into the 2030 General Plan project. The Board further finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by ensuring that all appropriate Native American tribes are contacted and consulted with prior to any proposed development activity, thereby reducing the likelihood that such activities would result in potential impacts. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

F. GEOLOGY, SOILS, AND MINERAL RESOURCES

Geology, Soils, and Mineral Resources setting information for the 2030 General Plan project is set forth in pages 10-1 through 10-13 of the Draft PEIR. The impact evaluation criteria and analysis methodology used in assessing impacts on geological resources as a result of implementing the Project are set forth in the Draft PEIR on pages 10-13 through 10-14. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

Impact GEO-4: Allow the use of septic tanks or alternative wastewater disposal systems in unfit soils that may result in increased nutrients or other pollutants reaching and damaging groundwater resources (Draft PEIR, pps. 10-23 to 10-29)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

Installation and operation of onsite wastewater treatment systems (OWTS)⁴ or similar individual wastewater disposal systems in unfit soils can lead to the degradation of groundwater quality, and ultimately impact all groundwater supplies.

⁴ As defined by the SWRCB, “Onsite wastewater treatment system(s)” (OWTS) means individual disposal systems, community collection and disposal systems, and alternative collection and disposal systems that use subsurface disposal. The short form of the term may be singular or plural. Septic tanks and leach fields, typically used in rural areas of Merced County are a type of OWTS. OWTS do not include “graywater” systems pursuant to Health and Safety Code Section 17922.12. To provide consistency to the following discussion, the term OWTS will be used even though the state CEQA Guidelines Appendix G uses the term “septic tanks” in the significance criterion set forth in Draft PEIR Chapter 10 and Impact GEO-4.

In June 2012, the SWRCB adopted a Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems. The policy became operational in May 2013. The policy establishes a set of comprehensive regulations for all aspects of siting, construction, and operating OWTS, including individual residential septic systems. However, according to the SWRCB, if an individual septic system (OWTS) is currently in good operating condition, and it is not near a stream, river, or lake that the state has identified as contaminated with bacteria and/or nitrogen-related compounds, the adopted Policy will have little or no affect on the owner of such a system.

Because California is well known for its extreme range of geological and climatic conditions, the establishment of a single set of criteria for OWTS by the SWRCB would either be too restrictive so as to protect water quality and public health in the most sensitive cases, or would have broad allowances that would not be protective enough of water quality and public health under some circumstances. To accommodate this extreme variance, local agencies may submit management programs (“Local Agency Management Programs”) for approval by the SWRCB, and upon approval then manage the installation of new and replacement OWTS under that program.

According to the SWRCB, OWTS are useful and necessary structures for people who live in a rural setting where they are not served by a centralized sewer or wastewater treatment system. When properly sited, designed, operated, and maintained, OWTS treat domestic wastewater to reduce its polluting impact on the environment and most importantly protect public health. To provide for consistent regulation of OWTS, the SWRCB has placed OWTS into categories, based on their performance and existing conditions in the area of the OWTS. These categories (called tiers in the policy) range from Tier 0 to Tier 4. These tiers are set forth on Draft PEIR page 10-24 (Draft PEIR, p. 10-23).

The Merced County Division of Environmental Health (DEH) enforces design standards for the operation and maintenance of on-site sewage disposal systems to minimize potential pollution of groundwater and surface water features (Merced County 1995). DEH requires that every occupied structure in the county that cannot be connected to a public wastewater treatment system must construct an OWTS under permit from DEH, consisting of an OWTS with effluent discharging into an approved subsurface disposal field. All systems must meet the minimum design standards of DEH, including location, system dimensions and capacity, soil capability, minimum depth to groundwater, and minimum separation distances between septic systems and wells, streams, and other water bodies. In order to obtain a permit, an applicant must provide DEH with a site plan indicating the dimensions and placement of the disposal field, the results of a percolation test to determine the capability of on-site soils to accept wastewater, and a soils report prepared by a certified professional. DEH expects that their exiting design standards for operation and maintenance OWTS will usually meet the requirements of the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (Draft PEIR, p. 10-25).

Even with implementation of these existing standards and regulatory requirements, certain areas of the county may be susceptible to groundwater contamination from OWTS. The unincorporated Atwater Rural Residential Center (RRC) or McSwain area of Merced County lies south of the City of Atwater. The McSwain area historically has been developed with low density rural residential / agricultural land uses, and is undergoing intensifying residential development, including subdivision projects with one-acre parcels served by well and septic systems. The Atwater RRC is a large area,

with over 300 OWTS non-point sources of potential contamination. The soil map units in the area are the “Atwater loamy sand, imperfectly drained variant” and “Atwater loamy sand, deep over hard pan, poorly drained” (Draft PEIR, p. 10-25).

Each residence within the McSwain area is likely to have at least one water supply well. Typical well depths are unknown, but it is likely that they were installed at depths greater than 100 feet as part of standard practice. It is unknown whether any local wells are installed within the shallow unconfined aquifer or within close vicinity to on-site wastewater treatment systems. The water table has been found to range from 40 to 60 feet below grade (Draft PEIR, p. 10-25).

The CVRWQCB has historically expressed concerns about potential impacts to groundwater quality from un-sewered residential development in this area (CVRWQCB 2004, 2005). The RWQCB recommended that such development be connected to nearby wastewater treatment facilities when feasible, or that the potential project and cumulative impacts to groundwater from unsewered development in the vicinity be examined. The RWQCB requested that cumulative effects on groundwater quality consider the existing and proposed development, including development that may occur “by-right.” It is likely that similar contamination could occur in other regions of the county in areas of intensive rural residential development, highly permeable soils and geology, and shallow depths to groundwater. Draft PEIR Figure 10-6 indicates those areas of the county where contamination from this source might be most likely to occur, depending upon the intensity of development (Draft PEIR, p. 10-25).

Draft PEIR Table 10-5 lists policies and programs under the 2030 General Plan to encourage and enforce water quality protection measures as they relate to septic system construction and operation (Draft PEIR, pps. 10-25 to 10-27).

Policies PFS-2.5 through PFS-2.7 reinforce the continued oversight and regulation of private OWTS by the County. Program PFS-B would provide information regarding alternative methods of wastewater disposal, permitting the County to review and consider alternative systems in situations where soil capabilities and groundwater conditions make traditional disposal systems ineffective or infeasible. Program PFS-D would educate the owners of private OWTS regarding the proper operation and maintenance of such systems, thus improving system performance and reducing the potential for adverse water quality effects (Draft PEIR, p. 10-27).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the 2030 General Plan could result in the intensification of rural residential development in areas of suspected groundwater contamination from on-site septic systems, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure GEO-4a:

Amend Policy PFS-2.5: Ground or Surface Water Contamination, as follows:

Prohibit wastewater disposal facilities, including private residential facilities, that are determined to have the potential to contaminate the groundwater or surface water, on either a site-specific or cumulative basis.

Mitigation Measure GEO-4b:

Add the following policy:

Policy PFS-2.10: Consistency with SWRCB OWTS Requirements

Revise the County’s on-site sewage disposal standards to conform to the SWRCB’s Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems, and submit the revised standards for approval as a Local Agency Management Program to maintain local oversight and approval of OWTS.

Mitigation Measure GEO-4c:

Add the following program:

Program PFS-H: Regional OWTS Suitability Evaluation

Conduct an evaluation of the general suitability of OWTS within areas known or suspected to contain contaminated groundwater or surface water from such systems based on groundwater and surface water sampling, soil capabilities, depth to groundwater, and the intensity of existing and future development. Develop standards for such areas to avoid continued or future contamination, which could include a prohibition on new OWTS, a requirement that new development install an alternative system that would reduce the potential for contamination over that provided by a standard OWTS, or mandatory connection to a community wastewater treatment plant.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by providing additional protection for areas sensitive to groundwater and surface water contamination. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

G. GLOBAL CLIMATE CHANGE

Global Climate Change setting information for the 2030 General Plan project is set forth in pages 11-1 through 11-8 of the Draft PEIR. The impact evaluation criteria and analysis methodology used in assessing impacts on global climate change as a result of implementing the Project are set forth in the Draft PEIR on pages 11-8 through 11-9. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

***Impact GHG-1: Increase in GHG emissions associated with 2030 General Plan buildout
(Draft PEIR, pps. 11-9 to 11-21)***

Finding: This would be a significant and unavoidable impact

Explanation:

Implementation of the 2030 General Plan would increase urban development, and increase the number or amount of scattered rural residential uses, confined animal facilities, agricultural industrial uses, and surface mining activities. All of these uses would generate increased amounts of GHG emissions.

Draft PEIR Table 11-1 and Figure 11-1 shows unincorporated Merced County's 2005 emissions, and compares them to 2020 and 2030 emissions under business as usual (BAU) conditions. In all three years, agricultural emissions constitute the largest GHG category, while transportation represents the second largest category.

The 2020 BAU emissions of 5,710,459 metric tons of CO₂e would need to be reduced by 29 percent, which equals 1.66 million metric tons. This amount exceeds the combined 2020 BAU GHG emissions from area sources, electricity, natural gas, water and wastewater, and solid waste. Consequently, the bulk of Merced County's GHG emission reductions must come from its two largest emission categories: transportation and agriculture (Draft PEIR, p. 11-9).

Draft PEIR Table 11-2 compares 2020 BAU CO₂e emissions to 2020 project CO₂e emissions, while Draft PEIR Table 11-3 compares 2030 BAU CO₂e emissions to 2030 project emissions. Both the 2020 and 2030 project emissions include the state-mandated transportation and electricity mitigation measures that have been programmed into or that support the ARB's GHG Scoping Plan. These include the Low Carbon Fuels Standard (LCFS), the Pavley Rule, the Sustainable Communities Strategy, and the California Renewables Portfolio Standard (SB X1-2). The project emissions shown in Draft PEIR Tables 11-2 and 11-3 also include emission reductions that would result from policies included in 2030 General Plan. Those policies are summarized in Draft PEIR Table 11-4.

In 2020, Merced County's project GHG emissions would be 10.6 percent lower than 2020 BAU emissions (see Draft PEIR Table 11-2). In 2030, project GHG emissions would be 15.7 percent lower than 2030 BAU emissions (see Draft PEIR Table 11-3) (Draft PEIR, pps. 11-10 to 11-11).

Draft PEIR Table 11-4 lists the 2030 General Plan policies that would encourage GHG emission reductions. The goals and policies listed in Draft PEIR Table 11-4 are an important part of reducing GHG emissions in unincorporated Merced County. The emission reduction potential of the policies listed in Draft PEIR Table 11-4 was evaluated by reviewing several sources. These sources included reports and planning documents issued by the California Air Pollution Control Officers Association, and by several counties (CAPCOA, 2009a; CAPCOA, 2009b; Yolo County, 2010; Sutter County, 2010; Tulare County, 2010; Solano County, 2008; Kings County, 2010; Madera County, 2010; San Bernardino County, 2011) (Draft PEIR, pps. 11-11 to 11-16).

Transportation emissions would be reduced by 22.5 percent in 2020 and 30.7 percent in 2030 when compared to BAU conditions. Two of the policies listed in the 2030 General Plan's circulation element, CIR-1.2 and CIR-1.3, would reduce vehicle miles traveled (VMT) and resulting GHG emissions. The transportation study conducted for this program estimated VMT reductions of 0.2

percent in 2020 and 0.3 percent in 2030 (KD Anderson, 2011). These percentages were used to calculate project transportation GHG emissions associated with the 2030 General Plan policies. These reductions were taken on top of the transportation emission reductions that would result from the ARB's Low Carbon Fuel Standard, Pavley Rule, and the Sustainable Communities Strategy (Draft PEIR, p. 11-16).

Electricity emissions would be reduced by 46.6 percent in 2020 and 49 percent by 2030 when compared to BAU conditions. These reductions are the result of California's Renewable Portfolio Standard, which requires that by 2020, all electric utilities generate 33 percent of their electricity using renewable resources. The project electricity emissions also assume that there would be a 10.2 percent reduction in average building electricity use by 2020, and a 14.1 percent reduction in building energy use by 2030 (see Draft PEIR Appendix E, *GHG Technical Methods Appendix* for additional details). These percentages are based on assumptions used to support several of the 2030 General Plan policies, including Policies LU-9.1 through LU-9.5, NR-2.4, and NR-2.9 (see Draft PEIR Table 11-4) (Draft PEIR, p. 11-16).

Natural gas emissions would be reduced by 10.2 percent in 2020 and by 14.1 percent in 2030. These reductions are associated with reduced average energy use in buildings, and are based on the assumptions used to support several of 2030 General Plan policies, including policies LU-9.1 through LU-9.5, NR-2.4, and NR-2.9 (see Draft PEIR Table 11-4) (Draft PEIR, p. 11-16).

Water and wastewater related energy use would be reduced by 40.6 percent in 2020 and 2030. These reductions are the result of California's Renewable Portfolio Standard, which requires that by 2020, all electric utilities generate 33 percent of their electricity using renewable resources (Draft PEIR, p. 11-16).

Agricultural emissions include four categories: livestock, agricultural equipment, fertilizers, and water pumping. For 2020 and 2030 project livestock emissions, the estimates assume a five percent reduction in emissions associated with dairy cattle manure emissions by 2020, and a 10 percent reduction by 2030. These reductions would not apply to non-dairy GHG emissions generated by beef cattle, steers, poultry, goats, hogs, sheep, or lambs. The mitigated emission percentages are based on an estimate of the maximum percentage of methane capture likely to be achieved as a result of 2030 General Plan Policy AQ-1.4 (see Draft PEIR Table 11-4) and Mitigation Measures GHG-1d through GHG-1g. For agricultural equipment, fertilizers, and water pumping, no GHG reductions are assumed to result from the 2030 General Plan policies (Draft PEIR, p. 11-17).

A significant impact is defined as one where the 2020 project emissions are not at least 29 percent lower than 2020 BAU emissions. As shown in Draft PEIR Table 11-2, GHG reductions resulting from the combination of 2030 General Plan policies and the regulations resulting from ARB's Scoping Plan will not reduce Merced County's emissions enough to meet the 29 percent reduction significance threshold. Therefore, unincorporated Merced County's project GHG emissions in 2020 would represent a significant GHG emissions impact (Draft PEIR, p. 11-17).

Draft PEIR Table 11-5 summarizes 2020 and 2030 BAU and mitigated emissions. The mitigated emission scenarios include reductions associated with state GHG reduction programs, 2030 General Plan policies, and the new policies described in Mitigation Measures GHG-1a through GHG-1g. The mitigation measures described below, combined with the mitigation measures included in ARB's Scoping Plan, would reduce 2020 GHG emissions by 12.4 percent as compared to 2020 BAU

emissions. This reduction is less than the SJVAPCD's 29 percent significance threshold. Similarly, the mitigation measures would reduce 2030 GHG emissions by 17.6 percent as compared to 2030 BAU emissions, which also is less than the 29 percent threshold (Draft PEIR, p. 11-17).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the 2030 General Plan would reduce 2020 GHG emissions by 12.4 percent as compared to 2020 BAU emissions and 2030 GHG emissions by 17.6 percent as compared to 2030 BAU emissions, both of which are less than the 29 percent threshold of the SJVAPCD, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure GHG-1a:

Implement Mitigation Measure AQ-3b: Add Policy AQ-6.6: Prohibition on Wood Stoves.

Mitigation Measure GHG-1b:

Implement Mitigation Measure AQ-3c: Add Policy AQ-6-7: Stove Replacement.

For Mitigation Measures GHG-1a and GHG-1b, the emission estimates assume that 50 percent of existing wood stove owners would switch to natural gas stoves by 2020 and that 75 percent of wood stove owners would switch to natural gas by 2030. In addition, the mitigated area source estimates assume that 90 percent of new residences in 2020 would use natural gas stoves in lieu of wood stoves and that 100 percent of new residences in 2030 would use natural gas stoves.

Mitigation Measure GHG-1c:

Add the following policy:

Policy AG-5.5: Fertilizer Application

Work with agricultural organizations to provide an outreach program to inform Merced County farmers about ways to reduce nitrogen fertilizer while minimizing effects on crop yield.

Implementation of Mitigation Measure GHG-1c assumes that fertilizer application would reduce N₂O emissions by five percent from 2005 levels by 2020 and 2030.

Mitigation Measure GHG-1d:

Add the following policy:

Policy AG-5.6: Agricultural Pump Energy Use

Work with Merced County agricultural organizations to develop an outreach program to encourage farmers to improve the efficiency of their irrigation pumps.

In Merced County, diesel and electric irrigation pumps are used to pump groundwater from agricultural wells and to return irrigation tail water for reuse in fields. This measure is assumed to reduce agricultural pumping emissions by 10 percent by 2020 and 2030.

Mitigation Measure GHG-1e:

Add the following policy:

Policy AQ-1.12: Dairy Digester Permit Streamlining

For existing dairy operations that are consistent with all permit requirements, including those issued by Merced County, the Central Valley Regional Water Quality Control Board, and the San Joaquin Valley Air Pollution Control District, amend the Zoning Ordinance and Animal Confinement Ordinance to permit digesters using on-farm feedstocks via Plot Plan Review. Proponents of digester projects using this process shall demonstrate that the digester is consistent with the RWQCB General Order for On-Farm Digesters (or any successor regulation) process, and that all needed SJVAPCD approvals necessary to construct and operate the digester have been obtained. No feature of this policy shall permit the expansion of any dairy herd or construction of other dairy facilities without compliance with all Zoning Code and Animal Confinement Ordinance requirements governing such uses.

Mitigation Measure GHG-1f:

Add the following policy:

Policy AQ-1.13: Methane Digester Policy

Cooperate with federal, state, and regional agencies to establish programs to encourage and provide incentives for the installation and operation of methane digesters.

Mitigation Measure GHG-1g:

Add the following policy:

Policy AQ-1.14: Methane Digester Funding

Use a wide range of funding mechanisms to establish a revolving low-interest loan program to provide funding for the construction of methane digesters, including obtaining available state and federal energy efficiency grants.

For 2020 and 2030 project livestock emissions, the estimates assume a five percent reduction in emissions associated with dairy cattle manure emissions by 2020, and a 10 percent reduction by 2030. The mitigated emission percentages are based on an estimate of the maximum percentage of methane capture likely to be achieved as a result of 2030 General Plan Policy AQ-1.4 (see Draft PEIR Table 11-4 for the text of this policy) and Mitigation Measures GHG-1e – GHG-1g.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by adding new policies that would further reduce GHG emissions. The

mitigation measures described above combined with the mitigation measures included in ARB's Scoping Plan would reduce 2020 GHG emissions by 12.4 percent as compared to 2020 BAU emissions, which is less than the SJVAPCD's 29 percent significance threshold. Similarly, the mitigation measures would reduce 2030 GHG emissions by 17.6 percent as compared to 2030 BAU emissions, which also is less than the 29 percent threshold. Because mitigated project emissions would meet the SJVAPCD significance standard, the project's GHG emissions would be significant and unavoidable. There are no additional or technically feasible mitigation measures available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact GHG-2: Increase in GHG emissions that would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions (Draft PEIR, pps. 11-21 to 11-22)

Finding: This would be a significant and unavoidable impact

Explanation:

Implementation of the 2030 General Plan may be inconsistent with ARB's Climate Change Scoping Plan. This would be a potentially significant impact.

ARB's Climate Change Scoping Plan represents the primary plan to reduce GHG emissions throughout California. This Plan is designed to reduce California's statewide 2020 GHG emissions by 29 percent as compared to the 2020 BAU scenario (California Air Resources Board, 2008).

Sources of potential GHG emissions reductions programs include model policies described by CAPCOA (*Model Policies for Greenhouse Gases in General Plans*) and reductions measures set forth by the SJVAPCD (*Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* and *District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*). These sources of policy have been used in the development of the 2030 General Plan policies presented in Draft PEIR Table 11-4. Additionally, Mitigation Measures GHG-1a through GHG-1g expand upon the proposed policies of the 2030 General Plan.

However, these policies and measures are directed primarily to reducing the emissions of urban development and transportation by improving the efficiency of land use and transportation systems, and reducing the energy requirements of structures and necessary to provide urban services. As set forth under Impact GHG-1, GHG emissions from urban sources, including those generated by the utilities necessary to serve such development make up a relatively small portion of the emissions inventories for 2005, 2020, and 2030. Within Merced County, the agricultural sector is the largest source of GHG emissions, accounting for over 64 percent of emissions within the unincorporated county in 2005 and 54 percent in 2030 under business-as-usual conditions. As shown in Draft PEIR Table 11-5, even the major reductions in GHG emissions mandated by the State of California for transportation and electricity generation sources, coupled with the policies of the 2030 General Plan

and mitigation measures identified in the Draft PEIR, would be insufficient to reduce 2020 and 2030 Merced County GHG emissions below Scoping Plan standards.

