

2 EXECUTIVE SUMMARY

2.1 PROJECT SUMMARY

The project would include 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 would include 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 (see Chapter 3, *Project Description*). 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.

2.2 SUMMARY OF PROJECT ALTERNATIVES

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) describe and comparatively evaluate a range of reasonable alternatives to a project that would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project. Thus, the range of alternatives evaluated in the following analysis is dictated by the range of significant impacts identified in this November 2012 Draft Program EIR (PEIR), and evaluated alternatives are limited to those that would reduce or eliminate identified environmental impacts. As discussed in this Draft PEIR (Chapter 21, *Alternatives Analysis*), there are 23 secondary or indirect impacts of implementing the 2030 General Plan project that would lead to significant adverse and unavoidable impacts. Four alternatives were selected to illustrate potential alternatives to the 2030 General Plan project.

- Alternative 1 – No Project Alternative
- Alternative 2 – City-Centered Growth
- Alternative 3 – No New Urban Communities
- Alternative 4 – Dairy Digester Requirement

Based on the comparative evaluation contained in the Draft PEIR, Alternative 3 (No New Urban Communities Alternative) would reduce the magnitude of the most impacts as an action alternative. Alternative 3 would be the environmentally superior alternative.

2.3 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

The potential areas of controversy and issues to be resolved through the Draft PEIR process were identified in the Notice of Preparation (NOP) (See Appendix A, *Notice of Preparation*). These areas are summarized as follows:

Environmental Topic	Draft PEIR Chapter Where Evaluated
Aesthetics/Visual Resources	Chapter 5, Aesthetics and Visual Resources
Agriculture/Forestry	Chapter 6, Agricultural and Forestry Resources
Air Quality	Chapter 7, Air Resources
Biological Resources	Chapter 8, Biological Resources
Cultural Resources	Chapter 9, Historical and Cultural Resources
Geology, Soils, and Minerals	Chapter 10, Geology, Soils, and Mineral Resources

Environmental Topic	Draft PEIR Chapter Where Evaluated
Global Climate Change	Chapter 11, Global Climate Change
Hazards and Hazardous Materials	Chapter 12, Hazards and Hazardous Materials
Hydrology and Water Resources	Chapter 13, Hydrology and Water Resources
Land Use/Planning	Chapter 14, Land Use
Noise	Chapter 15, Noise
Population and Housing	Chapter 16, Population and Housing
Public Services	Chapter 17, Public Services
Recreation	Chapter 18, Recreation
Transportation/Circulation	Chapter 19, Transportation
Utilities and Service Systems	Chapter 20, Utilities and Service Systems
Cumulative Impacts	Chapter 22, Other CEQA Considerations
Growth Inducement and other CEQA topics	Chapter 16, Population and Housing Chapter 22, Other CEQA Considerations

In addition, responses received from public agencies and the public during circulation of the NOP (see Appendix B, *Comments on the Notice of Preparation*) raised the following major concerns. Each concern is followed by a notation of the Draft PEIR section where the topic of the comment is addressed.

- Flood hazards (PEIR Chapter 13, *Hydrology and Water Resources*)
- Stream channels and riparian lands (PEIR Chapters 8, *Biological Resources*, 10, *Geology, Soils, and Mineral Resources*, and 13, *Hydrology and Water Resources*)
- Erosion (PEIR Chapter 10, *Geology, Soils, and Mineral Resources*)
- Open Space (PEIR Chapters 5, *Aesthetics and Visual Resources*, and 6, *Agricultural and Forestry Resources*)
- Seismic and geologic hazards (PEIR Chapter 10, *Geology, Soils, and Mineral Resources*)
- Emergency evacuation (PEIR Chapters 12, *Hazards and Hazardous Materials*, and 19, *Transportation*)
- Airport land use (PEIR Chapter 19, *Transportation*)
- Wildland fire hazards (PEIR Chapter 12, *Hazards and Hazardous Materials*)
- Archaeological and historic resources (PEIR Chapter 9, *Historical and Cultural Resources*)
- Rail Crossings (PEIR Chapter 19, *Transportation*)
- Land Use (PEIR Chapter 14, *Land Use*)
- Air quality (PEIR Chapter 7, *Air Resources*)
- Climate Change (PEIR Chapter, 11, *Global Climate Change*)
- Agricultural land preservation (PEIR Chapter 6, *Agricultural and Forestry Resources*)
- Agricultural/urban interface (PEIR Chapter 6, *Agricultural and Forestry Resources*)
- Minor Subdivisions and scattered rural development (PEIR Chapter 6, *Agricultural and Forestry Resources*)
- Hazardous materials (PEIR Chapter 12, *Hazards and Hazardous Materials*)
- Vehicle traffic (PEIR Chapter 19, *Transportation*)
- Wastewater treatment capacity (PEIR Chapter 20, *Utilities and Service Systems*)
- Water supply (PEIR Chapter 20, *Utilities and Service Systems*)
- Stormwater runoff and water quality (PEIR Chapter 13, *Hydrology and Water Resources*)
- Biological Resources (PEIR Chapter 8, *Biological Resources*)

