7 OTHER CEQA CONSIDERATIONS

This chapter addresses other California Environmental Quality Act (CEQA) considerations that are required as part of an EIR. These considerations are:

- Cumulative Impacts (Section 7.1);
- Growth-Inducing Impacts (Section 7.2);
- Significant Irreversible Environmental Changes (Section 7.3); and
- Significant Unavoidable Environmental Effects (Section 7.4).

7.1 CUMULATIVE IMPACTS

7.1.1 REQUIREMENTS FOR CUMULATIVE IMPACT ANALYSIS

This EIR provides an analysis of cumulative impacts of the proposed General Plan, as required by §15130 of the CEQA Guidelines (State CEQA Guidelines). Cumulative impacts are defined in State CEQA Guidelines §15355 as two or more individual effects that together create a considerable environmental impact or that compound or increase other impacts. "A cumulative impact occurs from the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (Guidelines §15355[b]). By requiring an evaluation of cumulative impacts, CEQA attempts to ensure that large-scale environmental impacts will not be ignored.

Consistent with State CEQA Guidelines §15130(a), the discussion of cumulative impacts in this EIR focuses on significant and potentially significant cumulative impacts. According to State CEQA Guidelines §15130(b), "The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

All of the following elements are necessary to an adequate discussion of cumulative impacts (Guidelines §15130[b]):

- Either: (A) a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the

agency; or (B) a summary of projections contained in an adopted general plan or related planning document that is designed to evaluate regional or areawide conditions. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

< A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available.

< A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable options for mitigating or avoiding any significant cumulative effects of the proposed projects.

The environmental impact analysis in Chapter 5 of this EIR is countywide in scope, so it already presents detailed analysis of environmental effects over a broad area, comprising most of the contribution relevant to cumulative environmental effects. For instance, significance conclusions and mitigation measures described for the impacts of the equal-weight General Plan alternatives may also be applicable to cumulative impacts. Therefore, when warranted, cross references to analysis or mitigation measures in Chapter 5 are provided to avoid repetition.

7.1.2 LOCAL AND REGIONAL CONTEXT OF CUMULATIVE IMPACTS

As described above, the State CEQA Guidelines identify two basic methods for establishing the cumulative environment in which the project is to be considered: the use of a list of past, present, and reasonably anticipated future projects, or the use of adopted projections from a general plan or other regional planning document. For this EIR, the plan approach is used, with one exception. A list approach is used to identify one project within El Dorado County that is not within the County's jurisdiction but is surrounded by County land, the proposed Shingle Springs Rancheria Casino/Hotel. All other cumulative development is included within general plans or other guiding plans. Because the General Plan directly influences, and is influenced by, regional development activities, the plan approach is used to allow a cumulative analysis on this regional scale. Projects and plans included in these two approaches are described below.

REGIONAL PLANNING DOCUMENTS

The regional cumulative analysis area covers incorporated cities within El Dorado County, adjacent counties, and the Eldorado National Forest, and includes an evaluation of the following plans:

- Sacramento County General Plan
- Amador County General Plan
- Alpine County General Plan
- Placer County General Plan
- City of Placerville General Plan
- City of South Lake Tahoe General Plan
- City of Folsom General Plan
- Tahoe Regional Plan (Tahoe Regional Planning Agency [TRPA])
- Douglas County (Nevada) Master Plan
- Eldorado National Forest Land and Resource Management Plan
- Sierra Nevada Forest Plan Amendment (SNFPA)

A summary of the cumulative planning environment in the county used for the regional cumulative impact analysis is provided below.

The general plans for the surrounding counties and the City of Folsom designate land uses similar to those of the adjacent portions of El Dorado County. Where Amador, Alpine, and Placer and Douglas (Nevada) counties abut the more eastern and mountainous part of El Dorado County, the land use designations are dedicated primarily to natural resource protection and production. Much of this higher elevation area is also under federal jurisdiction as National Forest. The western portion of Amador County near El Dorado County is primarily a mix of agricultural and rural residential land uses, many of which are under Williamson Act contracts. The area of Sacramento County that shares a common boundary with El Dorado County is also primarily agriculture and open space, and is designated as outside of the urban services boundary in Sacramento County's general plan.

Along the U.S. Highway 50 (U.S. 50) corridor the existing and planned land uses change from primarily rural to more urban uses. In Sacramento County, land south of U.S. 50 is presently undeveloped, and designated for agricultural use; however, the City of Folsom has expanded its sphere of influence over this area in preparation for future annexation and potential future urban development. According to the City of Folsom's planning department, there are currently no development plans in the sphere of influence area and the potential for future development is unknown and subject to future planning efforts. North of U.S. 50, within the city limits of Folsom, the land is urbanizing, with commercial and residential uses similar to those in adjacent El Dorado Hills. This area is either already built, under construction, or planned for development. Folsom Reservoir and the Folsom Lake State Recreation Area straddle the boundary between Placer and El Dorado counties. North and east of the reservoir are rural residential lands.

The cities of Placerville and South Lake Tahoe plan for urban development to continue to expand gradually. Placerville's general plan projects growth similar to that of the rest of western El Dorado County, with corresponding cumulative impacts on roads, biological resources, water, and other resources. While constrained by development restrictions of the Tahoe Regional Plan, South Lake Tahoe is likely to grow slowly, primarily through infill and redevelopment. The Tahoe Regional Plan affects the entire Lake Tahoe Basin, including the part of the basin in Douglas County, Nevada, prohibiting or limiting development on the more environmentally sensitive lands and restricting additional subdivision of land. Further, lands in Douglas County outside the basin and along the east slope of the Sierra Nevada are designated Forest and Range land, thereby providing a substantial buffer between the basin and the developing Carson Valley to the east.

National Forests are under the planning authority of the U.S. Forest Service (USFS). The USFS has two planning guides for the National Forest, the Eldorado Land and Resource Management Plan and the SNFPA, which covers the 11 National Forests in the Sierra Nevada. Both plans provide guidance and are relevant except where they overlap, in which case the SNFPA has authority. Both plans manage recreation and timber harvesting, among other issues. The SNFPA has more relevance to cumulative impacts because it addresses the interface between developing areas and the National Forest. Based on consultation with USFS staff, the issue of concern regarding cumulative impacts is fire management in what is termed the "urban intermix zone," areas developing at a density of generally one unit per 5 acres or more dense (although parcels smaller than 40 acres are also considered an indicator of "urbanizing" land use) adjacent to National Forest land (Pollock Pines, Grizzly Flats, Volcano, Kiburz, etc.). The SNFPA includes plans to reduce vegetative fuel loads on National Forests within one-quarter mile of development in the urban intermix zone. The SNFPA is being supplemented because its fuel reduction program was not implementable. The current plan relies on prescribed burning to reduce fuel loads, which could not be implemented because of air quality concerns and adverse weather conditions that make prescribed burns too risky. The supplement, in preparation, will instead provide for mechanical reduction of fuel loads through selective logging and clearing of newer growth vegetation. (Rodman, pers. comm., 2003.)