As described under Impact GHG-1, the General Plan's 2020 and 2030 mitigated emissions (described above under the Impact GHG-1 discussion) would be less than 29 percent below 2020 and 2030 BAU emission scenarios (Draft PEIR, p. 11-17 and p. 11-22).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that since emission reductions would be less than the 29 percent emissions reduction goal within unincorporated Merced County, the 2030 General Plan would not be consistent with California's Climate Change Scoping Plan, and this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure GHG-2:

Implement Mitigation Measures GHG-1a through GHG-1g.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by adding new policies that would further reduce GHG emissions. Even with implementation of policies and the identified mitigation measures, GHG emission reductions would fail to meet reduction goals. There are no additional or technically feasible mitigation measures available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

H. HAZARDS AND HAZARDOUS MATERIALS

Hazards and Hazardous Materials setting information for the 2030 General Plan project is set forth in pages 12-1 through 12-11 of the Draft PEIR, and pages 12-1 through 12-13 of the RDPEIR. The impact evaluation criteria and analysis methodology used in assessing impacts due to hazards and hazardous materials as a result of implementing the Project are set forth in the Draft PEIR on pages 12-11 through 12-12 and the RDPEIR on pages 12-13 to 12-14. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft, RDPEIR, and Final PEIR, the findings of the Board are as follows.

Impact HAZ-3: *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment (Draft PEIR, pps. 12-18 to 12-20; RDPEIR pps. 12-20 to 12-22)*

Finding: *This would be a less-than-significant impact after mitigation*

Explanation:

There are a number of sites identified in Merced County that contain groundwater or soil contamination. They are included on a list (i.e., RWQCB Geotracker, Envirostor, CIWMB SWIS list) of hazardous materials or contaminated sites pursuant to Government Code Section 65962.5. The list is available at <http://www.envirostor.dtsc.ca.gov/public/search.asp?basic=True>. Among the sites, some have a history of contamination due to hazardous materials spills, leakage from underground storage tanks, landfills, or other releases that are subject to federal and state environmental laws and regulations. Many of these sites are also undergoing assessment or remediation overseen by the Merced County Division of Environmental Health, CalRecycle (formerly the Integrated Waste Management Board), or the Regional Water Quality Control Board. Other sites, particularly agricultural sites that have a history of former agricultural operations, may also contain chemicals including heavy metals and organic compounds that can persist in the soil and contain residues that could pose health risks to sensitive receptors. Additionally, land uses sited near abandoned pipelines could be exposed to potential contamination. As a result, land development allowed under the 2030 General Plan could create a hazard to the public or the environment if development occurs on contaminated sites. While many contaminated sites are likely to have development restrictions prior to clean-up and remediation, the possibility remains that future development under the 2030 General Plan could expose the public and the environment to site contamination hazards (Draft PEIR, p. 12-18; RDPEIR, p. 12-20).

In addition to various state programs that require the clean-up of contaminated sites, the County would regulate hazardous material concerns and site contamination on a case-by-case basis as part of the development site review process for any future project within the county, including potential development adjacent to the routes of abandoned pipelines. Further, the 2030 General Plan contains various policies intended to ensure the safety of county residents, visitors, and businesses, and reduce the impacts of hazardous sites due to contamination. Draft PEIR and RDPEIR Table 12-3 lists the policies intended to protect the health and safety of county residents from contaminated sites (Draft PEIR, pps. 12-18 to 12-19; RDPEIR, pps. 12-20 to 12-21).

In the Health and Safety Element, Policy HS-5.3 would prohibit development on sites where it has been determined that such construction would further contaminate the surrounding land and jeopardize the health and safety of the County's residents. Further environmental investigation may be required to determine if soils, surface water, or existing structures require remediation, and whether the site would be safe for public uses after remediation. Policy HS-5.4 would require new development proposals to protect soils, surface water, and groundwater from hazardous materials contamination. However, neither policy explicitly states that redevelopment or reuse of previously contaminated sites would require formal environmental investigations according to recognized federal and state standards. The proposed 2030 General Plan incorporates local County policies with federal and state regulations that together aim to reduce hazards to the public related to hazardous contamination and the reuse of formerly contaminated sites; however, it remains that toxic chemical

hazards and other compounds that may persist in soils and groundwater may not be adequately assessed or remediated, resulting in residual contamination that could continue to pose health hazards to the County's residents and visitors (Draft PEIR, p. 12-19; RDPEIR, p. 12-21).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR, RDPEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the 2030 General Plan would lead to urban development and other activities that could be located at a location that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or environment, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure HAZ-3:

Amend Policy HS-5.4: Contamination Prevention, as follows:

Require new development and redevelopment proposals that have suspected or historic contamination to address hazards concerns and protect soils, surface water, and groundwater from hazardous materials contamination by conducting Phase I Environmental Site Assessments (ESA) according to the American Society for Testing and Materials (ASTM) standards and applicable Department of Toxic Substances Control (DTSC) remediation guidelines. Also, complete additional Phase II Environmental Site Assessments and soil investigations, and any identified or needed remediation when preliminary studies determine such studies are recommended.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measure is incorporated into the 2030 General Plan project. The Board further finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by requiring that the owners or responsible parties of all sites proposed for new development or redevelopment that have perceived or potential historic contamination due to past agricultural, commercial, or industrial uses must conduct appropriate environmental site assessments and remediate contamination, if present. The above-stated measure would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

Impact HAZ-4: *Be located within an airport land use plan or, where such a plan has not been adopted, within the vicinity of a public or private airport, and thereby result in a safety hazard for people residing or working in the project area (Draft PEIR, pps. 12-20 to 12-24; RDPEIR, pps. 12-22 to 12-26)*

Finding: *This would be a less-than-significant impact after mitigation*

Explanation:

Implementation of the proposed 2030 General Plan would lead to urban development and other land use activities that could be located within an area regulated by the Merced County Airport Land Use Commission's adopted Airport Land Use Plan or in the vicinity of a private airport, and pose a safety hazard for people residing or working in the project area.

In June 2012, the ALUC adopted the Merced County Airport Land Use Compatibility Plan (ALUCP), which contains individual compatibility plans for all five public airports in the county. The basic function of the ALUCP is to promote land use compatibility between the airports in Merced County and the land uses that surround them. The ALUCP also sets compatibility criteria applicable to local agencies reviewing development proposals and preparing land use plans and zoning ordinances, and to landowners designing new development. The Merced County ALUCP is primarily concerned with the land uses near the five public use airports in the County: Castle Airport, Gustine Municipal Airport, Los Banos Municipal Airport, Merced Regional Airport, and the Turlock Municipal Airport. With the exception of the Castle Airport, each airport's influence area extends approximately two miles from the airport runways. The Castle Airport influence area stretches approximately four miles from the runway end due to the heavy aircraft that the airport accommodates (Draft PEIR, p. 12-20; RDPEIR, p. 12-22).

The 2030 General Plan is required to be consistent, to the greatest extent possible, with the policies adopted by the ALUC reflected in each individual airport's ALUCP and its corresponding land use compatibility zone maps. Land uses not consistent with the ALUCPs would need to be modified by the County in the General Plan, Community Plans, and policy documents to ensure consistency. However, local agencies do not need to change land use designations to bring them into consistency with ALUC criteria if the current designations reflect existing development. Instead, applicable plans would need to establish policies to ensure that the non-conforming uses would not be expanded, and that redevelopment in the area would be made consistent with the compatibility criteria. In its June 2012 adoption of the ALUCP, the Merced County ALUC found that the 2030 General Plan was consistent with the ALUCP, and that there were no incompatible land use designations in the vicinity of the county's public use airports (Draft PEIR, p. 12-21; RDPEIR, p. 12-23).

The General Plan Updated does not include the redesignation of land for development; however, implementation of 2030 General Plan would still result in new residential and commercial projects. While the exact locations of new development is not known, the majority of development is anticipated to occur within focused growth areas, such as cities, city spheres of influence, and within unincorporated designated communities (i.e., Delhi, Planada, Hilmar, Franklin-Beachwood, Winton). Many of these areas, specifically the unincorporated designated communities, are situated outside the influence areas of public and private airports. However, it is likely that some new development may occur within the vicinity of private airport influence areas. While the majority of the County's five public use airports are located near or within designated urbanized areas, no expansion of non-

conforming uses would be permitted to occur near the public airport's influence areas where they are not in compliance with the ALUCP compatibility criteria. Any development proposed along urbanized fringe areas (i.e., outside the urban area boundary) or near agricultural uses would be allowed based on consistency with the ALUCP and discretionary review by the County. Draft PEIR and RDPEIR Table 12-4 list each public airport within Merced County and the surrounding existing and proposed land uses (Draft PEIR, pps. 12-21 to 12-22; RDPEIR, pps. 12-23 to 12-24).

Private airports are located at various locations within the county, many of which consist of private airstrips associated with agriculture-related uses situated in rural areas of the county. These private airstrips generally serve as access to large farms, and are used for agricultural related crop-dusting activities. Siting private airport uses in rural areas designated for agricultural uses may pose fewer land use conflicts to sensitive uses, but safety impacts may still occur. Further, any new development near airport facilities that involves multiple stories, large concentrations of people, sensitive uses such as nursing homes or school sites, and facilities with large antennas or extensive lighting, could obstruct and create hazards to aviation. The location of new development could also result in safety hazards to the people who reside and work near the airports due to noise, nuisances, and accidents related to aircrafts. All new development proposals near private airports would need to be reviewed on a case-by-case basis to ensure consistency with relevant land use plans and policies (Draft PEIR, p. 12-22; RDPEIR, p. 12-24).

Of the five public airports within Merced County, none contain land uses outlined in their ALUCPs that are inconsistent with the proposed land uses illustrated under the 2030 General Plan Land Use Diagram. Consistency with the ALUCPs ensures there are no conflicts with land uses, noise, or other safety hazards that may result in jeopardized safety operations. The ALUCPs for all public airports contain land use compatibility criteria, referred to as zones, that prohibit the development of sensitive uses within each airport's influence area surrounding its runway. The criteria prohibit the development of children schools, day care centers, libraries, hospitals, nursing homes, and other sensitive uses within its airport's influence area (Draft PEIR, p. 12-22; RDPEIR, p. 12-24).

The Castle Airport influence area is located three miles northeast of the City of Atwater and six miles northwest of the City of Merced. The majority of unincorporated lands within the Castle Airport's influence area consist of agricultural land uses, with the exception of some farm worker housing. While some non-conforming uses exist, none of these uses would be extended within the airport's influence area. All uses proposed for the influence area surrounding the Gustine Municipal Airport remain agricultural uses under the 2030 General Plan. Likewise, all land uses within unincorporated Merced County surrounding the Los Banos Municipal Airport would remain agricultural uses, with the exception of existing non-conforming residential land uses within the east and southeast portions of the Los Banos city limits (Draft PEIR, p. 12-22; RDPEIR, p. 12-24).

Most land uses within unincorporated Merced County that occur south and west of the Merced Regional Airport located just southwest of the Merced city limits and sphere of influence are designated for rural agricultural uses. While some land uses to the north, east, and southeast of the Merced Regional Airport influence area consist of non-conforming residential uses, none of these uses would be extended or expanded into the airport's influence area. Lastly, the majority of the Turlock Municipal Airport and its influence area occur within the north-central portion of unincorporated Merced County. All land uses within the Turlock Municipal Airport influence area are consistent with the use outlined in its CLUP, as all land uses consist of agricultural activities (Draft PEIR, pps. 12-22 to 12-23; RDPEIR, pps. 12-24 to 12-25).

The 2030 General Plan includes explicit goals and policies that would reduce land use compatibility issues and safety concerns that could impact the capability and functionality of the County's aviation system. Draft PEIR and RDPEIR Table 12-5 list the policies applicable to the safe operation of airports and the safety of county residents. The Health and Safety and Land Use Elements contain a number of policies that establish requirements for compatible development, some of which focus on promoting land use consistency between airport operations and surrounding uses, and others that apply screening, adaptive reuse, and performance standards. The Land Use Element contains two policies that aim to promote land use consistency with airport operations through screening and landscaping, and adaptive reuse of former air force base sites. Together, these policies would promote land use consistency and continued compatibility around airports (Draft PEIR, p. 12-23 to 12-24; RDPEIR, pps. 12-25 to 12-26).

Although the 2030 General Plan contains a number of specific policies to reduce land use compatibility issues, minimize airport-related nuisances, and ensure that airport safety zones are established for public airports, no safety provisions are outlined for private airports (Draft PEIR, p. 12-24; RDPEIR, p. 12-26).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR, RDPEIR, and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because the siting of new sensitive uses near any of the private airports, often near agricultural operations, could be expected to impact the safety of people residing or working in the areas around these airports, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure HAZ-4:

Amend Policy HS-4.1: Airport Land Use Compatibility Plan as follows:

Require that development around public use airports be consistent with the safety policies and land use compatibility guidelines contained in the Merced County Airport Land Use Commission's adopted Airport Land Use Compatibility Plan, and ensure that development near private airstrips addresses land use compatibility issues and complies with Federal Aviation Administration regulations.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measure is incorporated into the 2030 General Plan project. The Board further finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by ensuring that development near both public use and private airstrips addresses land use compatibility issues. The above-stated measure would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

I. HYDROLOGY AND WATER RESOURCES

Hydrology and Water Resources setting information for the 2030 General Plan project is set forth in pages 13-1 through 13-25 of the Draft PEIR. The impact evaluation criteria and analysis methodology used in assessing impacts on hydrology and water resources as a result of implementing the Project are set forth in the Draft PEIR on pages 13-25 through 13-26. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

Impact HYD-2: Substantially deplete groundwater supplies or interfere with groundwater recharge to the degree there would be continued aggravation of groundwater overdraft or a net reduction in aquifer volume that would negatively impact existing users or habitat needs (Draft PEIR, pps. 13-31 to 13-34; Final PEIR, pps. 4-82 to 4-85)

Finding: This would be a significant and unavoidable impact

Explanation:

Impact USS-1 as shown in Draft PEIR Chapter 20, *Utilities and Service Systems*, and Final PEIR, Chapter 4, *Changes to the Text of the EIR*, examines potential depletion of surface and groundwater supplies via increased user demand, and discusses 2030 General Plan goals and policies proposed to improve upon and, at a minimum, maintain an adequate water supply. Therefore, this impact strictly examines potential impacts to groundwater volume or recharge due to groundwater deprivation as opposed to water demand, and summarizes 2030 General Plan policies proposed to encourage infiltration and groundwater recharge (Draft PEIR, p. 13-31; FPEIR, p. 4-82).

Groundwater overdraft from pumping and drought conditions is a recurring problem in parts of Merced County to the degree that several county water agencies and irrigation districts have implemented groundwater recharge efforts in order to counteract the problem. Implementation of the proposed 2030 General Plan would lead to increased urban development that could potentially reduce localized groundwater recharge due to increased impervious surfaces and the redirection of storm water runoff. For example, a large residential development constructed in a former agricultural area might convert a large area of open space that allowed for infiltration to a large, impervious area that redirects storm water runoff away from the site and into an engineered storm water collection system or to a downstream water body (Draft PEIR, p. 13-31; FPEIR, p. 4-82).

There are several goals and policies under the 2030 General Plan that address potential impacts to aquifer recharge and volumes that could result from continued development, as shown in Draft PEIR and Final PEIR Table 13-4 (Draft PEIR, pps. 13-31 to 13-32; FPEIR, pps. 4-82 to 4-84). With the 2030 General Plan goals and policies, the County would protect groundwater resources and help offset groundwater recharge deficiencies through support of direct groundwater recharge efforts, efficient water use and conservation policies, watershed protection, and coordination with other responsible agencies. However, Policy W-4.1 only encourages the County to protect aquifer recharge areas rather than requiring such protection. Additionally, recharge of aquifers in many cases relies upon water providers and other entities outside of the control of the County (Draft PEIR, p. 13-33; FPEIR, p. 4-84).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because construction of urban development and other activities consistent with the 2030 General Plan could result in the expansion of impervious surfaces, thereby interfering with aquifer recharge and aquifer volumes and adversely affecting existing users or habitat needs, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure HYD-2a:

Amend Policy W-4.1: Water Resource Protection and Replenishment as follows:

~~Encourage the protection of~~ Protect watersheds, aquifer recharge areas, and areas susceptible to ground and surface water contamination by identifying such areas, and implementing requirements for their protection such as:

- a) ~~Consider the implementation of~~ Implement zoning and development regulations to protect water resources, including aquifer recharge areas and areas susceptible to ground and surface water contamination;
- b) ~~Encourage~~ For new development, and when adopting new Community Plans, require community drainage systems that incorporate on-site infiltration and contaminant control measures that are compatible with the County SWMP and NPDES regulations for post-construction runoff conditions; and
- c) ~~Coordinate~~ Cooperate with other agencies and entities with responsibilities for water quality and watershed protection.

Mitigation Measure HYD-2b:

Amend Policy LU-5.F.1, New Urban Community Size and Location Requirements, as follows:

Only accept applications for the establishment of additional new Urban Communities if they encompass a minimum area of 320 acres in order to achieve efficiencies in urban service delivery and provide for long-range growth needs. In addition, require that proposed new Urban Communities be located only in areas that:

- a) Are off the valley floor unless the project area is clearly located on non-productive soil;
- b) Contain few wetlands or significant natural resources;
- c) For proposals off the valley floor, do not contain more than 50 percent productive farmland (as defined in the General Plan Glossary) or 10 percent Prime Farmland (as classified on the Statewide Important Farmland Map), and for projects on the valley floor, do not contain more than 10 percent productive farmland;
- d) Are not located within two miles of an existing city or Urban Community; ~~and~~
- e) Are not delineated as a 200-year floodplain or are able to clearly demonstrate that they have adequate protection from a 200-year event;
- f) Are near major transportation routes; and
- g) Are not located within areas that recharge to already compromised source water aquifers (i.e., in overdraft condition) or areas highly susceptible to groundwater contamination.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by amending existing policies that would result in additional protection of aquifer recharge areas and areas sensitive to groundwater and surface water contamination. Although the 2030 General Plan identifies a number of actions to be taken by the County and different entities within the county to preserve aquifer recharge areas and support groundwater recharge projects, many of the actions necessary to successfully manage water resources and use in the county are beyond the control of Merced County government. Due to the uncertainty of future water management efforts to be conducted by these many different entities, insufficient future groundwater supplies may be experienced in portions of the county. Consequently, this impact would remain significant and unavoidable. There are no additional or technically feasible mitigation measures available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact HYD-3: Substantially alter existing drainage patterns within the county, including alteration of a stream course or river, in a manner which would result in detrimental flooding to property or infrastructure or substantial erosion or siltation that may be carried to a receiving water body (Draft PEIR, pps. 13-34 to 13-37)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

The value of natural streams and drainages in providing habitat, floodwater overbanking, recharging of groundwater, and aiding water quality is now recognized, and these values are often balanced with development needs statewide. The 2030 General Plan encourages the preservation of natural drainages and provides the following goals and policies listed in Draft PEIR Table 13-5 to protect creeks and drainages directly and indirectly through water and watershed protections (Draft PEIR, pps. 13-34 to 13-36).

Requirements to reduce post-construction runoff volumes and incentives to provide on-site storm water retention facilities by 2012 under the NPDES General Permit for construction, the Merced County Storm Water Management programs under the current MS4 permit and additional targeted restrictions for industrial and municipal discharges as part of the draft General Permits currently being circulated for adoption would prevent sharp increases in flows released to, or conveyed through, existing natural drainage channels or streams, thereby minimizing the potential for increased erosion or sedimentation as a result of development. The 2030 General Plan policies promote watershed protection, but do not directly limit new development from infringing upon or

modifying existing creeks or streams that could result in destabilizing banks or reducing flood capacity (Draft PEIR, p. 13-36).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because implementation of the 2030 General Plan would lead to continued urban development that could further alter natural drainages or streams, resulting in localized flooding or accelerated erosion and increased sediment loading downstream from increased, concentrated, or redirected runoff, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure HYD-3a:

Implement Mitigation Measure HYD-2a: Amend Policy W-4.1: Water Resource Protection and Replenishment.

Mitigation Measure HYD-3b:

Add the following policy:

Policy NR-3.14: Drainage Course Setbacks

Within all areas designated for urban land uses by the 2030 General Plan, all structures, paving, or grading shall be set back from rivers, creeks, channels or other major waterways at least twenty feet from the top of bank or twenty feet plus twice the channel depth measured from the toe of the near embankment, whichever is greater, unless a greater setback is required by state or federal regulation.

