

5 OTHER CEQA CONSIDERATIONS

5.1 INTRODUCTION

Section 15130 of the CEQA Guidelines requires that an EIR identify cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Section 15126 of the CEQA Guidelines, requires that all phases of a project be considered when evaluating its environmental impacts, including planning, acquisition, development and operation. This chapter discusses:

- ▶ Cumulative Impacts (Section 5.2)
- ▶ Growth-Inducing Impacts (Section 5.3);
- ▶ Significant Irreversible Environmental Changes (Section 5.4);
- ▶ Significant and Unavoidable Environmental Impacts (Section 5.5)

Alternatives are discussed in Section 6.0, "Alternatives."

5.2 CUMULATIVE IMPACTS

Section 15355 of the CEQA Guidelines defines a cumulative impact as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

Cumulative impacts can originate from one project or from separate projects. Cumulative impacts result when two or more impacts of a project combine and increase the severity or significance of either impact. Cumulative impacts can also be created when impacts from separate projects combine to make a compound impact that is more severe than the impacts would have been had the projects occurred in isolation.

Pursuant to Section 15130 of the CEQA Guidelines, "(t)he 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." According to the CEQA Guidelines, the discussion in this section is guided by the standards of practicality and reasonableness and focuses on the cumulative impacts to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

The cumulative analysis examines impacts of a proposed project taken together with past, present, and probable future projects producing related impacts. The analysis in this section includes:

- ▶ a determination of whether the long-term impacts of all related past, present, and future plans and projects would cause a cumulatively significant impact; and
- ▶ a determination as to whether implementation of the proposed project would have a "cumulatively considerable" contribution to any significant cumulative impact.

5.2.1 PROJECTS CONTRIBUTING TO POTENTIAL CUMULATIVE EFFECTS

The CEQA Guidelines identify two basic methods for establishing the cumulative environment in which the proposed project is to be considered:

- ▶ **List method**—A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the lead agency (in this case, the City of Roseville).
- ▶ **Plan method**—A summary of projections contained in adopted general plans or related planning documents, or in a prior environmental document that has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.

The cumulative analysis for this EIR uses the plan method.

5.2.2 CUMULATIVE CONTEXT

The cumulative context for this analysis is based on regional growth projections. The analysis examines population, housing, and employment growth for the six-county Sacramento Area Council of Governments (SACOG) region, which includes Roseville. SACOG’s Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) includes a regional-scale land use change scenario covering the period from 2016 to 2040 (SACOG 2020a).

The City has collected information on existing and projected future population and employment. Table 5-1 lists the estimated population, number of housing units and jobs in the six-county SACOG region. As shown, developed acreage in the region is forecast to increase by 7 percent between the baseline year for the MTP/SCS (2016) and the MTP/SCS planning horizon of 2040. This 7-percent increase in developed acreage contrasts with an increase in housing units of 28 percent and an increase in jobs of 26 percent, indicating that new development needs to be relatively more compact in order to promote economic development and quality of life, preserve open space and agricultural resources, protect air quality and public health, promote fiscal sustainability in public infrastructure and transportation facilities, allow more affordable methods of transportation, and provide housing opportunities for existing and future households (SACOG 2020b). This theme is reflected in the Placer County portion of the MTP/SCS region, as well, where SACOG has forecast an increase in developed acreage of 13 percent, with an accompanying housing unit growth of 37 percent and job growth of 38 percent – Placer County accounts for the highest percentage of housing and job growth of any county in the region in SACOG’s forecast.

County	Developed Acres			Dwelling Units			Jobs		
	2016	2040	Growth	2016	2040	Growth	2016	2040	Growth
El Dorado	208,992	214,851	3%	63,793	72,291	13%	48,690	57,965	19%
Placer	139,588	157,175	13%	146,701	200,870	37%	162,577	224,082	38%
Sacramento	190,564	207,135	9%	570,360	724,860	27%	688,895	840,273	22%
Sutter	12,691	14,292	13%	34,186	42,279	24%	34,417	43,969	28%
Yolo	39,671	42,635	7%	77,705	106,367	37%	104,771	135,376	29%
Yuba	95,341	97,162	2%	28,378	34,584	22%	21,401	29,149	36%
Total	686,847	733,250	7%	921,123	1,181,251	28%	1,060,751	1,331,813	26%