RELATED PROJECTS

One related project, not otherwise covered by the projections in the aforementioned planning documents, has been identified that could contribute to significant cumulative effects in El Dorado County. This is the proposed Shingle Springs Rancheria Casino/Hotel. Although located within the boundaries of El Dorado County, the land is outside of the County's jurisdiction and subject to regulation by the U.S. Department of the Interior, Bureau of Indian

Affairs. An environmental assessment was prepared by Environmental Science Associates for the Department of the Interior for the proposed casino (ESA 2001a, 2001b). Additional environmental work was completed by the California Department of Transportation for the proposed interchange access from U.S. 50 to the rancheria (Caltrans 2002).

7.1.3 ASSESSMENT OF CUMULATIVE IMPACTS

Chapter 5 of this EIR evaluates the impacts of development within El Dorado County through 2025 and at buildout of each of the four equal-weight alternatives. In virtually every category of environmental impact, the 1996 General Plan Alternative has the most severe impacts of the equal-weight alternatives considered. By extension, its contributions to cumulative impacts would exceed the other three alternatives. Unless stated otherwise, the analysis of cumulative impacts is based on the combination of cumulative development and the 1996 General Plan Alternative, because this provides for the most conservative analysis.

By its very nature as a General Plan EIR, the analysis in Chapter 5 is an analysis of cumulative development within the County. The Shingle Springs Rancheria Casino/Hotel project as well as growth outside of El Dorado County and in Placerville have been incorporated into the traffic, noise, and air quality analyses (to the extent these analyses are based on traffic generation). Thus, the analysis below addresses combined effects of the plans and projects discussed above with development consistent with the proposed General Plan alternatives.

LAND USE AND HOUSING

Land use is generally a County-specific issue, except where land uses may interact with surrounding jurisdictions. The land use diagram for each equal-weight alternative is specific to El Dorado County, so implementing one of the alternatives would result in effects on land use and housing within the county. As discussed in Section 5.1, the land use maps for each alternative provide for compatible land uses with adjacent land use maps, with the possible exception of adjacent land uses between one El Dorado existing commitment project (Carson Creek) and adjacent Sacramento County agriculture/open space. This specific issue is plan specific (not cumulative) and is addressed in Section 5.1. Continued concentration of urban development along the U.S. 50 corridor under the County's General Plan would extend a corridor of urban land uses east from Sacramento County. It is possible that future urbanization will occur south of U.S. 50 in Folsom, given the recent sphere of influence boundary expansion for that city. However, it would be speculative to assign any land use assumptions to that area because there are no current plans for its development. Extending an urban pattern along a freeway corridor, by itself, would not cause significant land use

impacts that interact with development in other counties of the region to cause cumulative land use impacts.

There is the potential, however, that as the U.S. 50 corridor continues to urbanize, the separation between El Dorado County and the City of Folsom will become less distinct, to the point where they merge together. This could alter the community identity/character of the county and the city. The urban development in El Dorado County north of U.S. 50 that is adjacent to the city of Folsom, Promontory, is covered by a development agreement and is adjacent to the approved Russell Ranch project in Folsom. Both projects include a mix of housing product type, and it is likely that once developed, the separation between Folsom and El Dorado County will be difficult to distinguish. Both these projects are approved; therefore, this impact is considered potentially significant and unavoidable.

South of U.S. 50 is Carson Creek in El Dorado County, which is also approved under a development agreement with a mixture of residential and research and development land uses. This area abuts open space/agricultural land in Sacramento County, and this area is within the newly expanded Folsom sphere of influence. While a development plan has not been proposed for this area, if it were to develop with uses similar to Carson Creek, the area to the south of U.S. 50 would also lose the physical separation between communities. Given that there currently no plans for this area of Sacramento County, it would be speculative to conclude whether any impacts would occur.

AGRICULTURE AND FORESTRY

California is experiencing an ongoing loss of agricultural land, as productive farmland and ranchlands are converted to urban and suburban uses, or subdivided into rural ranchettes. In the four-county region (El Dorado, Amador, Placer, and Sacramento), a net loss of 2,273 acres of important farmland has been documented from 1998 to 2000. In addition, another 6,862 acres of grazing land were converted (California Department of Conservation 2003). Each of the equal-weight alternatives provides a set of policies intended to protect the productive agricultural and grazing lands in El Dorado County; however, incremental development in the rural regions and urban fringe would add to the cumulative conversion of agricultural lands in the region. The cumulative loss of agricultural lands over time in the region would be significant.

The effects on forestry are similar to those on agriculture. The most productive timberlands exist primarily along the mid-elevation portion of the western front of the Sierra Nevada, running into adjacent Placer and Amador counties. Some timber production also occurs in the Lake Tahoe Basin (on a very limited basis), including Douglas County, Nevada, and in Alpine

County. Regulation of timber harvest on private lands is carried out by the California Department of Forestry and Fire Protection (CDF). Timber management is also practiced by the USFS on the federal lands under that agency's jurisdiction. The equal-weight alternatives provide a range of protection of productive timberlands, but cumulatively, continued growth in the Sierra Nevada puts pressure on forestlands for use other than timber production and protection of forest resources. The result would be increased obstacles to the ability to harvest and process timber, which would contribute to similar trends in adjacent foothill and Sierra counties. This cumulative pressure on timber production would be a significant effect.

Implementation of mitigation measures in Section 5.2, Agriculture and Forestry, would minimize El Dorado County's contribution to cumulative agricultural and forestry impacts, but would not reduce them to less-than-significant levels. Consequently, cumulative impacts of agricultural land conversion and obstacles to timber production are considered significant and unavoidable.

VISUAL RESOURCES

The continued urbanization of the U.S. 50 corridor through Sacramento County, the city of Folsom, and into western El Dorado County would have a significant cumulative effect on the visual resources of that region, because of a change in landscape from one with a more rural, pastoral character to one of urban and suburban development. This change is already in process and the change in visual character is significant. This corridor plays an important scenic role as the gateway to El Dorado County from the west. Conversion of the rural landscape to a suburban appearance would result in the reduction of the natural aesthetic qualities of the corridor. While the visual impacts in the U.S. 50 corridor would be reduced by policies and mitigation measures described in Section 5.3, Visual Resources, they cannot feasibly be avoided or reduced to a less-than-significant level. Therefore, the cumulative reduction in the natural aesthetic qualities of the U.S. 50 corridor is considered a significant and unavoidable impact.

TRAFFIC AND CIRCULATION

Traffic impacts are a regional concern. As has been discussed in Section 5.4, Traffic and Circulation, regional growth patterns affect traffic and circulation in El Dorado County, and planned growth in the county resulting from the equal-weight alternatives would affect the regional road network, including the U.S. 50 corridor. Jobs created in El Dorado County would result in employees commuting from Sacramento and Placer counties. Similarly, housing opportunities in western El Dorado County resulting from General Plan implementation would increase peak-hour trips into Sacramento, Rancho Cordova, Folsom,

and other areas of Sacramento County where jobs are concentrated. Impacts would generally be most pronounced under the 1996 General Plan Alternative, with its relatively high growth potential, followed by the Environmentally Constrained, Roadway Constrained 6-Lane "Plus," and No Project alternatives.

The Metropolitan Transportation Plan (MTP) (SACOG 2002a) is intended to respond to the cumulative traffic effects that local plans have on the circulation system of the entire Sacramento region. The impacts identified in Section 5.4 are considered to be significant within the county. These significant General Plan impacts would also cause a considerable contribution to significant regional traffic impacts. Much of the cumulative traffic impact outside of El Dorado County would occur in Sacramento County as a result of the increased commute traffic along the U.S. 50 corridor.