2.4 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table 2-1 presents a summary of project impacts and proposed mitigation measures that would avoid or minimize potential impacts. The level of significance for each environmental impact both before and after mitigation is indicated. For a detailed discussion of the impacts and mitigation measures of the 2030 General Plan, see Chapters 5 through 20 of the Draft PEIR.

Table 2-1 Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Aesthetics and Visual Resources					
Impact AES-1: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	LS		Mitigation Measure AES-1: None required.	LS	
Impact AES-2: Substantially degrade the existing visual character or quality of scenic resources or vistas.	LS		Mitigation Measure AES-2: None required.	LS	
Impact AES-3: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the county.		PS	Mitigation Measure AES-3: Amend Policy NR-4.5 as follows: <u>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.</u>	LS	
Agriculture and Forestry					
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-agriculture use – Development of Urban and Other Non-Agricultural Uses..		PS	Mitigation Measure AG-1a: Amend Policy AG-2.2 as follows: Protect productive agricultural areas from conversion to non-agricultural residential uses by establishing and implementing an agricultural mitigation program in cooperation with the six cities in Merced County, with consistent standards for county and city governments, that matches acres converted with farmland acres <u>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.</u> 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. The County shall <u>may</u> exempt commercial, industrial, and mixed-use projects within Urban Communities and Highway Interchange Centers from this mitigation requirement.		SU