Mitigation Measure HYD-3c:

Amend Policy NR-3.7: Merced River Corridor Buffers, as follows:

~~Encourage~~ **Require** surface mining operations in dredge tailing areas along the Merced River corridor to design riparian vegetation buffers consistent with the Merced River Corridor Restoration Plan.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by giving the County direct oversight of new development that could potentially conflict with or modify natural or fairly undisturbed creeks and streams in order to ensure that the stream channel bed and banks do not become a new source of erosion and sedimentation, and that there is no increase in flooding risk to adjacent properties. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

J. LAND USE

Land Use setting information for the 2030 General Plan project is set forth in pages 14-1 through 14-16 of the Draft PEIR. The impact evaluation criteria and analysis methodology used in assessing impacts to land use as a result of implementing the Project are set forth in the Draft PEIR on page 14-17. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

Impact LU-1: Physically divide an established community (Draft PEIR, pps. 14-18 to 14-26)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

The physical division of an established community refers to the construction of a physical feature such as an interstate highway, major roadway, high-speed rail line, utility infrastructure expansion, or the removal of access features that would impair connections within a community. Such features may also impair the mobility between communities and other areas. For example, the construction of a highway through an existing community may make it difficult for residents to travel within the community, or from one community to another. Implementation of the proposed 2030 General Plan would direct future urban development on a countywide scale within the unincorporated portions of the county. While the County seeks to direct growth to designated urban communities, this development would be accompanied by the extension of public services, utility infrastructure, and transportation improvements. Major infrastructure associated with the extension of services, specifically major roadway improvement projects, may physically divide established communities. Roadway improvements projects such as highway interchange improvements proposed at Interstate 5 and State Route 152 could divide communities, such as the Villages at Laguna San Luis. Such projects could make it difficult for residents to travel from one community to another, specifically where communities are located immediately adjacent to the proposed improvements (Draft PEIR, p. 14-18).

To minimize the potential that infrastructure projects would divide communities, the 2030 General Plan was designed in recognition of Cities and designated unincorporated urban communities to ensure that land uses are well distributed, well-planned, occur in an orderly pattern and manner, and provide services for all existing and future residents of the county. The 2030 General Plan was also designed to address the potential for the physical division of communities by actual or visual obstructions. The 2030 General Plan addresses these potential obstructions by directing development to designated communities, and by providing the orderly extension of roadways and infrastructure to serve existing and proposed new growth. The Land Use Diagram also contains open space corridors, and recreation and park lands intended to increase connections between communities, which would result in beneficial impacts. The implementation of these planning concepts would help ensure that future land use decisions balance development and associated infrastructure at appropriate locations so that needed roadways and utility infrastructure improvements do not divide communities. Further, the 2030 General Plan contains numerous goals and policies designed to ensure that communities and neighborhoods remain cohesively connected, that urban services are adequately provided, and that urban sprawl is prevented (Draft PEIR, p. 14-18).

The 2030 General Plan contains proposed goals and policies in the Land Use, Circulation, and Public Facilities and Services Elements that would prevent physically dividing an established community, as shown in Table 14-2 (Draft PEIR, pps. 14-18 to 14-24). Land Use Element Goal LU-1 and its supporting policies create a countywide land use pattern that enhances the integrity of both urban and rural areas by focusing urban growth towards existing or suitably located new communities, thereby minimizing the physical division of a community. Goal LU-5.A and its policies seek to preserve and enhance the character of Merced County by focusing future unincorporated development towards Urban Communities, also known as established existing planned communities. Goal LU-5.B and its supporting policies address community character and design in the effort to preserve the unique character and heritage of the county. Such goals and policies would limit the development of land uses that could contribute to an indirect physical division of established communities, such as the abandonment of older neighborhoods. Goal LU-7 would ensure development in the county/city fringe areas is well-planned and adequately serviced by necessary public facilities and infrastructure. In particular, Policy LU-7.1 encourages infill development; such development would not result in physically dividing an established community (Draft PEIR, p. 14-24).

The Circulation Element also provides guidance on the future development of the transportation network within the county to support integrated communities. The Circulation Element contains Goals CIR-1, CIR-3, and CIR-5. Through these goals the County seeks to maintain an efficient roadway system for the movement of people and goods, a public transit system that will provide viable alternatives to automobile travel, and a rail transportation system that will serve freight and passenger needs efficiently. In addition, the County is dedicated to creating complete streets designed to establish a comprehensive, integrated, and connected transportation network, which would better connect existing communities rather than divide them. Complete streets may also reduce demands on the roadway network because they integrate infrastructure that supports alternative modes of transportation, thereby minimizing the need to widen roadways or construct roadway bypasses. This policy shift would provide more transportation choices that, over time, could reduce the demands on county roadways, minimize the need for new roadway improvements, and lessen the likelihood that such improvements would physically divide communities (Draft PEIR, pps. 14-24 to 14-25).

In general, new development associated with the proposed 2030 General Plan would represent a continuation of the existing community areas of the county, and would not result in the physical division of an existing community within any of the county planning areas. However, although proposed goals and policies would ensure that new development would support and maintain the cohesiveness of the existing built environment, project-specific development projects at certain locations related to new development (e.g., new roadways, expanded utility and transmission lines) could physically divide existing communities. These types of major infrastructure projects would result in the construction of a physical feature that could impair connections within a community (Draft PEIR, p. 14-25).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that although the increase in urban development under total buildout of the 2030 General Plan would be directed to existing urbanized areas within incorporated cities and within designated unincorporated communities, and the project

was designed to support orderly and well-balanced growth patterns, because the plan itself and its infrastructure components, specifically highway improvements depending on their location, could physically divide a community, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure LU-1a:

Amend Policy CIR-1.2: Efficient Transportation Network, as follows:

Encourage land use patterns that promote shorter travel distances between residences and employment centers within Merced County, allow for non-auto travel, plan for multi-modal access for communities near I-5 and other major roadways, provide traffic-calming on local roadways, and promote the efficient expansion and maintenance of transportation-related infrastructure to avoid constructing new roadways that would cause the physical division of existing communities.

Mitigation Measure LU-1b:

Amend Policy PFS-5.3: New Transmission and Distribution Lines, as follows:

Encourage new transmission and distribution lines to be sited within existing utility easements and right-of-ways or utilize joint-use of easements among different utilities to avoid impacting existing communities.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by ensuring additional oversight is taken into consideration when siting and constructing new roadway links and utility infrastructure corridors such as major highway bypasses, interchanges, and transmission and distribution lines. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

K. NOISE

Noise setting information for the 2030 General Plan project is set forth in pages 15-1 through 15-6 of the Draft PEIR. The impact evaluation criteria and analysis methodology used in assessing impacts due to noise as a result of implementing the Project are set forth in the Draft PEIR on pages 15-6 through 15-7. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

Impact NSE-4: *A substantial permanent increase in ambient noise levels in the project vicinity above levels without the project - Traffic noise level increases at existing sensitive uses caused by development consistent with the 2030 General Plan (Draft PEIR, pps. 15-18 to 15-19)*

Finding: *This would be a significant and unavoidable impact*

Explanation:

Implementation of the 2030 General Plan, along with regional growth and traffic conditions, would cause traffic noise level increases ranging from 0 to 14 dB L_{dn} relative to existing traffic noise levels, as indicated in Draft PEIR Table 15-1. As listed in Draft PEIR Table 15-1, of the 47 roads and highways evaluated, 25 had traffic noise increases in excess of the increases allowed by Policy HS-7.9 under year 2030 traffic conditions as measured at 100 feet from the roadway centerline. Of the 25 roads with perceptible noise increases, predicted noise levels for 10 roadways exceeded the exterior noise standards for residential uses as set forth in Draft PEIR Table HS-1. For example, Draft PEIR Table 15-1 indicates that land uses adjacent to State Route 33, between Interstate 5 and Gustine (State Route 140 South), would be exposed to traffic noise levels resulting from future development within the county under the 2030 General Plan which are 11 dB higher than existing traffic noise levels. Because a traffic noise level increase of 1.5 dBA to 5 dBA L_{dn} is commonly considered the threshold of significance, depending on existing levels without the project, the thresholds of significance would be exceeded along this segment. At buildout of the 2030 General Plan, adverse traffic noise impacts would occur at more locations and the magnitude of such effects would be greater (Draft PEIR, p. 15-18).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because of the potential for adverse levels of future traffic noise to impact existing sensitive land uses at roadways throughout the county, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure NSE-4a:

Add the following policy:

Policy HS-7.14: Transportation Noise Mitigation Program

Adopt a countywide transportation noise mitigation program to reduce transportation noise levels at existing sensitive land uses.

Mitigation Measure NSE-4b:

Add the following program:

Program HS-L: Noise Sensitive Land Uses Near Major Transportation Noise Sources

For roadways, railways, and other sources of transportation noise estimated to produce noise levels in excess of General Plan standards, document the locations of all existing noise sensitive land uses, including but not limited to hospitals, schools, and residential dwellings. Predict noise levels at the noise sensitive land uses. If noise levels exceed General Plan standards, identify feasible mitigation measures, including a funding source for implementation of the measures. The mitigation program could include, but should not be limited to, the following specific elements for noise abatement consideration where reasonable and feasible: noise barrier retrofits; truck usage restrictions; reduction of speed limits; use of quieter paving materials; building façade sound insulation; traffic calming; additional enforcement of speed limits and exhaust noise laws; and signal timing.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by adding a policy and program that could result in a reduction of traffic noise levels at affected sensitive receptor locations. Despite the implementation of such a noise abatement program, it is not possible to ensure that all affected existing residential uses would not be exposed to future traffic noise levels exceeding the County's noise standards, or significantly exceeding the levels they are exposed to today. For example, it may not be possible to construct a noise barrier at an existing residence due to engineering constraints (utility easements or driveway openings), and building façade sound insulation would only benefit interior spaces, so outdoor activity areas may still be affected. It may also be infeasible to reduce speed limits in areas where speed surveys would not safely support the reduction. In addition, busy streets tend to also serve commercial uses, so restricting trucks on the busier streets may be impractical or illegal. Although a combination of the listed measures could be highly effective in reducing traffic noise levels on a countywide basis, it is not possible to state with certainty that it would be possible to mitigate this impact at every noise-sensitive use within the county. Consequently, this impact would remain significant and unavoidable. There are no additional or technically feasible mitigation measures available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact NSE-5: Expose people to, or generate excessive groundborne vibration or groundborne noise levels (Draft PEIR, pps. 15-19 to 15-24)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

The assessment of the exposure of people to groundborne vibration or noise is based on an analysis of the spatial location of development allowed by the 2030 General Plan with respect to existing and potential future sources of groundborne vibration or noise. Increased exposure to sources of groundborne vibration could occur where new residential or other sensitive uses would be located within proximity to noise generating activities (e.g., industrial, railroad), or where the development of a vibration-producing industrial operation takes place near existing sensitive uses. Specifically, vibration created through construction and industrial activities, or through the operation of railways, could result in potentially significant impacts on local residents (Draft PEIR, pps. 15-19 to 15-20).

Groundborne vibration can be a serious concern for nearby neighbors of a rail line or other groundborne vibration-generating use, causing buildings to shake and rumbling sounds to be heard. In contrast to airborne noise, groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and the operation of heavy earth-moving equipment (Draft PEIR, p. 15-20).

The effects of groundborne vibration include noticeable movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, or a rumble noise. The rumble is the noise radiated from the motion of the room surfaces. In essence, the room surfaces act like a giant loudspeaker causing what is called groundborne noise. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for normal transportation projects, with the occasional exception of blasting and pile-driving during construction. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings (Draft PEIR, p. 15-20).

In contrast to airborne noise, groundborne vibration is not a phenomenon that most people experience every day. The background vibration velocity level in residential areas is usually 50 VdB⁵ or lower, well below the threshold of perception for humans, which is around 65 VdB. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible (Draft PEIR, p. 15-20).

⁵ The response of humans, buildings, and equipment to vibration is more accurately described using velocity. The accepted reference quantities for vibration velocity are 1×10^{-6} inches/second in the United States. Although not a universally accepted notation, the abbreviation “VdB” is used in the PEIR for vibration decibels to reduce the potential for confusion with sound decibels.

Draft PEIR Figure 15-1 illustrates common vibration sources and the human and structural response to groundborne vibration. The range of interest is from approximately 50 VdB to 100 VdB. Background vibration is usually well below the threshold of human perception and is of concern only when the vibration affects very sensitive manufacturing or research equipment (Draft PEIR, p. 15-20).

Although the perceptibility threshold is about 65 VdB, human response to vibration is not usually significant unless the vibration exceeds 70 VdB. Rapid transit or light rail systems typically generate vibration levels of 70 VdB or more near their tracks. On the other hand, buses and trucks rarely create vibration that exceeds 70 VdB unless there are bumps in the road. Because of the heavy locomotives on diesel commuter rail systems, the vibration levels average about five to 10 decibels higher than rail transit vehicles. If there is unusually rough road or track, wheel flats, geologic conditions that promote efficient propagation of vibration, or vehicles with very stiff suspension systems, the vibration levels from any source can be 10 decibels higher than typical. Hence, at 50 feet, the upper range for rapid transit vibration is around 80 VdB and the high range for commuter rail vibration is 85 VdB. If the vibration level in a residence reaches 85 VdB, most people will be strongly annoyed by the vibration (Draft PEIR, p. 15-21). Different modes of transportation yield different effects from groundborne vibration and noise, and are summarized in Draft PEIR pages 15-21 through 15-22.

The purpose of vibration mitigation is to minimize the adverse effects that the project groundborne vibration will have on sensitive land uses. Because groundborne vibration is not as common a problem as environmental noise, the mitigation approaches have not been as well defined. Additionally, the vibration control measures developed for rail transit systems are not effective for freight trains. The heavy axle loads associated with freight rail are outside the range of applicable design parameters for vibration reduction on lighter rail transit systems. Potential mitigation approaches that could be used include: building modifications; trenches between the vibration source and the sensitive use; operational changes of the transportation sources; and buffering. Of these, the potential mitigation most applicable to the 2030 General Plan would be buffering (Draft PEIR, p. 15-22).

As shown in Draft PEIR Table 15-2, 2030 General Plan Policies HS-7.2 and HS-7.12 require the use of project-specific noise mitigation measures (completion of acoustical studies, use of buffering, and implementation of other noise abatement measures, as necessary) to mitigate noise impacts. While implementation of the 2030 General Plan policies as described above would reduce the potential for noise levels generated by new noise-producing land uses to exceed the standards for new sensitive land uses or the siting of new uses in areas of adverse noise levels, no aspect of these two policies applies to groundborne vibration or groundborne noise. Additionally new sources of groundborne vibration or noise that could locate near existing sensitive land uses are unaddressed.

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that even with implementation of the noise policies of the 2030 General Plan, because new development could be located near existing sources of groundborne vibration or noise, or existing development could be exposed to new sources, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure NSE-5a:

Amend Policy HS-7.2: Acoustical Analysis Requirements, as follows:

Acoustical and Groundborne Vibration Analysis Requirements

Require development project applicants to prepare an acoustical analysis as part of the environmental review process when noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels shown in Tables HS-1 and HS-2.

Require an analysis of groundborne vibration for proposed residential and other sensitive projects (including but not limited to hospitals and schools) located within 1,000 feet of a rail line with at least 30 operations per day or an existing industrial groundborne vibration source.

The acoustical and groundborne vibration analyses shall:

- a) Be the responsibility of the applicant;
- b) Be prepared by qualified persons experienced in the fields of environmental noise and groundborne vibration assessment and architectural acoustics;
- c) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions;
- d) Estimate projected future (20 year) noise levels relative to the standards shown in Tables HS-1 and HS-2 at the property line of the proposed use, and, as applicable, estimate project future groundborne vibration levels using a maximum vibration standard of 70 VdB;
- e) Recommend appropriate mitigation to achieve compliance with the adopted policies and standards in this element, including setbacks from groundborne vibration sources causing adverse levels of vibration; and
- f) Estimate interior and exterior noise, and groundborne vibration exposure after the prescribed mitigation measures have been implemented at the property line.

Mitigation Measure NSE-5b:

Amend Policy HS-7.4: New Noise Generating Uses, as follows:

New Noise or Groundborne Vibration Generating Uses

Require new commercial and industrial uses to minimize encroachment on incompatible noise or groundborne vibration sensitive land uses. Also consider the potential for encroachment by residential and other noise or groundborne vibration sensitive land uses on adjacent lands that ~~which~~ could significantly impact the viability of the commercial or industrial areas.

Mitigation Measure NSE-5c:

Amend Policy HS-7.7: Noise Impacted Residential Area Monitoring, as follows:

Noise or Vibration Impacted Residential Area Monitoring

Consider any existing residential area “noise or vibration impacted” if the exposure to exterior noise exceeds the standards shown in Table HS-2 or if groundborne vibration levels exceed 70VdB. Identify and evaluate potential noise or groundborne vibration impacted areas and identify possible means to correct the identified noise/land use incompatibilities.

Mitigation Measure NSE-5d:

Amend Policy HS-7.8: Project Design, as follows:

Require land use projects to comply with adopted noise and vibration standards through proper site and building design, such as building orientation, setbacks, natural barriers (e.g., earthen berms, vegetation), and building construction practices. Only consider the use of soundwalls after all design-related noise mitigation measures have been evaluated or integrated into the project or found infeasible.

Mitigation Measure NSE-5e:

Amend Policy HS-7.9: Transportation Project Construction/Improvements, as follows:

Require transportation project proponents to prepare all acoustical analysis for all roadway and railway construction projects in accordance with Policy HS-7.2; additionally, rail projects shall require the preparation of a groundborne vibration analysis in accordance with Policy HS-7.2. Consider noise mitigation measures to reduce traffic and/or rail noise levels to comply with Table HS-1 standards if pre-project noise levels already exceed the noise standards of Table HS-1 and the increase is significant. The County defines a significant increase as follows:

Pre- Project Noise Environment L_{dn}	Significant Increase
Less than 60 dB	5+ dB
60 - 65 dB	3+ dB
Greater than 65 dB	1.5+ dB

Mitigation Measure NSE-5f:

Add the following policy:

Policy HS-7.15: New Project Groundborne Vibration Mitigation Requirements

For residential projects within 1,000 feet of a rail line with at least 30 operations per day, or an existing industrial or commercial groundborne vibration source, require new residential projects to include appropriate groundborne vibration mitigation measures to reduce groundborne vibration levels to less than 70 VdB within structures. However, if a groundborne vibration-generating use is proposed adjacent to lands zoned for residential uses, then the groundborne vibration-generating use shall be responsible for mitigating its groundborne vibration generation to a state of compliance with the 70 VdB standard at the property line of the generating use in anticipation of the future residential development.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by adding and amending existing policies that would result in a reduction of vibration levels for new development at affected sensitive receptor locations to meet standards designed to minimize levels of human irritation and annoyance. Similarly, implementation of these measures would prevent the incursion of new sensitive uses into areas of adverse groundborne vibration or groundborne noise. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

L. POPULATION AND HOUSING

Population and Housing setting information for the 2030 General Plan project is set forth in pages 16-1 through 16-11 of the Draft PEIR. The impact evaluation criteria and analysis methodology used in assessing impacts to population and housing as a result of implementing the Project are set forth in the Draft PEIR on page 16-12. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

Impact POP-1: Induce substantial population growth, either directly or indirectly (Draft PEIR, pps. 16-12 to 16-24; Final PEIR, pps. 4-86 to 4-98)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

Growth Induced by Land Use Patterns Set Forth in the Land Use Diagram

This evaluation of growth inducement is based on a quantitative analysis of increases in population and employment, and the land necessary to accommodate such uses resulting from full buildout of the 2030 General Plan. The evaluation compares such growth to the demand for housing and employment projected by state and regional agencies. The proposed 2030 General Plan does not propose population growth caps (Draft PEIR, p. 16-13; FPEIR, p. 4-86).

Population growth anticipated in the Draft PEIR with implementation of the 2030 General Plan is based on the ultimate holding capacity under the General Plan, or the total amount of development that could be accommodated by the General Plan regardless of time. More specifically, the land use patterns set forth in the 2030 General Plan are based on the 2000 Merced County General Plan, amendments to that Plan, and approved projects since that plan, including recent Community Plan update projects. Large development projects, such as the Fox Hills Golf Course Community Plan, Villages of Laguna San Luis, University Community, and the updates to unincorporated urban area community plans, such as the Hilmar Community Plan (2008), are part of the amended 2000 Merced County General Plan, and hence provide the foundation for the 2030 General Plan. The land uses being proposed under the 2030 General Plan are not being changed or expanded to house a greater population than under the existing 2000 Merced County General Plan as amended through 2011 since the 2030 General Plan does not designate any additional land for residential or commercial uses beyond that designated under the existing 2000 Merced County General Plan (Draft PEIR, p. 16-13; FPEIR, p. 4-86).

It is unlikely that all urban uses identified in the 2030 General Plan would be constructed and occupied by the year 2030. However, the Draft PEIR evaluates total buildout conditions under the 2030 General Plan, meaning that the Draft PEIR considers the population and employment that may be induced if all the land uses designated by the 2030 General Plan for residential uses were developed and all commercial and industrial uses were operating and providing for new employment by 2030 (Draft PEIR, p. 16-13; FPEIR, p. 4-86).