Source: SACOG 2020a, Tables 2.3, 2.4, and 2.5

Roseville is identified primarily as an Established Community, which are typically adjacent to, or surrounding, Center and Corridor Communities with existing low- to medium-density residential neighborhoods, office and industrial parks, or commercial strip centers (SACOG 2020b). SACOG has identified Downtown Roseville in the vicinity of the Roseville Intermodal Station and along Douglas Boulevard being part of a Center and Corridor Community (SACOG 2020b). Center and Corridor Communities are typically denser and more mixed than surrounding land uses, including historic downtowns, main streets, commercial corridors, rail station areas, central business districts, town centers, or other high-density destinations. They have more compact development patterns, a greater mix of uses, and a wider variety of transportation infrastructure compared to the rest of the region. Some have frequent transit service, either bus or rail, and all have pedestrian and bicycling infrastructure that is more supportive of walking and bicycling than other Community Types. The northern and western portions of the Planning Area are identified by SACOG as Developing Communities, which represent vacant lands at the edge of existing urban or suburban development that are the next increment of urban expansion.

SACOG forecasts show substantial growth for Roseville between 2016 and 2035, with an increase of 34 percent in dwelling units and 25 percent in jobs. This is a similar rate of growth as shown for Rocklin (housing units increase by 36 percent and jobs by 34 percent), Placer County as a whole (dwelling units increase by 31 percent and jobs by 31 percent), and more than neighboring Sacramento County (24 percent increase in housing units and 18 percent increase in jobs) and Citrus Heights (3 percent increase in housing units and 13 percent increase in jobs).

5.2.3 CUMULATIVE IMPACT ANALYSIS

5.2.3.1 LAND USE AND AGRICULTURE

Physically Divide an Established Community

The regional planning efforts considered in this cumulative analysis incorporate both regional and local land use and infrastructure planning, with the goal of ensuring that established communities are not physically divided. Regional plans such as the MTP/SCS, as well as other City and County General Plans, are designed to improve mobility and connectivity amongst existing development and new development including a focus on pedestrian, bicycle, and transit mobility. New roadways are generally planned in undeveloped areas, where new infrastructure would not divide existing communities. Updates to existing roadways would add additional through lanes, turn lanes, and transit turnouts, along with traffic signals; these improvements would benefit the entire community and would not physically divide established communities. New natural gas, water, and wastewater pipelines are installed underground, and are required for equal service among all communities at both the regional and local level. Therefore, the regional planning efforts would not result in a significant cumulative impact.

The existing General Plan Land Use Map and infrastructure planning is designed to integrate into regional plans and adjacent County development plans. Compliance with goals and policies in the proposed General Plan Update would ensure that buildout of the General Plan would not disrupt or divide established communities. The proposed General Plan Update policies are designed to improve mobility and connectivity amongst existing development and new development, including a focus on pedestrian, bicycle, and transit mobility. New roadway improvements are primarily in undeveloped areas where new infrastructure would not divide existing communities. The proposed General Plan Update does not identify new infrastructure improvements that would divide an established community. The proposed General Plan Update would have **no cumulative impact** due to physically dividing an established community.

Conflict with an Applicable Land Use Plan, Policy, or Regulation

For the proposed General Plan Update, relevant plans, policies, and regulations to consider include the SACOG MTP/SCS, SACOG Region Blueprint, Placer County General Plan, and City of Roseville/Placer County MOU (see Section 4.1 of this EIR for more detail). The proposed General Plan Update was drafted to ensure consistency with other relevant plans, policies, and regulations that were developed to reduce or avoid environmental impacts. Indirect effects from those plans and policies adopted for the purpose of avoiding or mitigating environmental impacts can lead to physical environmental impacts, which are considered in the appropriate sections of this environmental assessment. The impact of the proposed General Plan Update would be less than cumulatively considerable because it would not conflict with an applicable land use plan, policy, or regulation.

Conflict with Existing Agricultural Operations

The regional planning efforts have and will continue to locate urban land uses adjacent to existing agricultural and grazing lands. This includes existing, approved, proposed, and reasonably foreseeable development projects within Placer County. Placer County has approved urban development along the northern, western, and southern boundaries of the Planning Area. The Placer Vineyard Specific Plan Area is south of the Sierra Vista Specific Plan Area, south of Baseline Road; the Curry Creek Community Plan Area is west of the City, north of Baseline Road and south of Philip Road; the Placer Ranch Specific Plan shares a three-mile boundary with the City, from the eastern Boundary of the Amoruso Ranch Specific Plan to just east of Woodcreek Oaks Boulevard; and Regional University is located on the western side of the City at the intersection of Pleasant Grove Boulevard and Santucci Boulevard. Many of these projects would locate urban development adjacent to existing agricultural and grazing lands potentially resulting in urban-agricultural interfaces that cause the conversion of agricultural lands to nonagricultural uses. Therefore, the regional planning efforts would result in a potentially significant cumulative impact.