The SACOG MTP projected a regional (SACOG-wide) increase in population of 928,048 between 2000 and 2025. The MTP allocated a share of this population growth, 69,500, to El Dorado County. To the degree that the county does not accommodate this level of growth, it is possible that this growth would occur in the adjacent counties, Sacramento, Placer, and Amador. This would place higher traffic levels in these counties. The No Project Alternative would accommodate 53,610 people by 2025, approximately 16,000 short of the MTP allocation. The Roadway Constrained 6-Lane "Plus" Alternative would accommodate 64,600 people, around 5,000 short of the MTP allocation. Both of these alternatives would, therefore, potentially shift to the adjacent counties traffic that would otherwise have occurred in El Dorado County. This is a potentially significant cumulative impact, although surrounding jurisdictions retain land use authority and authority over the approval of land uses that may result in significant traffic impacts. It is not feasible to mitigate such an impact because it is not known where, or whether it would occur, and mitigation would be the responsibility of whichever surrounding county would approve development that would cause the impact. The only other means available to mitigate this impact would be to increase the development potential of these two alternatives, and this would require substantially modifying the land use map or altering the basic conditions that define the alternatives (no new subdivisions of residential land under the No Project Alternative and maximum subdivision of four parcels under the Roadway Constrained 6-Lane "Plus" Alternative). This is considered infeasible because it would entirely redefine these alternatives. Therefore, this impact is considered potentially significant and unavoidable under these alternatives.

The Environmentally Constrained and 1996 General Plan alternatives both have sufficient associated growth (80,730 and 81,241 people, respectively) such that they would meet the MTP allocations of growth. Therefore, they would have no impact on SACOG MTP allocations.

The proposed Shingle Springs Rancheria Casino/Hotel project would add additional traffic impacts to U.S. 50 and other county roads (ESA 2001). While the casino project is beyond the control of the County, the trips generated by this project are included in the traffic analysis and discussed in detail in Chapter 5. The traffic associated with the casino would have a considerable contribution to cumulatively significant regional traffic impacts.

Implementation of mitigation measures presented in Section 5.4 would minimize El Dorado County's contribution to cumulative traffic impacts, but would not reduce them to less-than-significant levels. Consequently, cumulative regional traffic impacts are considered significant and unavoidable.

WATER RESOURCES

Like traffic, water is a regional issue. Surface and subsurface water supplies supporting the implementation of the General Plan originate primarily within the county, although some potential sources also originate in the surrounding Amador and Alpine counties. These surface water resources are also distributed both to surrounding counties and cities and to the San Francisco Bay area and Southern California. An increase in demand and water consumption in one region has the potential to affect supplies throughout California, because the surface-water supply systems are interconnected through the federal Central Valley Project (CVP) and the State Water Project (SWP).

Planning efforts by each jurisdiction, water agencies, and water purveyors have a great deal of overlap and must consider the growth projections and land use patterns of each county and city in the region. The water demand resulting from potential development from any of the equal-weight alternatives would have a considerable contribution to cumulatively significant water demand impacts regionally and throughout the integrated CVP/SWP water supply system. When drought conditions occur in the central Sierra Nevada, or elsewhere in the state, significant cumulative effects of regional and statewide demands on water supplies are exacerbated.

To respond to regional demands for water and the need to protect the resources of the lower American River, water agencies in Sacramento County developed a long-term agreement for water supply called the Sacramento Water Forum Agreement (WFA). The WFA considers cumulative water demands throughout the watershed of the American River. The County and particularly the El Dorado Irrigation District (EID) and the Georgetown Divide Public Utility District (GDPUD) were consulted regarding water needs on the west slope during the preparation of the WFA, but water supply issues with these agencies could not be resolved through the WFA. (Water Forum 2000.) The WFA assumed that El Dorado County would

build out in accordance with the 1996 General Plan, and would have a full buildout population of 298,000 (Sacramento City-County Office of Metropolitan Water Planning 1999). As described in Chapter 3 of this EIR, the 1996 General Plan Alternative is calculated to have a buildout population potential of 317,692. The Environmentally Constrained Alternative is calculated to have a buildout population potential of 258,688, followed by the Roadway Constrained 6-Lane "Plus" Alternative at 225,137 and, lastly, the No Project Alternative at 194,829. Although El Dorado County is not a party to the WFA, the WFA assumed in its cumulative water analysis that EID would increase water diversions in the American River watershed by 28,400 acre-feet per year (afy) (decreasing to 18,900 afy in drier/driest years) and GDPUD would increase diversions by 8,700 afy (decreasing to 2,500 afy in drier/driest years) by General Plan buildout. (Water Forum 2000.) The WFA assumed that EID would divert up to 17,000 afy from Project 184 and up to 7,500 afy from Folsom Reservoir through Public Law 101-514 (see Section 5.5.1 of this EIR). The WFA also assumed that GDPUD would divert up to 7,500 afy from Folsom Reservoir though Public Law 101-514.

As described in Section 5.5.1, EID's projected shortages at buildout range from a low of 18,365 afy under the No Project Alternative (shortages are projected to range from 18,365 to 26,871 afy), to a shortage of 23,162–31,668 afy under the Roadway Constrained 6-Lane "Plus" Alternative, a shortage of 26,372–34,878 afy under the Environmentally Constrained Alternative, and the largest projected shortage of 36,982–45,488 under the 1996 General Plan Alternative. Section 5.5.1 describes various options being considered by EID to avoid these shortages, and the level to which EID may be able to procure and use the 28,400 afy assumed in the WFA can not be determined at this time. It is also not known whether EID would seek to procure more surface water from the watershed than assumed by the WFA, or whether alternative sources would be sought. Even if EID is able to procure the entire 28,400 afy of water, it would only satisfy the buildout demand for surface water of the No Project and the Roadway Constrained 6-Lane "Plus" alternatives (assuming the lower end of the range of shortages).

Shortages associated with GDPUD's surface water demands at buildout range from a surplus of 170 afy to a projected shortage of 3,077 afy under the No Project Alternative, to a shortage of 2,536–7,187 afy under the Roadway Constrained 6-Lane "Plus" Alternative, a shortage of 3,564–8,215 afy under the Environmentally Constrained Alternative, and the largest projected shortage of 5,218-9,869 afy under the 1996 General Plan Alternative. All of these demand ranges could be satisfied (except the high-end range for the 1996 General Plan Alternative) with the assumed GDPUD allocation in the WFA.

The increase in demand would contribute to significant regional and statewide pressures on limited water resources. See the discussion in Section 5.1 regarding potential other sources of

water for the county's water purveyors. Mitigation measures identified in Section 5.5, Water Resources, would lessen the cumulative impact on water supply, but impacts would remain cumulatively significant and unavoidable.

Future development resulting from any of the alternatives would increase urban runoff resulting in potential degradation of water quality downstream. Most of the county ultimately drains into the American River, and pollutants have the potential to end up in the water supply of Sacramento County, East Bay Municipal Utility District, and other users of Folsom Reservoir. Mitigation measures identified in Section 5.5 would lessen the potential impact on water quality, but impacts would a cumulatively significant and unavoidable.