Forecasts of population and employment growth are prepared for planning purposes by both the Merced County Association of Governments (MCAG) and the California Department of Finance. MCAG projections indicate that by 2030, the General Plan horizon year, forecast development

within Merced County could result in 52,065 total residential units and 47,862 total jobs within the unincorporated county. This forecast (52,065 residences plus associated employment) forms the basis for the following analysis. Should the 2030 General Plan result in the provision of a substantial number of dwellings or employment beyond the amount that would be necessary to provide for the needs of forecasted growth, the 2030 General Plan could be considered growth inducing. If the number of dwellings or employment reasonably matched that required, the 2030 General Plan could be considered not to be growth inducing (Draft PEIR, p. 16-13; FPEIR, p. 4-87).

As shown in Draft PEIR and Final PEIR Table 16-7, based on total buildout capacity, the full implementation of the 2030 General Plan would result in the construction of 56,425 dwelling units in the unincorporated county, including 51,199 single-family units and 5,226 multi-family units. Provision of these residential units would result in the development of approximately 13,275 acres for residential uses, including the acreage devoted to residential development in 2010 plus the acreage developed by 2030 to host such uses. The 2030 General Plan buildout number of residences (56,425) would be greater than the demand for residential uses (52,065) forecast for 2030 by MCAG. Based on a comparison of these two numbers, it can be concluded that, at buildout, the 2030 General Plan designates more land for residential uses than would be necessary to meet forecast demand (Draft PEIR, p. 16-13; FPEIR, p. 4-87).

Assuming 56,425 residential units could be constructed under total buildout conditions by 2030, and the average household size in Merced County is 3.2 residents per unit, implementation of the 2030 General Plan could translate to an increase of approximately 180,560 new residents, a number greater than that projected under either MCAG or DOF forecasts. (Draft PEIR, p. 16-14; FPEIR, p. 4-87).

As shown in Draft PEIR and Final PEIR Table 16-8, implementation of the 2030 General Plan could result in the generation of a total of 58,615 jobs. This includes an estimated 11,376 agricultural jobs, 12,949 industrial jobs, 23,059 retail jobs, and 11,231 office jobs. This employment growth would result in the development of approximately 4.5 million square feet of commercial and industrial space, or approximately 596 acres of commercial development. The 2030 General Plan buildout amount of employment (58,615 jobs) would be greater than the demand for employment (47,862 jobs) forecast for 2030 by MCAG. Based on a comparison of these two numbers, it can be concluded that, at buildout, the 2030 General Plan designates more land for employment-generating land uses (commercial, industrial) than would be necessary to meet forecast demand (Draft PEIR, p. 16-14; FPEIR, pps. 4-87 to 4-88).

The population, housing units, and employment that would result from implementation of the 2030 General Plan, if fully built out, would be greater than the 2030 MCAG projections. Implementation of total buildout envisioned under the 2030 General Plan could add approximately 13,960 more residents (8 percent increase) and 4,365 more housing units than are currently anticipated by MCAG projections. The large amount of population, employment, and housing growth, and the acceleration of such growth, to be accommodated under the 2030 General Plan could, if realized, induce inefficient, unsustainable population growth near job centers within cities, cities' spheres of influence, or near designated unincorporated urban communities that could exceed the financial and physical capacity of the County and other service providers to maintain adequate levels of public services. Providing for this level of development could be growth-inducing, primarily with respect to the timing of development. While induced growth could result in direct impacts if not enough land or infrastructure is available to accommodate growth, it is the secondary impacts from

population growth that can result in the most significant environmental effects. The secondary effects of induced growth are evaluated throughout the Draft PEIR, RDPEIR, and Final PEIR, and all analyses assume that land uses identified in the 2030 General Plan would be fully built out by the year 2030 (Draft PEIR, pps. 16-14 to 16-15; FPEIR, p. 4-88).

However, several factors merit against the potential for these adverse effects to occur from implementation of the 2030 General Plan proposed land use pattern. The first, and most important, is that the 2030 General Plan does not designate any additional areas for urban land uses beyond those identified in the existing 2000 General Plan. In other words, the 2030 General Plan does not designate any area that could host new residential, commercial, or industrial uses beyond those currently existing. Thus, implementation of the 2030 General Plan would not induce any growth or the capacity for growth beyond that currently identified in the 2000 General Plan (Draft PEIR, p. 16-15; FPEIR, p. 4-88).

Additionally, the 2030 General Plan contains goals and implementing policies to manage the location of growth within the county by directing new urban development to urban areas (see Draft PEIR Table 16-9). Both the existing 2000 General Plan and the proposed 2030 Merced County General Plans support the “urban centered concept.” The objective of the “urban centered concept” is to direct development to designated urban centers, such as cities and unincorporated communities, to accommodate urban expansion in an orderly manner based on the ability of communities to furnish public services and land needs according to population demands and employment-generating land uses. Urban land uses include residential, commercial, industrial, and related institutional uses that are more intensive than rural uses. In general, the concept supports orderly and logical growth, the efficient use of land, growth patterns that complement city land uses, and development where public services are available. The concept also reduces the potential for growth-inducing impacts associated with land availability in rural parts of the county, employment opportunities, and unplanned population growth (Draft PEIR, p. 16-15; FPEIR, pps. 4-88 to 4-89).

Finally, the development market ultimately will dictate the timing of new development. As a result of the extreme downturn in the real estate market that began in 2008, both in Merced and statewide, especially with respect to residential development, there is an oversupply of residential land in the development process in Merced County. Residentially-designated land currently in the development process ranges from projects with approved but unrecorded subdivision maps, partially constructed and unoccupied subdivisions, and completed, unsold residences, to a large inventory of completed, repossessed, and unoccupied homes. Until this backlog of approved, in process, or completed residential development is depleted, it is unlikely that additional conversion of lands designated for residential uses but used for agricultural or other open space uses would be converted. Given the large size of the backlog, it is unlikely that the development that would actually occur under the 2030 General Plan would approach the buildout conditions set forth in Draft PEIR and Final PEIR Tables 16-7 and 16-8 (Draft PEIR, p. 16-15; FPEIR, p. 4-89).

Growth Induced by Proposed 2030 General Plan Goals and Policies

Several goals and policies in the Land Use Element of the 2030 General Plan indicate the County’s willingness to consider new urban communities in areas of the county that are otherwise designated for continued rural land uses. These include Goal 1 and Policy LU-1.5, Policy LU-5.A.1, and Goal LU-5.F and its supporting policies (Draft PEIR, pps. 16-16 to 16-17; FPEIR, pps. 4-89 to 4-90).

The 2030 General Plan Land Use Diagram has not identified specific areas for new urban communities, and has established a number of conditions regarding where such communities might be located. The 2030 General Plan also has set forth a number of stringent requirements that must be met before the County could consider amending the General Plan land use map to establish a new community. However, no goal or policy of the General Plan addresses the market demand for the new residences and employment that would be generated by a new community. There is the potential that establishment of a new community could redirect planned and anticipated growth from the designated urban areas currently proposed in the 2030 General Plan, or, alternatively, that the new community would result in the growth of both residential, commercial, and industrial uses above and beyond that planned in the 2030 General Plan or forecast by MCAG. The secondary effects of this induced growth could range from land use and service delivery inefficiencies, and an increase in vehicle trips with a concurrent increase in air pollutant and greenhouse gas emissions, to the conversion of greater amounts of natural habitat than contemplated under the 2030 General Plan and evaluated in the PEIR. For these reasons, policies in the 2030 General Plan related to the establishment of new communities would result in a potentially significant growth inducing impact (Draft PEIR, p. 16-17; FPEIR, pps. 4-90 to 4-91).

Similar potential growth inducement could occur with the expansion of existing Urban Community boundaries. Policy LU-5.A.8 sets forth limitations on the expansion of Urban Community boundaries outside of the County's ongoing community plan update process. Expanded Urban Community boundaries could result in adverse effects, similar to those set forth above for new communities without consideration of the demand for the expansion of urban uses. For these reasons, policies in the 2030 General Plan related to the expansion of existing Urban Community boundaries during the life of the 2030 General Plan would result in a potentially significant growth inducing impact (Draft PEIR, p. 16-17; FPEIR, p. 4-91).

Population growth and development could also occur within rural portions of the unincorporated county in Rural Residential Centers (RRC) and through minor subdivision of parcels within agricultural areas. For rural residential centers, the 2030 General Plan includes Policy LU-3.4, which prohibits the creation of new Rural Residential Centers, but is silent on whether existing RRCs can be expanded. The potential expansion of existing RRCs could lead to low density urban growth, and development beyond that contemplated by the 2030 General Plan (Draft PEIR, p. 16-18; FPEIR, p. 4-91).

The potential for the development of residences within agricultural areas of the county as a result of the division of a single parcel into four or fewer parcels is evaluated in Impact AG-2, in Chapter 6, *Agricultural and Forestry Resources*, of the Draft PEIR and RDPEIR.

The existing 2000 General Plan allows the continuation of pre-existing isolated areas designated for urban uses provided they were not expanded or re-designated for more intensive land uses (see Chapter I, Land Use Policy 12). The proposed 2030 General Plan retains this policy. The 2030 General Plan also contains related policies that: direct growth to two primary urban areas (City Planning Areas, and Urban Communities such as Delhi, Hilmar, Planada, Santa Nella, and Winton); limit growth in less populated Rural Centers (Ballico, Cressy, Dos Pasos Y, El Nido, Stevinson, and Tuttle); and limit the expansion of Highway Interchange Centers (HIC) (Draft PEIR, p. 16-18; FPEIR, p. 4-91).

To address the need to accommodate and plan for orderly population growth, the 2030 General Plan includes several goals and policies under the Economic, Land Use, and Housing Elements as shown in Draft PEIR and Final PEIR Table 16-9 that would ensure responsible development within the county (Draft PEIR, pps. 16-18 to 16-21; FPEIR, pps. 4-91 to 4-95).

The policies in the Economic Development Element address the infrastructure, land, and resources needed for general economic development. Goal ED-1 and its supporting policies would support and promote growth and diversification of the County's economy. Implementation of this goal and policies would minimize any potential adverse effects of growth through policies that support the planning for future development, and by directing growth to locations that have existing infrastructure and include sufficient employment-based land uses to maintain the jobs/housing balance (Draft PEIR, p. 16-22; FPEIR, p. 4-95).

The Land Use Element contains various goals and policies that encourage the management of growth in an orderly and sustainable manner. Goals LU-1, LU-5.A, LU-6, and LU-7 would create a countywide land use pattern that enhances the integrity of both urban and rural areas by focusing urban growth towards existing communities. These goals are supported by several policies to ensure that population is accommodated in areas that are well planned and adequately serviced by public facilities and infrastructure, and that future growth could be accommodated through increased densities and within existing urban communities. Proposed land use policies discourage housing in inappropriate locations, and the extension of roadways and infrastructure that could induce unexpected population growth (Draft PEIR, p. 16-22; FPEIR, p. 4-95).

The 2010 Housing Element also contains policies that ensure growth would be managed in an orderly and well-planned manner. Goal HE-1 would provide for a broad range of housing types and densities to meet the needs of all residents. Implementation of identified supporting policies would avoid building infrastructure that would induce unplanned growth and development outside established water and sewer boundaries. Instead, 2030 General Plan policies prioritize placing development in well-defined, well-planned, and core areas with existing infrastructure and public services or planned improvements (Draft PEIR, p. 16-22; FPEIR, p. 4-96).

The primary purpose of the 2030 General Plan is to provide a framework to guide land use development and conservation within the unincorporated portion of Merced County. The 2030 General Plan contains numerous goals and policies to promote responsible development and an orderly and sustainable growth framework, to direct development to core urban areas where services and infrastructure are in place, and to balance job opportunities with housing resources. The 2030 General Plan at buildout could accommodate greater population and employment beyond that projected by MCAG forecasts. However, the proposed land uses under the 2030 General Plan are the same as those currently existing and no new growth areas have been identified, the 2030 General Plan contains strong goals and policies to direct future development to existing urban areas, and it is unlikely that growth that would occur by the year 2030, the horizon year for the 2030 General Plan, would exceed regionally forecast demand. For these reasons, the potential growth inducing effects of the 2030 General Plan with respect to urban areas would be considered less than significant (Draft PEIR, p. 16-22; FPEIR, p. 4-96).

With respect to new communities and the expansion of existing Urban Communities, implementation of 2030 General Plan goals and policies could redirect planned and anticipated growth away from the designated urban areas currently proposed in the 2030 General Plan.

Alternatively, establishment of a new community or the expansion of an existing Urban Community could result in the growth of both residential, commercial, and industrial uses above and beyond that planned in the 2030 General Plan or forecast by MCAG. The secondary effects of this induced growth could be those as set forth above (Draft PEIR, p. 16-22; FPEIR, p. 4-96).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and the Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because proposed policies could result in induced growth from new communities, expansion of exiting Urban Area boundaries, and in rural areas, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure POP-1a:

Amend Policy LU-5.F.2: New Urban Community Application Requirements, as follows:

Require all applicants for new Urban Community to provide:

- a. A complete Guidance Package submitted for review by the Board of Supervisors. The Guidance Package shall include the following components: project description and history; statement of understanding of the basic facts including a summary of compliance with items a through e listed under Policy LU-5.F.1; the roles of the applicant and County in preparation of the Community Plan and Environmental Impact Report; identification of the anticipated planning issues that will need to be addressed through the application process; and a project schedule. The Guidance Package will be valid two years upon submittal to the County. If two years pass before action is taken on the project, the project applicant shall submit a new/updated Guidance Package for Board consideration;
- b. A General Plan Amendment and Zone Change Application;
- c. A Community Plan consistent with State specific plan requirements, including the location and intensity of planned land uses and circulation system. The plan shall provide a mix of land uses and densities, including residential, commercial, mixed-use, employment-generating, and public facilities;
- d. An infrastructure Master Plan that identifies public and private infrastructure needs; service district or assessment area formation details; a development phasing plan; and a strategy for the installation, operations, and ongoing maintenance of infrastructure required to support growth. This plan shall be consistent with all applicable private, local, regional, State, and Federal infrastructure, regulations, and programs related to transportation, sewage and wastewater treatment, water quality and quantity, drainage, parks and open space, and any other public facilities, infrastructure, and services;
- e. A Fiscal Impact Analysis that includes an assessment of projected tax revenues compared to projected County service costs in order to demonstrate that the project will have a fiscally neutral or positive impact on the County and any special districts that provide services to the project;
- f. A Market Demand Study that demonstrates how the proposed Urban Community will affect existing unincorporated communities in the County. This shall include an analysis of how and where new residents will shop/work and how their economic characteristics/trends will

affect the overall economic characteristics of the County. The analysis shall additionally include a demonstration of the need for the expansion of the community taking into consideration the land available for urban uses within other Urban Communities in unincorporated areas of the county;

- g. A program to ensure that the project will provide a full range of needed public services, including fire protection, law enforcement, parks, library, community center, and other necessary public services;
- h. A public outreach program to adjacent property owners and applicable community groups/organizations;
- i. A plan for coordination with other local, regional, State, and Federal agencies that have regulation authority over the project;
- j. Funding for the preparation of a project-specific Environmental Impact Report;
- k. Commitment to enter into a Reimbursement Agreement requiring deposits into a Planning Trust Fund with Merced County for all, or an agreed upon portion, of the estimated cost of the General Plan Amendment, Environmental Impact Report preparation, Infrastructure Master Plan, and peer review.

Mitigation Measure POP-1b:

Implement Mitigation Measure AG-3c, which would prohibit the expansion of existing Rural Residential Centers or the creation of new Centers.

Mitigation Measure POP-1c:

Implement Mitigation Measures AG-5a through AG-5h, which would limit future residential development within agricultural areas of Merced County.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by limiting the potential for Urban Community expansion or the establishment of new communities to result in unplanned or inefficient growth. The measures also would limit urban and scattered residential development in areas outside cities, cities' spheres of influence, and designated urban communities elsewhere in the unincorporated areas of Merced County. Potential effects in rural areas that would be avoided or significantly reduced include interference with continued agricultural operations, conversion of agricultural lands and biological habitat to developed uses, exposure of residential uses to flood hazards, increase in vehicle traffic leading to increase emissions of air pollutants and greenhouse gases, and increased or inefficient demands for community services and utilities. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

M. TRANSPORTATION

Transportation setting information for the 2030 General Plan project is set forth in pages 19-1 through 19-5 of the Draft PEIR. The impact evaluation criteria and analysis methodology used in assessing impacts to transportation as a result of implementing the Project are set forth in the Draft PEIR on pages 19-5 through 19-12. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

Impact TRF-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness of Merced County roads (Draft PEIR, pps. 19-13 to 19-26)

Finding: This would be a significant and unavoidable impact

Explanation:

Draft PEIR Table 19-4 lists the roadway segments that are projected to operate at LOS D, E, or F. Under Year 2030 conditions, eighteen (18) segments would exceed the LOS C minimum threshold. Under buildout conditions, thirty one (31) roadway segments would exceed the minimum LOS C / LOS D standard (Draft PEIR, pps. 19-13 to 19-14). Draft PEIR Table 19-5 presents proposed General Plan policies that would help to avoid or reduce traffic impacts (Draft PEIR, pps. 19-14 to 19-19).

The traffic analysis conducted for the 2030 General Plan recognizes the regional effects of major regional circulation system improvements. Major capacity improvement in one location can attract traffic that concurrently reduces traffic volumes on other roadway segments. Thus, the overall mitigation strategy for Merced County's roadways combines improvements to the state highway system, construction of new routes, and localized improvements.

Under Year 2030 and buildout conditions the regional roadway improvements identified in Draft PEIR Table 19-6 would be needed to address impacts to county roads (Draft PEIR, p. 19-19).

As shown in Draft PEIR Table 19-7, even with these regional improvements, ten roadway segments would continue to exceed the LOS C / D minimum standard in Year 2030. Additional local improvements would be required to deliver LOS C / LOS D on all county roadways in the year 2030. Draft PEIR Table 19-8 identifies the local improvements that would be required to deliver minimum standard Level of Service on Merced County roads in the Year 2030 (Draft PEIR, p. 19-20).

Implementation of these identified local roadway improvements would result in Merced County Roads operating at LOS C / LOS D in the year 2030 as noted. However, current funding mechanisms for roadway improvements are limited, and neither the existing Regional Traffic Impact Fee administered by MCAG nor the County's local Bridge and Major Thoroughfare programs administered within community plan areas cover these improvements. To deliver acceptable Levels of Service it would be necessary to create a funding mechanism to address the costs of both regional and local improvements in a manner that addresses the proportionate share of regional growth generated outside of Merced County and inside of incorporated cities (Draft PEIR, p. 19-20).

Under buildout conditions, the regional improvements identified in Draft PEIR Table 19-6 would still be required, and the portion of SR 152 west of the Los Banos Bypass would need to be upgraded to freeway status. With these regional improvements, sixteen (16) roadway segments would continue to exceed the LOS C / LOS D minimum standard in Year 2030. The local improvements shown in Draft PEIR Table 19-9 would be required to deliver LOS C / LOS D on all county roadways at buildout (Draft PEIR, p. 19-20).

Implementation of these identified mitigation measures would result in Merced County roads operating at LOS C or LOS D at buildout as noted. However, the length of time that may be needed for the incorporated area of Merced County to actually buildout is at best speculative, and is likely to far exceed the year 2030 horizon. Funding mechanisms for roadway improvements are limited, and neither the Regional Traffic Impact Fee administered by MCAG nor the County's local Bridge and Major Thoroughfare programs administered within community plan areas cover these improvements, nor is there a State-level program adopted generating funding for upgrading State Highways for regional pass-through traffic. While it would be necessary to eventually create a funding mechanism to address the costs of both regional and local improvements under buildout conditions, immediate creation of a mechanism to construct buildout improvements would be premature (Draft PEIR, p. 19-20).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because implementation of the proposed 2030 General Plan would lead to additional traffic on Merced County roads, and resulting traffic operations would exceed the LOS C (rural) / LOS D (urban) standards, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure TRF-1a:

Amend the 2030 General Plan Circulation Diagram to incorporate the regional roadway improvements listed in Table 19-6 of the Draft PEIR to reduce adverse operational traffic impacts under both 2030 and buildout conditions.

Mitigation Measure TRF-1b:

Amend the 2030 General Plan Circulation Diagram to incorporate the local roadway improvements listed in Table 19-8 of the Draft PEIR to reduce adverse operational traffic impacts under 2030 conditions.