LS=Less than significant

PS=Potentially Significant

SU=Significant and unavoidable

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>Mitigation Measure AG-1b: Add the following program: <u>Implementation Program AG-J: Agricultural Conservation Easement Program</u> <u>In conjunction with the Agricultural Land Mitigation Program (Policies AG-2.2, AG-2.4, and AG-2.8, and Program AG-B), the County shall develop an Agricultural Conservation Easement Program in coordination with appropriate third-party trustees to protect and preserve important farmlands. When the specific parcels have been identified under the Agricultural Land Mitigation Program to match the acres converted, the County shall facilitate the granting or purchase of agricultural conservation easements through a program administered by the appropriate third-party trustees. The program shall require that project applicants dedicate easements or make payments of an in-lieu fee that is sufficient to purchase parcels located in Merced County to be placed under an agriculture conservation easement, farmland deed restriction, or other farmland conservation mechanism to compensate for the loss of productive farmland to developed uses. Consistent with Policy AG-2.2, the in-lieu fee or other conservation mechanism shall recognize the importance of land value, and shall require equivalent mitigation. Where the payment is through in-lieu fees to purchase mitigation land, such funds shall be collected by the County and transferred to the appropriate third-party trustee, which shall arrange for the purchase of conservation easements. Where the conservation easement is to be dedicated by the project applicant, the easement deed shall be turned over to an appropriate third-party trustee for on-going management. In addition to easement funding or dedication, additional fees shall be provided to ensure that on-going management and monitoring is performed, consistent with practices of the third-party trustee.</u></p>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>Mitigation Measure AG-1c: Amend Policy NR-3.13 as follows: Require mining projects to obtain agricultural conservation easements on farmland of similar quality to the farmland converted 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.</p>		
<p>Impact AG-2: Conflict with existing zoning for agriculture use, or the provisions of Williamson Act contracts.</p>		PS	<p>Mitigation Measure AG-2a: Amend Policy AG-2.5 as follows: <u>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.</u></p>	LS	
			<p>Mitigation Measure AG-2b: Amend Policy AG-2.6 as follows: Remove (non-renew) current Williamson Act contracts on small parcels not devoted to commercial agriculture <u>and not operated as part of a larger farming operation.</u></p>		
			<p>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: <u>Policy AG-2.7: Modify Merced County Agricultural Preserve Rules</u> <u>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.</u></p>		
<p>Impact AG-3: Involve other land use changes that would result in conversion of farmland to non-agricultural uses from urban development.</p>		PS	<p>Mitigation Measure AG-3a: Implement Mitigation Measures AG-1a, AG-1b, and AG-1c.</p>		SU
			<p>Mitigation Measure AG-3b: Amend Policy AG-3.4 as follows: Require a minimum 200-foot buffer between new residential development <u>within designated urban areas</u> and existing agricultural operations, and establish design/maintenance guidelines for developers and property owners.</p>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			Mitigation Measure AG-3c: Amend Policy LU-3.4 as follows: Prohibit the creation of any new, <u>or the expansion of any existing</u> , Rural Residential Centers in the unincorporated county.		
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.	LS		Mitigation Measure AG-4: None required.	LS	
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.	PS		Mitigation Measure AG-5a: Amend Policy AG-3.1 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 <u>rural residential</u> , residential or urban development.		SU
			Mitigation Measure AG-5b: Amend Policy AG-3.2 as follows: <u>In consultation with the MCAC,</u> r Require 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 <u>rural residences and urban area</u> residential development.		
			Mitigation Measure AG-5c: Amend Policy AG-3.3 as follows: <u>In consultation with the MCAC,</u> e Establish agricultural buffer standards based on <u>the type of agricultural operation, and historic cropping and pesticide application patterns</u> , to be applied to <u>rural residences and urban area</u> residential development proposals adjacent to productive agricultural land and agricultural-related facilities.		
			Mitigation Measure AG-5d: Amend Policy LU-2.4 as follows: 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, <u>provided that such uses do not interfere with historic agricultural practices or result in adverse health risks.</u>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>Mitigation Measure AG-5e: Add the following policy: <u>Policy AG-3.12: Subdivision and Residential Uses in Agricultural Areas</u> <u>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 by recorded instrument to construct residences on the resulting parcels; and one that would permit the construction of residences on the resulting parcels subject to a conditional use permit.</u></p>		
			<p>Mitigation Measure AG-5f: Add the following program: <u>Program AG-K: MCAC Consultation to Establish Residential Setbacks</u> <u>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.</u></p>		
			<p>Mitigation Measure AG-5g: Add the following program: <u>Program AG-L: Program to Permit the Construction of Residences on Non-Residential Minor Subdivisions</u> <u>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.</u></p>		
			<p>Mitigation Measure AG-5h: Implement Mitigation Measures AQ-3a and AQ-5b.</p>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
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.	LS		Mitigation Measure AG-6: None required.	LS	
Impact AG-7: Involve other land use changes that would result in conversion of farmland to non-agricultural uses due to inadequate parcel sizes.	LS		Mitigation Measure AG-7: None required.	LS	
Air Resources					
Impact AQ-1: Increase in construction emissions associated with General Plan buildout.	LS		Mitigation Measure AQ-1: None required.	LS	
Impact AQ-2: Increase in operational emissions of ROG, NO _x , CO, and SO _x associated with General Plan buildout.	LS		Mitigation Measure AQ-2: None required.	LS	
Impact AQ-3: Increase in operational emissions of PM ₁₀ and PM _{2.5} associated with General Plan buildout.		PS	Mitigation Measure AQ-3a: Amend Policy AQ-2.2 as follows: Use the development review process to achieve measurable reductions in <u>criteria pollutant, toxic air contaminants, and greenhouse gas emissions.</u>		SU
			Mitigation Measure AQ-3b: Add the following policy: <u>Policy AQ-6.6: Prohibition on Wood Stoves</u> <u>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.</u>		

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	LS	PS		LS	SU
			<p>Mitigation Measure AQ-3c: Add the following policy:</p> <p><u>Policy AQ-6.7: Stove Replacement</u></p> <p><u>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 as defined for non-conforming structures in the Merced County Zoning Code 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.</u></p>		
Impact AQ-4: Increase in carbon monoxide concentrations at congested intersections.	LS		<p>Mitigation Measure AQ-4:</p> <p>None required.</p>	LS	
Impact AQ-5: Increase in health risks associated with locating sensitive receptors near high volume roads.		PS	<p>Mitigation Measure AQ-5a:</p> <p>Implement Mitigation Measure AQ-3a.</p>	LS	
			<p>Mitigation Measure AQ-5b: Amend Policy AQ-5.1 as follows:</p> <p>Require effective buffers between residential <u>and other sensitive</u> land uses, and non-residential land uses that generate hazardous air emissions such as highways (<u>e.g., I-5 and SR-99</u>), trucking centers, gasoline dispensing facilities, and dry cleaners. <u>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.</u></p>		
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.	LS		<p>Mitigation Measure AQ-6:</p> <p>None required.</p>	LS	

