



**INITIAL ENVIRONMENTAL STUDY
and NEGATIVE DECLARATION**

Project Title: Solano County 2015-2023 Housing Element and Health and Safety Element Updates

Lead Agency Name and Address: Solano County
Department of Resource Management
675 Texas Street, Ste. 5500
Fairfield, CA 94533

Project Location: Countywide

Project Sponsor's Name and Address: Solano County
Department of Resource Management
675 Texas Street, Ste. 5500
Fairfield, CA 94533

General Plan Designation(s): N/A

Zoning: N/A

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Date Prepared: February 28, 2015

1.0 INTRODUCTION

This document is an Initial Study and Negative Declaration (ND) prepared pursuant to the California Environmental Quality Act (CEQA), for the 2015-2023 Solano County Housing Element (referred to as the "2015-2023 Housing Element" or the "proposed Housing Element") and the 2015 Public Health and Safety Chapter of the General Plan (referred to as the "2015 Safety Element"). This ND has been prepared in accordance with CEQA, Public Resources Code Sections 21000 et seq., and the State CEQA Guidelines.

An initial study is conducted by a lead agency to determine if a project may have a significant effect on the environment. In accordance with State CEQA Guidelines, Section 15064, an environmental impact report (EIR) must be prepared if the initial study indicates that the proposed project under review may have a potentially significant impact on the environment. A negative declaration may be prepared instead, if the lead agency prepares a written statement describing the reasons why a proposed project would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (State CEQA Guidelines Section 15371). According to State CEQA Guidelines Section 15070, a negative declaration shall be prepared for a project subject to CEQA when either:

- a) The initial study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or
- b) The initial study identified potentially significant effects, but:
 - (1) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - (2) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

If revisions are adopted into the proposed project in accordance with the CEQA Guidelines Section 15070(b), a mitigated negative declaration (MND) is prepared.

1.1 Lead Agency

The lead agency is the public agency with primary responsibility over a proposed project. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." Based on these criteria, Solano County will serve as lead agency for the 2015-2023 Housing Element and 2015 Safety Element.

1.2 Purpose and Document Organization

Together, the 2015-2023 Housing Element and the 2015 Safety Element constitute a *project* that is subject to review under CEQA (Public Resources Code, Section 21000 et seq.), and the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.). This Initial Study has been prepared to assess the short-term, long-term, and cumulative environmental impacts that could result from the adoption and implementation of the proposed 2015-2023 Solano County Housing Element and 2015 Safety Element. This document is divided into the following sections:

- 1.0 **Introduction:** Provides an introduction and describes the purpose and organization of this document.
- 2.0 **Project Description:** Provides a detailed description of the proposed Housing Element.
- 3.0 **Environmental Factors Potentially Affected:** Provides an identification of those environmental factors that involve a "Potentially Significant Impact."
- 4.0 **Determination:** Provides the environmental determination for the 2015-2023 Housing Element and the 2015 Safety Element.
- 5.0 **Environmental Checklist and Evaluation:** Describes the environmental setting for each of the environmental subject areas, evaluates a range of impacts classified as "no impact," "less than significant," "potentially significant unless mitigation incorporated," or "potentially significant" in response to the environmental checklist.

This public document will be used by the County to determine whether the 2015-2023 Housing Element and 2015 Safety Element may have a significant effect on the environment. The Solano County General Plan was adopted and a General Plan EIR (SCH #2007122069) was certified by the Board of Supervisors on August 5, 2008. The General Plan contains supporting environmental studies, as well as extensive objectives, policies, and programs designed to identify and address the environmental impacts of development in the county over the long term. This initial study is tiered off the General Plan EIR because potential impacts of actions taken to implement the 2015-2023 Housing Element and 2015 Safety Element were addressed at a programmatic level of analysis in the General Plan EIR.

2.0 PROJECT DESCRIPTION

The 2015-2023 Housing Element and 2015 Safety Element are part of the comprehensive Solano County General Plan and were prepared to ensure compatibility with the remaining elements.

Amendments to the Housing Element and the Safety Element are subject to CEQA. No specific development projects are proposed as part of the project. However, the project does propose changes in existing land use regulations.

Descriptions of the 2015-2023 Housing Element and 2015 Safety Element are provided below.

2.1 2015-2023 Housing Element

The Draft 2015-2023 Solano County Housing Element focuses on housing needs from January 31, 2015, through January 31, 2023, in accordance with the 5th Cycle Housing Element planning period established for Solano County and other Bay Area jurisdictions by state law (Government Code Sections 65580–65589.8). The purpose of the Housing Element is to establish a comprehensive plan to address housing needs in the unincorporated area of Solano County, with a focus on meeting the housing needs of all economic segments of the community, including low- and moderate-income households that may have trouble affording market-rate housing and populations with special housing needs that may not necessarily be met through conventional housing products. The 2015-2023 Housing Element identifies the policies and programs which the County will implement to ensure that housing in Solano County is affordable, safe, and decent. The 2015-2023 Housing Element will remain in effect until such time as the County adopts an updated Housing Element.

It is the County's goal to promote and ensure adequate housing in a satisfying environment for all residents of Solano County. The 2015-2023 Housing Element sets forth a housing program that works toward the preservation, improvement, and development of housing for the County. The housing program includes many components, such as the establishment of objectives, policies, and programs, which together provide a foundation upon which detailed housing activities can be developed and implemented. The 2015-2023 Housing Element proposes changes to existing County land use policies, Zoning Ordinance, and other procedures, as shown in **Table 1**.

TABLE 1: CHANGES FROM 2015-2023 HOUSING ELEMENT

Description	Program	Zoning Ordinance Change
Removes constraints and allows for “reasonable accommodations” for the disabled in housing development standards, in accordance with Senate Bill (SB) 520.	HE E.1	Individuals with disabilities may request exceptions to zoning, subdivision, or building standards in order to receive reasonable accommodation to achieve accessibility.
Includes the needs of individuals with a developmental disability within the community in the Housing Element special housing needs analysis, in accordance with SB 812.	None. Analysis included in HE Appendix A	None.
Provides accommodation for development of new farmworker housing.	HE D.3	Employee housing for farmworkers will be permitted by right in certain agricultural zones, in accordance with the state Employee Housing Act.

As described in the draft 2015-2023 Housing Element, the Association of Bay Area Governments (ABAG) has assigned Solano County a regional housing need (RHNA) of 103 new residential units for the 2014–2021 RHNA cycle. The County’s RHNA is distributed across multiple income groups. The County plans to fulfill RHNA requirements using approved or already constructed new units, projected second units, and vacant or underutilized residentially zoned land. **Table 2** shows the RHNA allocation and anticipated capacity to fulfill the County’s share of regional need.

TABLE 2: LAND INVENTORY SUMMARY AND ABILITY TO MEET RHNA

Income Group	RHNA Allocation	Approved or Constructed Units	Remaining RHNA	Projected Second Units	Vacant Land Capacity	RHNA Surplus
Extremely Low	13	4 ^{1,2}	37	41	0	4
Very Low	13					
Low	15					
Moderate	19	1 ³	18	0	42 ⁵	24
Above Moderate	43	4 ⁴	39	0	552 ⁶	513
Total	103	9	94	41	594	541

Notes:

1. The extremely low-, very low-, and low-income categories have been combined in some of the columns in the table above to make up the lower-income RHNA. This approach is acceptable per California Department of Housing and Community Development guidance.
2. Four secondary dwelling units affordable to low-income households.
3. One manufactured home affordable to moderate-income households.
4. Four single-family homes affordable to above moderate-income households.
5. The 42 units include 28 that could be developed on vacant land with appropriate densities for development of moderate-income units (R-TC-D6, R-TC-MF, and R-TC-MU). The remaining 14 units are projected manufactured homes installed on land that would otherwise be considered appropriate for above moderate-income housing.
6. The above moderate total excludes 14 parcels that would accommodate the 14 projected manufactured units, as described in note 5.

2.2 2015 Safety Element

The draft 2015 Safety Element is an update to the 2008 Solano County Health and Safety Element required to accompany preparation of the 5th Cycle Housing Element, in accordance with Assembly Bill (AB) 162 (California Government Code Sections 65302, 65303.4, 65352, 65584.04, 65584.06, 65300.2, and 65302.7), SB 5 (California Government Code Sections 65302 and 65302.5, and California Public Resources Code Sections 65040.20 and 66474.02), and SB 5 (California Government Code Sections 65007, 65302.9, 65860.1, 65865.5, 65962, and 66474.5; Health and Safety Code Section 50465; and California Water Code Sections 8200 and 9600). The 2008 Health and Safety Element combines the statutory requirements for the Noise Element and Safety Element, in addition to addressing optional general plan topics including public health, air quality, and climate change.

The primary purpose of the 2015 Safety Element is to incorporate updated floodplain mapping prepared by the Federal Emergency Management Agency and the Department of Water Resources, and updated fire hazard and responsibility area mapping prepared by the California Department of Forestry and Fire Protection (CAL FIRE). The 2015 Safety Element includes comprehensive flood protection measures revised to reflect understood flood risks based on the most recent mapping. It also identifies rivers, creeks, streams, flood corridors, riparian habitat, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management. These updates are consistent with requirements established by the Central Valley Flood Protection Board for the Sacramento-San Joaquin Drainage District (SSJDD). The Central Valley Flood Protection Plan (CVFPP) and related requirements were developed in 2012, pursuant to SB 5. The 2015 Safety Element also includes updated fire hazard maps that include updated fire hazard severity zones and state responsibility areas as defined in Section 4102 of the Public Resources Code. State responsibility areas are land classified as “very high fire hazard severity zones,” as defined in Section 51177. These updates are consistent with the requirements of SB 1241. The inclusion of the above mapping information concerning flood and fire hazards, stormwater management, and groundwater recharge are consistent with the requirements of AB 162.

The 2015 Safety Element reiterates and changes implementation deadlines for policies and implementation programs contained in the 2008 General Plan that result in changes to the county code. In most cases, the 2015 Safety Element extends deadlines established in the 2008 General Plan for implementation items that have not begun or been completed due to funding constraints by five years from 2011 to 2016. The 2015 Safety Element directs changes to the County Zoning Ordinance addressing flood control, seismic safety and land stability, and fire safety, and to the Noise Ordinance addressing noise performance standard and restrictions. Minor editorial changes to update or remove implementation actions completed since 2008 (e.g., completion of the 2010 Climate Action Plan and 2011 Sea Level Rise Strategic Program) have also been completed.

Specifically, the 2015 Safety Element proposes the following specific changes to the 2008 Health and Safety Element, as shown in **Table 3**.

TABLE 3: CHANGES FROM 2015 SAFETY ELEMENT

Description	Program	Zoning Ordinance Change
Adds 200-year flood mapping data as a basis for flood management policy and implementation and regulatory enforcement.	HS I-5 and updates Figure HS-2	Enforce development review standards and public disclosure requirements established in Program HS I-7 in areas included in the 200-year flood zone.
Incorporates direct reference to the Central Valley Flood Protection Plan (CVFPP) to ensure CVFPP information is used in the review and approval of future projects.	HS I-1	Inclusion of relevant CVFPP measures in the County's Zoning Ordinance update to be completed after adoption of the Safety Element.
Adds project and non-project levee mapping for use in the review and approval of future projects.	None. Includes new Figure HS-4	Enforce reporting standards established in Program HS I-10 in areas included as levee inundation areas.
Updates wildland fire hazard maps to address the risk of fire for land classified as state responsibility areas, as defined in Public Resources Code (PRC) Section 4102, and land classified as very high fire hazard severity zones, as defined in PRC Section 51177. Also adds goals, policies, and objectives based on the revised map pursuant to Government Code 65302(g) subparagraph (A) for the protection of the community from the unreasonable risk of wildfire.	None. Updates Figure HS-12	Update the Zoning Ordinance to limit development in areas of extreme, very high, and high wildfire risk as shown in updated maps.
Directs revisions to the Zoning Ordinance to limit development within areas prone to earthquake-related hazards.		Limit development occurring in geologic hazard areas; limit development within landslide areas 3 and 4 on Figure HS-8.
Directs development of a Noise Ordinance that includes: performance standards and exemptions; restrictions on noise-emitting construction activities; regulations for mobile or single event types of noise emissions; standards to ensure training for enforcement personnel; and procedures for noise measurement for enforcement.	HS I-60	Ensure these provisions are accommodated within the Noise Ordinance.

2.3 2015-2023 Housing Element Project Objectives

It is the County's goal to promote and ensure adequate housing in a satisfying environment for all residents of Solano County. To achieve this goal, the 2015-2023 Housing Element contains the following objectives:

- A. Conserve existing affordable housing units and rehabilitate the existing housing stock of unincorporated Solano County.
- B. The County will provide sufficient land to accommodate Solano County's projected housing needs. As of September 2014, the County's remaining unmet need is 94 units.
- C. Provide housing to meet the needs of all economic segments of the community, including extremely low-, very low-, low-, moderate-, and above moderate-income households. While the County will address its full housing need allocation for the RHNA projection period through the sites inventory analysis, it is recognized that the County does not directly participate in production of most new housing units and that the ultimate number of new housing units is highly dependent on factors beyond the County's control.
- D. Provide housing to meet the special needs of the elderly, disabled (including developmentally disabled), large family, single female-headed, homeless, military, and farmworkers.
- E. Where consistent with Solano County's local "smart growth" philosophy to direct most development to the cities, minimize constraints to the production of housing in the unincorporated areas of the County where limited residential development is appropriate.
- F. Continue to provide properly timed residential development in a pattern which is consistent with County economic, social, and environmental needs.
- G. Provide for residential development that is generally self-sufficient in regard to water supply and sewage disposal, requiring only minimal public facilities and services essential for health, safety, and welfare.
- H. Enhance and preserve the environmental quality of residential areas.
- I. Promote energy conservation in new and existing residential units.

For each subject area, there is a discussion of related housing issues followed by an outline of the policies and programs that the County intends to implement in order to address the identified housing issues. In addition to listing a set of policies that can serve as a general framework for County planning and decision-making on a range of issues (e.g., land use, public services, capital improvements), the Housing Element also includes programs that call for the County to undertake or promote specific actions that will help to achieve housing element objectives.

2.4 2015 Health and Safety Element Project Objectives

The purpose of the 2015 Safety Element is to protect people and property from natural and human-made hazards, promote public health, preserve air and water quality, and guide development in a sustainable manner that respects the needs of both people and the environment. To achieve this, the 2015 Safety Element contains the following goals, which comprise the project objectives for the Safety Element:

- HS.G-1: Minimize the potential for loss of life and property resulting from natural or human-caused hazards.
- HS.G-2: Improve air quality in Solano County, and by doing so; contribute to improved air quality in the region.
- HS.G-3: Protect people living, working, and visiting Solano County from the harmful impacts of excessive noise.
- HS.G-4: Protect important agricultural, commercial, and industrial uses in Solano County from encroachment by land uses sensitive to noise and air quality impacts.
- HS.G-5: Recognize the multiple functions of the natural environment for safety, recreation, protection from climate changes, and economic uses.
- HS.G-6: Increase awareness of the effect humans have on the environment and encourage individuals and organizations to modify habits and operations that cause degradation to the environment and contribute to climate change.
- HS.G-7: Prepare for and adapt to the effects of climate change.

2.5 Environmental Setting and Surrounding Land Uses

The environmental setting consists of Solano County, which is one of the nine counties considered part of the San Francisco Bay Region, and is located halfway between the San Francisco and Sacramento metropolitan areas. The gross area of the county is 910 square miles composed of 830 square miles of land and 80 square miles of water. Water areas include San Pablo Bay, the Mare Island Strait, Suisun Bay, and the Sacramento River and related sloughs. Land area is divided into two topographic sections. The western quarter extends into the foothills of the Coast Range, characterized by steep slopes becoming more gently rolling in the easterly portion. The remainder of the county is part of the Sacramento Valley Basin, except for isolated areas of low rolling hills. Other features include the Suisun Marsh, the Napa (or Napa-Sonoma) Marsh, and the Sacramento-San Joaquin River Delta.

2.6 Other Approvals Required

There are no other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement) for the proposed project. The California Department of Housing and Community Development reviews and certifies Housing Elements; however, its approval is not required for adoption by the County. Likewise, updates to safety elements are subject to review by the California Geological Survey, State Board of Forestry and Fire Protection, and the Central Valley Flood Protection Board (for the portion of the County within the Sacramento-San Joaquin Drainage District). These agencies are required to advise the Board of Supervisors regarding the element, and the Board is required to consider their input prior to adopting the 2015 Safety Element.