Mitigation Measure TRF-1c:

Add the following program:

Implementation Program CIR-J: Modify Regional Transportation Improvement Fees

Work with MCAG, cities within the county and Caltrans to create a regional approach to addressing the costs of improvements needed to roads and highways as described in

Tables 19-6, 19-8, 19-13, and 19-18 of the Draft Program EIR through implementation of an expanded regional fee program.

Mitigation Measure TRF-1d:

Modify Implementation Program CIR-A: Traffic Impact Study, to add the following language:

Develop and adopt Traffic Impact Study Guidelines that identify the significance of traffic impacts when background traffic conditions, existing or in the future, exceed the County's minimum Level of Service goals.

Mitigation Measure TRF-1e:

Add the following program:

Implementation Program CIR-K: Buildout Right of Way Reservation and Fee Program

Work with MCAG, cities within the county and Caltrans to create a regional approach to address the preservation of rights of way, and the funding for such rights of way, needed to improve roads and highways under buildout conditions as described in Tables 19-9, 19-14, and 19-19 of the Draft PEIR through implementation of an expanded regional fee program.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by adding and modifying policies and programs that would result in all segments of Merced County roads operating within the LOS C (rural) / LOS D (urban) minimum standard. However, the cost of both the construction of improvements needed by the year 2030 and the preservation of rights of way needed to accommodate buildout improvements are beyond the control of Merced County alone. There is no guarantee that other jurisdictions will elect to participate in the cost of identified improvements in the unincorporated area of Merced County. Because improvements on State Highways and in other jurisdictions may not be installed, this impact would remain significant and unavoidable. There are no additional or technically feasible mitigation measures available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact TRF-2: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness of State Highways (Draft PEIR, pps. 19-26 to 19-40)

Finding: This would be a significant and unavoidable impact

Explanation:

Draft PEIR Table 19-10 lists the segments of state highways that are projected to operate at LOS D, E, or F in locations where the Transportation Concept Reports mandate LOS C, or LOS E or LOS F in locations where the TCRs mandate LOS D. Under Year 2030 conditions, thirty five (35) segments would exceed the current LOS C or LOS D minimum thresholds. Under buildout conditions, forty (40) roadway segments would exceed the current minimum LOS C or LOS D standard (Draft PEIR, pps. 19-26 to 19-28). Draft PEIR Table 19-11 summarizes General Plan policies related to travel on state highways that may assist in addressing impacts to these locations (Draft PEIR, pps. 19-28 to 19-34).

The traffic analysis conducted for the General Plan recognizes the regional effects of major regional circulation system improvements. Major capacity improvement in one location can attract traffic and concurrently reduce traffic volumes on other roadway segments. Improvements to state highways and construction of the bypasses around Hilmar and Los Banos are important parts of the overall improvement program. A regional funding mechanism shall be created that addresses the proportionate share responsibility of Merced County development, of development occurring in incorporated cities, and the impact of traffic passing through Merced County (Draft PEIR, p. 19-34).

Under Year 2030 and buildout conditions the following regional roadway improvements previously identified in Draft PEIR Table 19-6 also would be needed to address impacts to state highways. Draft PEIR Table 19-12 identifies the Levels of Service occurring with implementation of these improvements. Under Year 2030 conditions, there would be 17 roadway segments that would continue to exceed the minimum LOS D standard and three rural locations where the minimum LOS C standard would be exceeded, and additional local improvements would be needed at these locations (Draft PEIR, pps. 19-34 to 19-36). Draft PEIR Table 19-13 lists the additional improvements that would be needed to needed minimum standards under year 2030 conditions (Draft PEIR, p. 19-37).

Implementation of these identified state highway improvements would result in state highways in Merced County operating at LOS C or LOS D in the year 2030 as noted. However, current funding mechanisms for roadway improvements are limited. Identified improvements are not included in funding plans identified by the RTP, and the existing Regional Traffic Impact Fee administered by MCAG does not cover these improvements. To deliver acceptable Levels of Service, it would be necessary to create a greatly expanded funding mechanism to address the costs of both regional and local improvements in a manner that addresses the proportionate share of regional growth generated outside of Merced County and inside of incorporated cities (Draft PEIR, p. 19-37).

Under buildout conditions, the regional improvements previously noted would still be required. With these regional improvements, twenty five (25) roadway segments would continue to exceed the LOS D minimum standard at buildout, and one (1) segment would exceed the LOS C minimum standard (Draft PEIR, p. 19-38).

Draft PEIR Table 19-14 lists the additional improvements that would be needed to meet minimum Level of Service standards under buildout conditions. In the case of the segment of SR 33 from SR 152 north to the California Aqueduct, the maximum foreseeable improvement (i.e., 10 lanes) would not yield LOS D (Draft PEIR, pps. 19-38 to 19-39).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because implementation of the proposed 2030 General Plan would lead to additional traffic on state highways in Merced County, resulting in traffic operations that would exceed the current LOS C / LOS D standards adopted by Caltrans, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure TRF-2a:

Implement Mitigation Measure TRF-1a: Amend the 2030 General Plan Circulation Diagram to incorporate the regional roadway improvements listed in Table 19-6 of the Draft PEIR to reduce adverse operational traffic impacts under both 2030 and buildout conditions.

Mitigation Measure TRF-2b:

Amend the 2030 General Plan Circulation Diagram to incorporate the state highway improvements listed in Table 19-13 of the Draft PEIR to reduce adverse operational traffic impacts under 2030 conditions.

Mitigation Measure TRF-2c:

Implement Mitigation Measure TRF-1c: Add Implementation Program CIR-J, Modify Regional Transportation Improvement Fees.

Mitigation Measure TRF-2d:

Implement Mitigation Measure TRF-1e: Add Implementation Program CIR-K, Buildout Right of Way Reservation and Fee Program.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by adding and modifying policies and programs that would result in satisfactory traffic operations on state highways, with one exception; however, there is no guarantee that a regional funding program will be created to construct all of the identified improvements needed by the year 2030, or to preserve the rights of way required for buildout of the unincorporated area of Merced County. Such a program is beyond the control of Merced County and would take the combined efforts of all agencies, including the County, MCAG, Caltrans, and the cities within Merced County. There are no additional or technically feasible mitigation measures available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA

Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact TRF-3: Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness of streets within incorporated cities in Merced County (Draft PEIR, pps. 19-40 to 19-48)

Finding: This would be a significant and unavoidable impact

Explanation:

Draft PEIR Table 19-15 lists the segments of streets excluding state highways within the planning area of incorporated cities that are projected to operate at LOS E or F. Under Year 2030 conditions, five (5) segments would exceed the current LOS C or LOS D minimum threshold adopted by the respective jurisdiction. Under buildout conditions, five (5) roadway segments would exceed the current minimum LOS C / LOS D standard (Draft PEIR, pps. 19-40 to 19-41). Draft PEIR Table 19-16 presents General Plan policies related to travel on city streets that may assist in addressing impacts (Draft PEIR, pps. 19-41 to 19-44).

The traffic analysis conducted for the General Plan recognizes the regional effects of major regional circulation system improvements. Major capacity improvement in one location can attract traffic and concurrently reduce traffic volumes on other roadway segments. Improvements to state highways and construction of the bypasses around Hilmar and Los Banos are important parts of the overall improvement program.

Under Year 2030 and buildout conditions, the regional mitigation measures previously identified in Draft PEIR Table 19-6 are also needed to address impacts to city streets. Draft PEIR Table 19-17 identifies the Levels of Service occurring with implementation of these improvements. Under Year 2030 conditions, there will still be five (5) roadway segments that would continue to exceed the minimum LOS C / LOS D standard adopted by the City (Draft PEIR, pps. 19-44 to 19-45).

The extent to which additional improvements could be installed on city streets to further improve operating Levels of Service at impacted locations has been considered, and Draft PEIR Table 19-18 lists the additional improvements that would be needed to achieve minimum Level of Service standards under buildout conditions (Draft PEIR, p. 19-46).

The feasibility of improvements has been reviewed based on available information. In Atwater, widening of Applegate Road to at least four lanes would accompany the SR 99 / Applegate Road interchange Modification Project. That project is identified in the RTP but has not been assumed to be funded by the year 2030. However, the interchange project is addressed by the MCAG regional fee program and would be needed in order to address the overall goal of widening SR 99 to six lanes through Merced County. Therefore, this improvement would be feasible (Draft PEIR, p. 19-46).

In Los Banos, 7th Street between G Street and H Street would need to be improved to a four-lane section to achieve LOS D. However, the City's General Plan Update reported that 7th Street is to remain a two-lane road based on a projected daily traffic volume (i.e., 10,000 ADT) that is lower than the forecast made for the Draft PEIR. Improving 7th Street in this area would therefore be considered infeasible (Draft PEIR, p. 19-46).

Achieving LOS D on Pacheco Blvd between West I Street and SR 165 would require a six-lane section. However, widening of Pacheco Blvd through downtown Los Banos would not be feasible due to the level of existing development along the route (Draft PEIR, p. 19-46).

In Merced, achieving LOS D on G Street between Childs Avenue and 13th Street and on R Street between Childs Avenue and SR 99 would require widening each street to four lanes. Such improvements would be difficult in this developed area of Merced. Identical impacts were identified in the City of Merced GPU EIR, and no feasible mitigation was identified for either location (Draft PEIR, p. 19-46). Under buildout conditions, the regional improvements previously noted would still be required. With these regional improvements, four roadway segments would continue to exceed the LOS D minimum standard at buildout. These are the same locations impacted under Year 2030 conditions.

Draft PEIR Table 19-19 lists the additional improvements that would be needed to achieve minimum Level of Service standards under buildout conditions. These are the same improvements discussed under Year 2030 conditions, and the considerations regarding feasibility are the same (Draft PEIR, p. 19-47).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because implementation of the proposed 2030 General Plan would lead to additional traffic on streets within the planning areas of incorporated cities in Merced County, and resulting traffic operations would exceed the adopted LOS C or LOS D minimum threshold of some jurisdictions, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure TRF-3a:

Implement Mitigation Measure TRF-1c: Add Implementation Program CIR-J: Modify Regional Transportation Fees.

Mitigation Measure TRF-3b:

Implement Mitigation Measure TRF-1e: Add Implementation Program CIR-K: Buildout Right of Way Reservation and Fee Program.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030

General Plan project by adding programs that would result in satisfactory traffic operations on segments of city streets. However, there is no guarantee that a regional funding program will be created to construct all of the identified improvements needed by the year 2030, or to preserve the rights of way required for buildout of the unincorporated area of Merced County. Such a program is beyond the control of Merced County and would take the combined efforts of all agencies, including the County, MCAG, Caltrans, and the cities of Merced County. There are no additional or technically feasible mitigation measures available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

Impact TRF-6: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (Draft PEIR, pps. 19-50 to 19-52; Final PEIR, pps. 4-98 to 4-101)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

The proposed General Plan policies indicated in Table 19-21 are related to traffic hazards and safety. These policies would reduce the introduction of traffic hazards and would reduce the level of development in agricultural areas. However, implementation of the General Plan would result in substantial traffic on existing at-grade railroad crossings. Although this would not represent a direct traffic hazard, intersections located in proximity to at-grade crossings could experience increased traffic, creating congestion resulting in queuing and blocked roadways (Draft PEIR, pps. 19-50 to 19-51; FPEIR, pps. 4-98 to 4-99).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because implementation of the 2030 General Plan would result in increased traffic across existing at-grade railroad crossings, and to roads in areas where the County anticipates ongoing movement of agricultural equipment, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure TRF-6a:

Add the following policy:

Policy CIR-1.23: At-Grade Railroad Crossing Guidelines

Work with California Public Utilities Commission (CPUC) and the affected railroads to monitor the effects of additional traffic from new development on the safe operation of railroad crossings and adjacent roadways. If monitoring indicates that increased traffic

congestion results in queuing and blocked roadways at or near at-grade crossings, implement necessary and applicable design improvements at railroad crossings.

Mitigation Measure TRF-6b:

Add the following program:

Implementation Program CIR-L: Rail Crossing Safety Program

Develop a rail crossing safety program consisting of monitoring, safety standards, CPUC consultation, and facility funding as set forth below:

1. For development projects adding substantial traffic to existing at-grade crossings (defined as 2,000 or more daily trips), the development shall submit a traffic analysis to the County for review. The analysis and report shall estimate daily and peak hour traffic at the crossing and adjoining intersections, as well as collision history data and estimates of train, vehicle, bicycle and pedestrian travel on the crossing and will describe existing, planned and funded equipment at at-grade crossings.
2. The County will review traffic data in consultation with the CPUC to identify improvements needed to ensure public safety.
3. The County shall condition approval of development projects and community plans that add substantial traffic across at-grade crossings to participate in the funding for improvements needed to ensure the public safety as determined by the County. Such improvements may include coordinated highway / rail traffic signals, enhanced signing, warning equipment, markings and/or grade separations.
4. Depending on the outcome of these studies, the County may include crossing improvements in future updates to its Capital Improvement Program or to Bridge & Major Thoroughfare fee programs.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by ensuring that proposed land use developments would not introduce new design hazards or exacerbate existing deficiencies. Through the application of General Plan policies, and project conditions as development occurs, the County would provide for new facilities that do not create hazards and the upgrading / replacement of current facilities as needed. Policies require the County to consider the access and circulation requirements of agricultural vehicles as part of the approval process in order to maintain the viability of the agricultural industry and to ensure safety. The County's rural roadway standards also include shoulders to accommodate agricultural vehicles. Implementation of the above mitigation would ensure that large developments that would add substantial traffic to existing at-grade rail crossings would evaluate impacts and would be conditioned, as necessary, to funded needed improvements. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

Impact TRF-7: Result in inadequate emergency access (Draft PEIR, pps. 19-53 to 19-55)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

On a regional basis, emergency evacuation routes including state highways and freeways, county expressways, and arterial streets would continue to be available, and new roadways would be developed to serve areas of new development. No aspect of the 2030 General Plan would result lessening access to emergency routes (Draft PEIR, p. 19-53).

In Merced County emergency evacuation is primarily a localized issue in response to conditions relating to fire, flooding, or similar emergencies. The number of vehicles that would need to be accommodated on these routes during an emergency would increase in proportion to population growth as Merced County develops in the future. Accommodating emergency evacuation would therefore require improvements to the regional circulation system as noted in Draft PEIR Tables 19-6, 19-8, 19-13, and 19-18. These improvements have been identified to maintain acceptable levels of service on roadways within the county. However, levels of service for non-emergency traffic operations are higher than those necessary during an emergency. During an emergency, a primary goal is to evacuate at-risk residents while maintaining access for emergency vehicles. Many emergency operations tools are available to facilitate evacuations and access, including temporarily converting two-way roads to one-way roads. Thus, even if not all roadway improvements identified in Draft PEIR Tables 19-6, 19-8, 19-13, and 19-18 are constructed, emergency access could be maintained. Additionally, under the 2030 General Plan, urban development is directed to existing and designated urban areas. Few of these urban areas are located in regions of high fire risk, and all areas are well-served by the existing and proposed roadway network that would offer many facilities for emergency access (Draft PEIR, p. 19-53).

Table 19-22 identifies General Plan polices related to emergency access that may alleviate impacts (Draft PEIR, pps. 19-53 to 19-54).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because adequate emergency access would not be maintained under the 2030 General Plan, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure TRF-7:

Implement Mitigation Measures TRF-1a through TRF-1e, TRF-2a through TRF-2d, and TRF-3a and TRF-3b.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030

General Plan project by requiring new development to be built with adequate emergency access, and to be constructed so as to not adversely impact emergency vehicle access. Regional circulation improvements needed to maintain minimum Level of Service standards on county roads and state highways have also been identified. Even though not all of these identified improvements may be constructed, adequate and sufficient emergency evacuation routes would continue to be available. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

Impact TRF-8: Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities (Draft PEIR, pps. 19-55 to 19-61)

Finding: This would be a less-than-significant impact after mitigation

Explanation:

The policies listed in Table 19-23 address alternative transportation modes and help to reduce impacts (Draft PEIR, pps. 19-55 to 19-60). The Merced County Regional Bicycle Transportation Plan (adopted by MCAG in 2008) presents existing and planned bikeway networks within cities and unincorporated areas of the County. However, while this plan meets the requirements of the California Bicycle Transportation Act as set forth in §891.2 (items a-k) of the California Streets and Highways Code thereby permitting Merced County and local municipalities to apply for grants for bicycle project funding through the State Bicycle Transportation Act, the plan does not comprehensively identify existing and planned regional or local bicycle routes in the unincorporated county (Draft PEIR, pps. 19-60 to 19-61).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that although proposed policies included in the 2030 General Plan promote the use of all transportation modes, the County has not prepared or adopted a countywide bicycle transportation plan, and the potential for conflict with alternative transportation policies, plans, or programs would be potentially significant. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure TRF-8:

Add the following program:

Implementation Program CIR-M, County Regional Bicycle Transportation Plan

Prepare a Regional Bicycle Transportation Plan for the unincorporated area of the county for both existing and planned improvements and facilities, that compliments, links to wherever feasible, and integrates with bike routes and policies contained in bike plans for adjacent urban areas.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measure is incorporated into the 2030 General Plan project. The Board further finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the 2030 General Plan project by adding a program that would result in bicycle facilities being comprehensively planned within the unincorporated county, and there would be no conflicts with the performance or safety of any alternative mode of transportation. The above-stated measure would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict their conclusion in this regard.

N. UTILITIES AND SERVICE SYSTEMS

Utilities and Service Systems setting information for the 2030 General Plan project is set forth in pages 20-1 through 20-10 of the Draft PEIR. The impact evaluation criteria and analysis methodology used in assessing impacts to utilities and service systems as a result of implementing the Project are set forth in the Draft PEIR on page 20-11. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Draft and Final PEIR, the findings of the Board are as follows.

Impact USS-1: Have sufficient water supply resources and entitlements available to accommodate continued development through buildout under the 2030 General Plan (Draft PEIR, pps. 20-12 to 20-37; Final PEIR, pps. 4-101 to 4-127)

Finding: This would be a significant and unavoidable impact

Explanation:

The existing water supply for northern and eastern Merced County is obtained from groundwater pumping and from diversions of the Tuolumne and Merced Rivers. Western Merced County receives federal and state water project deliveries via the Delta Mendota Canal and the California Aqueduct. Implementation of the proposed 2030 General Plan would lead to increased potable water demand for developed urban uses. Urban development, both in the unincorporated county urban areas and within cities, is predicted to require up to an additional 92,000 acre feet per year under full buildout conditions. Of this amount, approximately 26,700 acre feet of the demand would come from planned unincorporated development, primarily from The Villages of Laguna San Luis and the community of Santa Nella (see Draft PEIR and Final PEIR Tables 20-2 and 20-3.) The preservation and promotion of additional operating agricultural lands under the 2030 General Plan would also likely increase water needs (Draft PEIR, pps. 20-12 to 20-17; FPEIR, pps. 4-101 to 4-107).

Existing water supply sources are already under strain with competition increasing for state and federal surface water supply sources, particularly during times of drought, and declining groundwater levels and recurring groundwater overdraft conditions in many parts of the county, including El Nido, Livingston, and Merced. Several community water districts are already individually implementing projects to alleviate the strain, including the Merced Irrigation District (MID), the

Merced Area Groundwater Pool Interests (MAGPI), and the Turlock Groundwater Basin Association (TGBA). These entities have initiated the substitution of surface water for groundwater supplies in some agricultural areas, and implemented conservation projects in order to stabilize groundwater elevation decline. The details of this overview are discussed further in pages 20-12 to 20-30 of the Draft PEIR, and pages 4-101 to 4-120 of the Final PEIR.

Adequate water supply and entitlements are valid concerns for the County given that many water purveyors are operating at or near capacity under existing entitlements, all four groundwater basins have exhibited patterns of decline or overdraft, and there is increased competition by urban, agricultural, and habitat needs for federal and state supplied surface water sources. The 2030 General Plan includes goals and policies created to ensure a reliable water supply sufficient to meet the existing and future demands of the county. Draft PEIR and Final PEIR Table 20-10 includes goals and policies from the 2030 General Plan that communicate the County's intention to monitor the water supply needs of the urban and agricultural communities, and encourage measures to promote the conservation and management of existing supplies (Draft PEIR, pps. 20-30 to 20-35; FPEIR, pps. 4-120 to 4-125).

As indicated in Draft PEIR and Final PEIR Table 20-11, the primary policy direction of the 2030 General Plan is to recognize that existing water supplies available to the county are finite, with little possibility of increasing supplies. Therefore, existing supplies need to be well managed and efficiently used. Only Policy W-1.6 contemplates an increase in supply, and it would function only by supporting other entities in their actions (Draft PEIR, pps. 20-35 to 20-36; FPEIR, pps. 4-125 to 4-126).