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	LS	PS		LS	SU
Biological Resources					
Impact BIO-1: Adverse effects to special status species and sensitive habitats due to the conversion of farmlands and open space.		PS	Mitigation Measure BIO-1a: Add the following policy: <u>Policy NR-1.21: Special Status Species Surveys and Mitigation</u> <u>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.</u>		SU
			Mitigation Measure BIO-1b: Add the following program: <u>Program NR-E: Biological Resources Review Requirements</u> <u>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.</u> <u>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.</u>		
			Mitigation Measure BIO-1c: Add the following program: <u>Program NR-F: Ongoing Inventory of Open Space Resources</u> <u>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, parks and recreation areas, historic resources, scenic highways, wetland, wildlife and vegetation resources, mineral and energy resource areas, fire hazard areas, geologic and flood hazard areas, noise impacted areas and other resource and hazard areas.</u>		

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	LS	PS		LS	SU
			<p>Mitigation Measure BIO-1d: Add the following program: <u>Program NR-G: Open Space Development Review System (OSDRS)</u> 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, 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 (4) step process. Whether or not a development is determined consistent with the Open Space Action Plan (OSAP), it will be determined by the OSDRS process. This system of review will be required of all projects for which a building permit or other entitlement occurs such as a land division or use permit, as well as during policy and ordinance amendment. The Planning and Community Development Department has developed a four-step process consisting of:</p> <ol style="list-style-type: none"> 1. Basic Land Use Category, Service Determination and Zoning Code Consistency Determination 2. Community Services Availability Determination 3. Environmental Determination 4. Land Use and Sensitive Resource Compatibility Determination 		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>Mitigation Measure BIO-1e: Add the following program: <u>Program NR-H: Open Space Acquisition Consideration as Part of the County Annual Capital Improvement Program</u> 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.</p>		
			<p>Mitigation Measure BIO-1f: Add the following policy: <u>Policy NR-3:14: Residual Mercury Survey and Mitigation Requirement</u> 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.</p>		
Impact BIO-2: Adverse effect on wetlands, riparian habitat, and other sensitive natural communities.		PS	<p>Mitigation Measure BIO-2: Implement Mitigation Measures BIO-1a through BIO-1f.</p>		SU
Impact BIO-3: Substantial loss and/or modification of federally protected wetlands.		PS	<p>Mitigation Measure BIO-3: Implement Mitigation Measures BIO-1a through BIO-1f.</p>	LS	
Impact BIO-4: Potential interference with animal movement/migration patterns.		PS	<p>Mitigation Measure BIO-4a: Implement Mitigation Measure BIO-1a through BIO-1f.</p>	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>Mitigation Measure BIO-4b: Amend Policy NR-1.1 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, <u>and wildlife movement and migration corridors</u>, and provide information to landowners.</p>		
			<p>Mitigation Measure BIO-4c: Amend Policy NR-1.2 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, <u>and wildlife movement and migration corridors</u>, potentially through the use of conservation easements.</p>		
			<p>Mitigation Measure BIO-4d: Amend Policy NR-1.6 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. <u>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.</u></p>		
<p>Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</p>	LS		<p>Mitigation Measure BIO-5: None required.</p>	LS	
<p>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.</p>	LS		<p>Mitigation Measure BIO-6: None required.</p>	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Historical and Cultural Resources					
Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource.		PS	Mitigation Measure CUL-1a: Add the following policy: <u>Policy RCR-2.9: Historical and Cultural Resources Investigation, Assessment, and Mitigation Guidelines</u> <u>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 geological features.</u>	LS	
			Mitigation Measure CUL-1b: Add the following program: <u>Program RCR-B: Historic and Cultural Resources Investigation, Assessment and Mitigation Guidelines</u> <u>Prepare and formally adopt guidelines and standards for the preparation of assessments of historical, cultural, archaeological, and paleontological resources, and unique geological 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 geological features.</u>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>Mitigation Measure CUL-1c: Amend Policy RCR-2.6 as follows: Identify and preserve buildings and areas with special and recognized historic, architectural, or aesthetic value <u>to be preserved and rehabilitated</u> during the Community Plan update process. New development should respect architecturally and historically significant buildings and areas, <u>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.</u></p>		
<p>Impact CUL-2: Cause a substantial adverse change in the significance of archaeological resources, paleontological resources, unique geological features, or disturbances to human remains.</p>		PS	<p>Mitigation Measure CUL-2: Implement Mitigation Measures CUL-1a and CUL-1b.</p>	LS	
<p>Impact CUL-3: Result in the degradation or loss of traditional cultural properties where Native American customs and traditions are practiced.</p>		PS	<p>Mitigation Measure CUL-3: Add the following policy: <u>Policy RCR-2.10: Tribal Consultation</u> <u>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).</u></p>	LS	
Geology, Soils, and Mineral Resources					
<p>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.</p>	LS		<p>Mitigation Measure GEO-1: None required.</p>	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
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.	LS		Mitigation Measure GEO-2: None required.	LS	
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.	LS		Mitigation Measure GEO-3: None required.	LS	
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.		PS	Mitigation Measure GEO-4a: Amend Policy PFS-2.5 as follows: Prohibit wastewater disposal facilities, <u>including private residential facilities</u> , that are determined to have the potential to contaminate the groundwater or surface water, on either a site-specific or cumulative basis.	LS	
			Mitigation Measure GEO-4b: Add the following policy: <u>Policy PFS-2.10: Consistency with SWRCB OWTS Requirements</u> <u>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.</u>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>Mitigation Measure GEO-4c: Add the following program: <u>Program PFS-H: Regional OWTS Suitability Evaluation</u> <u>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.</u></p>		
Global Climate Change					
Impact GHG-1: Increase in GHG emissions associated with 2030 General Plan buildout.		PS	<p>Mitigation Measure GHG-1a: Implement Mitigation Measure AQ-3b: Add Policy AQ-6.6: Prohibition on Wood Stoves.</p>		SU
			<p>Mitigation Measure GHG-1b: Implement Mitigation Measure AQ-3c: Add Policy AQ-6.7: Stove Replacement.</p>		
			<p>Mitigation Measure GHG-1c: Add the following policy: <u>Policy AG-5.5: Fertilizer Application:</u> <u>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.</u></p>		
			<p>Mitigation Measure GHG-1d: Add the following policy: <u>Policy AG-5.6: Agricultural Pump Energy Use</u> <u>Work with Merced County agricultural organizations to develop an outreach program to encourage farmers to improve the efficiency of their irrigation pumps.</u></p>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>Mitigation Measure GHG-1e: Add the following policy: Policy AQ-1.12: Dairy Digester Permit Streamlining <u>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.</u></p>		
			<p>Mitigation Measure GHG-1f: Add the following policy: Policy AQ-1.13: Methane Digester Policy <u>Cooperate with federal, state, and regional agencies to establish programs to encourage and provide incentives for the installation and operation of methane digesters.</u></p>		
			<p>Mitigation Measure GHG-1g: Add the following policy: Policy AQ-1.14: Methane Digester Funding <u>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.</u></p>		
<p>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.</p>		PS	<p>Mitigation Measure GHG-2: Implement Mitigation Measures GHG-1a through GHG-1g.</p>		SU

