- Cultural Resources Impacts to known and unknown archaeological, paleontogical and historic resources in the region.
- Hydrology and Water Quality Additional sources of point and non-point sources of surface water quality pollutants to region waterways. Further demand on groundwater resources and potential overdraft issues.
- Noise Increased transportation noise levels from increased traffic volumes.
- Public Services and Utilities Increased demand for the development and expansion of public services and facilities and associated environmental issues.
- Traffic Increased traffic volumes on the region's highways and regional roadways resulting in deficient levels of service of operation.

7.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

CEQA Sections 21100(b) (2) and 21100.1(a) require that EIRs prepared for the adoption of plan, policy, or ordinance of a public agency must include a discussion of significant irreversible environmental changes of project implementation. In addition, CEQA Guidelines Section 15126.2(c) describes irreversible environmental changes as:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Implementation of the proposed Napa County General Plan Update would result in the conversion of undeveloped open space land areas to agricultural (primarily vineyard development) residential, commercial, industrial, office, public and recreational uses. Subsequent development under the General Plan Update would constitute a long-term commitment to these uses. It is unlikely that circumstances would arise that would justify the return of the land to its original condition.

Development of the County would irretrievably commit building materials and energy to the construction and maintenance of vineyards and associated vineyard activities, buildings and infrastructure. Renewable, nonrenewable, and limited resources that would likely be consumed as part of the development of the proposed project would include, but are not limited to: oil, gasoline, lumber, sand and gravel, asphalt, water, steel, and similar materials. In addition, development of the project would result in the increase demand on public services and utilities (see Section 4.11 [Hydrology and Water Quality] and 4.13 [Public Services and Utilities]). The project would also result in significant unavoidable effects related to air emissions, including emissions of green house gases (see Section 4.8 [Air Quality]).

7.3 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL EFFECTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. In addition, Section 15093(a) of the CEQA Guidelines allows the decision-making

agency to determine the benefits of a proposed project outweigh the unavoidable adverse environmental impacts of implementing the project. The County can approve a project with unavoidable adverse impacts if it prepares a "Statement of Overriding Considerations" setting forth the specific reasons for making such a judgment.

The following significant and unavoidable impacts (project and cumulative) of the proposed General Plan for Alternatives A, B and C are specifically identified in Sections 4.1 through 4.14, and Section 5.0 of this EIR. The reader is referred to the various environmental issue areas of these sections for further details and analysis of the significant and unavoidable impacts identified below.

AGRICULTURE

- Impact 4.1.2 Implementation of the proposed General Plan Update would result in the loss of agricultural land as designated on the current Napa County General Plan Land Use Map (Significant and Unavoidable Alternative C and E).
- Impact 4.1.4 Implementation of the proposed General Plan could result in a conflict with existing agricultural zoning or Williamson Act contracts. (Significant and Unavoidable All Alternatives).

POPULATION/HOUSING/EMPLOYMENT

- Impact 4.3.1 Implementation of the proposed Napa County General Plan Update could result in substantial growth in population, housing or employment under the three alternatives that could be in excess of regional projections or the one percent per year housing unit standard set forth in the Napa County Housing Allocation Program. (Significant and Unavoidable All Alternatives)
- Impact 4.3.2 Implementation of the proposed Napa County General Plan could alter the ratio or "balance" between housing and employment in the unincorporated area, substantially increasing commutes in or out of the county. (Significant and Unavoidable Alternative A and D)

TRANSPORTATION

Impact 4.4.1 Land uses and growth under the proposed General Plan Update could cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system, within the County and adjacent jurisdictions, and could affect emergency access. (Significant and Unavoidable - All Alternatives)

BIOLOGICAL RESOURCES

Impact 4.5.2 Land uses and development under the proposed General Plan Update could result in the loss of sensitive biotic communities and oak woodlands within the County (Significant and Unavoidable - All Alternatives)

NOISE

- Impact 4.7.3 Traffic-related noise would increase along County roadways with projected increases in traffic volumes under all future scenarios. (Significant and Unavoidable All Alternatives)
- Impact 4.7.4 Proposed General Plan Update Circulation Element roadway improvements associated with Alternatives B and C could move traffic noise closer to noise-sensitive uses. (Significant and Unavoidable Alternatives B, C and E)

AIR QUALITY

Impact 4.8.1 Implementation of the General Plan Update would not be consistent with the Clean Air Plan (CAP) since County population and employment projections would exceed regional growth projections prepared by ABAG and projected VMT would increase at a faster rate than the population. Land uses and development would result in increased emissions of ozone precursors resulting primarily from vehicles. The increased emissions would exceed the BAAQMD thresholds. In addition, the General Plan Update would not fully support the Clean Air Transportation Control Measures that Cities and Counties are identified as having a role in implementing. (Significant and Unavoidable – All Alternatives)

- Impact 4.8.2 Implementation of the General Plan Update would lead to construction and new residential uses that could have wood burning devices. These activities would increase PM₁₀ emissions for an area that already exceeds the State ambient air quality standards. (Significant and Unavoidable All Alternatives)
- Impact 4.8.5 Implementation of the General Plan Update may locate new sensitive receptors near existing or future sources of toxic air contaminants (TACs). In addition, existing sensitive receptors could be affected by new sources of toxic air contaminants developed under the General Plan Update. (Significant and Unavoidable Alternatives B, C and E).
- Impact 4.8.7 Implementation of the proposed General Plan Update would contribute to an increase in Greenhouse Gas (GHG) emissions from vehicle transportation, building energy use and possibly agricultural operations and may contribute to increases in atmospheric GHG concentrations. Higher concentrations of GHGs have been linked to the phenomenon of climate change. (Significant and Unavoidable All Alternatives)