Buildout of the General Plan would locate urban land uses adjacent to existing grazing lands along the northwestern, western, and southern boundaries outside of the Planning Area. However, in the cumulative context most of these existing grazing lands will be converted to urban uses as a result of approved urban development in the County. The northern and western portions of the Amoruso Ranch Specific Plan Area will be adjacent to grazing land in unincorporated Placer County, including the Gleason cattle ranch to the west, Toad Hill Mitigation Bank to the northwest, and Reason Farms to the west within the City limits. The southern and western portions of the Sierra Vista Specific Plan Area would be adjacent to the Placer Vineyards and Curry Creek urban development areas. Until these future planning areas are developed, development within the Amoruso Ranch, West Roseville, and Sierra Vista Specific Plan Areas would result in urban development adjacent to grazing lands. Future development on the City/County boundary would be separated by open space/buffers and/or road rights-of-way. Any residential uses would be set back from grazing lands and separation would be created by design features, such as fences or walls. Future land use plans would be subject to project-level CEQA analysis and mitigation, if necessary, to ensure urban development does not conflict with on-going grazing operations. In addition, to reduce potential conflicts between sensitive uses and agricultural uses, previously adopted mitigation measures associated with the Specific Plans require all future occupants of properties adjacent to the County to be provided with a deed disclosure or similar notice regarding the proximity and nature of neighboring potential agricultural uses. Therefore, no long-term conflicts with grazing lands would occur as urban development occurs in unincorporated Placer County. In addition, Reason Farms, located in the northwestern corner of the Planning Area, is proposed as a major stormwater retention facility and future open space recreation area. Buildout of the

General Plan would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of grazing lands. Therefore, the impact of the proposed General Plan Update due to conflicts with existing agricultural operations would be **less-than-cumulatively considerable**.

5.2.3.2 POPULATION, EMPLOYMENT, AND HOUSING

Displace a Substantial Number of Existing People or Housing

Population growth, by itself, is not an environmental impact. However, the direct and indirect effects of population growth, such as housing and infrastructure needed to accommodate population growth, can lead to physical environmental effects. The region is expected to continue to grow through 2035 and 2040, adding more than 223,000 housing units and 217,000 jobs between 2016 and 2035 (SACOG 2020b). Placer County's population is anticipated to continue to grow, along with employment through 2035, adding approximately 44,860 dwelling units and 50,890 jobs (SACOG 2020b). The rate of development changes over time and depends on changes in the local and regional economy, demographic trends, and other factors. Regional planning efforts are specifically designed to accommodate new growth and infill development. Infill housing, if it involves demolition and replacement of existing structures, can result in the temporary and short-term displacement of people or housing from individual site-specific projects. However, regional planning efforts include new housing that would accommodate any persons who are displaced. Therefore, the regional planning efforts would not have a significant cumulative impact.

As discussed throughout this EIR, the proposed General Plan Update would not increase development beyond the level that has already been planned for in the existing General Plan. Increased population and employment in the region could generate the need for additional housing and infrastructure, which could lead to conversion of undeveloped land and associated adverse physical environmental impacts of the sort that are considered in Chapter 4 of this EIR. However, if there is unanticipated displacement, the existing General Plan land use plan includes capacity for the construction of between 20,000 and 25,000 residential dwelling units, which could provide housing for displaced residents. The impact of the proposed General Plan Update would not displace substantial numbers of people or housing; therefore, this impact would be **less than cumulatively considerable**.

Induce Substantial Unplanned Population Growth

The primary purpose of the regional planning efforts considered in this cumulative analysis is to avoid inducing substantial unplanned population growth. Within that context, the proposed General Plan Update provides a framework for the orderly and efficient long-term growth within Roseville through the year 2035. In addition, the majority of the vacant land adjacent to the City's boundaries is within existing adopted Specific Plans in Placer County, and is already planned for urbanization and development. The regional planning efforts all contain goals, policies, and implementation measures to appropriately plan for and accommodate additional growth. Therefore, the proposed General Plan Update does not have the potential to indirectly induce substantial unplanned growth outside of the Planning Area and the impact of the proposed General Plan Update would be **less than cumulatively considerable**.