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Hazards and Hazardous Materials					
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.	LS		Mitigation Measure HAZ-1: None required.	LS	
Impact HAZ-2: Emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	LS		Mitigation Measure HAZ-2: None required.	LS	
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.		PS	Mitigation Measure HAZ-3: Amend Policy HS-5.4 as follows: <u>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.</u>	LS	
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.		PS	Mitigation Measure HAZ-4: Amend Policy HS-4.1 as follows: <u>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.</u>	LS	
Impact HAZ-5: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.	LS		Mitigation Measure HAZ-5: None required.	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Hydrology and Water Use					
Impact HYD-1: Violate water quality standards or waste discharge requirements, or otherwise substantially degrade water quality.	LS		Mitigation Measure HYD-1: None required.	LS	
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.		PS	Mitigation Measure HYD-2a: Amend Policy W-4.1 as follows: Encourage the protection of <u>Protect</u> 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 <u>Implement</u> zoning and development regulations to protect water resources, including aquifer recharge areas and areas susceptible to ground and surface water contamination; b) Encourage <u>For new development, and when adopting new Community Plans, require</u> 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 with other agencies and entities with responsibilities for water quality and watershed protection.		SU

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p>Mitigation Measure HYD-2b: Amend Policy LU-5.F.1 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:</p> <ul style="list-style-type: none"> 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. <u>Are not delineated as a 200-year floodplain or are able to clearly demonstrate that they have adequate protection from a 200-year event;</u> f. Are near major transportation routes; <u>and</u> g. <u>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.</u> 		
<p>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.</p>		PS	<p>Mitigation Measure HYD-3a: Implement Mitigation Measure HYD-2a: Amend Policy W-4.1: Water Resource Protection and Replenishment.</p>	LS	