3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the 2015-2023 Housing Element and 2015 Safety Element, as indicated by the checklist and corresponding discussion on the following pages.

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

4.0 DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Planner's Signature

Date

Planner's Printed Name

Solano County, Department of Resource Management

5.0 ENVIRONMENTAL CHECKLIST AND EVALUATION

5.1 Evaluation of Environmental Impacts

- 1) A “No Impact” answer is adequately supported if the information shows that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).
- 2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses” may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significant.

5.2 Environmental Checklist

I. AESTHETICS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

Solano County comprises 910 square miles, including about 830 square miles of land and about 80 square miles of water (Solano County 2008b). Land area is divided into two topographic sections. The western quarter extends into the foothills of the Coast Range. This area is characterized by steep slopes, which become more gently rolling in the eastern portion. The remainder of the county is part of the Sacramento Valley, which is characterized by level topography, with some isolated areas of low rolling hills. Other significant features include the Suisun Marsh, which has an area of more than 30 square miles, and the Napa-Sonoma Marsh area, with an area of more than 60 square miles, some of which is in Solano County. The eastern portion of the county includes a portion of the Sacramento-San Joaquin River Delta.

The county’s visual resources include agricultural landscapes, the delta, and marshlands, and the oak and grass covered hills offer scenic vistas. This scenery is an important factor in sustaining a high quality of life for the county’s residents.

Discussion/Conclusion:

a) *Less than Significant Impact.* Solano County encompasses numerous unique views including views of marshlands and Delta waters to the south, the Coast Range extending in a north-south direction north and west of Fairfield, meandering hills between Cordelia and Benicia, and expanses of agricultural lands primarily in the eastern half of the county. Of these unique views in Solano County, the Coast Range and nearby hills are considered a scenic vista in Solano County because they are the one scenic resource viewable from a distance throughout the county.

The Housing Element includes policies and programs designed to facilitate the construction of housing units to meet the County’s share of the regional housing need. However, implementation of the 2015-2023 Housing Element would not allow for development beyond that identified in the County’s General Plan and all proposed adjustments to the County’s Zoning Ordinance would be consistent with the General Plan. Future housing development would be subject to project-specific environmental review, and potential impacts to scenic vistas or roadways will be identified and mitigated on a project-by-project basis. Similarly, Zoning Ordinance updates directed by the 2015 Safety Element for flooding, fire, earthquakes, and

other hazards would not change any applicable General Plan land use designations. Any specific development proposals or infrastructure construction that would block views would be subject to project-specific environmental review and potential impacts to scenic vistas or roadways will be identified and mitigated on a project-by-project basis.

Therefore, this impact is considered to be less than significant.

b-c) *Less than Significant Impact.* There is one eligible scenic highway, State Route 37, but no designated state scenic highway is located within Solano County, as identified on the California Scenic Highway Mapping System.

The 2015-2023 Housing Element and 2015 Safety Element are policy-level documents. While the Housing Element encourages the provision of a range of housing types and affordability levels, it does not include any specific designs or proposals, nor does it grant any entitlements for development that would degrade the existing visual character of the county. Likewise, the Safety Element includes mapping and policies that discourage development in some areas and encouragement development in others, but it does not include any specific proposals or grant any entitlements for development that would result in changes to the visual character of areas near the eligible scenic highway.

The Housing Element and the Safety Element anticipate land uses that are consistent with the land use designations established by the 2008 General Plan Land Use Element and Resources Element. Changes to the Zoning Ordinance resulting from Safety Element policies and implementation programs may limit development in certain areas and encourage land preservation; these changes would not result in changes to development location or design that would impact visual character.

Future residential development projects will require compliance with General Plan policies related to aesthetic resources and with Zoning Ordinance requirements associated with site planning and development regulations. For example, subsequent residential development projects would be subject to Solano County's design requirements for subdivisions for which a final map or parcel map is required (Chapter 26, Article VII of the County Code). All tentative maps must be consistent with the Solano County General Plan and satisfy all applicable planning, zoning, design, and improvement requirements specified or incorporated in the County Code. Chapter 26 of the County Code is intended to ensure that proposed development is compatible with existing and future development on neighboring properties, and produces an environment of stable and desirable character, consistent with the General Plan and any applicable specific plan. General Plan Implementation Program RS.I-21 seeks to preserve the visual character of scenic roadways, designating alternate routes for faster traffic, regulating off-site advertising, limiting grading in the view corridor through the grading ordinance, limiting travel speeds, and providing pullover areas with trash and recycling receptacles.

Therefore, implementation of the 2015-2023 Housing Element and 2015 Safety Element would result in less than significant impacts associated with the degradation of the visual character of the county.

d) *Less than Significant Impact.* As discussed under **b-c)** above, the 2015-2023 Housing Element and 2015 Safety Element update are policy-level documents that do not include any specific development designs or proposals or grant any entitlements for development that would increase daytime glare or nighttime illumination in the county. Future development projects in the county would be required to be designed and constructed in accordance with

the Solano County General Plan Resources Element, which contains Implementation Programs RS.1-20 and RS.1-22. Implementation Program RS.1-20 mandates that lighting fixtures be directed in a way that reduces glare and light pollution, and RS.1-22 requires new developments to use fixtures that direct light toward target areas and shield it from spillage.

Therefore, implementation of the 2015-2023 Housing Element and 2015 Safety Element would result in less than significant impacts associated with increased light and glare.

II. AGRICULTURE AND FORESTRY RESOURCES				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting:

Agriculture has historically been an important industry in Solano County and a central part of the county's identity. Agricultural lands account for more land than any other land use in the county. In 2013, Solano County had 306,873 acres of agricultural lands, which represents approximately 63 percent of the unincorporated county's total land area. This represents an 8 percent drop in agricultural land in the county since 2006. According to the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP), changes in Solano County land uses between 1984 and 2013 identify a loss of Important Farmland (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland) during the last two decades. The largest part of the lost Important Farmland was a result of conversion to urban land or low-density development.

Forest and timber resources are limited within Solano County, and are primarily located in the northwestern portion of the county. The 2010 Forest and Rangeland Assessment Report identifies Sustainable Working Forests that are priority landscapes in small portions of the Blue Ridge Hills in the northwestern portion of the county. Pockets of Working Timberland priority landscapes are also located in the northern portion of Suisun Valley. The county has no land zoned for forest land or for timber production.

Discussion/Conclusion:

a-b) No Impact. Future development consistent with housing needs identified for the County could result in the direct conversion of Prime Farmland or Farmland of Statewide Importance (Farmland). However, the 2015-2023 Housing Element is a policy-level document that encourages the provision of a range of housing types and affordability levels. It does not include any specific development designs or proposals, nor does it grant any entitlements for development that would convert agricultural lands to non-agricultural uses or place housing units adjacent to agricultural uses. The Housing Element anticipates land uses that are consistent with the land use designations established by the General Plan diagrams.

Furthermore, future residential development projects would require compliance with General Plan policies related to agricultural resources that are intended to preserve blocks of land in agricultural or open space use and maintain a continuing agricultural use of those lands. Policy AG.P-16 minimizes potential conflicts between agricultural and residential uses by encouraging the use of urban-agricultural buffers between residential uses and agricultural lands. Implementation Program AG.1-10 focuses preservation efforts, including use of Williamson Act contracts and conservation easements, in areas where agriculture is to be the predominant land use. This implementation program maintains large minimum parcel sizes and discourages rezoning that would negatively affect farming operations.

Changes to the Zoning Ordinance resulting from 2015 Safety Element policies and implementation programs would not result in direct conversion of Prime Farmland or Farmland of Statewide Importance, since these changes would not directly result in development of a specific site or a change of land uses within the unincorporated county.

The General Plan EIR found that buildout of the General Plan would result in the conversion of Important Farmland to non-agricultural uses throughout the county. However, the Housing Element and Safety Element's contribution to this conversion is not an impact peculiar to the project within the meaning of State CEQA Guidelines Section 15183. The General Plan EIR and the related findings adopted by the Solano County Board of Supervisors identified agricultural impacts as significant and unavoidable. To the extent that the Housing Element and Safety Element contribute incrementally to those impacts, Section 15183 permits the County to conclude that such impacts have been adequately discussed and disclosed in the General Plan EIR on pages 4.8-5 to 4.8-11. Therefore, no impact peculiar to the project would occur.

c-d) No Impact. No areas within the unincorporated county are zoned for forest land or timberland zone production. The Opportunity Sites identified in the 2015-2023 Housing Element are located in areas within or adjacent to existing developed, commercial, or otherwise urbanized areas. Lands identified as working forest land or timberland in the county are not within or adjacent to the Opportunity Sites. Furthermore, areas identified as working forest land or timberland are located in areas designated as Resource Conservation Overlays on the General Plan land use diagram, which is intended to deter developers from consideration for development. The 2015 Safety Element does not propose any action that would result in changes in land use, zoning district, or development of a specific site. The Housing Element and Safety Element anticipate land uses that are consistent with the land use designations established in the General Plan.

Implementation of the 2015-2023 Housing Element and 2015 Safety Element would not result in conversion of land that has been identified as forest land to any other use. Therefore, no impact would occur.

e) No Impact. The placement of non-agricultural uses adjacent to agricultural uses can result in agriculture-urban interface conflicts that inadvertently place growth pressure on agricultural lands to convert to urban uses. These conflicts include inconveniences or discomforts associated with dust, smoke, noise, and odor from agricultural operations, restrictions on agricultural operations (such as pesticide application) along interfaces with urban uses, farm equipment and vehicles using roadways, and trespassing and vandalism on active farms. The 2015-2023 Housing Element does not identify specific development. The 2015 Safety Element would not result in changes to existing zoning for agricultural use or Williamson Act contract lands. The Safety Element does not propose any action that would directly result in land use changes or development of a specific site.

If future land use or development proposals include land uses or housing adjacent to agricultural land uses, the County would consider agricultural-urban interface conflicts as part of the appropriate environmental review prior to taking any action to consider the approval of such changes. All future development would be required to be in accordance with local regulations, including the General Plan (i.e., Policies AG.P-16 and AG.P-21 and Implementation Program AG.1-5), the Zoning Ordinance, and adopted building standards. Environmental impacts of subsequent development projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

The General Plan EIR found that buildout of the General Plan would result in potential agricultural land use conflicts throughout the county. However, the Housing Element and Safety Element's contribution to this conversion is not an impact peculiar to the project within the meaning of State CEQA Guidelines Section 15183. The General Plan EIR and the related findings adopted by the Solano County Board of Supervisors identified agricultural impacts as significant and unavoidable. To the extent that the Housing Element and Safety Element contribute incrementally to potential agricultural land conversion, Section 15183 permits the County to conclude that such impacts have been adequately discussed and disclosed in the General Plan EIR on pages 4.8-5 to 4.8-11. Therefore, no impact peculiar to the project would occur.

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III. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in significant construction-related air quality impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting:

Two air quality management agencies have purview over air quality considerations for portions of Solano County. The northeastern portion of Solano County lies within the Sacramento Valley Air Basin (SVAB). The Yolo-Solano Air Quality Management District (YSAQMD) attains and maintains air quality conditions in the Solano County portion of the SVAB. The southwestern portion of Solano County is located in the San Francisco Bay Area Air Basin (SFBAAB), which is regulated by the Bay Area Air Quality Management District (BAAQMD). The YSAQMD and BAAQMD prepare plans and programs to attain ambient air quality standards, adopt and enforce rules and regulations, and issue permits for stationary sources. The districts also inspect stationary sources, respond to citizen complaints, monitor ambient air quality and meteorological conditions, and implement other programs and regulations required by the federal Clean Air Act (CAA), the federal Clean Air Act Amendments (CAAA), and the California Clean Air Act (CCAA).

The Solano County portion of the SVAB was designated in 2013 as nonattainment for the federal 8-hour ozone standard, the state ozone standard, and the state PM₁₀ (particulate matter between 2.5 and 10 microns in diameter) and PM_{2.5} (particulate matter less than 2.5 microns in diameter) standards. The CCAA requires the air districts to endeavor to achieve and maintain the state ambient air quality standards by the earliest practicable date and develop plans for attaining the state ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide standards. The YSAQMD prepared the 1992 Air Quality Attainment Plan to address the nonattainment status for ozone, and updates the plan every three years. The Air Quality Attainment Plan and triennial reports are designed to make expeditious progress toward attaining the state ozone standard and contain preliminary implementation schedules for control programs on stationary sources, transportation, indirect sources, and a vehicle/fuels program. The YSAQMD works together with other Sacramento area air districts to maintain the area's portion of the State Implementation Solano County

Initial Study

Plan. As part of the State Implementation Plan, the YSAQMD engages in emissions inventories, air quality modeling, reasonably available control measures, provisions for transportation control strategies and measures, rate of progress and reasonable further progress (RFP) demonstrations, attainment demonstration, transportation conformity motor vehicle emissions budgets, and contingency measures for failure to make RFP or attainment. Each of these items is submitted to and approved by the US Environmental Protection Agency (EPA).

The SFBAAB is designated as nonattainment for the federal 8-hour and 1-hour ozone standard, the sulfur dioxide ambient air quality standard, the state 1-hour ozone standard, and the state PM₁₀ and PM_{2.5} standards. In October 2001 the BAAQMD, ABAG, and Metropolitan Transportation Commission adopted the 2001 Ozone Attainment Plan (OAP), which was an update to the 1999 OAP, and submitted it to the California Air Resources Board (CARB). The OAP is the Bay Area's portion of California's State Implementation Plan to achieve the national ozone standard and is updated every three years. The 2010 Bay Area Clean Air Plan is a plan to reduce ground-level ozone levels in the San Francisco Bay Area and attain the state 1-hour ozone standard. The CCAA requires all air districts exceeding the state ozone standard to reduce pollutant emissions by 5 percent per year, calculated from 1987, or achieve emission reductions through all feasible measures. The CCAA further requires that the Clean Air Plan be updated every three years.

The EPA made a final finding in April 2004 that the BAAQMD had attained the national 1-hour ozone standard. As a result, certain planning commitments outlined in the 2001 OAP were no longer required. While the EPA has prepared a finding of attainment for the region, the Bay Area has not been formally reclassified as an attainment area for the 1-hour standard. In order to be reclassified as an attainment area, the region must submit a redesignation request to the EPA.

Discussion/Conclusion:

a) **No Impact.** A project would conflict with or obstruct implementation of the regional air quality attainment plan if it is inconsistent with the growth assumptions, in terms of population, employment, or regional growth in vehicle miles traveled. These population forecasts are developed, in part, on data obtained from local jurisdictions and projected land uses and population projections identified in community plans. Projects that result in an increase in population growth that is inconsistent with local community plans would be considered inconsistent with the various air quality plans.

Neither the 2015-2023 Housing Element nor the 2015 Safety Element policies include any specific development designs or proposals or grant any entitlements for development. All future development would be required to be in accordance with local regulations, including the General Plan and the County Code. Environmental impacts of subsequent development projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal. Furthermore, future development projects will require compliance with General Plan policies related to air quality, including policies and programs intended to reduce the consumption of fossil fuels and the use of private motor vehicles (Implementation Programs HS.1-54 and HS.1-58).

As the Housing Element and Safety Element are consistent with the development assumptions evaluated in the General Plan, they are not anticipated to exceed the impacts analyzed within the General Plan EIR. The Housing Element's and Safety Element's incremental contribution to regional nonattainment conditions as documented in the General Plan EIR is not an impact peculiar to the project within the meaning of State CEQA Guidelines Section 15183. Rather, the General Plan EIR and the related findings adopted by the Solano County Board of Supervisors

identified air quality impacts as significant and unavoidable. To the extent that the Housing Element and Safety Element contribute incrementally to those impacts, Section 15183 permits the County to conclude that such impacts have been adequately discussed and disclosed in the General Plan EIR on pages 4.2-26 to 4.2-28. Therefore, no impact peculiar to the project would occur.

b-d) No Impact. All ambient air quality standards except national standards for ozone and sulfur dioxide and the state standards for ozone, PM₁₀, and PM_{2.5} are met in Solano County. Future development of housing units facilitated by the 2015 Housing Element could result in an increase in criteria pollutants during both construction and operational activities and could also contribute substantially to the existing nonattainment status of both the SVAB and SFBAAB. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed earth could generate exhaust emissions and fugitive particulate matter emissions that would affect local air quality. This is variable depending on the weather, soil conditions, and the amount of activity taking place, as well as the nature of dust control efforts. Likewise, operational air quality impacts are dependent on the types of land uses and mitigation being used.

Likewise, the 2015 Safety Element includes mapping and policies that discourage development in some areas and encourage development in others. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed earth could generate exhaust emissions and fugitive particulate matter emissions that would affect local air quality.