5.2.3.3 TRANSPORTATION

Section 4.3 of this EIR addresses cumulative transportation-related effects. Section 4.3 addresses the following three impacts:

- ▶ Vehicular Travel Demand (VMT). VMT Per Capita Exceeds the Threshold of 15 Percent Below the City Baseline of 12.8 VMT per capita.
- ▶ Increase Hazards Due to a Design Feature, Incompatible Uses, or Inadequate Emergency Access.
- ▶ Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Create or Exacerbate Disruptions to the Performance or Safety of these Systems.

For Impact 4.3-1, related to VMT, under SB 375 (Chapter 728, Statutes of 2008), the California Air Resources Board (ARB) is responsible for issuing greenhouse gas targets to metropolitan planning organizations (MPOs) that reduce vehicle emissions, consistent with state climate goals, by a future planning horizon compared to an established baseline. SB 375 requires each MPO to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that shows how a land use/transportation scenario will achieve the assigned greenhouse gas target. The MPO for Roseville is the Sacramento Area Council of Governments (SACOG). SACOG is responsible for preparing the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) every four years. The current adopted 2020 MTP/SCS is for the years 2020 to 2040. For the 2020 MTP/SCS, ARB assigned SACOG a target of 19 percent per-capita GHG emissions reduction. The MTP/SCS indicates that VMT per capita in the SACOG region, which dipped significantly during the Great Recession, has increased starting in 2011. The MTP/SCS projects a 10-percent reduction in VMT per capita by 2040 for the SACOG region. This does not achieve a 15-percent reduction in VMT compared to the baseline and is considered a significant cumulative impact.

As discussed in Section 4.3, the City’s existing baseline is 15.1 VMT per capita, and development under buildout of the General Plan would generate 15.4 VMT per capita with constrained network conditions, and 14.9 VMT per capita with unconstrained network conditions. Therefore, development under buildout of the General Plan could lead to an increase in VMT per capita, and in either case will not reduce VMT to levels below the threshold of 12.8 VMT per capita. Therefore, the City’s VMT will contribute to the regional impacts, and impacts would be **cumulatively considerable**. There is no additional feasible mitigation beyond that included as a part of Section 4.3. This cumulative impact would be **significant and unavoidable**.

For Impact 4.3-3, related to increasing hazards due to design features, incompatible uses, or inadequate emergency access, the cumulative environment does not change the conclusions and analysis discussed in Section 4.3. The City’s land uses and transportation networks have been comprehensively planned through the Specific Plan process to conform to the City’s Design and Construction Standards, and establish appropriate and safe designs. Impacts related to increasing transportation network hazards would be **less than cumulatively considerable**.

For Impact 4.3-4, related to conflicts with or disruptions to public transit, bicycle, or pedestrian facilities, the cumulative environment does not change the conclusions and analysis discussed in Section 4.3. The proposed General Plan Update does not conflict with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities nor would it adversely affect performance or safety of such facilities. Impacts related to conflicts with or disruptions to public transit, bicycle, or pedestrian facilities would be **less than cumulatively considerable**.

5.2.3.4 AIR QUALITY

By its nature, air pollution is largely a cumulative impact. The implementation of plans and projects within the Sacramento Valley Air Basin would contribute to this impact on a cumulative basis. The emissions of an individual project may be individually limited but cumulatively considerable when taken in combination with past, present, and future development projects. All new development that would result in an increase in air pollutant emissions would contribute to cumulative construction air quality impacts. The nonattainment status of regional pollutants is a result of past and present development within the air basin.

Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors for Which the Region is in Nonattainment, and Conflict with or Obstruct and Air Quality Plan

Construction-related activities associated with buildout of the General Plan would result in temporary emissions of criteria air pollutants from ground disturbing activities, exhaust emissions from use of off-road equipment, material delivery, and construction worker commutes, building construction; asphalt paving, and application of architectural coatings. Implementation of the General Plan would include new development in the Planning Area, including buildings, structures, paved areas, roadways, utilities, and other improvements. Daily activities associated with the operation of these land uses would generate criteria air pollutant and precursor emissions from mobile, energy, and area sources. While Placer County Air Pollution Control District (PCAPCD) and City policies and regulations would reduce construction-related emissions, the effectiveness of these measures would depend on the number and extent of strategies feasible to incorporate in any given project. Because the timing and level of construction activities, and specific projects to be implemented, each year is unknown, it is not possible to estimate the extent to which the reduction strategies would result in emission reductions. Therefore, implementation of the proposed General Plan Update could combine with cumulative emissions and hamper implementation of the applicable air quality plan and result in a cumulatively considerable net increase of criteria air pollutants for which the project region is designated a nonattainment area under an applicable federal or state ambient air quality standard. The impact of the proposed General Plan Update would be **cumulatively significant and unavoidable**.