UTILITIES

Utility services in El Dorado County are generally a local concern. New development under the General Plan would place additional demands on municipal utilities and related services. Municipal utility and related service impacts are addressed in Section 5.6, Utilities, including drainage infrastructure, solid waste, communications, and energy supplies (electricity, natural gas, propane). Most of these utilities serve the county only, so they would not contribute to cumulative impacts along with regional development. Therefore, there would be no cumulative impacts on municipal utilities and related services, with the potential exception of electrical power generation and natural gas, as discussed below.

Demand for electrical power generation and natural gas, unlike other municipal utilities and services, has the potential to affect a broader area in a cumulative manner, because the energy systems are interconnected statewide. Pacific Gas and Electric Company (PG&E) provides electricity in El Dorado County and natural gas services to El Dorado Hills. As stated in Section 5.6 of the EIR, PG&E has indicated that it has the ability and capacity to provide infrastructure for electricity and natural gas services to support growth related to any of the equal-weight alternatives. Electric power supply is generated from a variety of sources; however, if growth in regional supplies does not keep pace with regional demand, the cumulative demand from growth in the county and the rest of the region has the potential to create shortages, as experienced recently throughout the state. Natural gas supplies originate from outside the region and, to some degree, from outside the state, so it is conceivable that, over time cumulative demand in the region could put stresses on natural gas supply and transmission capacity. However, given the limited service area in the county, General Plan development would not place a considerable demand on this resource.

Approval and development of additional electric power generation is regulated by the Federal Energy Regulatory Commission and California Public Utilities Commission, so they are

beyond the county's control. Electricity capacity may be constrained in the future, and development of additional capacity would reasonably be expected to result in environmental effects where the energy supplies are developed. This impact is discussed in Section 5.6. It is not feasible at this time to describe the nature and location of new energy supply development necessary to support cumulative demands in the region, but the types of impacts described in Section 5.6 would be expected. Energy conservation policies described in Section 5.6 would reduce El Dorado County's contribution to cumulative energy demands to the extent feasible. Regardless, electricity demands would increase with implementation of any of the equal-weight alternatives, with the 1996 General Plan Alternative resulting in the largest increased demand and the other three equal-weight alternatives producing lower demands based on their lower development potential. A considerable contribution to regional cumulative demands, and therefore the potential for significant cumulative environmental effects of providing additional supplies, would result. Because approval of new electricity supplies is the responsibility of other agencies, the County can only conclude that resulting impacts are potentially significant and unavoidable cumulative impacts.

PUBLIC SERVICES

Public services are a countywide, and not generally cumulative, concern. All public services except fire protection are provided by various departments (police, fire, etc.) and districts (schools) in El Dorado County. Impacts of the equal-weight alternatives are addressed in Section 5.7; development outside the County's jurisdiction would not result in cumulative impacts on services. The exception is the CDF, which provides wildland fire protection and may need new facilities in El Dorado County as a consequence of General Plan development. Development in the Sierra Nevada foothills in and around El Dorado County is increasing the number of people living in proximity to wildlands, and increasing the potential for wildland fires. This can be expected to place higher demands on scarce state fire protection resources. It can also be expected that this demand would create the need for new fire protection facility development in surrounding foothill areas, which could result in environmental impacts. It is assumed that this cumulative demand and subsequent facility development would lead to significant environmental impacts. The analysis and mitigation of any potential impacts would be the responsibility of the State of California. This is considered a potentially significant and unavoidable impact.

HUMAN HEALTH AND SAFETY

Human health and safety concerns are generally county-specific and not a cumulative concern. Development in accordance with any of the General Plan alternatives would not result in cumulative health and safety impacts. The impacts are generally site-specific in nature, as would be the case for hazardous materials transportation safety, electromagnetic fields,

naturally occurring asbestos, and wildland fire. Although planned urban development in a fire hazard area next to the county could result in a risk of wildfire within county boundaries, this would generally not constitute a cumulative impact issue, because the safety risk is still restricted to the site-specific location of a fire. Further, the SNFPA would eventually reduce wildland fire risk through long-term fuel reduction programs. As in Section 7.1.2 above, the SNFPA includes a program to reduce the fire fuel load in National Forest areas adjacent to developed and developing areas (the "urban intermix zone"). According to USFS staff, it would likely take 20 years to meaningfully reduce the fire hazard risk, but over time the reduction in risk would be expected to counter the increased hazard potential of introducing more people to wildland margins (Rodman, pers. comm., 2003). On balance, regional development would not lead to combined environmental effects that result in a greater cumulative impact than would occur for each specific location of a potential heath or safety risk, with the potential exception of downstream flood hazard.

The risk of downstream flooding in a watershed can be increased as urban and suburban development increases and creates additional impervious surfaces in upland areas, increasing potential runoff. The most intensively developed area of El Dorado County is within the American River watershed, so storm water drainage flows to the river, to Folsom Reservoir, and through the lower American River to the Sacramento River. Land in Placer County and Sacramento County would also contribute additional flood flows as future urban development proceeds. The combined urban development in a watershed has the potential to create cumulative flood risks downstream, and in this case, in Sacramento County below Folsom Reservoir. Mitigation measures identified in Section 5.8 would reduce the county's contribution to the potential for increased flooding to a less-than-significant level. Also, the Sacramento Area Flood Control Agency (SAFCA), in coordination with many other agencies including the U.S. Army Corps of Engineers and U.S. Bureau of Reclamation, has implemented flood hazard protection measures (e.g., levee strengthening) for Sacramento County that would ultimately provide protection against at least the 100-year flood hazard, although this requires additional federal funding, which is not assured. SAFCA is continuing to pursue additional programs to increase protection from greater levels of flood hazard in the future, recognizing existing and planned development throughout the American River watershed. Considering the General Plan mitigation measures that would minimize the county's contribution to stormwater flows, the contribution of General Plan development to cumulative flood hazards would not be significant.

GEOLOGY, SOILS, AND MINERAL RESOURCES

The geology and soils impacts associated with growth under any of the equal-weight alternatives are specific to the geographic location of the physical resource and are not a

cumulative concern. Planned development in adjacent counties would not lead to geology or soils effects that would accumulate with impacts within the county, because the effects are site specific. Therefore, there would be no significant cumulative impacts on geology, soils, and mineral resources.

NOISE

Noise is generally a county issue, except for roadways that carry significant traffic between counties. For most noise-related impacts, the location of the impact is site specific and influenced by local rather than regional conditions (e.g., traffic on a roadway, local topographic conditions, adjacent stationary noise sources). As overall development occurs, ambient noise levels increase, but compliance with standards that define noise impacts is invariably controlled by traffic levels and site-specific development. Potential cumulative noise impacts that warrant consideration are traffic noise on the regional freeway, U.S. 50, and aircraft noise from Mather Field in Sacramento County.

Increases in traffic noise on U.S. 50 resulting from growth under the equal-weight alternatives would affect adjacent land uses in Sacramento and El Dorado counties. The largest increase in noise would be from the 1996 General Plan Alternative with its highest level of traffic, followed by the Environmentally Constrained, Roadway Constrained 6-Lane "Plus," and No Project alternatives. The source of traffic noise in El Dorado County on U.S. 50 is from a broader regional area (Sacramento County and other areas), not just El Dorado County. These cumulative traffic noise levels are evaluated in Section 5.10, Noise. In addition to traffic noise in El Dorado County, traffic from development of any of the general plan alternatives in combination with other regional growth would increase noise levels adjacent to U.S. 50 in Sacramento County.