The 2015-2023 Housing Element and 2015 Safety Element do not include any specific development designs or development proposals, nor does it grant any entitlements for development. All future construction of housing or infrastructure improvements would be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal. All construction projects would also have to comply with local regulations, including the General Plan and the County Code.

As the Housing Element and Safety Element are consistent with the development assumptions evaluated in the General Plan, they are not anticipated to exceed the impacts analyzed in the General Plan EIR. The General Plan EIR found that buildout of the General Plan would contribute to violations of air quality standards. However, the Housing Element's and Safety Element's incremental contribution to air quality violations is not an impact peculiar to the project within the meaning of State CEQA Guidelines Section 15183. Rather, the General Plan EIR and the related findings adopted by the Solano County Board of Supervisors identified air quality impacts as significant and unavoidable. To the extent that the Housing Element and Safety Element contribute incrementally to those impacts, Section 15183 permits the County to conclude that such impacts have been adequately discussed and disclosed in the General Plan EIR on pages 4.2-21 to 4.2-32. Therefore, no impact peculiar to the project would occur.

e) No Impact. Housing units anticipated by the 2015-2023 Housing Element would be considered sensitive receptors that could be exposed to pollutant concentrations. The 2015 Safety Element does not result in new sensitive receptors. However, as discussed under **a)** and **b-d)** above, the Housing Element does not include any specific development designs or development proposals, or grant any entitlements for development. Future development or construction activities would be required to comply with General Plan policies related to air quality, and conform to either the 1992 Air Quality Attainment Plan and 8-Hour Ozone Rate-of-Progress Plan for areas of the county in the SVAB, or the 2001 Ozone Attainment Plan and 2000 Bay Area Clean Air Plan for areas of the county located in the SFBAAB. Residential development

would also be required to meet National Ambient Air Quality Standards and either YSAQMD or BAAQMD thresholds during both construction and operation activities.

As the Housing Element and Safety Element are consistent with the development assumptions evaluated in the General Plan, they are not anticipated to exceed the impacts analyzed in the General Plan EIR. The General Plan EIR found that buildout of the General Plan would expose sensitive receptors to substantial pollutant concentrations. However, the Housing Element's and Safety Element's incremental contribution to siting sensitive receptors is not an impact peculiar to the project within the meaning of State CEQA Guidelines Section 15183. Rather, the General Plan EIR and the related findings adopted by the Solano County Board of Supervisors identified air quality impacts as significant and unavoidable. To the extent that the Housing Element and Safety Element contribute incrementally to those impacts, Section 15183 permits the County to conclude that such impacts have been adequately discussed and disclosed in the General Plan EIR on pages 4.2-29 to 4.2-31. Therefore, no impact peculiar to the project would occur.

f) No Impact. Residential developments facilitated by the 2015-2023 Housing Element are not considered to be an emissions source that would result in objectionable odors. The 2015 Safety Element could result in infrastructure projects, such as levee improvements, which are not considered an emissions source that would result in objectionable odors. No impact would occur.

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IV. BIOLOGICAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting:

Solano County, despite its modest size, lies at the intersection of numerous geographical and geological provinces. This location, in conjunction with variations in hydrology and climate, has resulted in the formation of unique biological and ecological conditions and a great diversity of native species and habitats. Habitat types include the valley floor grassland and vernal pool natural community; the inner Coast Range natural community; the riparian, stream, and freshwater marsh natural community; and the coastal marsh natural community (Solano County 2008a).

The valley floor grassland and vernal pool natural community encompasses the historical alluvial terraces or valley floor portions of the county. These areas currently support or likely historically supported, and are reasonably capable of being restored to, vernal pool habitats and surrounding grasslands within their immediate watershed. The inner Coast Range natural community encompasses the entire western margin of the county. This natural community

includes the Sky Valley and Sulphur Springs Mountain area, the area west of Green Valley (e.g., West Hills), the volcanic hills of the Rockville area, and the Vaca Mountains/Blue Ridge. It is distinguished from the lowland valley floor and vernal pool grassland community by geographic location, elevation, and soils. Consisting of ridges and valleys that trend in a northwestern direction, this natural community is better characterized as a geographical region because it combines a number of plant communities—grassland, oak woodland, oak savanna, and mixed chaparral/scrub—that form a continuum/mosaic over the entire inner Coast Range. This mosaic of different plant communities at various successional stages and ecotones provides a diverse array of habitat types for plants and wildlife. Embedded throughout all of the other natural communities is the riparian, stream, and freshwater marsh natural community, which encompasses all freshwater, aquatic, marsh, and riparian habitats in Solano County. Conversely, the coastal marsh natural community refers only to those areas that lie within the historic influence of tidal action, including areas that either are currently influenced by tidal action or are diked and no longer affected by tides. These marshes exhibit a broad range of characteristics; they include the current and historic estuarine-influenced marshes of San Pablo Bay/lower Napa River, Southampton Marsh in the Carquinez Strait, Suisun Marsh, and tidally influenced freshwater marshes in the upper regions of the sloughs and creeks in the Sacramento–San Joaquin Delta region of the county.

The northeastern portion of the county consists primarily of irrigated agriculture, which provides important habitat for several special-status species (e.g., Swainson’s hawk and burrowing owls). Agricultural areas are not defined as a natural community type. Nevertheless, the importance of agricultural resources to wildlife and important agricultural resources for sensitive species and for species federally and/or state listed as threatened and endangered are discussed in the “Agricultural Lands” section below because these are priority areas for biological resource conservation.

Discussion/Conclusion:

a) *Less than Significant Impact.* Future residential development projects consistent with the 2015-2023 Housing Element could result in impacts to biological resources. Site-specific field studies are generally required to search for special-status species and to determine whether suitable habitat for any special-status species occurs on or near a study area. The proposed Housing Element is a policy-level document and while it encourages the provision of a range of housing types and affordability levels in areas currently designated for residential development, it does not include any specific development proposals, or grant any entitlements for development. The Housing Element anticipates land uses that are consistent with the land use designations established by the General Plan Land Use Element and anticipates that provisions of the County Zoning Ordinance related to high-density, affordable, and special needs housing will continue to be implemented. The Housing Element does not involve the construction or expansion of any residential land uses.

The 2015 Safety Element is a policy-level document and does not include any specific proposals or permit approvals for projects that could impact biological resources.

Future development or infrastructure projects occurring in the county pursuant to either the Housing Element or Safety Element would be required to comply with local regulations, including the General Plan and the County Code. Environmental impacts of subsequent development projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal. With compliance with the General Plan, applicable ordinances, and future CEQA project-level review, adverse impacts to special-status plant and animal species, as well as their habitats, would be less than significant.

b-c) *Less than Significant Impact.* Future residential development in the county could result in adverse impacts to sensitive natural communities such as riparian habitat and federally protected wetlands. Likewise, activities consistent with the Safety Element could result in ongoing maintenance of floodwater infrastructure and levees. As discussed under **a)** above, the 2015-2023 Housing Element and the 2015 Safety Element are policy-level documents that do not include any specific development designs or development proposals, nor do they grant any entitlements for development. Future development or infrastructure projects will be required to comply with General Plan policies related to riparian and wetland resources (i.e., Resources Element Policies RS.P-1, RS.P-7, RS.P-8, RS.P-11, and RS.P-15, and Implementation Program RS.1-10). Such projects would also be subject to regulations enforced by the US Army Corps of Engineers, US Fish and Wildlife Service, and California Department of Fish and Wildlife designed to reduce potential impacts to sensitive natural communities. Therefore, adverse impacts to federally protected wetlands and riparian resources would be less than significant.

d) *Less than Significant Impact.* As discussed under **a)** above, the 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not include any site-specific designs or development proposals, or grant any entitlements for development. The potential for adoption and implementation of the Housing Element and Safety Element to impede native resident or migratory wildlife corridors or the uses of wildlife nursery sites cannot be determined, as no specific details regarding future land use, development, or infrastructure are available. While additional impacts may result from the implementation of future individual projects in areas of the county, environmental review of these future proposals would be required and would identify and provide mitigation for any impacts to native wildlife corridors and nursery sites. Furthermore, future development and infrastructure projects will be required to comply with the General Plan policies related to biological resources. Therefore, impacts would be less than significant.

e) *No Impact.* Currently, there are no ordinances protecting biological resources in the county (other than General Plan policies). As discussed under **a-d)** above, the 2015-2023 Housing Element and 2015 Safety Element do not include any specific development proposals, or grant any entitlements for development that would affect biological resources. Any such projects would be subject to regulations enforced by the US Army Corps of Engineers, US Fish and Wildlife Service, and California Department of Fish and Wildlife designed to reduce potential impacts to biological resources. Therefore, no conflict would result and no impact would occur.

f) *No Impact.* In March 1999, the US Fish and Wildlife Service, in accordance with Section 7 of the Federal Endangered Species Act (ESA) of 1973 (as amended), issued a Biological Opinion regarding the Solano Project Water Service Contract Renewal between the US Bureau of Reclamation and the Solano County Water Agency (SCWA). The Solano Project is the reclamation project that makes water available to SCWA and its contractors. SCWA delivers Solano Project water in accordance with its eight member agency contracts. The 25-year contract between the US Bureau of Reclamation and SCWA provides for continued delivery of Solano Project water for agricultural, municipal, and industrial purposes throughout the SCWA contract service area. In response to the US Fish and Wildlife Service Biological Opinion, the Solano Multispecies Habitat Conservation Plan (MSHCP) was drafted. The purpose of the MSHCP is to promote the conservation of biological diversity and the preservation of endangered species and their habitats consistent with the recognition of private property rights; provide for a healthy economic environment for citizens, agriculture, and industries; and allow for the ongoing maintenance and operation of public and private facilities in Solano County.

Solano County has decided not to participate in the MSHCP, and the County is not required to do so. Therefore, there is no adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan in place within the unincorporated county. Furthermore, implementation of the Housing Element and Safety Element would not obstruct the ability of any participating agency to implement the MSHCP. As a result, no conflict would result from implementation of the 2015-2023 Housing Element and 2015 Safety Element, and no impact would occur.

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V. CULTURAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

Several ethnohistorical and ethnographic accounts describe the Patwin and the Miwok who were the native inhabitants of what is now Solano County (Solano County 2008a). When Europeans first entered central California, the area west of the Sacramento River and north of Suisun Bay was occupied by a series of linguistically and culturally related tribelets. These groups appeared to have no political unity or collective identity, but did speak dialects of the same historically related language. This linguistic similarity led these groups to be called “Patwin,” a term each group used in reference to themselves. The Patwin, along with their neighbors the Nomlaki and Wintu, are Wintuan speakers. The Wintuan language is part of the larger Penutian language family, which also includes Miwok, Maidu, Costanoan, and Yokuts.

The Patwin appear to have been the linguistic and cultural group in Solano County at first contact with Europeans. However, there are discrepancies in accounts as to who inhabited the eastern portion of Solano County along the Sacramento River and within the tidal plain, including the Montezuma Hills. Some hypotheses indicating that the area in question was an unclaimed region utilized by several groups and territorial boundaries have been disputed, while others map the Plains Miwok residing east of the Patwin and adjacent to the Sacramento River.

Plains Miwok territory covered both banks of the Cosumnes and Mokelumne rivers, and included both banks of the Sacramento River from approximately Rio Vista to Sacramento. The foothills of the Sierra formed the eastern boundary of Plains Miwok territory. Linguistically, the Plains Miwok were part of the eastern group of the two subdivisions of Miwokan speakers (Solano County 2008a). Because the discrepancy has not been resolved as to the boundary between Patwin and Miwok, the overview focuses only on the Patwin.

Members of the Pedro Fages expedition of 1772 were the first people of European descent to reach the Carquinez Strait. Four years later, the de Anza expedition reached the strait while looking for a land route to Point Reyes. Although native people regularly crossed the strait in tule boats, these reed crafts were not suitable for transporting the Europeans’ horses. Europeans did not cross the strait until 1810, when Gabriel Moraga led a raid against the Suisun tribe on the strait’s north shore.

In 1817, another Spaniard, Jose Antonio Sanchez, was sent from the Presidio of San Francisco to combat the Suisun. According to some sources, Sanchez's group captured a small group of Suisun, including a young man named Sem-Yeto. Sem-Yeto, baptized Francisco Solano at the newly founded Mission San Francisco Solano in 1824, became an influential figure in the North Bay county later named for him, due in part to his friendship with another young man, Mariano Guadalupe Vallejo (Solano County 2008a).

In 1835, General Mariano Guadalupe Vallejo was ordered by the Mexican government to colonize the Fairfield/Suisun area to protect interior interests from the Russians at Fort Ross. The lower part of the Sacramento Valley and Delta areas were then settled rapidly as the Mexican government granted large tracts of land and access to the region's natural resources. Francisco Solano apparently allied himself and his group of Patwin with Vallejo to gain political advantage over rival native groups.

In 1837, in return for his service to Mexico, Chief Solano was granted Rancho Suisun, an area that encompassed Fairfield and part of Suisun Valley. Some Patwin remained in the area; Chief Solano's adobe and other Patwin houses are believed to have been located in the northern portion of Suisun Valley. In 1846, Chief Solano traveled north and spent the next four years in the Pacific Northwest, finally returning to Solano County in 1850, where he died.

In the late 1840s and 1850s, former gold seekers and pioneers began settling Solano County, where they raised livestock and cultivated fruit orchards, vineyards, wheat, barley, and oats. Produce and livestock were transported over land by wagons to the many sloughs throughout the county, and then shipped by water to waiting markets. Twelve townships were established in Solano County between 1850 and 1871. Although the largest towns were adjacent to San Pablo and Suisun bays, the majority of towns were situated at the ends of sloughs or channels that primarily ran through the eastern portion of the county. In 1868, the completion of the California Pacific Railroad through Solano County allowed the shipment of goods to East Coast markets, significantly bolstering economic development, agricultural production, and population growth. In 1913, the Oakland, Antioch, and Eastern Railway, a high-speed electric interurban railway, opened its 93-mile route from San Francisco to Sacramento, through largely unpopulated parts of Solano County (Solano County 2008a).

Discussion/Conclusion:

a) **No Impact.** Future residential development pursuant to the 2015-2023 Housing Element and future infrastructure projects pursuant to the 2015 Safety Element could conflict with existing known historical resources in the county. The Housing Element is a policy-level document. The Housing Element encourages the provision of a range of housing types and affordability levels, but does not include any specific development designs or proposals, or grant any entitlements for development that would adversely affect historical resources.

The Housing Element anticipates land uses that are consistent with the land use designations established by the General Plan Land Use Element and anticipates that provisions of the County's Zoning Ordinance related to high-density, affordable, and special needs housing will continue to be implemented. All future development occurring in the county would be required to comply with local regulations, including the General Plan and the County Code. Environmental impacts of subsequent development projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

The Safety Element includes updated flood and fire hazard mapping and policies and directs revisions to the Zoning Ordinance related to flood hazard management, wildfire protection, and noise. However, it does not include any specific proposals or grant any entitlements for development that would result in additional construction or operational activities. All future construction for infrastructure improvements would be required to comply with local regulations, including the General Plan and the County Code. Environmental impacts of subsequent development and infrastructure projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

The Housing Element and Safety Element are consistent with the development assumptions evaluated in the General Plan. Housing development and infrastructure projects pursuant to the Housing Element or Safety Element may remove historical built-environment resources, resulting in substantial adverse changes in the significance of the resources. However, the Housing Element's and Safety Element's contribution to this is not an impact peculiar to the project within the meaning of State CEQA Guidelines Section 15183. The General Plan EIR and the related findings adopted by the Solano County Board of Supervisors identified historic resource impacts as significant and unavoidable. To the extent that the Housing Element and Safety Element contribute incrementally to those impacts, Section 15183 permits the County to conclude that such impacts have been adequately discussed and disclosed in the General Plan EIR on pages 4.10-25 to 4.10-29. Therefore, no impact peculiar to the project would occur.

b-d) Less than Significant Impact. Future residential development pursuant to the 2015-2023 Housing Element and future infrastructure projects pursuant to the 2015 Safety Element could conflict with existing known cultural resources in the county. In addition to "known" resource areas, there is the potential that there are undiscovered paleontological and archeological resources that would be encountered and potentially impacted by future construction activities. These resources could include human remains located outside of cemeteries. The Housing Element is a policy-level document. The Housing Element encourages the provision of a range of housing types and affordability levels, but does not include any specific development designs or proposals, or grant any entitlements for development that would adversely affect archaeological or paleontological resources.