GEOLOGY AND SOILS

- Impact 4.10.1 Land uses and development under the proposed Napa County General Plan Update may expose people, structures, and development to ground shaking as a result of earthquakes resulting in the risk of loss, injury, or death. (Significant and Unavoidable All Alternatives)
- Impact 4.10.2 Land uses and development under the proposed Napa County General Plan Update may expose people, structures, and development to seismic-related ground failures including surface fault rupture, lateral spreading, lurching,

liquefaction, as well as potential failure of dams and levees resulting in the risk of loss, injury, or death. (Significant and Unavoidable - All Alternatives)

Impact 4.10.4 Land uses and development under the proposed Napa County General Plan Update may expose people, structures, and development to slow or rapidly occurring down slope earth movement resulting in the risk of loss, injury, or death. This type of hazard can be triggered seismically, result from seasonal saturation of soils, erosion, or grading activities. (Significant and Unavoidable - All Alternatives)

Impact 4.10.5

Land uses and development under the proposed Napa County General Plan Update may expose people, structures, and development to the damaging effects of ground subsidence resulting in the risk of loss, injury, or death. This type of hazard can be triggered seismically, result from seasonal saturation of soils, or result from by grading activities. (Significant and Unavoidable - All Alternatives)

HYDROLOGY AND WATER QUALITY

Impact 4.11.5 Continued land uses and development under the proposed General Plan Update would increase demand on groundwater supplies, and the associated increased well pumping could therefore result in the decline of groundwater level and accelerated overdraft. (Significant and Unavoidable – All Alternatives)

CULTURAL AND PALEONTOLOGICAL RESOURCES

Impact 4.12.2 Projected development under the proposed Napa County General Plan Update could result in the substantial alteration or demolition of significant historic architectural resources (e.g., buildings, structures, and/or stone walls). (Significant and Unavoidable—All Alternatives).

PUBLIC SERVICES AND UTILITIES

Impact 4.13.3.1 Land uses and development under the proposed General Plan Update would increase the demand for additional sources of potable and irrigation water as well as additional or expanded treatment and distribution facilities to meet projected demands at year 2030 and at year 2050. (Significant and Unavoidable – All Alternatives)

CUMULATIVE IMPACTS

Population/Housing/Employment

Impact

Land uses and growth under the proposed General Plan EIR under all alternatives would include increases to population, housing and employment in the County that would be in addition with anticipated growth of the cities of Napa County and region, as well as cities in other adjacent counties. This impact would be cumulatively considerable.

Transportation

Impact

Land uses and growth under the proposed General Plan Update under all alternatives as well as potential development in the incorporated areas would contribute to significant impacts on local roadways and state highways under cumulative conditions. This impact would be cumulatively considerable.

Biological Resources

Impact

Land uses and growth under the proposed General Plan under all alternatives along with other land use activities in the region and state-wide would substantially contribute to cumulative impacts associated with significant effects to special-status plant and wildlife species, sensitive natural communities, and movement corridors. The impact to sensitive biotic communities would be cumulatively considerable.

Noise

Impact

Land uses and growth under the proposed General Plan under all alternatives along with potential development of the incorporated areas and neighboring counties could result in increased traffic noise along local and regional roadways and highways. This impact would be cumulatively considerable.

Air Quality

Impact

Land uses and growth under the proposed General Plan Update under all alternatives along with potential development of the incorporated urban areas could conflict with existing regional efforts to achieve attainment of ambient air quality standards for ozone and particulate matter. This impact would be cumulatively considerable.

Impact

Land uses and growth under the proposed General Plan Update under all alternatives along with potential development of the incorporated urban areas would contribute to an increase in Greenhouse Gas (GHG) emissions from vehicle transportation, building energy use and possibly agricultural operations and may contribute to increases in atmospheric GHG concentrations. Higher concentrations of GHGs have been linked to the phenomenon of climate change. This impact would be cumulatively considerable.

Geology and Soils

Impact

Land uses and growth under the proposed General Plan Update under all alternatives along with development of the existing urban areas in the cities of the County and the region could result in cumulative impacts to geologic and seismic hazards by increasing population in a seismically active area. This impact would be cumulatively considerable.

Hydrology and Water Quality

Impact

Land uses and growth under the proposed General Plan Update under all alternatives in combination with current land uses in the unincorporated area

of the County and land use activities and development of the cities and other agencies in the County would result in increased demand on groundwater supplies, leading to groundwater decline and overdraft, which could contribute to cumulative water supply conditions. This impact would be cumulatively considerable.

Cultural and Paleontogical Resources

Impact

Land uses and growth under the proposed General Plan Update under all alternatives along with foreseeable land use activities and development in the region could result in the disturbance of cultural and paleontological resources (i.e., prehistoric sites, historic structures, and isolated artifacts and features) and human remains. This impact would be cumulatively considerable.

Public Services and Utilities

Impact

Land uses and growth under the proposed General Plan Update under all alternatives along with foreseeable land use activities and development in the County would increase the demand for additional sources of potable and irrigation water as well as additional or expanded treatment and distribution facilities to meet projected demands at year 2030 and at year 2050. This impact would be cumulatively considerable.