The Draft Program EIR on the Final Draft Metropolitan Transportation Plan (MTP) 2025 (SACOG 2002b) evaluated, among other things, increases in noise levels on several regional roads as a result of growth in the six-county SACOG region, including El Dorado County. As discussed in the traffic and circulation section above, the MTP is based on assumed regional population growth of 928,048 by 2025, of which 69,505 are projected from El Dorado County. The MTP EIR predicts a 3 dBA increase in traffic noise along U.S. 50 from Prairie City Road to the El Dorado County line (SACOG 2002b). The 1996 General Plan Alternative assumes growth of 81,241 people in 2025. Buildout under this alternative would substantially add to that total. The General Plan would contribute to this cumulatively significant impact, and at the 1996 General Plan level of development, the contribution would slightly exceed (in 2025) what was predicted in the MTP EIR. The MTP EIR identifies mitigation measures for these cumulative impacts, including construction of sound walls as needed (to a limit) and other noise barriers, and specifies that such measures are the responsibility of the implementing

agency for specific road projects. This is consistent with the approach El Dorado County is taking in each General Plan alternative, for which policies are included to mitigate noise increases associated with new transportation projects. SACOG acknowledges that this impact may not be able to be fully reduced, and concludes it would be significant and unavoidable.

Noise from continued aircraft operations at Mather Field in Sacramento County would add to the noise impact on El Dorado County residents through exposure to aircraft overflights. As residential development increases south of U.S. 50 near the Sacramento County line, more residences would be under one or more of the common aircraft approach paths to this airfield. A greater number of El Dorado County residents would be exposed to aircraft noise because of the location of residential development, but this would be a direct General Plan-related effect, rather than a contribution to a regional, cumulative impact concern. This has been addressed in Section 5.10. The growth resulting from the implementation of the equal-weight alternatives would not influence the level of aircraft activity at Mather Field nor encourage development outside the county that would be subject to Mather Field aircraft noise. Consequently, there would be no contributions to cumulative Mather Field aircraft noise levels or to the number of non-county residents exposed to aircraft as a result of approval of the General Plan. Implementation of the General Plan would not contribute to any significant cumulative aircraft noise impacts from Mather Field air traffic.

AIR QUALITY

Air quality is a regional environmental issue, with the majority of air pollutant emissions being created by motor vehicle use within the county's air basins and other air basins in the region. El Dorado County has two air basins, the Mountain Counties Air Basin (MCAB) and Lake Tahoe Air Basin (see Lake Tahoe discussion further below). The designated growth areas of the county are on the west slope, which is in the MCAB. The MCAB is designated as nonattainment for the state and national ozone standards and the state particulate (PM_{10}) standard. Ozone pollution is the primary air quality impact of cumulative concern, because precursor emissions of ozone can occur throughout the region and combine to exacerbate attainment of air quality standards in El Dorado County. Pollutants transported from the San Francisco Bay area also contribute to regional air quality impacts.

The County Air Quality Management District (AQMD) participated with other AQMDs in the Sacramento area to prepare the 1991 Air Quality Attainment Plan, which includes strategies for achieving the state and national air quality standards. The equal-weight alternatives include policies and mitigation measures to support reduction of air emissions and help attain the standards, in keeping with the attainment plan. Section 5.11, Air Quality, evaluates potential air pollutant emissions related to stationary and mobile sources resulting from implementation of the equal-weight alternatives and determines that significant impacts on

regional air quality cannot not be avoided, despite the inclusion of all feasible mitigation measures. The significant air quality impact in El Dorado County would contribute to a cumulative significant air quality in the region, which also could not be avoided. Therefore, for all equal-weight alternatives, planned development leading to increases in motor vehicle travel, wood fire stoves/fireplaces, and other sources would contribute cumulatively to the significant impact on air quality in the region. The source of the highest level of emissions and the largest contributor to cumulative air quality impacts would be the 1996 General Plan Alternative, followed by the Environmentally Constrained, Roadway Constrained 6-Lane "Plus," and No Project alternatives. Although all feasible policies and mitigation measures are included, as described in Section 5.11, this cumulative impact is considered significant and unavoidable.

BIOLOGICAL RESOURCES

El Dorado County includes Sierra foothill habitats that are experiencing pressures from urban and suburban development in surrounding counties, as well as in El Dorado County. As a result of planned development in foothill counties, including El Dorado County, a cumulative loss and fragmentation of natural habitats is a growing impact concern. Foothill woodland and chaparral habitats are two habitat types experiencing substantial cumulative loss and fragmentation as a result of growth pressures. Also, riparian habitats are experiencing encroachment by urban uses, vegetation loss, and fragmentation. In addition, populations of special-status species that occupy these habitats, such as rare plant communities and the California red-legged frog, are experiencing cumulative loss of habitat and reduction in numbers of individuals.

General Plan policies to protect habitats and special-status species vary by equal-weight alternative as discussed in detail in Section 5.12, Biological Resources; however, development permitted in El Dorado County under each alternative would contribute to the cumulatively significant impact of the loss and fragmentation of woodland and chaparral habitats, riparian corridors, and other important biological resources of the Sierra Nevada foothills and impacts on special-status species. Proposed policies and mitigation measures would reduce the habitat and special-status species effects to the extent feasible. However, the impact of habitat loss and fragmentation is considered significant and unavoidable.

CULTURAL RESOURCES

Cultural resources are a site-specific resource in the county, and although there is potential for the cumulative loss of such resources throughout the region, policies contained in each of the alternatives and mitigation identified in Section 5.13, Cultural Resources, would adequately

protect those resources in El Dorado County. No cumulative impacts on cultural resources has been identified.

LAKE TAHOE BASIN

Section 5.14 of this EIR addresses impacts of the equal-weight alternatives on the Lake Tahoe Basin. This section not only addresses impacts of development in the basin, but also considers cumulative impacts of development outside the basin and other cumulative influences. Please refer particularly, to Table 5.14-1.

Environmental issue areas for which additional regional development is not expected to contribute considerably to cumulative impacts, as chronicled in Section 5.14, include land use and housing, agriculture and forestry, visual resources, water resources, utilities, human health and safety, geology and soils, and cultural resources.

Areas of potential cumulative impacts include the following:

< **Traffic:** Increases in traffic in the region, including the west slope, would combine with overall increases in basin-generated traffic to adversely affect the operating levels of several intersections along U.S. 50 in South Lake Tahoe. The 1996 General Plan Alternative would generate the highest west-slope development level and traffic, so would contribute the most of the equal-weight alternatives to cumulative traffic in the Basin. The next highest level of traffic generation would be associated with the Environmentally Constrained Alternative, then the Roadway Constrained 6-Lane "Plus" Alternative, and the lowest level of traffic would be from the No Project Alternative. As described in Section 5.14, cumulative impacts would be significant and unavoidable.