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	LS	PS		LS	SU
			<p>Mitigation Measure HYD-3b: Add the following policy: <u>Policy NR-3.14: Drainage Course Setbacks</u> <u>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.</u></p>		
			<p>Mitigation Measure HYD-3c: Amend Policy NR-3.7 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.</p>		
<p>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.</p>	LS		<p>Mitigation Measure HYD-4: None required.</p>	LS	
<p>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.</p>	LS		<p>Mitigation Measure HYD-5: None required.</p>	LS	
<p>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.</p>	LS		<p>Mitigation Measure HYD-6: None required.</p>	LS	
<p>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.</p>	LS		<p>Mitigation Measure HYD-7: None required.</p>	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Land Use Compatibility					
Impact LU-1: Physically divide an established community.		PS	Mitigation Measure LU-1a: Amend Policy CIR-1.2 as follows: Encourage land use patterns that promote shorter travel distances between residences and employment centers within Merced County, allow for non-auto travel, <u>plan for multi-modal access for communities near I-5 and other major roadways</u> , provide traffic-calming on local roadways, and promote the efficient expansion and maintenance of transportation-related infrastructure <u>to avoid constructing new roadways that would cause the physical division of existing communities</u> .	LS	
			Mitigation Measure LU-1b: Amend Policy PFS-5.3 as follows: Encourage new transmission and distribution lines <u>to be sited</u> within existing utility easements and right-of-ways <u>or utilize</u> joint-use of easements among different utilities <u>to avoid impacting existing communities</u> .		
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.	LS		Mitigation Measure LU-2: None required.	LS	
Noise					
Impact NSE-1: Exposure of persons to, or generation or, noise levels in excess of standards established in the local General Plan, noise ordinance, or applicable standards of other agencies.	LS		Mitigation Measure NSE-1: None required.	LS	
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.	LS		Mitigation Measure NSE-2: None required.	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
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.	LS		Mitigation Measure NSE-3: None required.	LS	
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.		PS	Mitigation Measure NSE-4a: Add the following policy: <u>Policy HS-7.14: Transportation Noise Mitigation Program</u> <u>Adopt a countywide transportation noise mitigation program to reduce transportation noise levels at existing sensitive land uses.</u>		SU
			Mitigation Measure NSE-4b: Add the following program: <u>Program HS-L: Noise Sensitive Land Uses Near Major Transportation Noise Sources</u> <u>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.</u>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
<p>Impact NSE-5: Expose people to, or generate excessive groundborne vibration or groundborne noise levels.</p>		PS	<p>Mitigation Measure NSE-5a: Amend Policy HS-7.2 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. <u>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.</u> The acoustical and groundborne vibration analyses shall:</p> <ul style="list-style-type: none"> a) Be the responsibility of the applicant; b) Be prepared by qualified persons experienced in the fields of environmental noise <u>and groundborne vibration</u> 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, <u>and, as applicable, estimate project future groundborne vibration levels using a maximum vibration standard of 70 VdB;</u> e) Recommend appropriate mitigation to achieve compliance with the adopted policies and standards in this element, <u>including setbacks from groundborne vibration sources causing adverse levels of vibration;</u> and f) Estimate interior and exterior noise, <u>and groundborne vibration</u> exposure after the prescribed mitigation measures have been implemented at the property line. 	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
		PS	<p>Mitigation Measure NSE-5b: Amend Policy HS-7.4 as follows: New Noise <u>or</u> Groundborne Vibration Generating Uses Require new commercial and industrial uses to minimize encroachment on incompatible noise <u>or groundborne vibration</u> sensitive land uses. Also consider the potential for encroachment by residential and other noise <u>or groundborne vibration</u> sensitive land uses on adjacent lands that which could significantly impact the viability of the commercial or industrial areas.</p>		
			<p>Mitigation Measure NSE-5c: Amend Policy HS-7.7 as follows: Noise <u>or</u> Vibration Impacted Residential Area Monitoring Consider any existing residential area “noise <u>or vibration</u> impacted” if the exposure to exterior noise exceeds the standards shown in Table HS-2 <u>or if groundborne vibration levels exceed 70VdB</u>. Identify and evaluate potential noise <u>or groundborne vibration</u> impacted areas and identify possible means to correct the identified noise/land use incompatibilities.</p>		
			<p>Mitigation Measure NSE-5d: Amend Policy HS-7.8 as follows: Require land use projects to comply with adopted noise <u>and vibration</u> 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.</p>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation											
	LS	PS		LS	SU										
			<p>Mitigation Measure NSE-5e: Amend Policy HS-7.9 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:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Pre - Project</td> <td style="text-align: center;">Significant Increase</td> </tr> <tr> <td style="text-align: center;"><u>Noise Environment L_{dn}</u></td> <td></td> </tr> <tr> <td style="text-align: center;">Less than 60 dB</td> <td style="text-align: center;">5+ dB</td> </tr> <tr> <td style="text-align: center;">60 - 65 dB</td> <td style="text-align: center;">3+ dB</td> </tr> <tr> <td style="text-align: center;">Greater than 65 dB</td> <td style="text-align: center;">1.5+ dB</td> </tr> </table>	Pre - Project	Significant Increase	<u>Noise Environment L_{dn}</u>		Less than 60 dB	5+ dB	60 - 65 dB	3+ dB	Greater than 65 dB	1.5+ dB		
Pre - Project	Significant Increase														
<u>Noise Environment L_{dn}</u>															
Less than 60 dB	5+ dB														
60 - 65 dB	3+ dB														
Greater than 65 dB	1.5+ dB														
			<p>Mitigation Measure NSE-5f: Add the following policy: <u>Policy HS-7.15: New Project Groundborne Vibration Mitigation Requirements</u> 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.</p>												