The Housing Element anticipates land uses that are consistent with the land use designations established by the General Plan Land Use Element and anticipates that provisions of the County's Zoning Ordinance related to high-density, affordable, and special needs housing will continue to be implemented. All future development occurring in the county would be required to comply with local regulations, including the General Plan and the County Code. Environmental impacts of subsequent development projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

The Safety Element includes updated flood and fire hazard mapping and policies and directs revisions to the Zoning Ordinance related to flood hazard management, wildfire protection, and noise. However, it does not include any specific proposals or grant any entitlements for development that would result in additional construction or operational activities. All future construction for infrastructure improvements would be required to comply with local regulations, including the General Plan and the County Code. Environmental impacts of subsequent development and infrastructure projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

Therefore, impacts to cultural resources, including archaeological and paleontological resources, as well as human remains, are considered less than significant.

INITIAL STUDY

VI. GEOLOGY AND SOILS				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

Mountains and valleys dominate the western part of Solano County, extending from the Carquinez Strait close to the City of Benicia north through Green Valley and Pleasants Valley into Napa County toward Lake Berryessa. These mountain ranges and associated valleys are: the Sulphur Springs Mountains and Sky Valley, located north of Benicia and east of Vallejo; the Chimiles, Green Valley, and Suisun Valley northwest of Fairfield; and Blue Ridge, Pleasants Valley, and the English Hills north of Vacaville.

Flat broad valleys, marshes, sloughs, bays, islands, and low-lying hills associated with the Sacramento River alluvial fan dominate the south and east parts of Solano County. Major topographic features in the southern and eastern parts of the county are: Suisun Slough, Suisun Marsh, Grizzly Bay, Suisun Bay, Honker Bay, Grizzly Island, and the Potrero Hills, south of Suisun City; the Montezuma Hills, Kirby Hill, and Montezuma Slough, west of Rio Vista; Lindsay Slough, Cache Slough, Skag Slough, and the Sacramento River Deep Water Ship Channel, north of Rio Vista; and the Napa-Sonoma Marsh area, west of the City of Vallejo.

Solano County is located in an area of Northern California known to be seismically active. Seismic activity may result in geologic and seismic hazards: seismically induced fault displacement and rupture, ground shaking, liquefaction, lateral spreading, landslides and avalanches, and structural hazards.

Geologic evidence indicates that Solano County is laced with a number of faults—fractures or fracture zones in the earth’s crust along which there has been displacement of the two sides relative to one another parallel to the fracture. The displacement may be a few inches to several feet. Cumulative displacement through geologic time may reach miles.

Faults in Solano County include the Green Valley Fault, the Cordelia Fault, the Midland–Rio Vista Fault, and the Vacaville–Kirby Hills Fault, as well as the Carneros-Franklin Fault and the Great Valley Thrust. Some are considered active (i.e., capable of displacement in the near future). Others, although not recognized as active, must be considered as potentially active until they are investigated more closely.

Soil properties influence the development of building sites, including the site selection, structure design, construction, performance after construction, and site and structure maintenance. Soils located around rivers, ponds, and lakes are typically those with limitations related to ponding, saturation, and flooding. Most of the land surrounding Grizzly Bay, Honker Bay, Suisun Bay, and San Pablo Bay are prone to ponding, saturation, and flooding. Land surrounding the Sacramento River and the Napa River and tributaries to these rivers are also prone to these limitations, which can affect the load-supporting capacity of a soil.

Shrink-swell potential is the relative change in volume to be expected with changes in moisture content—that is, the extent to which the soil shrinks as it dries out or swells when it gets wet. Extent of shrinking and swelling is influenced by the amount and kind of clay in the soil. Shrinking and swelling of soils cause damage to building foundations, roads, and other structures. A high shrink-swell potential indicates a hazard to maintenance of structures built in, on, or with material having this rating. Most of the areas with the greatest limitations related to shrink-swell potential are located in the floodplains of the rivers and tributaries that traverse the county (Solano County 2008a).

Discussion/Conclusion:

a) i-iii) Less than Significant Impact. The 2015-2023 Housing Element includes policies and programs designed to facilitate the construction and conservation of housing which could increase exposure of people and structures to seismic hazards, including rupture of a fault, strong seismic shaking, and seismic-related ground failure. However, the Housing Element is a policy-level document that encourages the provision of a range of housing types and affordability levels rather than identifying any specific designs or development proposals. The Housing Element anticipates land uses that are consistent with the land use designations established by the General Plan Land Use Element and anticipates that provisions of the County’s Zoning Ordinance related to high-density, affordable, and special needs housing will continue to be implemented. All future residential development occurring in the county would be required to comply with local regulations, including the General Plan and County Code. Environmental impacts of subsequent development projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

In addition, future residential development projects would be required to comply with 2015 Safety Element Implementation Program HS.1-19 which includes requirements for development projects to conduct site-specific geotechnical reports that identify measures necessary to ensure stable soil conditions. Furthermore, the County has adopted the California Uniform Building Code, and all future residential developments would be required to conform to the code requirements that are intended to be sufficient to prevent significant damage from ground shaking during seismic events.

The 2015 Safety Element does not facilitate development or infrastructure improvements that would expose people or structures to seismic hazards. Rather, it includes policies and programs designed to reduce potential seismic and geologic hazards in the county.

Therefore, impacts related to seismic hazards would be considered less than significant.

iv) No Impact. Landslides, land slips, mudflows, and debris flows have been the subject of numerous studies in the San Francisco Bay region. In this geologically young area, continued uplift of the Coast Range has resulted in widespread susceptibility to mass movement, particularly in upland areas. Placement of residential structures or other improvements in or below a landslide slope or in steep slopes can affect slope stability and could expose persons and property to danger or destruction. While the 2015-2023 Housing Element does not propose any specific residential development projects, all residential development is subject to the seismic, geotechnical review, grading standards, hillside development standards, and Uniform Building Code process before they are approved. This requires that projects meet certain standards in order to ensure the safety of the residents and buildings. The 2015 Safety Element does not facilitate development that would expose people or structures to landslides and related geologic events. Rather, it includes policies and actions to reduce exposure of people or structures to these hazards. Therefore, adoption and implementation of the 2015-2023 Housing Element and 2015 Safety Element would not expose people or structures to potential impacts involving landslides or mudflow hazards and no impact would result.

b) No Impact. Future construction in the county would result in the moving and grading of topsoil, which would lead to disturbed soils that are more likely to suffer from erosion from a variety of sources, such as wind and water. However, the 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not propose any specific development and would not directly result in adverse impacts associated with substantial loss of topsoil or erosion. The Solano County General Plan requires geotechnical evaluation and recommendations before new development in areas of moderate or higher hazards. This geotechnical evaluation would analyze the potential hazards from erosion. New development would be required to incorporate project features that avoid or minimize the identified erosion hazards. In addition to General Plan policies, any future development or infrastructure projects would be subject to the requirements of the County's building permit and grading permit processes. Since the Housing Element and Safety Element do not involve the construction or expansion of any residential land uses, identification of environmental impacts associated with specific future developments or policies would be speculative at this time. Therefore, no impact would occur.

c-d) Less than Significant Impact. Future residential development on unstable or expansive soils could create substantial risks to life or property and result in adverse impacts such as on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. As discussed under *a) i-iii)* above, the 2015-2023 Housing Element is a policy-level document that does not propose any specific development. All future residential development occurring in the county would be required to comply with local regulations, including the General Plan and Zoning Ordinance. Environmental impacts of subsequent development projects would also be considered pursuant

to CEQA on a case-by-case basis following submittal of a specific development proposal. The 2015 Safety Element does not facilitate development that would expose people or structures to landslides, lateral spreading, subsidence, liquefaction, or collapse. Rather, it includes policies and actions to reduce exposure of people or structures to these hazards.

Impacts resulting from soils that are unstable and/or expansive are generally site-specific, and the Solano County General Plan requires development projects to conduct geotechnical evaluation and recommendations before new development in areas of moderate or higher hazards. In addition to General Plan policies, any future residential development or infrastructure projects would be subject to the requirements of the County's building permit and grading permit processes.

Therefore, impacts resulting from adoption and implementation of the 2015-2023 Housing Element and 2015 Safety Element would be less than significant.

e) ***Less Than Significant Impact.*** The 2015-2023 Housing Element includes policies and programs designed to facilitate the construction and conservation of housing. Soil limitations with respect to septic systems are described as either low, moderate, or severe. These ratings are based on slope, soil depth, permeability, depth to the water table, and whether or not the soil is subject to ponding. Chapter 6.3 of the County Code provides regulations for building, including adoption of the Uniform Building Code. Chapter 6.4 includes regulations governing on-site sewage disposal systems and permitting. The regulations for wastewater disposal in the County Code and the policies in the General Plan would ensure that sewage treatment systems not have a negative impact on groundwater quality. The 2015 Safety Element would not result in any new development creating need for additional septic tanks or alternative wastewater disposal systems.

Therefore, adoption and implementation of the 2015-2023 Housing Element and 2015 Safety Element would result in a less than significant impact.

VII. GREENHOUSE GAS EMISSIONS				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate Greenhouse Gas Emissions That May Have a Significant Impact on the Environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Greenhouse gases (GHGs) generated by human activities can contribute to changes in the natural greenhouse effect, which could result in climate change. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. California is a significant emitter of CO₂e in the world and produced 459 million gross metric tons of CO₂e in 2012 (CARB 2014). California has adopted various administrative initiatives and also enacted a variety of legislation relating to climate change, much of which sets aggressive goals for GHG emissions reductions within the state. However, none of this legislation provides definitive direction regarding the treatment of climate change in environmental review documents prepared under CEQA. Instead, the State CEQA Guidelines allow lead agencies to choose methodologies and make significance determinations based on substantial evidence.

The discussion below provides a brief overview of the primary legislation relating to climate change that may affect the emissions in Solano County.

AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, and 38592–38599) requires that statewide GHG emissions be reduced to 1990 levels by the year 2020, to be accomplished through an enforceable statewide cap on GHG emissions. AB 32 requires that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels. In October 2008, CARB published its initial Climate Change Proposed Scoping Plan, which is the state’s plan to achieve GHG reductions in California as required by AB 32. The Scoping Plan was updated by CARB in 2013.

AB 1493 (“the Pavley Standard,” or AB 1493, 2005) (Health and Safety Code Sections 42823 and 43018.5) aimed to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks of model years 2009–2016. The bill authorized CARB to grant emissions reduction credits for reductions in GHG emissions. In 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model years 2017–2025. The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero emission vehicles.

Executive Order S-01-07 (Low Carbon Fuel Standard, 2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. The Low Carbon Fuel Standard will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. Carbon intensity is a measure of the GHG emissions associated with the various production, distribution, and use steps in the “life cycle” of a transportation fuel.

The Renewables Portfolio Standard (RPS) (Senate Bill 1078, Senate Bill 107, and Senate Bill X1-2) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. The 33 percent standard is consistent with the RPS goal established in the Scoping Plan. As an interim measure, the RPS requires 25 percent of retail sales to be sourced from renewable energy by 2016.

SB 375 (codified in the Government Code and Public Resources Code¹) took effect in 2008 and provides for a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development. SB 375 also requires metropolitan planning organizations to incorporate a sustainable communities strategy (SCS) in their regional transportation plans that will achieve GHG emissions reduction targets by reducing vehicle miles traveled. Solano County is a part of ABAG’s SCS, adopted in 2012, known as “Plan Bay Area.”

In 2010, Solano County adopted a Climate Action Plan (CAP) in accordance with General Plan Program HS-1.73 and to comply with AB 32. The County established a community-wide GHG emissions reduction goal in the CAP of 20 percent below 2005 levels by 2020, which exceeds guidance provided in the Scoping Plan and by the BAAQMD CEQA Guidelines. For the purposes of evaluating the proposed project’s GHG contribution and the potential to conflict with the implementation of an applicable GHG-reducing regulation, the 2015-2023 Housing Element and 2015 Safety Element are evaluated in relation to the GHG emissions reduction targets established in the CAP.

Discussion/Conclusion:

a) Less Than Significant Impact. The 2015-2023 Housing Element designates adequate sites for potential future residential development that could accommodate unmet portions of the RHNA through 2021. New development could potentially generate GHG emissions due to new vehicle trips, stationary equipment use, natural gas use; indirect emissions from electricity use, water demand, and wastewater treatment; and solid waste disposal. The Housing Element is consistent with the General Plan and CAP. New development pursuant to the Housing Element is anticipated and accounted for in the CAP and by its measures to achieve a 20 percent reduction in GHG emissions relative to 2010 levels. Further, the Housing Element is a policy-level document that does not propose any specific development. All future residential development occurring in the county would be required to comply with local regulations, including the General Plan and CAP.

The 2015 Safety Element could result in new infrastructure projects that could potentially generate GHG emissions due to construction activities, such as use of stationary equipment. The Safety Element is consistent with the General Plan and the CAP. The CAP anticipates potential future construction activities in its measures to achieve a 20 percent reduction in GHG emissions

¹ Senate Bill 375 is codified at Government Code Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, 65588, 14522.1, 14522.2, and 65080.01 as well as Public Resources Code Sections 21061.3 and 21159.28 and Chapter 4.2.

relative to 2010 levels. Further, the Safety Element is a policy-level document that does not propose any specific development or infrastructure project. All future infrastructure projects occurring in the county would be required to comply with local regulations, including the General Plan and CAP.

Therefore, with compliance with the General Plan and CAP, impacts to the environment resulting from GHG emissions related to the project are considered less than significant.

b) Less than Significant Impact. Refer to discussion under **a)** above. The Solano County CAP was adopted as the County's plan to reduce GHG gas emissions resulting from activity and development occurring through 2020, and includes provisions that would place Solano County on a trajectory to achieve 2050 emissions reductions in a manner consistent with Executive Order S-03-05. The 2015-2023 Housing Element and 2015 Safety Element are determined to be consistent with the Solano County CAP. Therefore, with compliance with the General Plan and CAP, no conflict would result, and this impact would be less than significant.

INITIAL STUDY

VII. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting:

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. According to California Health and Safety Code Section 25501(o), "hazardous material" means any material that, because of its quantity, concentration, or physical or

chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. The Solano County Department of Resource Management, Environmental Health Services Division is the Certified Unified Program Agency (CUPA) for unincorporated areas in Solano County. The legislation that developed the CUPA was created by the state legislature to minimize the number of inspections and different fees for businesses that use hazardous materials and dispose of hazardous wastes. The CUPA provides regulatory oversight for the following program activities: Hazardous Materials Business Plan, Hazardous Waste, California Accidental Release Prevention (Risk Management Plan), Underground Storage Tanks, Aboveground Petroleum Storage Act, Emergency Response, Illegal Disposal/ Complaints, and Waste Tire Program.

Travis Air Force Base (AFB) encompasses an area of about 5,025 acres adjacent to the City of Fairfield. The base was placed on the EPA National Priorities List in 1989 as a Superfund project (Solano County 2008a). Searches of the Department of Toxic Substance Control's EnviroStor database identified 14 sites on Travis AFB; seven of them are active, requiring action or further evaluation. There are 122 listed sites in the county, 15 of them located in the unincorporated area (DTSC 2014). The State Water Resources Control Board Geotracker database identified 145 with an "open" status, 29 of them located in the unincorporated county (SWRCB 2014).

Solano County contains three airports: Travis AFB, the Nut Tree Airport, and the Rio Vista Municipal Airport. The potential for aircraft crash landings make airports hazardous to life and property. Adjacent areas can also be exposed to high level of noise and air pollution. The Solano County Airport Land Use Commission (ALUC) is the agency in Solano County empowered by state law to prepare the airport land use compatibility plan (ALUCP) for airports and heliports in the county. The Solano County ALUC oversees orderly development of airports and adoption of land use measures that minimize public exposure to excessive noise and safety hazards in areas around public airports, to the extent that these areas are not already devoted to incompatible uses (Solano County 2008a).

Discussion/Conclusion:

a-d) No Impact. Future development of housing units pursuant to the 2015-2023 Housing Element could create a significant hazard to future residents through exposure to the routine transport, use, or disposal of hazardous materials; through exposure to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; through exposure to the handling or emission of hazardous materials; or by locating residential development on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, impacts associated with hazardous materials would be dependent on the location of future residential development and the nature of surrounding land uses. The Housing Element is a policy-level document that encourages the provision of a range of housing types and affordability levels, but does not include any specific development designs, development proposals, or grant any entitlements for development. The Housing Element anticipates land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map and anticipates that provisions of the County's Zoning Ordinance related to high-density, affordable, and special needs housing will continue to be implemented. Future residential development projects will require compliance with General Plan policies related to safety and hazardous materials (Policy HS.P-26 of the 2015 Safety Element) and Zoning Ordinance standards regarding

hazardous materials. Residential development projects are also required to comply with the Solano County Department of Resource Management, Environmental Health Services Division requirements regarding allowed land uses and placement of compatible land uses which are designed to safeguard the public from potential adverse impacts associated with certain land uses, including those that are associated with the use, disposal, and transportation of hazardous materials. Additionally, residential developments do not generally include the routine transportation, use, or disposal of hazardous materials that could create a significant hazard to the public.