Future land uses that rely on groundwater for supply will continue to increase the net discharges from the groundwater subbasins. For the basins with groundwater storage decline, specifically the Merced and Turlock Groundwater Basins, additional decreases in unrealized storage are likely to continue unless mitigated through conjunctive use programs, groundwater banking, and recharge. Further studies, as identified in General Plan policies, would be pursued for augmenting groundwater supply with alternative water sources such as water conservation, water banking, and development of reclaimed wastewater for urban reuse. Groundwater conservation practices would continue to be encouraged, as well as groundwater recharge projects and studies (Draft PEIR, p. 20-36; FPEIR, p. 4-126).

Water purveyors within the Turlock and Merced Groundwater Basins have developed management plans that seek to stabilize and reverse declines in groundwater levels within the respective basins through conjunctive use, agricultural water efficiency improvements, and recharge. Similarly, state legislation requires increasing urban water use efficiency for both existing and future development (Draft PEIR, p. 20-36; FPEIR, p. 4-126).

Effective implementation of groundwater management practices are necessary to meet future water demands via groundwater extraction, without creating or worsening declining groundwater levels, and adversely affecting existing wells. Interpreting the long-term success of groundwater management efforts within Merced County and elsewhere cannot be achieved at the present time. While there are many examples of local agency successes, there are neither mandates to prepare groundwater management plans nor reporting requirements when plans are implemented, so a comprehensive assessment of local planning efforts is not possible. Additionally, many plans have been adopted only recently, so many of the plan components are either untested or not

implemented. At a minimum, successful groundwater management should be defined as maintaining and maximizing long-term reliability of the groundwater resource, focused on preventing significant depletion of groundwater in storage over the long term, and preventing significant degradation of groundwater quality (Draft PEIR, p. 20-36; FPEIR, p. 4-126).

Although the 2030 General Plan identifies a number of actions to be taken by the County and different entities within the county, many of the actions necessary to successfully manage water resources and use in the county are beyond the control of Merced County government, especially water use within the agricultural sector. Due to the uncertainty of future water management efforts to be conducted by these many different entities, insufficient future surface water and groundwater supplies may be experienced in portions of the county (Draft PEIR, p. 20-36; FPEIR, p. 4-126).

Finding on Significance of Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board finds that because existing water supplies that serve agricultural, municipal, and industrial uses may be inadequate to accommodate future water demands within Merced County, this would be a significant impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure USS-1a:

Amend Policy LU-5.F.4: Water Impacts, as follows:

Prohibit new Urban Communities, or the expansion of existing urban communities, if they will negatively impact the water supply of existing users.

Mitigation Measure USS-1b:

Amend Policy W-3.7: Existing Development Retrofits, as follows:

~~Encourage~~ **Enforce** the retrofitting of existing development with water-conserving devices as required by state law.

Mitigation Measure USS-1c:

Amend Policy W-5.3: Water Forum, as follows:

Support a county-wide water forum to coordinate long-term water demand and supply programs that emphasize sustainability in the County consistent with approved IRWMPs.

Mitigation Measure USS-1d:

Add the following policy:

AG-2.17: Continued Access to Surface Water for Subdivided Parcels

Where requested by the water purveyor, when agricultural parcels are subdivided and the original parcel (prior to subdivision) has access to surface water (such as from an irrigation or water district facility), require that an easement be provided over the parcel(s) that has/have access to the surface water source to the remaining parcel(s) that will not be adjacent to or near the

surface water source. The easement should specify the purpose of the easement and whose responsibility it is to maintain private water conveyance facilities within said easement.

Findings on Proposed Mitigation

The Board finds that the above-stated mitigation measures are incorporated into the 2030 General Plan project. The Board further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the adverse environmental effects associated with the 2030 General Plan project by amending policies or adding a new policy that would result in increased water conservation and the continued use of appropriate sources of water, and potentially lead to reductions in future demand for such resources arising from the development of urban uses and infrastructure identified in the 2030 General Plan. No additional technologically or economically feasible mitigation measures beyond supporting water purveyor and state programs to conserve water, and the implementation of policies contained within the 2030 General Plan are currently available to reduce this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Board has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

O. CUMULATIVE IMPACTS

The CEQA Guidelines require that all EIRs contain an analysis of cumulative impacts to which the project might contribute. An EIR must discuss the “cumulative impact” of a project when its incremental effect would be cumulatively considerable. State CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” By requiring an evaluation of cumulative impacts, CEQA attempts to minimize the possibility that an EIR will overlook large-scale environmental impacts by only focusing on the effects of a single project.

The CEQA Guidelines definition of probable future projects includes “projects included in an adopted capital improvements program, General Plan, Regional Transportation Plan, or other similar plan or included in a summary of projections of projects (or development areas designated) in General Plans or similar plans, and those projects anticipated as a later phase of a previously approved project (e.g., a subdivision)” [Section 15130(b)(1)(B)(2)]. Considering the proposed 2030 Merced County General Plan (2030 General Plan) is a countywide planning document, this cumulative analysis combines impacts from implementation of the project in addition to development in adjacent counties and cities using a projections-based approach.

State CEQA Guidelines Section 15065(c) states that a mandatory finding of significance is required if the project would make a cumulatively considerable contribution to a cumulative impact. The importance of a project’s contribution must be viewed in the context of the cumulative effect. Case law has held that even a small contribution may be cumulatively considerable if the cumulative effect is particularly acute (*Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98).

In summary, to be consistent with the requirements of CEQA, an assessment of cumulative effects must contain the following elements:

- The geographic scope of the expected cumulative effects;
- A list of past, present, and probable future projects, or an adopted projection of projects, that contribute to cumulative effects;
- A summary of expected cumulative effects; and
- A reasonable analysis of the cumulative effects of the cited projects. (Draft PEIR, pps. 22-1 to 22-2)

DEFINITION OF GEOGRAPHIC SCOPE OF CUMULATIVE IMPACTS ANALYSIS

In general, the geographic scope for this cumulative impacts analysis includes Merced County, the incorporated cities within Merced County, and the adjacent counties (including their incorporated cities). Listed in Draft PEIR Table 22-1 are the cities and counties used in this analysis, along with the year of their adopted General Plan. Some cumulative issue areas have a larger geographic scope, including air quality and watershed-level hydrologic effects. For each cumulative environmental issue area discussed, the issue-specific cumulative geographic scope is identified (Draft PEIR, pps. 22-2 to 22-6). Future land use and growth projections are based on information provided in the General Plans for the counties and cities in the region. While buildout years for the counties and cities included vary, the growth identified in the planning documents represents maximum planned growth that can be accommodated in the area.

EVALUATION OF CUMULATIVE EFFECTS

Considering the above information, the findings of the Board are as follows:

Cumulative Impact: Aesthetics/Visual Resources (Draft PEIR, pps. 22-6 to 22-7)

Finding: This would be a less-than-significant impact

Explanation:

The environmental impact analysis presented in Chapter 5 of the Draft PEIR identified no potentially significant impacts that cannot be reduced to a less-than-significant level for visual resources.

Future growth in Merced County and development in cities within the county, and in surrounding cities and counties, would result in the intensification of existing urban uses as well as conversion of open space to urban land uses. These activities could degrade the existing visual character and quality of scenic resources. Visual changes would be most apparent in where development occurs in jurisdictions and areas that lack comprehensive design guidelines. Particularly in agricultural areas with scattered development, there will be an incremental change in the visual character of that area. In addition, light pollution has the potential to become an issue of increasing concern in the cumulative region as new development contributes additional outdoor lighting installed for safety and other reasons. While future development in all jurisdictions would be subject to the California Building Code standards that would prevent potential impacts associated with light and glare, glow effects could occur in previously dark areas. This would be a significant cumulative effect (Draft PEIR, p. 22-7).

Proposed development within unincorporated new urban communities and elsewhere within Merced County outside of city boundaries would be subject to standard design review, thereby lessening visual impacts. For potential visual effects within scenic highway corridors, the 2030 General Plan contains goals, policies, and implementation programs that would preserve the viewsheds within state scenic highway corridors, and approved and existing urban communities adjacent to scenic highways contain design guidelines, setback standards, and open space buffers that would minimize visual changes. For development within rural areas of Merced County, the 2030 General Plan establishes a framework of goals and policies that aims to balance agricultural and open space preservation with new development, and ensure that new development preserves and protects the aesthetic rural character of Merced County. Additionally, the 2030 General Plan proposes that less than two percent of the existing rural and agricultural land be developed through the life of the Plan. Finally, even though new development in Merced County, particularly within rural areas could increase the amount of light and glare that spills onto nearby sensitive land uses, mitigation measures identified in the Draft PEIR would reduce this potential effect to a less-than-significant level (Draft PEIR, p. 22-7).

The goals and policies of the 2030 General Plan would act to minimize the amount of new urban development in unincorporated Merced County, especially in rural areas. The policies would additionally act to maintain visual quality in designated scenic highway corridors, would continue design review and requirements within designated urban areas, and would impose requirements to protect scenic quality within rural areas. Mitigation identified in the Draft PEIR would prevent light intrusion on sensitive resources.

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds that future growth in Merced County and development in cities within the county, and in surrounding cities and counties, would result in the intensification of existing urban uses as well as conversion of open space to urban land uses, which could degrade the existing visual character and quality of scenic resource. While future development in all jurisdictions would be subject to the California Building Code standards that would prevent potential impacts associated with light and glare, glow effects could occur in previously dark areas. This would be a significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that the 2030 General Plan goals and policies and mitigation measures identified in Section XI.A of these Findings would reduce and offset Merced County's contribution to cumulative impacts to aesthetic and visual resources. Therefore, Merced County's contribution to this significant cumulative loss of aesthetic quality is expected to be less than cumulatively considerable. Notwithstanding the existence of significant and unavoidable adverse cumulative effects as identified above, the 2030 General Plan project would not result in a cumulatively considerable contribution to this significant and unavoidable effect. The Board has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

The Board further finds that because the contribution of the 2030 General Plan project to cumulative impacts on visual resources is expected to be less than cumulatively considerable, no additional mitigation measures beyond those included in the Draft, RDPEIR, and Final PEIR would be required. Under CEQA, no mitigation measures are required for impacts that are less than significant (Public Resources Code Section 21002; CEQA Guidelines Section 15091, 15126.4, subd. (a)(3)). The Board has been presented with no evidence to contradict its conclusion in this regard.

Cumulative Impact: Agricultural Resources (Draft PEIR, pps. 22-7 to 22-8)

Finding: ***This would be a significant and unavoidable impact***

Explanation:

The environmental impact analysis presented in Chapter 6 of the Draft PEIR, RDPEIR, and Final PEIR identified the following significant and unavoidable impacts for agricultural resources:

- Convert Important Farmland as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use – Development of Urban and Other Non-Agricultural Uses.
- Involve other land use changes that would result in conversion of farmland to non-agricultural uses from urban development.
- Involve other land use changes that would result in conversion of farmland to non-agricultural uses due to the Minor Subdivision of Rural Parcels.

Impact AG-7, *Interference with Agricultural Operations because of Inadequate Parcel Sizes*, was identified as significant and unavoidable because the Board of Supervisors could have adopted one or several policies regarding minimum parcel sizes. The adoption of one proposed policy would have resulted in a significant and unavoidable impact. However, the Board of Supervisors chose not to adopt this policy without the concurrent adoption of a second policy that would mitigate the potential environmental effect. For this reason, the Board concludes that Impact AG-7 would be less than significant. See the finding for Impact AG-7 in Section XI.B of these findings for the reasoning supporting this conclusion.

Development under the 2030 General Plan in Merced County, in cities within the county, and in surrounding cities and counties would contribute to cumulative agricultural impacts. While the 2030 General Plan would limit new development in unincorporated rural areas outside of urban area boundaries, scattered farmland conversion may result over time from urban development within smaller designated urban areas. Agricultural parcels located near existing urban uses, specifically suburban areas, may have limited long-term viability for active agricultural activities due to urban edge conflicts. While the 2030 General Plan policies would promote the preservation of agricultural lands, the agricultural land use designations and the policies would not prevent the overall net loss of important farmlands within the county associated with future urban development within agricultural areas (Draft PEIR, p. 22-8).

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR, the RDPEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds that development under the 2030 General Plan in Merced County, in cities within the county, and in surrounding cities and counties would contribute to cumulative agricultural impacts. This would be a significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that although the 2030 General Plan goals and policies described in Draft PEIR and RDPEIR Chapter 6, and Final PEIR Chapter 4 would reduce and partially offset Merced County's contribution to these impacts, the contribution from the 2030 General Plan project to cumulative loss of agricultural resources is expected to be cumulatively considerable. No measures in addition to proposed 2030 General Plan policies and mitigation identified in the Draft PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact. Because the decisions of surrounding municipalities regarding conversion of agricultural land are outside the control of Merced County, this cumulative impact would be considered significant and unavoidable. The Board has been presented with no evidence to contradict its conclusion in this regard.

For findings on the effectiveness of the agricultural resource mitigation measures applicable to the 2030 General Plan project, see Section XI.B of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Board has been presented with no evidence to contradict its conclusion in this regard.

Cumulative Impact: Air Quality (Draft PEIR, pps. 22-8 to 22-9)

Finding: ***This would be a significant and unavoidable impact***

Explanation:

The geographic scope for cumulative effects to air quality is the San Joaquin Valley Air Basin, which encompasses the larger San Joaquin Valley. The environmental impact analysis presented in Chapter 7 of the Draft PEIR and RDPEIR identified the following significant and unavoidable impact to air quality:

- Increase in operational emissions of PM₁₀ and PM_{2.5} associated with General Plan buildout.

Since air quality protection and improvement is a major focus of the 2030 General Plan, the Air Quality Element includes goals and policies that would reduce air emissions from on-road vehicles, agricultural sources, and area sources. Buildout of the Merced County General Plan would generate operational emissions of ROG, NO_x, CO, and SO_x from on-road vehicles, agricultural sources, and area sources. Due to existing and expected improvements in emission control technology, these

emissions would be less than significant. Because the increase in emissions of PM₁₀ would exceed San Joaquin Valley Air Pollution Control District (SJVAPCD) significance criteria even after implementation of 2030 General Plan policies and mitigation, this would be a significant impact (Draft PEIR, p. 22-8).

The SJVAPCD's Air Quality Plans establish the projections of air quality that would result from development within the air basin, and sets forth measures and strategies for attainment of federal air quality standards in the Air Basin. The Air Basin is in attainment for federal PM₁₀ standards, and a PM_{2.5} Plan is under development. The 2007 Ozone Plan anticipates attainment after 2020 but no later than 2023. The 2030 General Plan is generally consistent with the assumptions contained in the 2007 Ozone Plan. As discussed above, implementation of the 2030 General Plan is predicted to have net decreases in ROG, NO_x, and CO emissions despite increase vehicle miles traveled (VMT) due to existing and expected improvements in emission control technology. While additional development within incorporated municipalities and counties in the Air Basin would result in air pollutant emissions, such development would be subject to the requirements of the SJVAPCD.

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR, RDPEIR, and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds development under the 2030 General Plan in Merced County, in cities within the county, and in surrounding cities and counties would contribute to cumulative air quality effects due to PM emissions. This would be a significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR, RDPEIR, and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that because PM_{2.5} emissions would exceed SJVAPCD significance criteria, the 2030 General Plan would result in a cumulatively considerable contribution to cumulative operational air quality impacts. No measures in addition to proposed 2030 General Plan policies and mitigation identified in the Draft PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact. Therefore this cumulative impact would be significant and unavoidable. The Board has been presented with no evidence to contradict its conclusion in this regard.

For findings on the effectiveness of the air quality mitigation measures applicable to the 2030 General Plan project, see Section X.I.C of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Board has been presented with no evidence to contradict its conclusion in this regard.

Cumulative Impact: Biological Resources (Draft PEIR, p. 22-9)

Finding: This would be a significant and unavoidable impact

Explanation:

The geographic scope for cumulative effects to biological resources is the San Joaquin Valley and the cities and counties adjacent to Merced County for those portions of adjacent counties on the valley floor and lower foothills. The environmental impact analysis presented in Chapter 8 of the Draft PEIR and RDPEIR identified the following significant and unavoidable impacts to biological resources:

- Adverse effects to special status species and sensitive habitats.
- Adverse effect on wetlands, riparian habitat and other sensitive natural communities.

Cumulative impacts due to the development under the 2030 General Plan and in the cumulative impact area are expected to be similar in type to those listed above and discussed in Chapter 8 of the Draft PEIR and the RDPEIR. Because of the potentially greater land area that may be converted and unavailable to native species and their habitats, the magnitude of the cumulative impact is expected to be greater than for Merced County alone. Species and habitats potentially affected are also expected to be similar. There would be potentially significant cumulative impacts to all of the biological resource categories identified above (Draft PEIR, p. 22-9).

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR, RDPEIR, and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds development under the 2030 General Plan in Merced County, in cities within the county, and in surrounding cities and counties would contribute to cumulative biological resource effects. This would be a significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR, RDPEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that although 2030 General Plan goals and policies would reduce and partially offset Merced County's contribution to this impact, the potential impacts to habitat and protected species throughout the San Joaquin Valley are expected to be cumulatively considerable. Therefore, the 2030 General Plan would make a cumulatively considerable contribution to this significant cumulative impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

For findings on the effectiveness of the biological resource mitigation measures applicable to the 2030 General Plan project, see Section XI.D of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Board has been presented with no evidence to contradict its conclusion in this regard.

Cumulative Impact: Cultural Resources (Draft PEIR, pps. 22-9 to 22-10)

Finding: ***This would be a less-than-significant impact***

Explanation:

Because impacts to cultural resources are isolated incidents that are project-specific, and generally do not contribute to a cumulative condition, the geographic scope for cumulative effects to cultural resources is unincorporated Merced County. Although the environmental impact analysis presented in Chapter 9 of the Draft PEIR identified potentially significant impacts to cultural resources, feasible mitigation measures identified in the Draft PEIR are available to reduce these significant impacts to less than significant.

As described in Draft PEIR Chapter 9, implementation of the proposed 2030 General Plan would lead to development and the construction of infrastructure that could lead to substantial adverse changes in the significance of historical resources within the unincorporated county, and could cause a substantial adverse change in archaeological and paleontological resources, unique geological features, or disturbance of human remains. However, the 2030 General Plan contains goals and policies to protect known and unknown historic and cultural resources. The Draft PEIR additionally identifies feasible mitigation measures to reduce identified impacts to less than significant.

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds that because impacts to cultural resources are isolated incidents that are project-specific, and generally do not contribute to a cumulative condition, this would be a less-than-significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that the 2030 General Plan goals and policies and mitigation measures identified in Section XI.E of these Findings would reduce and offset Merced County's contribution to cumulative impacts to cultural resources. Therefore, Merced County's contribution to this less-than-significant cumulative effect is expected to be less than cumulatively considerable. The Board has been presented with no evidence to contradict its conclusion in this regard.

Cumulative Impact: Global Climate Change (Draft PEIR, p. 22-10)

Finding: ***This would be a significant and unavoidable impact***

Explanation:

Climate change is considered a global cumulative issue due to the nature of associated environmental changes. Chapter 11 of the Draft PEIR describes the 2030 General Plan contribution to global climate change, and is accordingly an analysis of the project's contribution to this cumulative impact. The State of California has adopted plans to reduce statewide greenhouse gas

emissions in an effort to reduce the state's proportional share of such emissions and the adverse effects of global warming (Draft PEIR, p. 22-10).

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds that climate change is a global cumulative issue, and development under the 2030 General Plan in Merced County would contribute to cumulative climate change effects. This would be a significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that while implementation of the goals and policies included in the 2030 General Plan would reduce Merced County's contribution to regional and global greenhouse gas emissions, the County's emissions reductions would be inconsistent with adopted state greenhouse gas emissions reduction targets, and regional increases in greenhouse gases and the County's contribution to them would be considered significant and unavoidable. No measures in addition to those proposed in the 2030 General Plan policies and mitigation identified in the Draft PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact. Therefore, the 2030 General Plan would make a cumulatively considerable contribution to this significant cumulative impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

For findings on the effectiveness of the climate change mitigation measures applicable to the 2030 General Plan project, see Section XI.G of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Board has been presented with no evidence to contradict its conclusion in this regard.

Cumulative Impact: Hydrology and Water Quality (Draft PEIR, p. 22-11)

Finding: ***This would be a significant and unavoidable impact***

Explanation:

The geographic scope for cumulative effects to hydrology is the San Joaquin River Watershed. The environmental impact analysis presented in Chapter 13 of the Draft PEIR and Chapter 4 of the Final PEIR identified the following significant and unavoidable impact to water quality and hydrology:

- Substantially deplete groundwater supplies or interfere with groundwater recharge to the degree there would be continued aggravation of groundwater overdraft or a net reduction in aquifer volume that would negatively impact existing users or habitat needs.