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Population and Housing					
Impact POP-1: Induce substantial population growth, either directly or indirectly.		PS	Mitigation Measure POP-1: Amend Policy LU-5.F.2 as follows: Require all applicants for new Urban Community to provide: <ul style="list-style-type: none"> 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; 	LS	

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			<p>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;</p> <p>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 that their economic characteristics/trends will affect the overall economic characteristics of the County. <u>The analysis will 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;</u></p> <p>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;</p> <p>h) A public outreach program to adjacent property owners and applicable community groups/organizations;</p> <p>i) A plan for coordination with other local, regional, State, and Federal agencies that have regulation authority over the project;</p> <p>j) Funding for the preparation of a project-specific Environmental Impact Report;</p> <p>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.</p>		
			<p>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.</p>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
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			Mitigation Measure POP-1c: Implement Mitigation Measures AG-5a through AG-5h, which would limit future residential development within agricultural areas of Merced County.		
Impact POP-2: Displace substantial amounts of population and housing units, necessitating the construction of replacement housing elsewhere.	LS		Mitigation Measure POP-2: None required.	LS	
Public Services					
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.	LS		Mitigation Measure PS-1: None required.	LS	
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.	LS		Mitigation Measure PS-2: None required.	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
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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.	LS		Mitigation Measure PS-3: None required.	LS	
Recreation					
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.	LS		Mitigation Measure REC-1: None required.	LS	
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.	LS		Mitigation Measure REC-2: None required.	LS	
Transportation					
Impact TRF-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness of Merced County roads.		PS	Mitigation Measure TRF-1a: Amend the 2030 General Plan Circulation Diagram to incorporate the regional roadway improvements listed in Table 19-6 of this Draft PEIR to reduce adverse operational traffic impacts under both 2030 and buildout conditions.		SU
			Mitigation Measure TRF-1b: Amend the 2030 General Plan Circulation Diagram to incorporate the local roadway improvements listed in Table 19-8 of this Draft PEIR to reduce adverse operational traffic impacts under 2030 conditions.		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
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			<p>Mitigation Measure TRF-1c: Add the following program: <u>Implementation Program CIR-J: Modify Regional Transportation Improvement Fees</u> <u>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 this General Plan Program EIR through implementation of an expanded regional fee program.</u></p>		
			<p>Mitigation Measure TRF-1d: Modify Implementation Program CIR-A, Traffic Impact Study, to add the following language: <u>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.</u></p>		
			<p>Mitigation Measure TRF-1e: Add the following program: <u>Implementation Program CIR-K, Buildout Right of Way Reservation and Fee Program</u> <u>Work with MCAG, cities within the county and Caltrans to create a regional approach to address the preservation of right 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 this EIR through implementation of an expanded regional fee program.</u></p>		
Impact TRF-2: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness of State Highways.		PS	<p>Mitigation Measure TRF-2a: Implement Mitigation Measure TRF-1a.</p>		SU
			<p>Mitigation Measure TRF-2b: Amend the 2030 General Plan Circulation Diagram to incorporate the state highway improvements listed in Table 19-13 of this Draft PEIR to reduce adverse operational traffic impacts under 2030 conditions.</p>		
			<p>Mitigation Measure TRF-2c: Implement Mitigation Measure TRF-1c.</p>		