The 2015 Safety Element does not facilitate development that would create a significant hazard to future residents through exposure to the routine transport, use, or disposal of hazardous materials; through exposure to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; through exposure to the handling or emission of hazardous materials; or by locating residential development on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Rather, the Safety Element includes policies and actions to regulate and reduce potential for these conditions to occur.

Therefore, adoption and implementation of the 2015-2023 Housing Element and 2015 Safety Element would not create a significant hazard to the public or the environment regarding the transport, storage, use, and disposal of hazardous materials; exposure to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; exposure to the handling or emission of hazardous materials; or locating residential development on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur.

e-f) *Less than Significant Impact.* Airport-related hazards are generally associated with aircraft accidents, particularly during takeoffs and landings. Airport operation hazards include incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the imaginary surfaces surrounding an airport. As discussed under **a-d)** above, the 2015-2023 Housing Element is a policy-level document that does not propose any specific development. While the proposed Housing Element does encourage housing consistent with General Plan land use designations and does identify the need for increased density, it does not provide specific details regarding future development. Additionally, the Solano County ALUC is the agency in Solano County empowered by state law to prepare the ALUCP for airports and heliports in the county. The Solano County ALUC oversees orderly development of airports and adoption of land use measures that minimize public exposure to excessive noise and safety hazards in areas around public airports, to the extent that these areas are not already devoted to incompatible uses.

The 2015 Safety Element would not result in any new development within an airport land use plan, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip.

Therefore, this impact is considered less than significant.

g) *No Impact.* The Solano County Office of Emergency Services (Solano OES) manages and coordinates disaster response, terrorism response, search and rescue missions, flood response, and other major emergencies within its sphere of influence. It works with city and county departments with fire suppression activities, evacuations, hazardous materials incidents, disaster exercises, planning, and use of resources through the SEMS/Incident Command System. Additionally, Solano OES conducts emergency preparedness training and awareness

presentations for citizens and various organizations so they better understand what they should do before, during, and after a disaster or major emergency (Solano County 2008a). As discussed under **a-d)** above, the 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not propose any specific development. All future development and infrastructure projects occurring in the county would be required to comply with local regulations, including the General Plan and Zoning Ordinance. Environmental impacts of subsequent development and infrastructure projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific proposal. Therefore, no impact would occur.

h) No Impact. Areas at risk for extreme wildfires are designated by CAL FIRE as those lands where dense vegetation with severe burning potential prevails. The current areas at very high risk for wildfires are found in western Solano County, in the foothills and mountainous watershed areas. The Cordelia Hills, Potrero Hills, Cement Hills, and western English Hills are all designated as high-risk fire areas. Before nearby lowlands were urbanized, vegetation in these west foothill and mountainous communities was naturally maintained by periodic fire. As nearby lands were developed, natural wildfires were suppressed, resulting in the further buildup of fire-prone brush and woodlands. These efforts to suppress natural processes have resulted in larger, more damaging fires (Solano County 2008a). New development would be required by law to incorporate the California Building Code, County Fire Code requirements, and other applicable state and local fire safety requirements. Additionally, the Solano County General Plan requires that structures be built in fire-defensible spaces and minimize the construction of public facilities in areas of high or very high wildfire risk and that new developments in areas of high and very high wildfire risk incorporate fire-safe building methods and site planning techniques into the development (Policies HS.P-20 and HS.P-22 of the 2015 Safety Element). All future residential development occurring in the county would be required to be in accordance with local regulations, including the General Plan and Zoning Ordinance.

The 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not propose any specific development. All future development and infrastructure projects occurring in the county would be required to comply with local regulations, including the General Plan and Zoning Ordinance. Both elements also include policies and actions reducing the potential exposure of persons and property to wildfire hazards.

Therefore, with compliance with General Plan policies and actions and the County Zoning Ordinance, no impact would occur.

INITIAL STUDY

VIII. HYDROLOGY AND WATER QUALITY				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

Surface water resources in Solano County are diverse and include many creeks, drainages, sloughs, marshes, and bays. Solano County has two major drainage provinces, the Sacramento River/Delta Drainage Province and the San Francisco Bay Drainage Province. As a result, Solano County falls within the jurisdiction of two regional water quality control boards (RWQCBs), the San Francisco Bay RWQCB and the Central Valley RWQCB. Each of the major water resources in Solano County is described in more detail below.

Sacramento–San Joaquin Delta

A few miles south of Sacramento, two of California’s major rivers converge to form one of the most important features of California’s water system, the Sacramento–San Joaquin Delta. More than 23 million Californians and millions of acres of farmland rely on the Delta for all or part of their water supply. Covering more than 700 square miles, the Delta is a patchwork of nearly 60 islands and tracts surrounded by natural and human-made channels and sloughs. The Delta is also the single most important link in California’s water supply system. Two of the state’s biggest water projects, the State Water Project and the federal Central Valley Project, depend on Delta waterways to convey water from Northern California rivers to pumping facilities in the southern Delta. Delta levees play a critical role in preventing salty water from San Francisco Bay from intruding into critical parts of the Delta and contaminating the fresh water that supplies communities and farms. Approximately 150 miles of navigable rivers, sloughs, channels, and bays composing the western portion of the Delta lie within the jurisdiction of Solano County (Solano County 2008a).

Suisun Bay

Suisun Bay is a shallow tidal estuary that lies at the confluence of the Sacramento and San Joaquin rivers and forms the entrance to the Delta. Estuaries are water bodies located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Estuaries extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. On its western end, Suisun Bay is drained by the Carquinez Strait, which connects to San Pablo Bay, a northern extension of San Francisco Bay. In addition to the Carquinez Bridge at the Carquinez Strait, Suisun Bay is spanned in its center by the Benicia-Martinez Bridge and at its eastern end by the SR 160 crossing (also known as the Antioch Bridge) between Antioch and Oakley (Solano County 2008a).

Suisun Marsh

Suisun Marsh is the largest contiguous brackish-water marsh remaining on the west coast of North America. It is a critical part of the San Francisco Bay/Sacramento–San Joaquin Delta (Bay-Delta) estuary ecosystem. Encompassing 116,000 acres, Suisun Marsh includes 52,000 acres of managed wetlands, 27,700 acres of upland grasses, 6,300 acres of tidal wetlands, and 30,000 acres of bays and sloughs. Suisun Marsh is located in southern Solano County about 35 miles northeast of San Francisco. The marsh is bordered on the east by the Delta, on the south by Suisun Bay, on the west by Interstate 680, and on the north by SR 12 and the cities of Suisun City and Fairfield (Solano County 2008a).

San Pablo Bay

The San Pablo Bay watershed drains into the northern reaches of San Francisco Bay. The San Pablo Bay watershed is a major drainage basin for Marin, Sonoma, Napa, Solano, and Contra Costa counties. The catchment area of San Pablo Bay is approximately 810 square miles (520,000 acres), and the surface area of the bay is approximately 90 square miles (60,000 acres). The western portion of Solano County is characterized by large expanses of diked baylands that border San Pablo Bay and the eastern edge of Mare Island. The City of Vallejo borders the Napa River on the west and San Pablo Bay on the south (Solano County 2008a).

Groundwater

There are four groundwater basins in Solano County as defined by the California Department of Water Resources: the Napa-Sonoma Lowlands subbasin within the Napa-Sonoma Valley basin, the Suisun-Fairfield Valley basin, and the Solano and Yolo Valley subbasins within the Sacramento Valley Basin (Solano County 2008a). The cities of Rio Vista and Dixon are served exclusively by groundwater from the Solano subbasin underlying the cities. Vacaville gets approximately one-third of its municipal water supply from this basin, which underlies the eastern portion of the city. Most of the growers in the Solano Irrigation District (SID) use surface water supplied by SID, but SID also has its own wells to supplement its surface water supply from the Solano Project. Maine Prairie Water District and Reclamation District 2068 provide surface water to their growers and do not currently use groundwater underlying their districts. Growers outside of districts that provide surface water rely entirely on groundwater unless they have an individual right to a surface water supply. SID also provides domestic water service to several areas of the unincorporated county as well as the cities of Vallejo, Suisun City, and Vacaville. Most rural residential landowners have individual shallow groundwater wells that serve their domestic needs. Some small rural residential water systems also distribute groundwater to their customers. The Solano subbasin, which underlies the northeastern portion of the county, is the largest groundwater basin in the county. This basin starts in the foothills above Vacaville and extends to the Sacramento River and runs from Putah Creek to the north to the boundaries of Fairfield to the south (Solano County 2008a).

Flooding

Areas subject to flooding in Solano County are located in areas subject to potential extreme high tides or concurrent high tides and watershed flooding. A large portion (30 to 40 percent) of developed and undeveloped lands in Solano County is subject to flooding because of periodic heavy winter rainfall, tidal fluctuations, and the potential for canal, levee, and dam failure from seismic activity. The potential for flood damage in the county is further aggravated by spreading urbanization. Urbanization is encroaching upon and reducing floodplain area in the low-lying areas while increasing the rates and volumes of runoff from overlying higher lands (e.g., through construction of structures and paving), thereby restricting natural infiltration. Potential for flood damage is high in the vicinity of Cordelia and Rockville along Green Valley, Dan Wilson, and Suisun creeks. These streams have a long history of flooding, particularly along the lower reaches of Green Valley Creek, which are influenced by Suisun Bay tides. The most severe flood conditions occur in these areas when heavy rainfall coincides with high tides and offshore winds (Solano County 2008a).

Water Supply

Solano County Water Agency Water Supplies

Solano Project

The Solano Project was conceived in the 1940s and 1950s to meet the water demands of agriculture, municipalities, and military facilities in Solano County. The population of Solano County in the 1940s and 1950s was also expected to grow; however, planners at that time had no way of knowing that the urban population growth in Solano County would increase as dramatically as it has in recent decades. The Solano Project was sized to meet only the projected water needs of Solano County. The amount of water contracted (207,350 acre-feet per year [afy]) is approximately the firm yield of the Solano Project. The firm yield is an engineering calculation based on a specified water amount every year during the driest hydrologic period on record. The Solano Project currently serves 4,150 people and 71,445 acres of irrigable land (USBR 2014). For the Solano Project, the driest hydrologic record was from 1916 to 1934. This is a conservative method of determining water supply from a reservoir, and results in a very dependable water supply (Solano County 2008a).

Tsunamis

Coastal regions are threatened by tsunamis, which are powerful wave surges that can be caused by earthquakes and have the potential to flood lowland areas. By the time a tsunami wave reaches the Carquinez Strait, much of its energy would have already dissipated. The only areas of the county that would be subject to inundation tsunamis are the southwestern part of Mare Island and Island No. 1 located southwest of SR 37 (Solano County 2008b).

Discussion/Conclusion:

a) and f) *Less than Significant Impact.* Future development and infrastructure projects in the county could result in both construction and operational impacts to water quality and discharge standards. Potential operational impacts include the use of fertilizers, herbicides, and pesticides to maintain lawns, as well as motor vehicle operation and maintenance. Potential construction impacts include grading and vegetation removal activities that would result in the exposure of raw soil materials to the natural elements (wind, rain, etc.). However, the 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not include any specific design or development proposals, or grant any entitlements for development. Therefore, identification and analysis of water quality impacts associated with the Housing Element and Safety Element would be speculative at this time. The elements are consistent with the General Plan Land Use Element and Land Use Policy Map and anticipate that provisions of the County's Zoning Ordinance related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented. All future residential development occurring in the county would be required to comply with local regulations, including the General Plan and Zoning Ordinance. Environmental impacts of subsequent development projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

Future residential developments would be subject to Solano County General Plan policies intended to reduce impacts associated with hydrology and water quality (Policies RS.P-64, RS.P-67, RS.P-68, RS.P-70, and RS.P-74 of the General Plan Resource Element). In addition, all new development projects in the county are subject to the requirements of the National Pollution Discharge Elimination System (NPDES) Stormwater Permit enforced by the San Francisco or Central Valley RWQCB, depending on the location. The permit requires that the County impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. Additionally,

Solano County General Plan Development Review Policy RS.I-48 states that building permits require submittal of grading and erosion, sediment, and runoff control plans. Compliance with the provisions of the NPDES permit and the County's General Plan policies and implementation programs would reduce the impacts of future development and infrastructure projects pursuant to the Housing Element and Safety Element. Therefore, water quality and waste discharge impacts would be less than significant.

b) Less than Significant Impact. New residential development in the county will result in additional water demand and may eventually require an increase in water supply in the county's water system. The increase in water supply may place an additional demand on groundwater resources. However, the 2015-2023 Housing Element anticipates that residential development would occur on sites already planned and zoned for such uses. The impacts to the water system, including groundwater, are addressed in the 2008 Solano County General Plan, including mitigation measures in the General Plan EIR to reduce water supply impacts. The 2015 Safety Element will not result in additional water demand and may eventually require an increase in water supply in the county's water system. In addition, future development and infrastructure projects will be subject to environmental review. The elements do not promote growth (e.g., population and housing units) in excess of population and housing needs accommodated by the County's General Plan and Zoning Ordinance. Therefore, adoption and implementation of the 2015-2023 Housing Element and 2015 Safety Element would have less than significant impacts to groundwater quantity and public water supplies.

c-e) Less than Significant Impact. The 2015-2023 Housing Element encourages the development of a range of housing types at varying affordability levels in Solano County. These residential developments could degrade water quality and deplete groundwater supplies. If development of housing units were to occur in previously undeveloped areas, increased impervious surfaces and grading and vegetation removal activities could increase surface runoff and could exceed the capacity of existing stormwater drainage systems and increase the potential for localized flooding and/or erosion. The 2015 Safety Element will not result in development that would demand additional groundwater or degrade water quality.

The Housing Element and Safety Element are policy-level documents that do not include any specific designs or development proposals, or grant any entitlements for development. The elements anticipate land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map and anticipate that provisions of the County's Zoning Ordinance related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented. All future development and infrastructure projects occurring in the county would be required to comply with local regulations, including the General Plan and Zoning Ordinance. Environmental impacts of subsequent development and infrastructure projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific proposal.

Future development and infrastructure projects will require compliance with General Plan policies related to hydrology and water quality and with Zoning Ordinance requirements associated with creeks and other natural drainage courses/tributary standards. In addition, all new development projects in the county are subject to the requirements of the NPDES Stormwater Permit enforced by the San Francisco or Central Valley RWQCB, depending on the location of the project. The NPDES permit requires water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. There are several regulations/procedures in place that implement the water quality measures, including General Plan Development Review Policy

RS.I-48, which states that building permits require submittal of grading and erosion, sediment, and runoff control plans. Compliance with the provisions of the NPDES, best management practices, and the County's Development Review guidelines would reduce the impacts of future development. No specific development or infrastructure project is proposed and future development and infrastructure projects pursuant to the 2015-2023 Housing Element and 2015 Safety Element would be subject to the regulations discussed above. Therefore, impacts to drainage or runoff would be less than significant.

g-h) Less than Significant Impact. Portions of the county are located within the FEMA-designated 100-year and 200-year flood zones. However, as discussed under **a) and f)** above, the 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not include any specific development proposals, or grant any entitlements for development. Future development and infrastructure projects would be subject to 2015 Safety Element policies and Zoning Ordinance provisions, which include requirements for appropriately elevating and flood proofing developments for human occupancy within the floodplain for the profile of a 100-year or 200-year flood event (Policy HS.P-5). Any residential development or infrastructure project in the floodplain must be consistent with County floodplain zoning regulations, which would prevent redirection or impedance of flood flows. Therefore, with compliance with General Plan policies and actions and Zoning Ordinance requirements, impacts would be less than significant.

i) No Impact. Dam inundation occurs when a dam is not structurally sound or is unable to withstand damages resulting from seismic activity. The degree and rapidity of dam failure depends on the dam's structural characteristics. There are 18 dams in Solano County. Of these dams, the state of California Office of Emergency Services (OES) has identified 10 where dam inundation has the potential to cause human injury or loss of life. To reduce the likelihood of dam inundation, the 2015 Safety Element includes policies and programs (HS.P-7 and HS.I-10) which require an assessment of each dam's potential for earthquake-induced failure, evacuation times, inundation profiles (flood depth), and inclusion of project features that may reduce dam failure hazards. Since the 2015-2023 Housing Element and 2015 Safety Element would not otherwise affect the structural integrity of an existing dam's structure or substantially add to the risk of dam failure, no impact is expected to occur.

j) Less than Significant Impact. The project area is not located near any seiche hazard areas. The potential for a tsunami and mudflow hazards exists in Solano County. The 2015-2023 Housing Element anticipates that residential development would occur on sites already planned and zoned for such uses. The 2015 Safety Element would not result in new development within the county. However, 2015 Safety Element Program HS.I-20 requires geotechnical evaluation and recommendations before new development in moderate or higher-hazard areas. Such geotechnical evaluation shall analyze the potential hazards from landslides, liquefaction, expansive soils, steep slopes, erosion, subsidence, Alquist-Priolo Earthquake Fault Zones or other identified fault zones, tsunamis, and seiches. Additionally, this program requires new development to incorporate project features that avoid or minimize the identified hazards. Therefore, with compliance with this General Plan program, seiche, tsunami, or mudflow hazard impacts resulting from adoption and implementation of the 2015-2023 Housing Element and 2015 Safety Element would be less than significant.