< **Recreation Facilities:** Recreational facilities in the basin are largely overused, leading to recreational facility degradation. Development on the west slope would add more visitors to the basin, leading to increased overuse of recreational facilities. See the traffic discussion above regarding the relative rank of the alternatives in their contribution to this impact. As described in Section 5.14, this impact can be mitigated but is considered significant and unavoidable pending further action by TRPA.

< **Noise:** As described in Section 5.14, there are occasional exceedances in TRPA noise standards under current conditions. A large number of these exceedances are a result of exposure to traffic noise. Increases in traffic from development in the region and along the west slope would increase the level of traffic noise in the basin. Other noise impacts are basin-specific, such as boat noise and aircraft noise; however, the higher the level of visitation to the basin, which can be directly tied to regional population

increases, the greater the contribution to these impacts. See the traffic discussion above regarding the relative rank of the alternatives in their contribution to this impact. As described in Section 5.14, this impact can be mitigated, but is considered significant and unavoidable pending further action by TRPA.

< **Air Quality:** As described in Section 5.14, air quality in the basin is very good to excellent. Few, if any, violations of federal and state air quality standards have occurred in recent years.

The air quality in the basin is affected predominantly by activities within and to the west of the basin. The most important meteorological factors influencing air quality in the basin are: (1) localized inversions, which trap air masses over the basin, and (2) prevailing westerly winds, which transport air masses from the Sacramento Valley and San Francisco Bay area into the basin. The transport of pollutants into the basin from out-of-basin sources to the west (i.e., upwind sources) is an important factor affecting air quality in the basin. Increased development outside of the basin, including development in El Dorado County, could affect attainment of TRPA's air quality thresholds, particularly its VMT and regional visibility thresholds. The VMT threshold is not being met and would be significantly effected by increased traffic generated by in-basin development. Development in the west-slope area of the County would contribute additional traffic to the basin (see the traffic discussion above). This would add to VMT in the basin and would make attainment of the VMT threshold more difficult. Other thresholds such as traffic volume, ozone, and atmospheric nitrogen deposition could also be affected by the increase in traffic. West-slope development would also result in increased wood smoke, which could contribute to regional visibility impacts in the basin. Regional haze is transported into the basin from upwind sources, including the Sacramento Valley and San Francisco Bay area. TRPA has not yet been able to quantify the relative contribution of out-of-basin development to the basin's air pollution problems. However, development in west-slope portion of the county would increase under all of the proposed alternatives and would therefore contribute to these problems. This is a significant and unavoidable cumulative impact.

< **Biological Resources:** Increased regional development will lead to increases in recreational visitors to the Basin. Increased recreational use of public lands containing uncommon plant communities, rare plants, and old-growth ecosystems could adversely affect those resources. Fish habitat could also be impacted by increases in motor vehicle emissions and recreational use of watercraft. As described in Section 5.14, Lake Tahoe Basin, this impact can be mitigated by TRPA, but is considered significant and unavoidable pending further action by TRPA.

7.2 GROWTH-INDUCING IMPACTS

The State CEQA Guidelines (§15126.2[d]) require that an EIR evaluate the growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that would induce new growth.

Growth inducement, by itself, is not an environmental effect but may indirectly lead to environmental effects. Such environmental effects may include increased demand on other community and public services and infrastructure, increased traffic and noise, degradation of air or water quality, degradation or loss of plant or wildlife habitats, or conversion of agricultural and open space land to urban uses.

7.2.1 GROWTH-INDUCING IMPACTS OF THE PROPOSED GENERAL PLAN

Based on Government Code §65300, the proposed General Plan is required to serve as a comprehensive, long-term plan for physical development of El Dorado County. By definition, the General Plan is intended to provide for and address future growth in the county. However, the proposed General Plan is not proposing any specific development projects, so it would not have direct growth-inducing impacts. Indirect growth-inducing impacts would occur, however, because the land use map and designations, as well as the goals and policies, of the General Plan are designed to provide a framework to accommodate future population growth. The analysis of these indirect growth-inducing impacts for the proposed General Plan focuses on two main factors: (1) promotion of economic or population growth, and (2) elimination of obstacles to growth.

ECONOMIC EXPANSION AND POPULATION GROWTH

Promotion of economic and population growth represents the extent to which the proposed General Plan would increase economic activity and population in the county and region. All four of the equal-weight General Plan alternatives would indirectly result in increased population growth. Anticipated population growth is indirect in nature because the proposed General Plan does not directly propose development, but only provides the framework for development planning and implementation to proceed. As described in Chapter 4, Land Use Forecasts and Development Estimates, the proposed General Plan is expected to accommodate approximately 53,600 to 81,200 new residents by 2025, depending on the alternative adopted. The SACOG MTP projects a SACOG-wide (six counties) growth of 928,048 people by 2025, of

which 69,000 are "allocated" to El Dorado County. Thus the issue becomes whether or not and how to accommodate the expected demand for housing in the region.

As described in the cumulative analysis above (see Traffic and Circulation), it can be expected that SACOG-allocated housing demand that is not accommodated in El Dorado County would be pushed to other areas. Given their proximity and developing nature, it is most likely that demand not met in El Dorado County would place the greatest pressures on Sacramento and Placer counties. These counties are expected to grow by 476,638 and 178,190 people, respectively, between 2000 and 2025 (SACOG 2002a). This is a total population growth of 654,828 for these two counties. If the No Project Alternative were adopted, El Dorado County would be projected to fall 16,000 people short of its allocated population growth. If this were to be entirely absorbed by Sacramento and Placer counties, it would increase the population totals in those counties by a total 2.4%. If the Roadway Constrained 6-Lane "Plus" Alternative were adopted, El Dorado County would fall 5,000 people short of its allocated population. This could add 0.7% more growth to Sacramento and Placer counties, assuming that all unmet growth goes to these two counties. This would add a minor amount of additional growth pressure to these areas, and if accommodated would potentially result in environmental impacts associated with the construction of additional housing and infrastructure. However, Sacramento County, Placer County, and any other jurisdiction that would be faced with additional growth pressure would have the same land use authority as El Dorado County and could choose whether to accommodate the additional growth and the attendant environmental impacts.

One aspect of each General Plan Alternative has the potential for inducing growth across the Sacramento County line just south of U.S. 50. The high-density residential, commercial, and research and development land use designations south of U.S. 50 near the county line conflict with the agricultural and open space designation of Sacramento County's general plan. As development occurs in this area, there would be greater pressure on Sacramento County to redesignate that area for some other, more intensive use, especially if additional access is provided between that area of El Dorado County and U.S. 50 through Sacramento County. This impact would exist to some degree whether a new plan is adopted or not, because the Carson Creek Specific Plan has already been approved and it provides for much of this development potential. At the same time, the City of Folsom has expanded its sphere of influence boundary to include the area south of U.S. 50, adjacent to the El Dorado County line, and will in the future consider development proposals for this area.

Increased employment is necessary to support increased population, so as the General Plan accommodates the expected growth to one degree or another, related job growth would result. Each equal-weight alternative promotes job creation in the tourism and agriculture sectors, and land use policies encourage the development of mixed uses to promote a variety of

housing and job types. The Economic Element goals and policies also address increasing the number of jobs in the county, which could reduce vehicular trips commuting into Sacramento County. Indirectly, then, increases in employment and population would generate a secondary demand for other services. For example, El Dorado County's growing population would require additional goods and services such as food, entertainment, and medical services, which would stimulate economic growth in those sectors. Job growth is included in the employment projections, and the environmental effects associated with this growth are discussed in Chapter 5.