Although the 2030 General Plan identifies a number of actions to be taken by the County and different entities within the county to preserve aquifer recharge areas and support groundwater

recharge projects, many of the actions necessary to successfully manage water resources and use in the county are beyond the control of Merced County government. Due to the uncertainty of future water management efforts to be conducted by these many different entities, insufficient future groundwater supplies may be experienced in portions of the county.

Implementation of the 2030 General Plan and development in the region may alter local drainage and runoff; however, these impacts are generally localized and would not affect the larger watershed. Increased urbanization and associated traffic could result in additional impacts to water quality due to contaminated runoff, which could have a regional impact. Notwithstanding, compliance with Regional Water Quality Control Board regulations, such as applicable National Pollutant Discharge Elimination System permits and associated Best Management Practices, would minimize discharge of contaminated surface water as a result of development in cities and counties. Therefore, the 2030 General Plan would not make a cumulatively considerable contribution to this significant cumulative water quality impact (Draft PEIR, p. 22-11).

Implementation of 2030 General Plan policies and actions would also reduce potential impacts related to flooding as a result of dam failure. Although implementation of the 2030 General Plan and development in the region would result in development in floodplains, and levee and dam inundation areas, policies contained in the 2030 General Plan and mitigation identified in the Draft PEIR would result in a less-than-significant impact. Thus, implementation of the 2030 General Plan would not make a cumulatively considerable contribution to this significant cumulative flood impact (Draft PEIR, p. 22-11).

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds that future growth in the region, including cities and surrounding counties, could cumulatively lead to depletion of existing groundwater supplies. This would be a significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that no measures in addition to proposed General Plan policies and mitigation identified in the Draft PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of impacts related to cumulative groundwater overdraft. Therefore, the 2030 General Plan would make a cumulatively considerable contribution to this significant cumulative groundwater recharge impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

For findings on the effectiveness of the groundwater overdraft mitigation measures applicable to the 2030 General Plan project, see Section XI.I of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Board has been presented with no evidence to contradict its conclusion in this regard.

Cumulative Impact: Noise (Draft PEIR, p. 22-12)

Finding: ***This would be a significant and unavoidable impact***

Explanation:

The geographic scope for cumulative effects to the noise environment is the Merced County region, including incorporated and unincorporated areas of Merced County and surrounding counties. The environmental impact analysis presented in Chapter 15 of the Draft PEIR identified the following significant and unavoidable impact due to noise:

- A substantial permanent increase in ambient noise levels in the project vicinity above levels without the project - Traffic noise level increases at existing sensitive uses caused by development consistent with the 2030 General Plan.

The proposed 2030 General Plan noise policies are considerably more comprehensive than the County's current Noise Policies, and provide a considerably greater degree of noise protection to citizens and business/industry within, and adjacent to, the county. Despite the implementation of noise abatement measures included in the 2030 General Plan and in the Draft PEIR, it is infeasible to ensure that existing sensitive uses would not be exposed to future noise levels exceeding the County's noise standards or those of adjacent affected jurisdictions. While noise impacts are generally experienced locally, increased traffic from implementation of the 2030 General Plan would contribute to a significant increase in traffic noise levels on roadway segments throughout the region (Draft PEIR, p. 22-12).

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds development in the Merced County region, including incorporated and unincorporated areas of Merced County and surrounding counties, would contribute to cumulative noise effects. This would be a significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that no measures in addition to proposed 2030 General Plan policies and mitigation identified in the Draft PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact. The 2030 General Plan would make a cumulatively considerable contribution to this significant cumulative effect. The Board has been presented with no evidence to contradict its conclusion in this regard.

For findings on the effectiveness of the biological resource mitigation measures applicable to the 2030 General Plan project, see Section XI.K of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Board has been presented with no evidence to contradict its conclusion in this regard.

Cumulative Impact: Transportation (Draft PEIR, p. 22-13 to 22-14)

Finding: ***This would be a significant and unavoidable impact***

Explanation:

The geographic scope for cumulative effects to transportation and circulation is the Merced County region, including incorporated and unincorporated areas of Merced County and surrounding counties. The environmental impact analysis presented in Chapter 19 of the Draft PEIR and Chapter 4 of the Final PEIR identified the following significant and unavoidable impact due to transportation issues:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness of Merced County roads.
- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness of State Highways.
- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness of streets within incorporated cities

Implementation of the proposed 2030 General Plan would lead to additional traffic on roads and state highways in Merced County and the region, and resulting traffic operations would exceed Level of Service (LOS) standards and may result in traffic hazards. The cost of both the construction of improvements needed by the year 2030 and the preservation of rights of way needed to accommodate buildout improvements is beyond the control of Merced County alone, and would take the combined efforts of all agencies, including the County, MCAG, Caltrans, and adjacent counties and cities. There is no guarantee that other jurisdictions will elect to participate in the cost of identified improvements. Because improvements may not be installed, this impact would remain significant and unavoidable (Draft PEIR, pps. 22-13 to 22-14).

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds development in the Merced County region, including incorporated and unincorporated areas of Merced County and surrounding counties, would contribute to cumulative transportation and traffic effects. This would be a significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that no measures in addition to proposed 2030 General Plan policies and mitigation identified in the Draft PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this cumulative impact. Therefore, the County's contribution to regional cumulative impacts related to traffic would be cumulatively significant. The Board has been presented with no evidence to contradict its conclusion in this regard.

For findings on the effectiveness of the traffic mitigation measures applicable to the 2030 General Plan project, see Section XI.M of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Board has been presented with no evidence to contradict its conclusion in this regard.

Cumulative Impact: Utilities and Service Systems (Draft PEIR, p. 22-14)

Finding: This would be a significant and unavoidable impact

Explanation:

The geographic scope for cumulative effects to utilities and service systems is the Merced County region, including incorporated and unincorporated areas of Merced County and surrounding counties. The environmental impact analysis presented in Chapter 20 of the Draft PEIR and Chapter 4 of the Final PEIR identified the following significant and unavoidable impact to water supply:

- Have sufficient water supply resources and entitlements available to accommodate continued development through buildout under the 2030 General Plan.

Although the 2030 General Plan identifies a number of actions to be taken by the County and different entities within the county, many of the actions necessary to successfully manage water resources and use in the county are beyond the control of County government, especially water use within the agricultural sector, and the potential shortfall in water supplies extends to the entirety of the cumulative geographic scope. Due to the uncertainty of future water management efforts to be conducted by these many different agencies, insufficient future surface water and groundwater supplies may be experienced in portions of the county and the region (Draft PEIR, p. 22-14).

Finding on Significance of Cumulative Impact

Based on the analysis contained within the Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors finds development in the Merced County region, including incorporated and unincorporated areas of Merced County and surrounding counties, would contribute to cumulative utility and service system effects. This would be a significant cumulative effect.

Findings on Contribution of Project to Cumulative Impact

Based on the analysis contained within the 2030 General Plan project Draft PEIR and Final PEIR, other considerations in the record, and the impact evaluation criteria, the Board specifically finds that no measures in addition to proposed 2030 General Plan policies and mitigation identified in the Draft PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact. Therefore, the 2030 General Plan would make a cumulatively considerable contribution to this significant cumulative impact. The Board has been presented with no evidence to contradict its conclusion in this regard.

For findings on the effectiveness of the utility and service system mitigation measures applicable to the 2030 General Plan project, see Section XI.N of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Board finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Board has been presented with no evidence to contradict its conclusion in this regard.

XII. PROJECT ALTERNATIVES

Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed will still cause one or more significant environmental effects that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first determine whether, with respect to such impacts, there remain any project alternatives that are both environmentally superior and feasible within the meaning of CEQA. As noted earlier, in Sections II and VII of these Findings, an alternative may be “infeasible” if it fails to promote the project applicant’s goals and objectives with respect to the project. Thus, “‘feasibility’ under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors” of a project (City of Del Mar, *supra*, 133 Cal.App.3d at 417; see also Sequoiah Hills, *supra*, 23 Cal.App.4th at 715).

The proposed project and the alternatives addressed in the Draft PEIR and RDPEIR are based on several ideas and concepts developed during the 2030 General Plan community outreach process. Citizen input was essential to the 2030 General Plan process. In 2006, key stakeholder interviews and community workshops were held, followed by rounds of focus group meetings, joint study sessions held between the Board of Supervisors and Planning Commission, local Municipal Advisory Council (MAC) meetings, and input from County staff, the Planning Commission, and the Board of Supervisors. In 2011, a scoping meeting initiated the environmental review process, which further contributed to the development of the selected alternatives. The alternatives addressed in the Draft PEIR and RDPEIR were also selected in consideration of one or more of the factors as set forth in Section 15126.6 of the State CEQA Guidelines.

The detailed discussion in Section XI demonstrates that many significant environmental effects of the Project have been either substantially lessened or avoided through the imposition of existing policies or regulations of the 2030 General Plan, or by the amendment or addition of existing policies and programs via mitigation measures identified in the EIR. However, even with mitigation in the form of the application of existing policies and, where feasible, the addition of formal mitigation measures, the following significant effects remain significant and unavoidable, though they have been substantially lessened:

- Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, or Confined Animal Agriculture (Important Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use
- Involvement of other land use changes that would result in conversion of farmland to non-agricultural uses from urban development

- Conversion of farmland to non-agricultural uses due to minor subdivision of rural parcels
- Increase in operational emissions of PM₁₀ and PM_{2.5} associated with 2030 General Plan buildout
- Adverse effects to special status species and sensitive habitats due to the conversion of farmlands and open space
- Adverse effect on wetlands, riparian habitat, and other sensitive natural communities
- Increase in GHG emissions associated with 2030 General Plan buildout
- Increase in GHG emissions that would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions
- Substantially deplete groundwater supplies or interfere with groundwater recharge to the degree there would be continued aggravation of groundwater overdraft or a net reduction in aquifer volume that would negatively impact existing users or habitat needs
- Ambient and Traffic noise level increases caused by development consistent with the 2030 General Plan
- Conflicts with a plan, ordinance, or policy establishing measures of effectiveness on Merced County roads
- Conflicts with a plan, ordinance, or policy establishing measures of effectiveness of State Highways
- Conflicts with an applicable plan, ordinance, or policy establishing measures of effectiveness of streets within unincorporated cities in Merced County
- Lack of sufficient water supply resources and entitlements available to accommodate continued development through buildout under the 2030 General Plan
- Cumulative Agricultural Resources impacts
- Cumulative Air Quality impacts
- Cumulative Biological Resources impacts
- Cumulative Global Climate Change impacts
- Cumulative Hydrology and Water Quality impacts
- Cumulative Noise impacts
- Cumulative Transportation impacts
- Cumulative Utilities and Service System impacts
- Irreversible Environmental Changes.

The alternative selection process was complemented by background information provided in the recently updated 2030 General Plan Background Report (Merced County 2007; updated 2012), the 2030 General Plan Alternatives Report (Merced County 2008), the 2030 General Plan Revised Alternatives Report (Merced County 2009), the project objectives, and the identification of community issues collected during outreach workshops and meetings. The discussion of the 2030 General Plan alternatives, as referenced in the Alternatives Report and the Revised Alternatives Report, is distinct from the alternatives analysis presented in the Draft PEIR. However, there is some overlap regarding certain concepts. The 2030 General Plan alternatives were designed to compare various development scenarios for the purpose of exploring different policy directions. The

Draft PEIR alternatives are developed to address scenarios that reduce potentially significant impacts associated with the proposed 2030 General Plan.

The County can fully satisfy its CEQA obligations by determining whether any alternatives identified in the EIR are both feasible and environmentally superior with respect to these impacts (Laurel Hills, *supra*, 83 Cal.App.3d at pp. 520-521 and pp. 526-527); Kings County Farm Bureau v. City of Hanford, *supra*, 221 Cal.App.3d at pp. 730-731; and Laurel Heights I, *supra*, 47 Cal.3d at pp. 400-403; see also Public Resources Code Section 21002). As the succeeding discussion will show, no identified alternative is both feasible and environmentally superior with respect to the unmitigated impacts.

To fully account for these unavoidable significant effects, and the extent to which particular alternatives might or might not be environmentally superior with respect to them, these Findings will not focus solely on these impacts, but instead will address the environmental merits of the alternatives with respect to all impacts. The Findings will also assess whether each alternative is feasible in light of the County's objectives for the Project.

Consistent with CEQA Requirements (CEQA Guidelines Section 15126.6(a)), during the Draft PEIR preparation process, each alternative scenario was reviewed to develop a range of alternatives that would feasibly attain most of the project objectives, but also avoid or lessen several significant effects associated with the proposed project. The objectives of the 2030 General Plan, based upon regulatory requirements, the vision established within the community workshops, and the County's guiding principles as set forth in the 2030 General Plan, are as follows:

1. Adopt a General Plan that complies with state law;
2. Promote a development strategy for city- and unincorporated community-centered growth that locates urban growth in the incorporated cities and unincorporated communities with existing urban services, and allows for consideration for new towns;
3. Protect and support agriculture as an integral component to the county's economic vitality and quality of life;
4. Sustain and enhance the county's natural environment, including all critical habitat areas, watersheds, wildlife corridors, and other natural communities;
5. Identify methods to expand and diversify the county's local economy in order to create and sustain employment and business opportunities that enable existing and future residents to improve their quality of life;
6. Protect the county's natural resources, including air, water, energy, wildlife, and scenery, to assure a high quality of life for current and future residents;
7. Require new growth and development to have adequate access to all essential public facilities and services, including water, sewer, storm water drainage, roadways, schools, government centers, and recreation; and
8. Coordinate, network, and maintain a multi-modal countywide transportation system, including freeways, highways, streets, bicycle and pedestrian pathways, mass transit, airports, and rail to meet the needs of residents and businesses.

The Draft PEIR and RDPEIR identified and evaluated three action alternatives and also evaluated the environmental impacts of the No Project alternative. In accordance with CEQA Guidelines Section 15126.6(f), several alternatives were considered for the 2030 General Plan project, but

rejected as infeasible. These alternatives rejected as infeasible included: Unincorporated-Community Growth Alternative; Resource Protection/Infrastructure Availability Alternative; and Alternative Project Location. The potentially feasible alternatives were analyzed in relation to the objectives of the Project and in relation to their ability to avoid or substantially lessen environmental impacts.

A. ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

Definition of Alternative 1

CEQA Guidelines require discussion of the “No Project” alternative to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project [CEQA Guidelines Section 15126.6(e)]. When the project is a revision or update of an existing land use plan or regulatory policy, the No Project Alternative will be the continuation of the existing plan or policy. Under the No Project Alternative, the existing 2000 General Plan (adopted in 1990) would remain the long-range planning policy document for the county. Therefore, the effects of continued implementation of the existing 2000 General Plan would be evaluated. Consequently, current development patterns would continue to occur in accordance with the existing General Plan, Community Plans, and Zoning Ordinance.

Without approval of the proposed 2030 General Plan, the 2000 General Plan would continue to rely upon policies adopted in 1990 and would not reflect current state law and recent legislation. Because the proposed 2030 General Plan contains new and updated goals and policies to better direct urban development due to population growth, protect natural resources, and preserve agricultural lands, the No Project Alternative would not include any of the new policies and implementation programs designed to address the environmental impacts of future county development. Additionally, implementation of the No Project alternative would not include implementation of the mitigation measures identified in the Draft PEIR (Draft PEIR and RDPEIR, p. 21-5).

As a result, the No Project Alternative would involve a greater amount of land subject to development. It would likely result in a larger buildout population due to a lack of guiding goals and policies (designed to manage growth) and a lower-density, sprawling, and scattered development pattern. Urban and other development permitted under the existing 2000 General Plan goals and policies, and the current Zoning Ordinance, would continue under the No Project Alternative.

Evaluation of Alternative 1

The No Project Alternative would increase the magnitude of anticipated environmental impacts associated with the proposed project because the new and updated goals and policies included as part of the proposed 2030 General Plan would not be implemented. Compared to the proposed 2030 General Plan, the existing 2000 General Plan lacks detailed goals and policies to protect scenic resources and minimize day and nighttime light and glare. The 2000 General Plan lacks goals and policies designed to prevent and compensate the loss of important farmlands. The 2000 General Plan also lacks specific policy direction to improve air quality and protect biological and cultural resources by directing growth to cities, designated unincorporated urban area boundaries, and New Urban Communities under certain conditions. The lack of new and updated policies would likely result in greater impacts to scenic resources, air quality, and agricultural, biological, and cultural resources (Draft PEIR and RDPEIR, p. 21-5).

Because the No Project Alternative lacks the protective policies set forth in the 2030 General Plan, it would allow for the conversion of greater amounts of open space land to urban uses and create more impervious surfaces, which would increase the amount of surface water runoff that also would have an adverse effect on water quality. The increase in the creation of impervious surfaces would also reduce groundwater recharge. Compared to the proposed 2030 General Plan, the existing 2000 General Plan lacks extensive goals and policies requiring the efficient and timely provision of public services, recreation facilities, and utility infrastructure. Further, the 2000 General Plan does not have updated wildland fire requirements for new development, or new standards for development within the 100-year and 200-year floodplains. It does not include updated land use and transportation policies to ensure consistency with state and regional growth, and climate change policies. While the No Project Alternative would result in some similar environmental impacts to the proposed 2030 General Plan, such as geology, soils, and minerals, most environmental impacts would be greater because the protective policies contained within the 2030 General Plan or identified as mitigation in this Draft PEIR would not be implemented. Based on the foregoing, the No Project Alternative would result in more environmental effects than the proposed 2030 General Plan project (Draft PEIR, p. 21-5). Draft PEIR Table 21-1 includes an evaluation of the relative impacts of implementing Alternative 1 – No Project Alternative (Draft PEIR and RDPEIR, pps. 21-6 to 21-11).

Implementation of the No Project Alternative would not fully meet the following goals of the County in proposing the 2030 General Plan project since it would lack the protective policies included in the Proposed Project.

- Adopt a General Plan that complies with state law (*the existing plan would continue to rely upon policies adopted in 1990 and would not reflect current state law and recent legislation*);
- Promote a development strategy for city- and unincorporated community-centered growth that locates urban growth in the incorporated cities and unincorporated communities with existing urban services, and allows for consideration for new towns (*the existing plan lacks guiding goals and policies designed to manage growth, which would result in a lower-density, sprawling, and scattered development pattern*);
- Protect and support agriculture as an integral component to the County's economic vitality and quality of life (*the existing plan lacks goals and policies designed to prevent and compensate for the loss of important farmlands*);
- Sustain and enhance the County's natural environment, including all critical habitat areas, watersheds, wildlife corridors, and other natural communities (*the existing plan lacks specific policy direction to protect biological resources by directing growth to cities, designated unincorporated urban area boundaries, and New Urban Communities under certain conditions*);
- Identify methods to expand and diversify the County's local economy in order to create and sustain employment and business opportunities that enable existing and future residents to improve their quality of life (*the existing Plan lacks new and updated policies that focus on diversifying the economy and attracting new industries*);
- Protect the County's natural resources, including air, water, energy, wildlife, and scenery, to assure a high quality of life for current and future residents (*the existing Plan lacks new and updated policies, which would likely result in greater impacts to scenic resources, air quality, and agricultural, biological, and cultural resources*);

- Require new growth and development to have adequate access to all essential public facilities and services, including water, sewer, storm water drainage, roadways, schools, government centers, and recreation (*the existing plan lacks extensive goals and policies requiring the efficient and timely provision of public services, recreation facilities, and utility infrastructure*); and
- Coordinate, network, and maintain a multi-modal countywide transportation system, including freeways, highways, streets, bicycle and pedestrian pathways, mass transit, airports, and rail to meet the needs of residents and businesses (*the plan does not include updated land use and transportation policies to ensure consistency with state and regional growth*) (Draft PEIR and RDPEIR, p. 21-12).

Finding of Feasibility on Alternative 1

The Merced County Board of Supervisors rejects Alternative 1, No Project Alternative, as infeasible for each and every reason listed, each reason being a separate and independent basis upon which the Board finds the alternative to be infeasible.

- The No Project Alternative is rejected as infeasible because it does not fully advance the adopted Project objectives of the County for pursuing the 2030 General Plan project.

The basis for the foregoing determination can be found in Section IV of these Findings, Section 3.5 of the Draft EIR dated November 2012 and the RDEIR dated July 2013 regarding the County’s Project objectives, pages 21-6 through 21-11 of the Draft PEIR dated November 2012 and the RDPEIR dated July 2013 regarding the environmental effects of the Alternative, and the information presented in Section XIII, Statement of Overriding Considerations, of these Findings, regarding County policy and factual determinations.

To the extent that any environmental impacts might be less significant under the No Project Alternative, the rejection of this alternative is appropriate for the reason stated above and in the statement of overriding considerations. The Board has been presented with no evidence to contradict its conclusion in this regard.