INITIAL STUDY

IX. LAND USE AND PLANNING				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting:

According to the Solano County General Plan EIR, Solano County encompasses 830 square miles of land and 80 square miles of water. Approximately 85 percent (773 square miles) of the land area is located in unincorporated portions of the county. The county's incorporated cities—Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville, and Vallejo—together encompass 128 square miles. The county contains a diversity of physical settings. The western quarter extends into the foothills of the Coast Range. This area is characterized by steep slopes that become more gently rolling as one moves east. The remainder of the county is part of the Sacramento Valley, which consists primarily of level topography, with some isolated areas of low hills. Other significant features include the Suisun Marsh in the southern portion of Solano County and the Napa-Sonoma Marsh area in the southwest.

Over 306,000 acres of land are in agricultural use, approximately 63 percent of the unincorporated land area in the county. Agricultural land is concentrated in the eastern portion of the county and in smaller areas scattered throughout the county. Watershed lands are also in agricultural use. About 41 percent of the unincorporated land area is some type of undeveloped natural resource land, including marsh and range and watershed lands in the southern and western portions of the county comprising 183,338 acres. Residential land uses occupy 6 percent, approximately 28,445 acres, developed mostly at rural residential densities of one dwelling unit per 1 or more acres. Industrial land uses account for about 1,383 acres of land area in the unincorporated county. Most of the existing industrial development in Solano County is in cities. Approximately 2,200 acres are in commercial land use, which includes retail, office uses, commercial sales and services, and service stations. Other uses of land in the unincorporated county include public use (such as schools, cemeteries, and federal lands), and park and recreation land, which together account for 57,456 acres, and vacant land, which includes about 6,416 acres.

As stated in Section 2.0, Project Description, no development projects are proposed as part of the 2015-2023 Housing Element or 2015 Safety Element. However, the Housing Element and Safety Element do propose changes to existing county land use regulations and policies. These proposed changes include the following:

- Remove constraints and allow for “reasonable accommodations” for the disabled in housing development standards, in accordance with SB 520.
- Include the needs of individuals with a developmental disability within the community in the Housing Element special housing needs analysis, in accordance with SB 812.
- Add a section to Program D.3 to address Health and Safety Code 17021.6 stating the County will amend its zoning code to treat employee housing consisting of no more than 12 units or 36 beds as an agricultural use and permitted in the same manner as other agricultural uses in the same zone in zones where agricultural uses are permitted.
- Direct revisions to the County Zoning Ordinance to encourage land preservation and construction practices that limit impacts to watersheds.
- Direct revisions to the Zoning Ordinance to include CVFPP-recommended measures.
- Direct revisions to the Zoning Ordinance to limit development in areas prone to earthquake-related hazards.
- Direct revisions to the Noise Ordinance to establish noise performance standards and restrict noise-emitting construction.

Regional and Local Plans, Policies, Regulations, and Ordinances

Solano County General Plan

The 2008 Solano County General Plan contains goals and policies that guide and direct both the location and extent of land uses, population growth, and housing. It also contains policies that direct the services and infrastructure required to accommodate such growth. The General Plan includes a Land Use Policy Map, a Housing Element that contains housing policies and programs that are aimed at providing housing opportunities for residents of all income levels and abilities, and a Safety Element that contains policies and programs to reduce risk to persons and properties from a variety of natural and human-caused hazards.

County Zoning Ordinance

The Solano County Zoning Ordinance provides a precise plan for land use and development standards in Solano County. General Plan land use designations are associated with zoning districts, which include specific requirements, including setbacks, height limits, and development standards. The Zoning Ordinance must be consistent with the General Plan, and so amendments and updates to the General Plan require corresponding Zoning Ordinance changes.

Orderly Growth Initiative

The Orderly Growth Initiative was adopted in 1994 and renewed and extended through 2028 with adoption of Measure T in 2008. The purpose of the initiative is to ensure protection of Solano County’s agricultural and open space resources through the following provisions:

- Amending the General Plan to restrict redesignation of lands identified as Agriculture or Open Space on the land use and circulation map through December 31, 2010 (extended through December 31, 2028 by Measure T); and
- Amending the General Plan to restrict the density of residential and other development of lands designated Agriculture or Open Space through the year 2028, preventing large-scale residential or mixed-use developments outside of municipal areas.

Under the provisions of the Orderly Growth Initiative, a popular vote is required to redesignate Agriculture or Open Space lands into some other use, or to increase the density of development on designated Agriculture or Open Space lands.

Collinsville–Montezuma Hills Area Plan and Program

This plan addresses the area around the historic community of Collinsville in the extreme southern portion of the county bordered generally by Montezuma Slough on the west, Rio Vista on the east, the Sacramento River on the south, and SR 12 on the north. This plan was drafted to analyze the economic, planning, and environmental conditions related to providing for water-dependent industrial development, although this has not occurred to date in this part of the county, despite some development proposals.

White Slough Specific Area Plan

This plan was required by the White Slough Protection and Development Act of 1990 to address habitat preservation, transportation improvements, flood protection, public access, land use changes, and sewer line relocation. The planning area is bisected by SR 37 and located adjacent and east of the Napa River/Mare Island area. The plan was jointly adopted by the City of Vallejo and Solano County.

Tri-City and County Cooperative Plan for Agriculture and Open Space Preservation

The Tri-City and County Cooperative Plan for Agriculture and Open Space Preservation was adopted by the County and the cities of Vallejo, Benicia, and Fairfield in 1994. The plan is intended to guide future land use and park planning for the protection of open space and agricultural resources in an area located south of SR 12 and west of Interstate 680.

Solano County Local Agency Formation Commission

The Solano County Local Agency Formation Commission (LAFCO) is responsible for coordinating changes in local governmental boundaries, including city, agency, and special district boundaries and spheres of influence. This includes establishing boundaries and spheres of influence for each city and special district in Solano County. LAFCO's efforts are directed toward seeing that services are provided efficiently and economically while agricultural and open space lands are protected.

City General Plans

Each of Solano County's seven cities has its own general plan regulating land use and development within the city's boundaries. These general plans, and the associated land use diagrams, are particularly relevant to areas of the unincorporated county that are adjacent to or near city boundaries. In most cases, the County has deferred to city designations within established city spheres of influence.

Association of Bay Area Governments

ABAG is the regional land use planning agency for the Bay Area, including Napa, Sonoma, Marin, San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, and Solano counties. ABAG is responsible for preparing the RHNA, allocating regional housing needs through the nine-county area. In addition, as the regional land use planning agency for the Bay Area, ABAG is responsible for describing existing conditions, forecasting changes to the population and

economy, and assisting local governments in identifying policies that address a changing environment, including preparation and implementation of the region's SCS, known as Plan Bay Area. ABAG prepares demographic and economic projections for the Bay Area on a biennial basis and supports regional cooperation on issues of development, sustainability, and the environment.

Discussion/Conclusion:

a) No Impact. The 2015-2023 Housing Element and 2015 Safety Element are consistent with the land uses envisioned in the 2008 General Plan. The elements' policies and programs do not provide specific details regarding future land use decisions, and no course of action associated with these policies has been determined. However, as neither element proposes a specific development or infrastructure project, there is no potential to divide an established community, and no impact would occur.

a) No Impact. The 2015-2023 Housing Element and 2015 Safety Element are consistent with the land uses envisioned in the 2008 General Plan, adopted city general plans, area plans established by the County, the ABAG SCS, and regulatory procedures established by the Orderly Growth Initiative. The updated elements do not remove policies or programs that currently protect environmental resources. The elements anticipate that provisions of the County's Zoning Ordinance related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented. Future residential development projects will require compliance with General Plan land use policies and with Zoning Ordinance requirements associated with zoning districts, allowable uses, and development standards. All future development occurring in the county would be required to comply with local regulations as listed previously. Environmental impacts of subsequent development and infrastructure projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal. Therefore, no conflicts would result, and no impact would occur.

c) No Impact. As discussed in Section IV Biological Resources **f)**, in March 1999, the US Fish and Wildlife Service, in accordance with Section 7 of the ESA of 1973 (as amended), issued a Biological Opinion regarding the Solano Project Water Service Contract Renewal between the US Bureau of Reclamation and the SCWA. In response to the US Fish and Wildlife Service Biological Opinion, the Solano MSHCP was drafted. The purpose of the MSHCP is to promote the conservation of biological diversity and the preservation of endangered species and their habitats consistent with the recognition of private property rights; provide for a healthy economic environment for citizens, agriculture, and industries; and allow for the ongoing maintenance and operation of public and private facilities in Solano County.

Solano County has decided not to participate in the MSHCP, and the County is not required to do so. Therefore, there is no adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan in place within the unincorporated county. As a result, no conflict would result from implementation of the 2015-2023 Housing Element and 2015 Safety Element, and therefore no impact would occur.

INITIAL STUDY

X. MINERAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting:

Mineral resources mined or produced in Solano County include mercury, sand and gravel, clay, stone products, calcium, and sulfur. Solano County falls within Mineral Resources Zones described in California Surface Mining and Reclamation Act (SMARA) Mineral Land Classification Reports SR 146 Parts I and III, and SR 156. These classification projects assisted the California Mining and Geology Board in adopting and designating lands needed for their mineral content.

Known mineral resource zones in Solano County consist of an area located northeast of Vallejo, south and southeast of Green Valley, and areas south and east of Travis AFB. Land use designations for most of these mineral resource zones, including the area northeast of Vallejo, south and east of Travis AFB, are unchanged. The 2008 General Plan designates an area of Green Valley, which overlaps with the remaining mineral resource zone, as a Specific Project Area. Development of this area is governed by the Middle Green Valley Specific Plan.

The Tri-City and County Cooperative Plan identifies an area south of Interstate 80 near Lynch Canyon as an Aggregate Mineral Resource Area. The area is designated as Agriculture and is also in a Resource Conservation Overlay. This designation would allow mineral resource extraction in the area.

Discussion/Conclusion:

a-b) No Impact. The 2015-2023 Housing Element and 2015 Safety Element are consistent with the land uses envisioned in the General Plan and would not require changes to the Zoning Ordinance or remove policies that currently protect mineral resources. The elements are policy-level documents that encourage the provision of a range of housing types and affordability levels and protection of persons and property from a range of natural and human-caused hazards. The elements do not include any site-specific designs or development proposals, or grant any entitlements for development. They anticipate land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map. Future residential development projects or infrastructure projects would require compliance with General Plan policies related to mineral resource protection and the County would conduct the appropriate level of CEQA review prior to taking any action to consider the approval of such projects. Therefore, with compliance with General Plan policies and programs and Zoning Ordinance requirements, no impact to mineral resources would occur.

INITIAL STUDY

XI. NOISE				
Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting:

The major noise sources in Solano County consist of highway traffic and local traffic on city streets, commercial and industrial uses, active recreation areas of parks, outdoor play areas of schools, railroad operations, and aircraft overflights (Solano County 2008a). Each noise source is discussed individually below.

Roadways

Interstate 80 and Interstate 680 are the two most heavily traveled roadways in Solano County. The Federal Highway Administration model was used with existing traffic data to develop L_{dn} contours for the highways and major roadways in Solano County.

Railroads

Railroad activity in Solano County consists of freight and passenger operations on the Union Pacific Railroad tracks, which extend from the southwest portion to the northern portion of Solano County. Passenger train activity on this line consists of three Capitol Corridor (Amtrak) routes between the Bay Area and Sacramento, with one route stopping at the Fairfield/Suisun City station. At least 20 Capitol Corridor (Amtrak) trains pass through Solano County Monday through Friday. In addition to the passenger services, freight services use the Union Pacific Railroad tracks to transport goods into and through Solano County. Use of the railroad warning horns at roadway crossings results in brief periods of elevated noise levels near the tracks (Solano County 2008a).

Nontransportation Noise Sources

Noise exposure in industrial facilities is controlled by federal and state employee health and safety regulations, but exterior noise levels may exceed locally acceptable standards. Activities at commercial, recreational, and public services facilities can also produce noise that affects adjacent noise-sensitive land uses.

General Service Commercial and Light Industrial Uses

Noise sources associated with service commercial uses such as automotive and truck repair facilities, wrecking yards, tire installation centers, car washes, loading docks, transfer stations, corporation yards, recycling centers, and concrete ready-mix facilities are found at various locations in Solano County. Many of these sources are located in the cities of Benicia, Dixon, Fairfield, Vacaville, and Vallejo.

Parks and School Playing Fields

Numerous parks and schools are spread throughout Solano County. Noise generated by these uses depends on the age and number of people using the respective facility at a given time and the types of activities in which they are engaged. Activities at school playing fields tend to generate more noise than those at neighborhood parks because the intensity of school playground usage tends to be much higher. At 100 feet from an elementary school playground being used by 100 students, average and maximum noise levels of 60 dB and 75 dB, respectively, can be expected. At organized events such as high-school football games with large crowds and public-address systems, the noise generation is often significantly higher. As with service commercial uses, the noise generation of parks and school playing fields is variable.

Noise Associated with Construction Activities

During construction and demolition associated with projects in Solano County, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels typically ranging from 85 dB to 90 dB at a distance of 50 feet. Certain intensive construction activities, such as pile driving, would generate even higher noise levels. Although construction activities can vary in duration, they are nonetheless temporary in nature and typically occur during normal daytime working hours (Solano County 2008a).

Airports

Travis Air Force Base

Travis AFB is located in central Solano County just east of the City of Fairfield. The base is home to three US Air Force command units and occupies approximately 7,100 acres of land with two 11,000-foot runways oriented along the northeast-southwest diagonal away from existing housing developments. The County Department of Resource Management has estimated that 40,000 residents are exposed to noise levels from Travis AFB of 60 dBA CNEL periodically on a daily basis. Approximately 10,000 Solano County residents currently are exposed to noise levels of 80 dBA CNEL from Travis AFB.

Rio Vista Municipal Airport

Rio Vista Municipal Airport (Baumann Field) is located in the southwest corner of Solano County, three miles northwest of the City of Rio Vista. This airport is home to approximately 42 aircraft: 36 single-engine, 2 multi-engine, 2 jet airplanes, and 2 helicopters. The airport's daily aviation operations are approximately 96 aircraft per day. Air traffic is divided equally between local and transient general-aviation flights. The noise levels from Rio Vista Municipal Airport range from 65 dBA CNEL to 55 dBA CNEL within the airport's noise contours.

Nut Tree Airport

Nut Tree Airport is located in central Solano County within the city limits of Vacaville. This airport is home to approximately 183 aircraft: 168 single-engine and 15 multi-engine aircraft. The airport's daily aviation operations are approximately 278 aircraft per day. Air traffic consists of general-aviation local flights, with a higher number of transient flights than local flights or flights originating at the airport. The noise levels from Nut Tree Airport range from 70 dBA CNEL to 60 dBA CNEL within the airport's noise contours.

In recognition of the adverse impacts of noise, the County Code establishes numerical standards restricting noise generated by wind turbine generators and wireless communication sites to 50 dB L_{dn} at the property line of a noise-sensitive land use.