ELIMINATION OF OBSTACLES TO GROWTH

Whether or not growth obstacles are eliminated relates to the extent to which the proposed General Plan would increase infrastructure capacity or change the regulatory structure such that additional development in the county and region would be allowed. A physical obstacle to growth typically involves the lack of public service infrastructure or insufficient infrastructure capacity. The extension of public service infrastructure (e.g., roadways, water and sewer lines) into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

The most significant obstacle that would be eliminated as a result of adoption of a new General Plan is the Judgment Granting Petition for Writ of Mandate, entered by the Sacramento County Superior Court on July 19, 1999, in the case *El Dorado County Taxpayers for Quality Growth, et al v. El Dorado County*. Assuming that the General Plan adopted by the County and this EIR satisfy the concerns expressed by the court in its previous decision, the inability to approve new residential development (beyond that already approved by the County before January 1999) would be lifted and the County would regain land use authority and the ability to make discretionary land use decisions; these factors could be considered growth-inducing. Even if the No Project Alternative is selected, the County would be permitted to consider new population growth, even if it were to amend the General Plan that would be adopted under that alternative. Certain classes of nonresidential development, a new Zoning Ordinance, and other implementation measures that cannot presently be pursued would also be permitted to be processed by the County and considered for approval. Although the County would have the ability to make discretionary land use decisions, this does not mean that all projects that could result in residential and commercial growth would necessarily be approved. However, it is clear that substantial new growth could occur beyond the projected growth in the No Project Alternative, unless the No Project Alternative is adopted, as described in Chapters 4 and 5, and this would result in a host of environmental impacts that are thoroughly addressed in Chapter 5.

The acquisition of additional water rights to supply county residents could also be assisted by the adoption of one of the equal-weight alternatives. Until a General Plan is adopted, several water rights applications are held up because of the requirement that a valid general plan must be in place on which to base the need for the water. Adoption of one of the alternatives would allow the water rights applications to be processed, potentially providing additional water supplies to support the growth anticipated during the next 20 years. Without that additional water, the water purveyors would have a limited amount of water that would be insufficient to support the residential and commercial development anticipated during the time frame of the plan.

A third constraint is the road system, notably U.S. 50, necessary to support anticipated growth. The Roadway Constrained 6-Lane "Plus" Alternative mandates that U.S. 50 not exceed six travel lanes, while other policies prohibit new development if the highway, or other road segments, falls to a LOS of F. It is demonstrated in Section 5.4, Traffic and Circulation, that six lanes cannot adequately accommodate the traffic from expected development. The other alternatives do not impose such a limitation. Therefore, as a result of and in response to development, U.S. 50 would be improved to accommodate the growth and its associated traffic.

To the extent that infrastructure is sized to accommodate already approved and expected growth based on the population projections of the General Plan alternatives, growth inducement would not occur. However, if infrastructure and facilities are oversized, or extended to areas outside of the identified community regions and rural centers, it would induce growth by providing capacity to areas not intended for development. None of the alternatives include specific plans for the development of new infrastructure.

7.2.2 SUMMARY OF GROWTH-INDUCING IMPACTS

In summary, adoption of the General Plan would indirectly induce population growth and increase economic activity in the county as a result of changes in the employment-generating uses and provisions for additional residential development. It could also induce growth in surrounding counties if the adopted alternative would not accommodate expected regional growth, which would occur if the No Project or Roadway Constrained 6-Lane "Plus" alternative is adopted. Development south of U.S. 50 near the Sacramento County line could put development pressure on the adjacent agricultural and open-space areas in Sacramento County. Additionally, serious obstacles to growth would be eliminated with the adoption of three of the four equal-weight alternatives analyzed in this EIR. As a result, the proposed General Plan is considered to be growth-inducing. The environmental effects of growth resulting from the General Plan are evaluated in Chapter 5.

7.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the State CEQA Guidelines requires that this EIR consider significant irreversible environmental changes that would be caused by the General Plan. An impact would be determined to be a significant and irreversible change in the environment if:

- development enabled by the General Plan would involve a large commitment of nonrenewable resources;
- the primary and secondary impacts of development would generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- development of the General Plan would involve uses in which irreversible damage could result from any potential environmental accidents associated with the plan; or
- the development of the General Plan land uses would result in an unjustified consumption of resources (e.g., the wasteful use of energy).

Chapter 5 of this EIR addresses the commitment of nonrenewable resources (e.g., development vs. retention of mineral resources), commitment of future generations to similar uses (e.g., development of designated land uses), the potential for environmental accidents (e.g., exposure to hazardous waste spills), and the consumption of energy (e.g., the use of electricity) associated with each of the four equal-weight alternatives. The reader is referred to Chapter 5 and its subsections for these discussions. On a more general note, the implementation of the proposed General Plan would likely result in or contribute to the following irreversible environmental changes:

- Relatively low-density (primarily residential) suburban land use patterns that would likely preclude future higher density development except where designated. This would likely preclude efficient, cost-effective full-service transit services. This would be particularly acute under the No Project and Roadway Constrained 6-Lane "Plus" alternatives, with their dispersed, lower density land use patterns. These impacts would be less under the Environmentally Constrained Alternative, which would have a more compact and denser (but not dense from a typical urban development perspective) land use pattern. The 1996 General Plan Alternative allows for somewhat denser, subdivided land uses, but over a greater area.
- Conversion of existing undeveloped land and open vistas to developed land uses, thus precluding other alternate land uses in the future, and precluding preservation of the existing land use pattern and vistas. Under the No Project and Roadway Constrained

6-Lane "Plus" alternatives, residential development would be pushed out to remote areas of the county over the planning horizon, resulting in low density (lowest under the No Project Alternative), rural and semirural development in areas of the county that are more open. The Environmentally Constrained Alternative, with a land use pattern that focuses development on areas where development is already densest and includes policies and programs to establish environmental overlays that condition or preclude development, would have the least impact on undeveloped land and vistas. The 1996 General Plan Alternative would fall between these alternatives, as it allows for somewhat denser, subdivided land uses, but would also be expected to result in development in rural and semirural areas.

< Irreversible loss of agricultural land and timberland (see Section 5.2).

< Commitment of water resources to serve development and degradation of water quality from suburban runoff (see Section 5.5).

< Commitment of municipal resources to the provision of services and operations of infrastructure for future suburban development (see Sections 5.6 and 5.7).

< Surfacing of substantial areas of important soils and mineral resources with impermeable surfaces associated with semirural and suburban development (see Section 5.9).

< Increased ambient noise and background air emissions (Sections 5.10 and 5.11, respectively).

< Conversion of existing habitat and irreversible loss of wildlife (see Section 5.12).