B. ALTERNATIVE 2 – CITY-CENTERED GROWTH

Definition of Alternative 2

Under the City-Centered Growth Alternative, urban growth would be directed to the six incorporated cities and designated unincorporated urban community areas. The six incorporated cities and the unincorporated urban community areas in Merced County would accept additional population growth by increasing their density and by developing contiguous land within their spheres of influence (SOI) boundaries.

This alternative would discourage new development in the county’s unincorporated areas, especially in unincorporated rural areas outside existing designated unincorporated urban community boundaries (i.e., Rural Residential Centers, Rural Centers, Isolated Urban Areas). This alternative would revise or remove goals and policies that permit development in Rural Residential Centers, Rural Centers, New Urban Communities, or Isolated Urban Areas. Policies LU-1.2 and LU-1.3 (Countywide Growth and Development); Goal LU-3 and Policies LU-3.1 through LU-3.4 (Rural Residential Centers); Goal LU-4 and Policies LU-4.1 through LU-4.8 (Rural Centers); Goal LU-5.F

and Policies LU-5.F.1 through LU-5.F.5 (New Urban Communities); and Goal LU-8 and Policies LU-8.1 through LU-8.2 (Isolated Urban Communities) would be removed from the Land Use Element.

Under this alternative, land within the cities' SOI would be annexed as necessary. New development under this alternative would be consistent with current growth trends. This alternative implies the establishment of cooperative development and fiscal arrangements between the County and the six cities. However, under this alternative, while more growth would be directed to the six incorporated cities, Merced County would not have land use discretion over development activities within the each city's planning area. This alternative assumes that cities may have fewer protective environmental policies compared to the County. With the exception of policies that permit urban development outside designated unincorporated urban community area boundaries (i.e., Rural Centers), all other proposed 2030 General Plan goals and policies would apply (Draft PEIR and RDPEIR, p. 21-13).

Evaluation of Alternative 2

The City-Centered Growth Alternative would decrease the magnitude of most anticipated environmental impacts associated with the proposed project because urban development would be directed to cities and designated unincorporated urban communities, and away from important farmlands and natural resources. Assuming that development within cities and designated unincorporated urban communities more efficiently uses land resources compared to development within rural parts of the unincorporated county, this alternative would result in a compact and smaller development footprint, and there would be fewer impacts on environmental resources. As a result, the City-Centered Growth Alternative would convert less open space and important farmlands, preserve scenic resources, reduce vehicle miles traveled and related automobile emissions, convert less sensitive plant and wildlife habitat, better protect undiscovered cultural resources, reduce exposure of structures and people to high wildfire risk, decrease the creation of impervious surfaces and surface water runoff associated with increased urbanization, and reduce impacts associated with the construction of utilities and facilities needed to serve growth. Based on the foregoing, the City-Centered Growth Alternative would result in fewer environmental effects than the proposed 2030 General Plan project. Table 21-2 includes an evaluation of the relative impacts of implementing Alternative 2 – City-Centered Growth Alternative (Draft PEIR and RDPEIR, pps. 21-13 to 21-19).

Implementation of the City-Centered Growth Alternative would not fully meet the following objectives of the proposed 2030 General Plan project.

- Promote a development strategy for city- and unincorporated community-centered growth that locates urban growth in the incorporated cities and unincorporated communities with existing urban services, and allows for consideration for new towns (*this alternative would discourage new development in the county's unincorporated areas, especially in unincorporated rural areas outside existing designated unincorporated urban community boundaries*) (Draft PEIR, p. 21-19).

Finding of Feasibility on Alternative 2

The Merced County Board of Supervisors rejects Alternative 2, City-Centered Growth Alternative, as infeasible for each and every reason listed, each reason being a separate and independent basis upon which the Board finds the alternative to be infeasible.

- The City-Centered Growth Alternative is rejected as infeasible because it does not fully advance the adopted Project objectives of the County for pursuing the 2030 General Plan project.

The basis for the foregoing determination can be found in Section IV of these Findings and Section 3.5 of the Draft EIR dated November 2012 and the RDPEIR dated July 2013 regarding the County's Project objectives, pages 21-14 through 21-19 of the Draft PEIR dated November 2012 and the RDPEIR dated July 2013 regarding the environmental effects of the Alternative, and the information presented in Section XIII, Statement of Overriding Considerations, of these Findings, regarding County policy and factual determinations.

To the extent that any environmental impacts might be less significant under the City-Centered Growth Alternative, the rejection of this alternative is appropriate for the reason stated above and in the statement of overriding considerations. The Board has been presented with no evidence to contradict its conclusion in this regard.

C. ALTERNATIVE 3 – NO NEW URBAN COMMUNITIES

Definition of Alternative 3

Under the No New Urban Communities Alternative, no New Urban Communities would be permitted within the unincorporated county, nor would the County accept applications for the establishment of New Urban Communities. This alternative would remove goals and policies that permit New Urban Communities. Goal LU-5.F, and supporting Policies LU-5.F.1 through LU-5.F.5 would be removed from the Land Use Element. Instead, this alternative would include a revised policy that would prohibit new development, such as large-scale master-planned communities in unincorporated rural areas outside designated unincorporated urban area boundaries. Similar to the City-Centered Growth Alternative, new development under this alternative would be limited to incorporated areas within the six cities in the county, and to existing designated unincorporated urban area boundaries. Also, new development would be consistent with current growth trends. While the objective supporting consideration of New Urban Communities, and all goals and policies that allow consideration of New Urban Communities would be removed from the 2030 General Plan with the adoption of this alternative, all other proposed 2030 General Plan goals, objectives, and policies would remain (Draft PEIR and RDPEIR, pps. 21-19 to 21-20).

Evaluation of Alternative 3

Similar to the City-Centered Growth Alternative, the No New Urban Communities Alternative would decrease the magnitude of many anticipated environmental impacts associated with the proposed project because new development outside cities and designated unincorporated urban areas would not be permitted. Because development would not occur outside cities or the boundaries of designated unincorporated urban areas, there would be fewer impacts on environmental resources. As a result, like the City-Centered Growth Alternative, the No New Urban Communities Alternative would convert less open space and important farmlands than the 2030 General Plan to developed uses, preserve scenic resources, reduce vehicle miles traveled and related automobile emissions, convert less sensitive plant and wildlife habitat, better protect undiscovered cultural resources, and decrease the creation of impervious surfaces and surface water runoff associated with urbanization. The main reason for these reduced impacts is that the New

Communities would be growth inducing and are assumed to result in growth over and above the buildout from the General Plan without adding urban communities. Based on the foregoing, the No New Urban Communities Alternative would result in fewer environmental effects than the proposed 2030 General Plan project.

Table 21-3 includes an evaluation of the relative impacts of implementing Alternative 3 – No New Urban Communities Alternative (Draft PEIR and RDPEIR, pps. 21-20 to 21-26).

Implementation of the No New Urban Communities Alternative would not fully meet the following objective of the proposed 2030 General Plan project.

- Promote a development strategy for city- and unincorporated community-centered growth that locates urban growth in the incorporated cities and unincorporated communities with existing urban services, and allows for consideration for new towns (*new development under this alternative would be limited to incorporated areas within the six cities in the county, and to existing designated unincorporated urban area boundaries*)

Finding of Feasibility on Alternative 3

The Merced County Board of Supervisors rejects Alternative 3, No New Urban Communities Alternative, as infeasible for each and every reason listed, each reason being a separate and independent basis upon which the Board finds the alternative to be infeasible.

- The No New Urban Communities Alternative is rejected as infeasible because it does not fully advance the adopted Project objectives of the County for pursuing the 2030 General Plan project.

The basis for the foregoing determination can be found in Section IV of these Findings and Section 3.5 of the Draft EIR dated November 2012 and the RDPEIR dated July 2013 regarding the County's Project objectives, pages 21-20 through 21-26 of the Draft PEIR dated November 2012 and the RDPEIR dated July 2013 regarding the environmental effects of the Alternative, and the information presented in Section XIII, Statement of Overriding Considerations, of these Findings, regarding County policy and factual determinations.

To the extent that any environmental impacts might be less significant under the No New Urban Communities Alternative, the rejection of this alternative is appropriate for the reason stated above and in the statement of overriding considerations. The Board has been presented with no evidence to contradict its conclusion in this regard.

To the extent that any environmental impacts might be less significant under the No New Urban Communities Alternative, the rejection of this alternative is appropriate for the reason stated above and in the statement of overriding considerations. The Board has been presented with no evidence to contradict its conclusion in this regard.

D. ALTERNATIVE 4– DAIRY DIGESTER REQUIREMENT ALTERNATIVE

Definition of Alternative 4

Under the Dairy Digester Requirement Alternative, all existing and new dairies in the county would be required to install a manure digester system sized to sufficiently capture methane gas, reduce greenhouse gas (GHG) emissions, and to generate an alternative source of energy. California GHG emissions contributing to global climate change are attributable in large part to human activities associated with the industrial, transportation, residential, commercial, institutional, and agricultural sectors. In Merced County, the greatest contributor to the county's total GHG emissions is agriculture. To reduce GHG emissions associated with agricultural operations, specifically dairy operations, this alternative involves collaboration between the County and confined livestock operators to identify potential funding assistance for the implementation of methane biogas control systems and related renewable energy generation systems. New development under this alternative would be consistent with current growth trends. Under this alternative, all proposed 2030 General Plan goals and policies would apply (Draft PEIR and RDPEIR, pps. 21-26 to 21-27).

Evaluation of Alternative 4

The Dairy Digester Requirement Alternative would decrease the magnitude of increased GHG emissions impacts because this alternative would substantially reduce methane and nitrous oxide emission from dairy cattle. It would reduce conflicts with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions. Under this alternative, the mitigated emission estimates assume that by 2020, 90 percent of the methane and nitrous oxide emissions from dairy cattle mature would be captured (Yolo County 2010). The 90 percent reduction would not apply to non-dairy GHG emissions generated by beef cattle, steers, poultry, goats, hogs, sheep, or lambs, nor would it apply to enteric fermentation emissions from dairy cattle.

Draft PEIR Table 21-4 compares the emissions associated with the Dairy Digester Requirement Alternative in 2020 and 2030 to the 2020 and 2030 Business as Usual (BAU) emissions. In 2020, the Dairy Digester Requirement Alternative would reduce emissions by 32.3 percent compared to BAU. In 2030, the Dairy Digester Requirement Alternative would reduce emissions by 35.3 percent. This alternative would reduce GHG emission impacts to a less-than-significant level because the emission reduction in 2020 would exceed the California Air Resources Board's (CARB) Scoping Plan 29 percent reduction threshold (Draft PEIR and RDPEIR, p. 21-27).

Implementation of the Dairy Digester Requirement Alternative would also reduce conflicts with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The CARB Climate Change Scoping Plan represents the primary plan to reduce GHG emissions throughout California. This Plan is designed to reduce California's statewide 2020 GHG emissions by 29 percent as compared to the 2020 BAU scenario. Under the proposed 2030 General Plan, Merced County's 2020 and 2030 mitigated emissions would exceed the 29 percent reduction threshold in 2020 and 2030 (as compared to BAU emissions). Since emission reductions proposed under the Dairy Digester Requirement Alternative would exceed the 29 percent emission reduction goal within unincorporated Merced County, this alternative would be consistent with California's Climate Change Scoping Plan, and it would reduce the potential conflict with applicable plans, policies, or regulations designed to reduce GHG emission to a less-than-significant level. With the exception of a reduction in GHG emissions (shown in Draft PEIR and RDPEIR Table 21-4) and

water quality impacts, and increased air quality and potential human health impacts, all remaining environmental impacts would be the same as the proposed project. Draft PEIR and RDPEIR Table 21-5 includes an evaluation of the relative impacts of implementing Alternative 4, Dairy Digester Requirement Alternative (Draft PEIR and RDPEIR, pps. 21-28 to 21-32).

Implementation of the Dairy Digester Requirement Alternative would not fully meet all the objectives of the proposed 2030 General Plan project.

- Protect and support agriculture as an integral component to the county's economic vitality and quality of life (*existing dairies within Merced County under this alternative would be forced to modify existing operations in which they have made substantial investments; existing manure management systems may be incompatible with dairy digester operations and outputs; existing and new dairies within Merced County would face construction and operational costs not required of other dairy producers in California, thereby resulting in reduced competitiveness*)
- Identify methods to expand and diversify the county's local economy in order to create and sustain employment and business opportunities that enable existing and future residents to improve their quality of life (*in aggregate, Merced County dairies provide a large amount of permanent, year-round agricultural jobs; decreasing the competitiveness of Merced County dairies could result in an overall decrease in this source of employment*)

Finding of Feasibility on Alternative 4

The Merced County Board of Supervisors rejects Alternative 4, Dairy Digester Requirement Alternative, as infeasible for each and every reason listed, each reason being a separate and independent basis upon which the Board finds the alternative to be infeasible.

- The Dairy Digester Requirement Alternative is rejected as infeasible because it does not fully advance the adopted Project objectives of the County for pursuing the 2030 General Plan project.

The basis for the foregoing determination can be found in Section IV of these Findings and Section 3.5 of the Draft EIR dated November 2012 and RDPEIR dated July 2013 regarding the County's Project objectives, pages 21-28 through 21-32 of the Draft PEIR dated November 2012 and RDPEIR dated July 2013 regarding the environmental effects of the Alternative, and the information presented in Section XIII, Statement of Overriding Considerations, of these Findings, regarding County policy and factual determinations.

To the extent that any environmental impacts might be less significant under the Dairy Digester Requirement Alternative, the rejection of this alternative is appropriate for the reason stated above and in the statement of overriding considerations. The Board has been presented with no evidence to contradict its conclusion in this regard.

XIII. STATEMENT OF OVERRIDING CONSIDERATIONS

As set forth in the preceding sections, the County's approval of the 2030 General Plan will result in significant adverse impacts that cannot be substantially lessened or avoided even with the adoption of all feasible mitigation measures or Project alternatives. Despite these impacts however, the County chooses to approve the Project because, in its view, the economic, social, and other benefits that the Project will render the significant effects acceptable. Prior to approving the Project, the County must adopt this Statement of Overriding Considerations (Pub. Resources Code Section 21081; CEQA Guidelines Section 15093).

The following statement identifies the reasons why, in the County's judgment, the benefits of the Project outweigh its unavoidable significant effects. The significant and unavoidable effects of the County's approval of the 2030 General Plan include: Impact AG-1 (Conversion of Important Farmland to Non-Agricultural Use); Impact AG-3 (Involve land use changes resulting in conversion of farmland from urban development); Impact AG-5 (Conversion of Farmland Due to Minor Subdivisions); Impact AG-7 (Involve land use changes resulting in conversion of farmland due to inadequate parcel sizes); Impact AQ-3 (Increase in operational emissions of PM₁₀ and PM_{2.5} associated with buildout); Impact BIO-1 (Adverse effects to special status species and sensitive habitats due to conversion of farmland and open space); Impact BIO-2 (Adverse effect on wetlands, riparian habitats, and other sensitive natural communities); Impact GHG-1 (Increase in GHG emissions associated with 2030 buildout); GHG-2 (Increase in GHG emissions that would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions); Impact HYD-2 (Substantially deplete groundwater supplies or interfere with groundwater recharge); Impact NSE-4 (A substantial permanent increase in ambient noise levels in the project vicinity above levels without the project - Traffic noise level increases at existing sensitive uses caused by development consistent with the 2030 General Plan); Impact TRF-1 (Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness of Merced County roads); Impact TRF-2 (Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness of State Highways); Impact TRF-3 (Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness of streets within incorporated cities in Merced County); and Impact USS-1 (Have sufficient water supply resources and entitlements available to accommodate continued development through buildout under the 2030 General Plan). The Project would have the following cumulative significant and unavoidable impacts: Agricultural Resources Air Quality; Biological Resources; Global Climate Change; Hydrology and Water Quality; Noise; Transportation; and Utilities and Service Systems. The Project would also have a significant and unavoidable impact in the Required CEQA Analysis area of Irreversible Environmental Changes as referenced in Section 22.6.2 of the Draft Program EIR. All of the aforementioned significant and unavoidable impacts are discussed in Section XI.

Each of the reasons for approval cited below is independently sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the County will stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the documents found in the Record of Proceedings, as defined in Section VI.

The County finds that the Project will have the following specific economic, legal, social, technological, or other benefits:

A. FRAMEWORK FOR ACHIEVING THE COUNTY'S VISION

The Project is a guide for both development and resource conservation in unincorporated Merced County through 2030. It contains the policy framework necessary to fulfill the County's vision for the future. The 2030 General Plan establishes and implements new goals and policies for regulating development projects and for balancing population growth with infrastructure availability, agricultural preservation, and natural resource protection. Other goals and policies are directed to resource protection, ensuring the timely availability of public infrastructure and services, and encouraging a well-balanced economy. The plan also integrates new planning concepts endorsed by the County Board of Supervisors, and translates the updated goals and policies into implementation programs (such as amendments to the County's code, zoning ordinance, and subdivision regulations) to assure that the County's vision is implemented. As demonstrated in the evaluation of Alternative 1, No Project, because of the resource protective policies and programs of the 2030 General Plan, implementation of the proposed Plan would result in a significant reduction in the number and magnitude of environmental effects that would occur in the future compared to the County's existing 2000 General Plan and its related regulations. Moreover, the Project does not redesignate any land within the County for urban uses.

For the reasons set forth above, the Board finds that the ability of the Project to provide the policy framework for achieving the County's vision outweighs its environmental impacts.

B. PRESERVATION OF OPEN SPACE AND AGRICULTURAL AREAS

Approval and implementation of the 2030 General Plan would protect natural resources and preserve agricultural lands by managing urban development due to population growth and directing growth to cities, designated unincorporated urban area boundaries, and New Urban Communities under certain conditions, therefore avoiding a lower-density, sprawling, and scattered development pattern. The 2030 General Plan also includes goals and policies designed to prevent and compensate for the loss of important farmlands.

For the reasons set forth above, the Board finds that the ability of the Project to preserve open space and agricultural areas outweighs its environmental impacts.

C. FOCUSING GROWTH TO PROVIDE NEEDED ECONOMIC DEVELOPMENT FOR THE COUNTY AND IMPROVE QUALITY OF LIFE

Merced County is predominantly rural and is part of the San Joaquin Valley, a highly productive agricultural region. The 2030 General Plan identifies ways Merced County can diversify its economy and attract new industries, while expanding the agricultural industry. By directing growth to cities, designated unincorporated urban area boundaries, and New Urban Communities under certain conditions, the Project promotes strong, community-centered economies. With focused growth, the Project also emphasizes the concurrent provision of adequate public facilities and services where there is existing infrastructure, which leads to improved quality of life.

For the reasons set forth above, the Board finds that the economic and quality of life benefits of the Project outweigh its environmental impacts.

D. PROVISION OF TRANSPORTATION AND CIRCULATION IMPROVEMENTS

The 2030 General Plan seeks to improve the mobility of both persons and goods throughout Merced County, and promotes alternative forms of transportation (e.g., transit, bicycle, pedestrian). Through the implementation of focused growth within designated areas, and the promotion of alternative modes of transportation, some reduction in commute times is expected. The Project also requires improvements to County roadways to reduce adverse operational traffic impacts and improve traffic circulation.

For the reasons set forth above, the Board finds that the transportation and circulation benefits of the Project outweigh its environmental impacts.

E. IMPROVEMENTS TO WATER RESOURCES

The 2030 General Plan provides a new element that addresses the multiple uses of water, including urban, agricultural, and environmental. This includes water resources, such as water supply, water quality, and watershed management. Both surface water and groundwater supplies are important determinants of future growth and agricultural production in the County. The element also addresses water quality in areas where contaminating sources have degraded water. Although the County is not itself a water purveyor, the 2030 General Plan includes policies and implementation programs to reduce water consumption by new development from current rates of consumption, to coordinate water planning and management among the various water purveyors in the county throughout all areas of the unincorporated county, and encourages the most efficient uses and sources of water to maintain adequate water supplies. Additionally, the Natural Resources Element and the Water Element contain new policies and programs to enhance existing water quality for surface waters and groundwater within the county.

For the reasons set forth above, the Board finds that the benefits of the Project to water resources outweigh its environmental impacts.

F. PRESERVATION OF BIOLOGICAL RESOURCES AND SENSITIVE HABITATS

Approval and implementation of the 2030 General Plan would act to protect biological resources and sensitive habitats by managing urban development due to population growth and directing growth to cities, designated unincorporated urban area boundaries, and New Urban Communities under certain conditions, therefore avoiding a lower-density, sprawling, and scattered development pattern. In addition, the 2030 General Plan also includes a number of policies and implementation programs to protect biological resources from urban development and other activities, including resource preservation policies, resource agency consultation requirements, and evaluation and mitigation protocols, and the extension of protective requirements to activities previously unregulated by the County.

For the reasons set forth above, the Board finds that the ability of the Project to preserve biological resources and sensitive habitats outweighs its environmental impacts.

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