Discussion/Conclusion:

a-d) Less than Significant Impact. The 2015-2023 Housing Element encourages the provision of a range of housing types and affordability levels. Housing is not considered a major source of noise in the county, but placing housing adjacent to major sources of noise could expose people to temporary or permanent noise levels in excess of standards established in the 2015 Safety Element. However, the Housing Element is a policy-level document that does not include any specific development proposals, or grant any entitlements for development. The Housing Element anticipates land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map and anticipates that provisions of the County Code related to high-density, affordable, and special needs housing will continue to be implemented. Future residential development projects will require compliance with 2015 Safety Element policies related to noise and vibration standards (including Policies HS.P-48 through HS.P-52). Residential projects will also be required to comply with 2015 Safety Element daytime noise standards, which are typically set at noise levels that would not annoy or impede human interaction or function in outdoor activity areas, as well as with nighttime noise standards, which are typically set to result in acceptable noise levels that would not interfere with sleep for most people inside a building with windows closed. In general, noise standards are designed to prevent annoyance or sleep disruption in sensitive members of the public. The Housing Element does not involve the construction or expansion of any residential land uses. All future residential development occurring in the county would be required to comply with local regulations, including the General Plan and County Code. Environmental impacts of subsequent development projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

The 2015 Safety Element includes policies and programs to protect persons and property from a range of natural and human-caused hazards. It does not facilitate development that places housing or other sensitive receptors close to major sources of noise in the county. Rather, Safety Element policies and programs establish acceptable operational noise standards for various land use types to reduce impacts to sensitive receptors. It also establishes standards for

construction noise levels that would reduce temporary or periodic increases to ambient noise levels from construction activities associated with future housing development and infrastructure projects pursuant to the Housing Element and Safety Element.

Therefore, with compliance with General Plan policies and programs and Zoning Ordinance requirements, adverse construction and operational noise and vibration impacts related to adoption and implementation of the 2015-2023 Housing Element and 2015 Safety Element would be less than significant.

e-f) No Impact. As discussed under **a-d)** above, the 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not include any site-specific designs or development proposals, or grant any entitlements for development within an airport land use plan, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip. Future development or infrastructure projects would be subject to General Plan policies regarding noise from transportation sources, including aircraft in flight. In addition, such projects would be required to comply with applicable ALUCP, County Zoning Ordinance, and County Code standards regarding noise. Therefore, with compliance with these policies and regulations, no impact would occur.

XII. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

In 2014, according to the California Department of Finance, the unincorporated county had a population of 19,036 compared to the total county population of 420,339. The unincorporated area had a 1.5 percent population decrease from 2000 to 2014, decreasing from 19,322 to 19,032 persons. The county overall grew 4.0 percent from 2000 to 2014.

Several unincorporated areas of the county contain smaller residential communities that have unique housing and population characteristics. These eleven communities in the unincorporated areas of Solano County include Homeacres, Starr Subdivision, Sandy Beach, Cordelia, Rockville, Green Valley, Tolenas, North Vacaville, East Vacaville, Olive School, and Elmira. While there are other housing units outside of the eleven communities, these communities represent the majority and the largest concentrations of housing units in the unincorporated area.

Based on the 2008 Solano County General Plan EIR, the existing General Plan provides capacity in 2030 for a total of 39,455 persons and 14,923 dwelling units in the unincorporated county (Solano County 2008a).

Discussion/Conclusion:

a) *No Impact.* The 2015-2023 Housing Element is a policy-level document that encourages the provision of a range of housing types and affordability levels. It does not include any specific development proposals, or grant any entitlements for development that would induce population growth. The Housing Element does not direct the construction or expansion of any residential land uses. Housing Element policies and programs do not provide specific details regarding future land use decisions, and no course of action associated with these policies has been determined.

The 2015 Safety Element includes policies and programs to protect persons and property from a range of natural and human-caused hazards. It would not result in the construction of additional housing or infrastructure that would induce population growth. Although additional levees and flood control infrastructure may be required to implement Safety Element policies, such projects would be designed to increase the level of flood protection afforded to existing and currently planned residential development, rather than to expand protected areas to accommodate additional housing.

The Housing Element and Safety Element anticipate land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map, and anticipate that provisions of the County Code related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented. Future residential development projects will require compliance with General Plan policies related to population growth in the county. Environmental impacts of subsequent development projects would be considered pursuant to CEQA on a case-by-case basis following submittal of a specific proposal.

The Housing Element and Safety Element are consistent with the land use and population assumptions evaluated in the General Plan EIR. The General Plan EIR (page 4.1-21) concluded that growth would be induced with implementation of the General Plan. However, the project's contribution to this is not an impact peculiar to the project within the meaning of State CEQA Guidelines Section 15183. The General Plan EIR and the related findings adopted by the Solano County Board of Supervisors identified population growth impacts as significant and unavoidable. To the extent the Housing Element and Safety Element contribute incrementally to those impacts, Section 15183 permits the County to conclude that such impacts have been adequately discussed and disclosed in the General Plan EIR. No impact peculiar to the project would occur.

b-c) Less than Significant Impact. The 2015-2023 Housing Element encourages the provision and preservation of a range of housing types and affordability levels to meet the County's housing needs. Implementation of the Housing Element may increase, but would not displace or decrease housing units in the county.

The 2015 Safety Element includes mapping and directs changes to County ordinances that may result in discouraging development in some areas and encouraging development in others. Development in areas subject to high flood or fire risk may be discouraged through policies such as requiring disclosure of risk, requiring levee failure inspections by developers, and heightened flood insurance rates. However, the Safety Element does not include any specific proposals or grant any entitlements for development. Environmental impacts of subsequent development decisions would be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

Therefore, displacement impacts would be less than significant.

XIII. PUBLIC SERVICES				
Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

Fire Protection and Emergency Services

Solano County does not have its own fire department. The following individual fire districts serve the unincorporated county:

- California Department of Forestry and Fire Protection (CAL FIRE) – Gordon Valley Fire Station
- Cordelia Fire Protection District (FPD)
- Dixon FPD (under contract with City of Dixon Fire Department)
- East Vallejo FPD (under contract with the City of Vallejo Fire Department)
- Montezuma FPD
- Suisun FPD
- Vacaville FPD

Where source is not noted, information about fire service is from the 2014 Solano LAFCO Fire District Municipal Service Review. CAL FIRE provides fire protection to several unincorporated communities in Solano County. Battalion 1415's Gordon Valley station serves West Hills, Green Valley, Vaca/Lagoon Valley, and Pleasants Valley. Dixon FPD is currently under contract with the City of Dixon Fire Department and utilizes the city's station. Also, East Vallejo FPD is under contract with the City of Vallejo Fire Department to provide services to unincorporated southeast Vallejo (Solano County 2014).

The Solano Emergency Medical Services Cooperative, in its role as the local emergency medical service (EMS) agency, provides pre-hospital emergency care to any persons in the jurisdiction of the agency needing such service through a comprehensive and coordinated arrangement of appropriate health and safety resources (Solano County 2014).

CAL FIRE's Gordon Valley Station has a rescue squad and provides basic pre-hospital emergency care. However, the station is seasonal and made up of volunteers, and the number of people who assist with EMS fluctuates.

Dixon FPD has a current force of 38 firefighters, 20 of whom are career firefighters, 79 percent of whom are emergency medical technician (EMT) 1 certified, and 24 percent of whom are paramedics.

Cordelia FPD has two paid employees who assist with the EMS function of the district. Each employee is required to be an EMT. In addition, the district has 45 volunteers. Cordelia FPD uses a private ambulance service.

East Vallejo FPD does not have staff of its own. All staff is provided by the Vallejo Fire Department, which has 87 firefighting personnel. Of the personnel that serve East Vallejo FPD, 23 percent are EMT 1 certified and 65 percent are paramedics.

Montezuma FPD has two paid employees who assist with the EMS function of the district. One of these is an EMT. In addition, 20 volunteers, two of whom are EMTs, assist with this function.

Vacaville FPD has eight paid chiefs and firefighters, 66 percent of whom are EMT 1 certified. In addition, 68 volunteers assist with this function. A private ambulance service is used.

Suisun FPD has 39 firefighting personnel, 38 percent of whom are EMT-1 certified, and 8 percent of whom are paramedics (Solano Local Agency Formation Commission 2014).

Police Protection

The Office of the Sheriff is a state constitutional office headed by an elected sheriff in each county. The Solano County Sheriff's Office is responsible for providing public safety services in the unincorporated county including patrol, investigations, custody of adult offenders, and coroner services. The County Sheriff's Office also provides a variety of support services including maintenance of criminal records, operation of the County jail, security at County court facilities, and dispatch of public safety personnel. Through comprehensive community, intergovernmental, and employee partnerships, the County Sheriff's Office provides effective law enforcement, safe, humane, secure jails, and security for the Superior Courts.

The Solano County Sheriff's Office (530 Union Avenue in Fairfield) employs more than 500 people, including 116 sworn law enforcement professionals. This amounts to approximately 0.006 officers per resident of the unincorporated county. No information regarding service and response standards and current performance is available (Solano County 2008a).

Schools

Ten school districts lie partially or completely within the county boundary. Two of the school districts, Winters Joint Unified School District and Davis Joint Unified School District, are based in Yolo County, although their service areas extend into northern Solano County. The other eight

school districts serve the majority of students in the county. These districts are listed below and include the number of schools shown in parentheses.

- Benicia Unified School District (7): Four elementary, one middle, and two high schools
- Dixon Unified School District (7): Three elementary, one middle, and two high schools
- Fairfield-Suisun Unified School District (30): 13 elementary, four K-8, three middle, five high, three continuation, and two community day schools
- River Delta Joint Unified School District (11): Five elementary, two middle, one high, one high and continuing, one continuation, and one community day school
- Travis Unified School District (9): Five elementary, one middle, one high, one continuation, and one community day school
- Vacaville Unified School District (19): 10 elementary, two middle, four high, one alternative, and two continuation schools
- Vallejo City Unified School District (25): 15 elementary, three middle, three alternative or charter, three high, and one continuation school
- Winters Joint Unified School District (6): One pre-school, two elementary, one middle, one high, and one continuation school
- Davis Joint Unified School District (21): Nine elementary, four junior high, two high, and six alternative schools

Schools located in unincorporated areas include Suisun Valley K-8 School, Tolenas School, and Solano Community College. River Delta Joint Unified School District (which is headquartered in Rio Vista and covers parts of Solano County) is considered a Solano County district even though Ed-Data Education Data Partnership (from which most of the data was acquired) lists it as a Sacramento County district.

Discussion/Conclusion:

a, b, d, e) **Less than Significant Impact.** The 2015-2023 Housing Element includes policies and programs designed to facilitate the construction and conservation of housing to meet the County's affordable housing needs. Subsequent residential development projects could result in an increase in demand for public services that would require new or expanded facilities or change existing fire, police, park, or other public facility service levels. However, the Housing Element is a policy-level document that does not include any specific development proposals, or grant any entitlements for development.

The 2015 Safety Element includes policies and programs to protect persons and property from a range of natural and human-caused hazards. It would not result in the construction of additional housing or infrastructure that would create need for new or expanded facilities or change existing fire, police, park, or other public facility service levels.

The Housing Element and Safety Element anticipate land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map and anticipate that provisions of the County Code related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented. Housing Element and Safety Element policies and programs do not provide specific details regarding future land use decisions, and no course of action associated with these policies has been determined. Therefore, determining that

implementation of the 2015-2023 Housing Element and 2015 Safety Element would require new or expanded facilities or change existing fire, police, park, or other public facility service levels would be speculative at this time. All future development and infrastructure projects occurring in the county would be required to comply with local regulations, including the General Plan and Zoning Ordinance. Environmental impacts of subsequent development projects would be considered pursuant to CEQA on a case-by-case basis following submittal of specific proposals. Additionally, future residential development projects will require compliance with General Plan policies related to the provision of public services.

Therefore, impacts associated with an increased demand for fire, police, park, or other public facility services that would require new or expanded facilities or change in service levels would be less than significant.

c) Less than Significant Impact. The 2015 Safety Element would not result in the construction of additional housing or infrastructure that would create need for new or expanded school facilities. New housing units built pursuant to the 2015-2023 Housing Element could generate the need for additional schools to serve students residing in new housing, but would not likely increase the demand for school-related services to the extent that new school facilities would be required. If such facilities were required, payment of impact fees for construction of new school facilities would constitute sufficient mitigation for school facility impacts, consistent with state law (SB 50). Therefore, impacts would be less than significant.

INITIAL STUDY

XIV. RECREATION				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

Four regional parks are located in the unincorporated area of Solano County: Lake Solano Park, Sandy Beach Park, Belden’s Landing Water Access Facility, and Lynch Canyon Open Space Park. These parks are described below.

- Lake Solano Park is located at the base of the Coast Range foothills west of Winters and at the north end of the county along Putah Creek. The park contains a campground, picnic sites, group picnic facilities, a free boat launch for nonpowered vessels, parking, and public restrooms.
- Sandy Beach Park is located near Rio Vista on the Sacramento River. The park has a boat-launch ramp, campsites, picnic grounds, a hiking trail, roads for bicycling and driving, a beach, and volleyball and horseshoe pitch courts.
- Belden’s Landing Water Access Facility is located southeast of Suisun City in the Montezuma Slough/Grizzly Island area. The day-use facility includes a boat-launch ramp, a fishing pier, restrooms, and parking.
- Lynch Canyon Open Space Park is a hilly, natural landscape located north of SR 12 between Vallejo and Fairfield. The park has a restroom and parking lot, including room for equestrian rigs.

No neighborhood or community parks are located in the unincorporated area.

Benicia, Fairfield, and Vallejo also currently collaborate with the County in the operation of a 10,000-acre open space—the Tri-City and County Cooperative Planning Area for Agriculture and Open Space.

In Solano County, open space lands fall into three general categories: resource-oriented open space, conservation open space, and recreational open space. Activities in these areas include hiking, mountain biking, horseback riding, picnicking, bird watching, fishing, hunting, and boating. Support facilities such as parking lots, staging areas, restrooms, and individual and group picnic areas may also occur in such areas. In addition to the three county and two state parks mentioned above, Solano County has 10 open space areas (132,500 acres) open to public recreation. These areas provide county and city residents and visitors with substantial recreational opportunities.

A network of trails exists in the unincorporated county and the cities. New trails are being added to make the system more accessible and connected. Because of limited County data, the quantity of trail miles and the quantity of publicly accessible open space could not be determined at the time of writing (Solano County 2008a).

Discussion/Conclusion:

a-b) Less than Significant Impact. Future residential development consistent with the 2015-2023 Housing Element could increase the use of existing neighborhood and regional parks or other recreational facilities and require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The Housing Element does not involve the construction or expansion of any residential land uses.

The 2015 Safety Element includes policies and programs to protect persons and property from a range of natural and human-caused hazards. It would not result in the construction of additional housing or infrastructure that would create need for new or expanded recreation facilities.

The Housing Element and Safety Element are policy-level documents that do not include any specific development proposals, or grant any entitlements for development that would result in an increase demand for park and recreational facilities. The elements anticipate land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map and anticipate that provisions of the County Code related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented.

All future development and infrastructure projects occurring in the county would be required to comply with local regulations, including the General Plan and County Code. Environmental impacts of subsequent development and infrastructure projects would be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

Therefore, impacts to park and recreation facilities and services would be less than significant.

INITIAL STUDY

XV. TRANSPORTATION/TRAFFIC				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

Solano County’s roadway system consists of several types of roadways: freeways, arterial roads, collector roads, and local roads. Typically, these roadways are defined according to use, and the appropriate geometric features of the roadways vary based on a variety of conditions. Generally, roadways in unincorporated Solano County are not designed with sidewalks, because these roadways generally are located in areas with low population or employment density.

The county’s pedestrian connectivity consists primarily of short sidewalks and multiuse trails. Class I bicycle trails are usually designed as multiuse trails that can be shared with pedestrians. Pedestrian facilities also include crosswalks and pedestrian-actuated signals at major intersections near developed areas.

Extensive efforts have been made in Solano County to identify bicycle and pedestrian projects and conditions. The *Solano Countywide Bicycle Plan*, maintained and updated by the Solano Transportation Authority, summarizes a countywide bicycle system and establishes anticipated costs, funding requirements, and priorities for implementing and maintaining a system (Solano County 2008b).

Solano County is located along the main line of the Union Pacific Railroad, which carries substantial amounts of freight traffic through Solano County to connect West Coast ports and inland markets. This requires the operation of frequent and long freight trains. In addition, the Capitol Corridor (Amtrak) service runs through Solano County. Currently, this service stops only at the Fairfield/Suisun City station. New stations at Fairfield/Vacaville and Dixon are in various stages of planning and design. Industrial and warehousing functions occasionally use several spur railroad tracks, as well as a track that runs between Suisun City and the Napa County line east of Cordelia.