In addition to these irreversible changes, other more general irreversible changes would be expected, and the magnitude would be generally tied to population growth (see Chapter 4 for a discussion of relative growth levels of the equal-weight alternatives). Within the 2025 planning horizon, populations would be highest under the Environmentally Constrained and 1996 General Plan alternatives and lowest under the Roadway Constrained 6-Lane "Plus" and No Project alternatives, No Project being the lowest. At theoretical buildout, the 1996 General Plan Alternative has the highest potential population growth, by a wide margin. The next highest would be the Environmentally Constrained Alternative, followed by the Roadway Constrained 6-Lane "Plus," with the No Project Alternative the lowest, growing at a slow rate after 2025. General, population related, irreversible changes would be as follows:

< Irreversible consumption of goods and services associated with the future population.

- Irreversible consumption of energy and natural resources associated with the future population.
- Possible demand for and use of goods, services, and resources by the county to the exclusion of development in other locations in the region.

7.4 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL EFFECTS

CEQA Guidelines §15126.2(b) requires that an EIR describe the significant unavoidable impacts of a project. Chapter 5 of this EIR describes in detail the significant unavoidable impacts of each of the four equal-weight alternatives. Provided below is a listing of those impacts. The number of the relevant impact as it is discussed in Chapter 5 is presented next to the impact. Please refer to Chapter 5 for the detailed discussion. Following the listing of each impact is a statement of which alternatives it would apply to, and whether it would apply in 2025 or at buildout. If no distinction is made, the impact applies at both 2025 and buildout.

Following the plan-related significant unavoidable impact summary is a listing of those impacts that were found to be cumulatively significant and unavoidable, by topic area. Please refer to Section 7.1 for the full discussion of cumulatively significant and unavoidable impacts.

7.4.1 SIGNIFICANT AND UNAVOIDABLE IMPACTS OF THE GENERAL PLAN ALTERNATIVES

LAND USE AND HOUSING

Impact 5.1-2: Substantial Alteration or Degradation of Land Use Character in the County or Subareas. Applies to the buildout scenario of all alternatives and the 2025 scenario of the 1996 General Plan Alternative.

AGRICULTURE AND FORESTRY

Impact 5.2-1: Potential for Conversion of Important Farmland, Grazing Land, or Land Currently in Agricultural Production or for Conflict that Results in Cancellation of a Williamson Act Contract. Applies to all alternatives.

VISUAL RESOURCES

Impact 5.3-2: Degradation of Existing Visual Character or Quality of the Area or Region. Applies to the Environmentally Constrained and 1996 General Plan alternatives at 2025 and to all alternatives at buildout.

TRAFFIC AND CIRCULATION

Impact 5.4-1: Potential Inconsistencies with LOS Policies. Depending on which mitigation is adopted, impact may or may not be mitigated to less than significant. Applies to all alternatives.

Impact 5.4-2: Increase in Daily and Peak Hour Traffic. Applies to all alternatives.

Impact 5.4-3: Short-Term Unacceptable LOS Conditions Related to Generation of New Traffic in Advance of Transportation Improvements. Applies to all alternatives.

Impact 5.4-4: Insufficient Transit Capacity. Applies to all alternatives.

WATER RESOURCES

Impact 5.5-1: Increased Water Demand and Likelihood of Surface Water Shortages Resulting from Expected Development.

Impact 5.5-2: Potential Environmental Impacts Associated with the Development of New Surface Water Supplies and Related Infrastructure. Applies to all alternatives.

Impact 5.5-3: Increase in Groundwater Demand and Related Impacts. Applies to all alternatives.

Impact 5.5-4: Increase in Wastewater Flows and Related Infrastructure Impacts. Applies to all alternatives.

Impact 5.5-7: Increase in Surface Water Pollutants from Additional Wastewater Treatment Plant Discharges. Applies to all alternatives.

UTILITIES

Impact 5.6-3: Potential Noncompliance with State-Mandated Solid Waste Diversion Rate. Applies to all alternatives.

Impact 5.6-5: Potential for Land Use Incompatibility and Other Impacts of New and Expanded Solid Waste and Hazardous-Waste Facilities. Applies to all alternatives.

Impact 5.6-6: Potential for Land Use Incompatibility and Other Impacts of New and Expanded Energy Supply Infrastructure. Applies to all alternatives.

Impact 5.6-7: Potential for Impacts Associated with New and Expanded Communications Infrastructure.

PUBLIC SERVICES

Impact 5.7-3: Potential Land Use Incompatibility Associated with Development and Expansion of Public School Facilities.

HUMAN HEALTH AND SAFETY

Impact 5.8-2: Increased Incidents of Illegal Dumping of Household Hazardous Wastes. Applies to all alternatives.

Impact 5.8-3: Increased Risk of Accidental Release of Hazardous Materials. Applies to all alternatives.

Impact 5.8-6: Risk of Exposure to Flood Hazards Inside Dam Inundation Area. Applies to all alternatives.

Impact 5.8-7: Exposure to Electromagnetic Fields Generated by New Electric Energy Facilities at School Locations. Applies to all alternatives.

Impact 5.8-10: Increased Potential for Fire Incidents and Fire Hazards. Applies to all alternatives.

GEOLOGY, SOILS, AND MINERAL RESOURCES

None.

NOISE

Impact 5.10-1: Exposure of Noise-Sensitive Land Uses to Short-Term (Construction) Noise. Applies to all alternatives.

Impact 5.10-2: Exposure to Ground Transportation Noise Sources. Applies to all alternatives.

Impact 5.10-3: Exposure of Noise-Sensitive Land Uses to Fixed or Nontransportation Noise Sources. Applies to all alternatives.

Impact 5.10-4: Exposure to Aircraft Noise. Applies to all alternatives.

AIR QUALITY

Impact 5.11-1: Construction Emissions of ROG, NOx, and PM10. Applies to all alternatives.

Impact 5.11-2: Long-Term Operational (Regional) Emissions of ROG, NOx, and PM10. Applies to all alternatives.

Impact 5.11-3: Toxic Air Emissions. Applies to all alternatives.

Impact 5.11-4: Local Mobile-Source Emissions of Carbon Monoxide (CO). Applies to all alternatives.

Impact 5.11-5: Odorous Emissions. Applies to all alternatives.

BIOLOGICAL RESOURCES

Impact 5.12-1: Loss and Fragmentation of Wildlife Habitat. Applies to all alternatives.

Impact 5.12-2: Impacts on Special-Status Species. Applies to all alternatives.

Impact 5.12-3: Impacts on Wildlife Movement. Applies to all alternatives.

Impact 5.12-4: Removal, Degradation, and Fragmentation of Sensitive Habitats. Applies to all alternatives.

CULTURAL RESOURCES

None.

LAKE TAHOE BASIN

Impact 5.14-1: Impacts from New In-Basin Development. Applies to all alternatives.

Impact 5.14-2: Traffic and Air Quality Impacts from New Out-of-Basin Development. Applies to all alternatives.

7.4.2 CUMULATIVELY SIGNIFICANT AND UNAVOIDABLE IMPACTS OF THE EQUAL-WEIGHT GENERAL PLAN ALTERNATIVES

The following topics are issues in which each of the equal-weight general plan alternatives would contribute considerably to a cumulatively significant and unavoidable impact.

- Land Use and Housing
- Agriculture and Forestry
- Visual Resources
- Traffic and Circulation
- Water Resources
- Utilities
- Public Services
- Air Quality
- Biological Resources
- Lake Tahoe Basin (traffic, recreation, noise, air quality, and biological resources)
- Growth Inducement