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
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			Mitigation Measure TRF-2d: Implement Mitigation Measure TRF-1e.		
Impact TRF-3: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness of streets within incorporated cities in Merced County.		PS	Mitigation Measure TRF-3a: Implement Mitigation Measure TRF-1c.		SU
			Mitigation Measure TRF-3b: Implement Mitigation Measure TRF-1e.		
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.	LS		Mitigation Measure TRF-4: None required.	LS	
Impact TRF-5: Result in change to air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks.	LS		Mitigation Measure TRF-5: None required.	LS	
Impact TRF-6: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.		PS	Mitigation Measure TRF-6a: Add the following policy: <u>CIR-1.23: At-Grade Railroad Crossing Guidelines</u> <u>Work with California Public Utilities Commission (CPUC) and the affected railroads to monitor the effects of development, and implement necessary and applicable design improvements at railroad crossings.</u>	LS	

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			<p>Mitigation Measure TRF-6b: Add the following program: <u>Implementation Program CIR-L: Rail Crossing Safety Program</u> Develop a rail crossing safety program consisting of monitoring, safety standards, CPUC consultation, and facility funding as set forth below:</p> <ol style="list-style-type: none"> 1. <u>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.</u> 2. <u>The County will review traffic data in consultation with the California Public Utilities Commission (PUC) to identify improvements needed to ensure public safety.</u> 3. <u>As appropriate, the County will 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.</u> 4. <u>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.</u> 		
Impact TRF-7: Result in inadequate emergency access.		PS	<p>Mitigation Measure TRF-7: Implement Mitigation Measures TRF-1a through TRF-1e, TRF-2a through TRF-2d, and TRF-3a and TRF-3b.</p>	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Impact TRF-8: Conflict with adopted polices, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.		PS	Mitigation Measure TRF-8: Add the following program: <u>Implementation Program CIR-M, County Regional Bicycle Transportation Plan</u> <u>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.</u>	LS	
Utilities and Service Systems					
Impact USS-1: Have sufficient water supply resources and entitlements available to accommodate continued development through buildout under the 2030 General Plan.		PS	Mitigation Measure USS-1a: Amend Policy LU-5.F.4 as follows: Prohibit new Urban Communities, <u>or the expansion of existing urban communities</u> , if they will negatively impact the water supply of existing users.		SU
			Mitigation Measure USS-1b: Amend Policy W-3.7 as follows: Encourage Enforce the retrofitting of existing development with water-conserving devices <u>as required by state law.</u>		
			Mitigation Measure USS-1c: Amend Policy W-5.3 as follows: Support a county-wide water forum to coordinate long-term water demand and supply programs that emphasize sustainability in the County <u>consistent with approved IRWMPs.</u>		
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.	LS		Mitigation Measure USS-2: None required.	LS	
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.	LS		Mitigation Measure USS-3: None required.	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
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.	LS		Mitigation Measure USS-4: None required.	LS	
Cumulative Impacts					
Aesthetics/Visual Resources		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.	LS	
Agricultural Resources		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.		SU
Air Quality		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.		SU
Biological Resources		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.		SU
Cultural Resources		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.	LS	
Soils and Geological Resources	LS		None necessary.	LS	
Global Climate Change		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.		SU
Hazards and Hazardous Materials	LS		No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.	LS	
Hydrology and Water Quality		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.		SU
Land Use	LS		None necessary.	LS	

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Noise		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.		SU
Population and Housing	LS		No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.	LS	
Public Services	LS		None necessary.	LS	
Recreation	LS		None necessary.	LS	
Transportation		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.		SU
Utilities and Service Systems		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.		SU
CEQA Required Topics					
Growth Inducement		PS	See Impact POP-1, in Chapter 16, <i>Population and Housing</i> .	LS	
Energy Use	LS		None necessary.	LS	
Irreversible Commitment of Resources	LS		None necessary in addition to those identified for resources in chapters 5-20 of this PEIR.	LS	
Irreversible Environmental Changes		PS	No measures in addition to proposed General Plan policies and mitigation identified in this PEIR are available and within the jurisdiction of Merced County to reduce the magnitude of this impact.		SU
Potential Environmental Damage from Accidents	LS		None necessary.	LS	

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