Three airports operate in Solano County. The Nut Tree Airport and the Rio Vista Municipal Airport are public use facilities and Travis AFB is a military airfield. These facilities are described previously under "Noise" and "Land Use and Planning."

Along the southern and eastern borders of Solano County, the San Joaquin–Sacramento Ship Channel, carries ship-based traffic through the Carquinez Strait from major inland ports to the Pacific Ocean. This ship channel is used for recreational purposes and serves local and regional industries. Solano County has three marinas, all privately owned: Arrowhead Harbor (Prospect Island), Snug Harbor Resort (Ryer Island), and the Delta Marina (Rio Vista). These marinas serve as the key access points for most water-based recreation users in the county.

A number of transit services are provided for Solano County residents, with 15 routes operating across the county. Most of these are oriented to serving residents in particular jurisdictions, although unincorporated Solano County residents also have access to these services. Regional transit services include express bus, rail, and ferry. Each type of service features park-and-ride lots to accommodate riders from a nearby catchment area, and unincorporated Solano County residents may use them.

In 2011, the Solano Transportation Authority finalized a Countywide Congestion Management Program (CMP). The document was updated in 2013 to incorporate SB 375 requirements and be consistent with the RTP/SCS, Plan Bay Area. The CMP has stated goals to ensure that Solano County's transportation system operates effectively, maintains mobility, and conforms to Plan Bay Area, Metropolitan Transportation Commission, and the Bay Area's multimodal network of highways, major arterials, transit services, and other circulation systems.

Discussion/Conclusion:

a-b) Less than Significant Impact. The 2015-2023 Housing Element includes policies and programs designed to accommodate the County's affordable housing needs. Subsequent residential development projects could result in an impact on the county circulation system. The 2015 Safety Element includes policies and programs to protect persons and property from a range of natural and human-caused hazards. It would not result in development that would reduce the effectiveness of the county circulation system in a manner inconsistent with the CMP.

The Housing Element and Safety Element are policy-level documents that do not include any specific development proposals, or grant any entitlements for development. The elements anticipate land uses that are consistent with the CMP and RTP/SCS as well as land use

designations established by the General Plan Land Use Element and Land Use Policy Map, and anticipate that provisions of the County Code related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented. Roadway standards and service levels established by the CMP, RTP/SCS, and General Plan are based on these land use designations. Any future development would be required to comply with local regulations, including the General Plan and Zoning Ordinance. Environmental impacts of subsequent development or infrastructure projects would be considered pursuant to CEQA on a case-by-case basis following submittal of a specific proposal.

Therefore, no conflict would result, and impacts to the circulation system associated with adoption and implementation of the 2015-2023 Housing Element and 2015 Safety Element would be less than significant.

c) *Less than Significant Impact.* The Solano County ALUC is empowered by state law to prepare the ALUCP for airports and heliports in the county. The Solano County ALUC oversees orderly development of airports and adoption of land use measures that minimize public exposure to excessive noise and safety hazards in areas around public airports by adopting and implementing ALUCPs for each airport. The 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not include any specific development proposals, or grant any entitlements for development. The elements anticipate land uses that are consistent with land use designations established by the General Plan Land Use Element and Land Use Policy Map, and anticipate that provisions of the County Code related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented. Upon last adoption and through amendments to date, the General Plan and Zoning Ordinance have been found by the County to be consistent with the ALUCPs. Therefore, as the Housing Element and Safety Element do not change land use designations or zoning districts within ALUCPs, this impact is considered to be less than significant.

d-e) *Less than Significant Impact.* As discussed under **a-b)** above, the 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not include any specific development proposals, or grant any entitlements for development that would affect the site design or emergency access of any development site. Future development and infrastructure projects will require compliance with General Plan policies related to traffic and circulation and County road design standards adopted to reduce hazards and ensure adequate emergency access. Therefore, impacts would be less than significant.

f) *Less than Significant Impact.* As discussed under **a-b)** above, the 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not include any specific development proposals, or grant any entitlements for development. Future development and infrastructure projects will require compliance with General Plan policies and master plans (e.g., Countywide Bicycle Plan) related to alternative transportation. Therefore, no conflict with any local policies or ordinances supporting alternative transportation would result, and this impact would be less than significant.

XVI. UTILITIES AND SERVICE SYSTEMS				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

Water Supply

Solano County Water Agency (SCWA) provides water to unincorporated areas for agriculture and some domestic water use. SCWA relies on two primary water sources, the US Bureau of Reclamation's Solano Project, which provides surface water through Monticello Dam, and the California Department of Water Resources' State Water Project, which supplies surface water to Solano County through the North Bay Aqueduct. Unincorporated areas of Solano County rely on water from myriad sources. Portions of unincorporated areas are located within municipal service areas (MSA) and are served by existing water districts. Unincorporated areas outside of MSAs demand water for agricultural and domestic purposes, with agriculture being the largest water user. The discussion below describes the water sources and supply in Solano County, including surface water supplied through SCWA, groundwater sources, local supplies of surface water provisions through existing water districts, and public and private water wells (Solano County 2008a).

Wastewater

In Solano County, existing wastewater treatment is provided by wastewater facilities within MSAs; where treatment systems are not available, including most rural areas of the county, wastewater is treated using centralized systems and on-site septic systems. Within MSAs, wastewater treatment is provided by cities and districts primarily through the annexation process. The Division of Environmental Health of the County's Department of Resource Management regulates wastewater provisions throughout the unincorporated areas outside of MSAs, with larger systems subject to the approval by the San Francisco Bay RWQCB and the Central Valley RWQCB.

Each of the cities in Solano County is currently served by municipal sewer and wastewater systems. Some parcels in the unincorporated county near cities are served by sewer and wastewater services from adjacent cities and sewer districts. The City of Vacaville serves the unincorporated community of Elmira, which is adjacent to the service area for the Vacaville sewer system and is limited to infill development. The Suisun-Fairfield Sewer District provides sewer service to the unincorporated community of Cordelia and parts of Suisun Valley from Rockville Road south to the Fairfield city limits. The Vallejo Sanitation and Flood Control District provides sewer service to the Vallejo unincorporated islands. The City of Dixon provides service to a few parcels directly outside of Dixon.

The majority of developments in the unincorporated county operate individual on-site wastewater treatment systems. More than 90 percent of the properties in the unincorporated county that are not served by city municipalities are served by such systems. Water treatment using a septic system depends on gravity to move sewage effluent through the soil, where the effluent is treated by the biological activity in the soil. Some properties also employ either an aerobic treatment unit or a sand filter, or both, to assist in treatment. A permit is required from the County to install, repair, or modify a septic system. Under this permitting system, records are kept for all septic tanks in the county.

A few developments in the unincorporated county have their own small package treatment systems. Some have RWQCB permits for sewage ponds. Developments with existing small package treatment systems include the Twin Creeks Condominium Project in Green Valley and the recreational vehicle parks in the Midway Road area. However, for new small package treatment systems, the equivalent amount of wastewater generated by 200 units is generally the minimum to make centralized small treatment systems economically viable (Solano County 2008a).

Solid Waste

The County contracts for collection, processing, and disposal services for solid waste, recyclables, and organic waste. Various service providers serve the unincorporated communities outside of Solano County's cities. Allied Waste (Allied Waste Industries) serves the unincorporated area outside of Benicia; Vacaville Sanitary Service (Norcal Waste Systems) serves the unincorporated areas outside of Dixon, Vacaville, and Vallejo; Solano Garbage Company (Republic Services) serves the unincorporated areas outside of Fairfield and Suisun City; and Rio Vista Sanitation Service (Garaventa Enterprises) serves the unincorporated area outside of Rio Vista.

Two privately owned landfills are located in the unincorporated area of Solano County. Potrero Hills Landfill is owned by Republic Services and located outside of Suisun City near SR 12. Recology Hay Road Landfill, owned by Norcal Waste Systems, is located east of Vacaville and Dixon near SR 113. Based on current disposal rates, Phase I of the Potrero Hills Landfill is estimated

to accept waste until approximately 2045 with a remaining capacity of 13,872,000 cubic yards. The Hay Road Landfill is expected to provide capacity until approximately 2077 with a remaining capacity of 30,433,000 cubic yards. No new landfills are planned in the county. No incinerators or other non-landfill facilities in Solano County accept solid waste for disposal.

Stormwater

A discharge from any point source is unlawful unless the discharge is in compliance with a NPDES permit. In California, EPA delegates much of the implementation of the Clean Water Act to the SWRCB. NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, stormwater associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than 1 acre of soil, mining operations, and animal feedlots and agricultural facilities above certain thresholds.

Stormwater discharges from both large and small construction sites are now subject to NPDES requirements. Large construction sites are those that involve 5 or more acres of soil disturbance. The SWRCB has issued an NPDES general permit for discharges of stormwater associated with construction activity (General Construction Permit) under the Clean Water Act. The permit requires the preparation of a stormwater pollution prevention plan (SWPPP) for proposed construction activities greater than 5 acres in size. A SWPPP is an operational plan that identifies and describes the best management practices to be implemented at the construction site to control pollution of stormwater runoff. Since March 10, 2003, small construction sites (those involving disturbance of less than 5 acres of soil) have also required an NPDES permit as part of Phase II of EPA's NPDES Stormwater Program. Phase II is intended to further reduce adverse impacts on water quality and aquatic habitat by instituting the use of best management practices on previously unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation. The Phase II requirements also impose new obligations on municipal separate storm sewer systems (MS4s). Small MS4s (i.e., those located in an incorporated city or a county of less than 100,000 people) that are located in urbanized areas as defined by the US Census must now be covered by a NPDES permit (Solano County 2008a).

Discussion/Conclusion:

a-b); d-e) No Impact. Future residential development in the county would require adequate wastewater service and adequate domestic water service, including adequate water supplies and wastewater treatment capacity. Increased demand for wastewater and water service can also result in exceedance of wastewater treatment requirements and the need for new water or wastewater treatment facilities or expansion of existing facilities. Soil limitations with respect to septic systems are described as either low, moderate, or severe. These ratings are based on slope, soil depth, permeability, depth to the water table, and whether or not the soil is subject to ponding. Chapter 6.4 and 13.10 of the County Code includes regulations governing on-site sewage disposal systems and permitting. Implementation of regulations for wastewater disposal in the County Code and policies in the General Plan would ensure that sewage treatment systems not have a negative impact on groundwater quality.

The 2015-2023 Housing Element includes policies designed to facilitate the construction and conservation of housing to meet the County's affordable housing needs. The 2015 Safety Element includes policies and programs to protect persons and property from a range of natural and human-caused hazards. It would not result in development that would require wastewater service and domestic water service, so would not affect existing water supplies and wastewater treatment capacity. The elements are policy-level documents that do not include any specific

development proposals, or grant any entitlements for development. The elements anticipate land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map and anticipate that provisions of the County Code related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented. Any future development occurring in the county would be required to comply with local regulations, including the General Plan and Zoning Ordinance. Environmental impacts of subsequent development projects would be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal.

Additionally, future development and infrastructure projects would require compliance with General Plan policies related to public services and facilities. Future proposals would be reviewed by the appropriate service agencies as part of the development application review process in order to ensure that sufficient capacity for all public services and facilities would be available on time to maintain desired service levels.

The Housing Element and Safety Element are consistent with the land use and population assumptions evaluated in the General Plan EIR. The General Plan EIR concluded that buildout of the General Plan could result in significant impacts related to the construction of new or expanded water or wastewater treatment facilities (page 4.9-43), availability of sufficient water supplies (page 4.9-41), and wastewater treatment capacity (page 4.9-45). However, the project's contribution to these is not an impact peculiar to the project within the meaning of State CEQA Guidelines Section 15183. The General Plan EIR and the related findings adopted by the Solano County Board of Supervisors identified population growth impacts as significant and unavoidable. To the extent the Housing Element and Safety Element contribute incrementally to those impacts, Section 15183 permits the County to conclude that such impacts have been adequately discussed and disclosed in the General Plan EIR. No impact peculiar to the project would occur.

b) No Impact. Future housing development pursuant to the 2015-2023 Housing Element could increase runoff and alter normal drainage patterns on various project sites throughout the county. The 2015 Safety Element includes policies and programs to protect persons and property from a range of natural and human-caused hazards. It would not result in development that would increase runoff and alter normal drainage patterns. As discussed under **a-b); d-e)** above, the elements are policy-level documents that do not include any specific development proposals, or grant any entitlements for development. Additionally, Solano County General Plan Development Review Policy RS.I-48 states that building permits require submittal of grading and erosion, sediment, and runoff control plans. Compliance with the provisions of the NPDES and the County's General Plan policies and implementation programs would reduce the impacts of future development and infrastructure projects pursuant to the elements. Any future development or infrastructure projects in the county would be subject to further CEQA review.

The Housing Element and Safety Element are consistent with the land use and population assumptions evaluated in the General Plan EIR. The General Plan EIR concluded that buildout of the General Plan could result in significant impacts related to the construction of new or expanded stormwater drainage facilities (page 4.5-52). However, the project's contribution to this is not an impact peculiar to the project within the meaning of State CEQA Guidelines Section 15183. The General Plan EIR and the related findings adopted by the Solano County Board of Supervisors identified population growth impacts as significant and unavoidable. To the extent the Housing Element and Safety Element contribute incrementally to those impacts, Section 15183 permits the County to conclude that such impacts have been adequately discussed and disclosed in the General Plan EIR. No impact peculiar to the project would occur.

f-g) Less than Significant Impact. Future residential development would increase the demand for solid waste services in the area and would increase the amount of solid waste generated and sent to local landfills. Solid waste collection and disposal for single-family and multi-family residential units would be contracted for recycling, collection, and processing, in order to help meet and exceed the state diversion goal.

As discussed under **a-b); d-e)** above, the 2015-2023 Housing Element includes policies and programs designed to facilitate the construction and conservation of housing to meet the County's affordable housing needs. The 2015 Safety Element includes policies and programs to protect persons and property from a range of natural and human-caused hazards. These elements do not include any specific development proposals, or grant any entitlements for development. The elements anticipate land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map and anticipate that provisions of the County Code related to high-density, affordable, and special needs housing and development in areas subject to wildfire, flooding, and seismic hazards will continue to be implemented. As demonstrated in the 2008 General Plan and EIR, the landfills serving the county have sufficient permitted capacity to serve future development consistent with the General Plan. The County's integrated waste-management plan (IWMP) was developed in response to AB 75 (Chapter 764, Statutes of 1999), which required each state agency and large state facility to develop such a plan. This legislation requires the County to report annually on the implementation of its IWMP. AB 939 and the County IWMP, which require recycling programs that result in a 50 percent diversion away from landfills, would apply to new development.

Therefore, with implementation of IWMP, General Plan policies and programs, and Zoning Ordinance requirements, solid waste impacts would be less than significant.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.				
Does the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion:

a) and c) Less than Significant Impact. The 2015-2023 Housing Element and 2015 Safety Element are policy-level documents. While the Housing Element encourages the provision of a range of housing types and affordability levels, it does not include specific development proposals, or grant any entitlements for development that would have the potential to degrade the quality of the environment or to adversely affect human beings. The Housing Element anticipates land uses that are consistent with the land use designations established by the General Plan Land Use Element and Land Use Policy Map and anticipates that provisions of the County Code related to high-density, affordable, and special needs housing will continue to be implemented. Housing Element policies and programs do not provide specific details regarding future land use decisions, and no course of action associated with these policies has been determined. All future residential development occurring in the county would be required to comply with local regulations, including the General Plan and Zoning Ordinance. Environmental impacts of subsequent development projects would also be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal. Future residential development projects would require compliance with General Plan policies and other County codes and ordinances intended to protect the environment.

Likewise, the 2015 Safety Element includes mapping and ordinances that discourage development in some areas and encourage development in others. The Safety Element could also trigger construction activities for infrastructure projects to reduce flooding or other hazards. However, the Safety Element does not include any specific proposals or grant any entitlements for development. All future construction activities for infrastructure improvements would be

considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal. All construction projects would also have to comply with local regulations, including the General Plan and the County Code.

Therefore, adoption and implementation of the 2015-2023 Housing Element and 2015 Safety Element would result in less than significant adverse impacts to the environment or to human beings as a result of environmental degradation.

b) *Less than Significant Impact.* As discussed in **a) and c)** above, the 2015-2023 Housing Element and 2015 Safety Element are policy-level documents that do not propose any specific development. Therefore, identifying or analyzing cumulative impacts would be speculative at this time. Future development and infrastructure projects and/or policies would be subject to project-specific environmental review, including a review of cumulative impacts. Therefore, impacts would be less than significant.

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