Generation of Long-Term Operational Emissions of Criteria Air Pollutants and Precursors for Which the Region is in Nonattainment, or Conflict with or Obstruct and Air Quality Plan

The proposed General Plan Update will generate long-term operational emissions that exceed PCAPCD significance thresholds. PCAPCD currently enforces several rules and regulations that would reduce the long-term operational impacts described in Section 4.4-1. Rules that establish emissions standards for various commercial and industrial emission sources (e.g., internal combustion engines, gasoline dispensing facilities, water heaters and boilers) and ROG concentrations in architectural coatings would help reduce operational emissions. In addition, vehicle emission standards established by ARB, such as the Low Emissions Vehicle Program and On-Road Heavy-Duty Program would help reduce long-term mobile source emissions. Even with adherence to General Plan policies and Specific Plan mitigation, operational emissions from implementation of the General Plan could still result in a net increase of criteria air pollutant emissions that could exceed PCAPCD-recommended thresholds of significance. In addition, mitigation measures would add new General Plan implementation measures to reduce operational emissions of criteria air pollutants from development projects within the Planning Area.

The ARB Technical Advisory identifies several strategies to reduce air pollution exposure near high-volume roadways, including strategies to reduce overall emissions from traffic through speed reduction mechanisms and traffic management, strategies to increase dispersion of emissions through design mechanisms that promote air flow and the use solid and vegetation barriers, and strategies that remove pollution from the air through indoor filtration technology. The proposed General Plan Update incorporates such recommendations, but the City cannot enforce strategies to reduce pollutant concentrations or policies that ensure appropriate indoor air quality for sensitive uses located near high-volume roadways outside the Planning Area.

PCAPCD rules and regulations, City policies and implementation measures, and mitigation measures would reduce criteria air pollutant emissions. However, because the specific development projects within the Planning Area cannot be defined at the time of this analysis, precise effectiveness of these measures cannot be determined. Such emissions could exceed or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations. In addition, these emissions could conflict with or obstruct implementation of the applicable air quality plan. There are no additional feasible mitigation measures available to address this impact. For the foregoing reasons, the impact of the proposed General Plan Update on air quality due to long-term operations of development accommodated by the General Plan would be **cumulatively significant and unavoidable**.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Construction Impacts

Construction activities associated with development throughout the region would occur at various locations, potentially exposing sensitive receptors to substantial construction-related toxic air contaminant (TAC) concentrations. It is anticipated that over time, construction-related emissions will decrease with construction equipment fleet turnover, increased emissions technology, and more stringent emissions standards. Air districts throughout the Sacramento region have standard mitigation that would also help reduce construction-related pollutant concentrations. TACs disperse at a relatively short distance and, as a result, the proposed General Plan Update would have **no cumulative** impacts associated with construction-related TAC emissions occurring elsewhere in the region.

Long-Term Operational Impacts

Existing TAC sources in the Planning Area include mobile sources, stationary sources, and areawide sources, which all cumulatively contribute to the existing TAC concentrations and the associated health risk. Mobile sources are dispersed on roadways throughout the Planning Area, which are generated, in part, by existing and planned uses throughout the region. SR 65 and I-80 both handle heavy-duty diesel trucks with emissions that can expose residents and other adjacent sensitive receptors to TACs. Future development anticipated under SACOG's MTP/SCS would involve substantial development that would further increase traffic along main regional roadways. The proposed General Plan Update would generate additional long-term operational TACs that would contribute substantially to regional TAC emissions and potential health issues. Therefore, the proposed General Plan Update would have a **significant and unavoidable cumulative** impact due to the operation of development accommodated under the General Plan.

Result in Concentrated Carbon Monoxide Levels (“hotspots”)

As discussed in Section 4.4-4, screening levels have been established to determine if a project would have the potential to create a violation of the CO standard, based on the CO emissions generated by the project and whether the affected intersection is operating at acceptable levels of service. The analysis concludes that the proposed General Plan Update would not cause significant adverse impacts related to CO hotspots. This analysis is based on cumulative traffic volumes contributed from developments outside the Planning Area. Therefore, the impact of the proposed General Plan Update would be **less than cumulatively considerable**.

Other Emissions (Odor)

Odor impacts are generally localized and do not combine with odor impacts in nearby jurisdictions to increase the severity of impacts. Because odor emissions from various land uses differ in nature, these emissions would not cumulatively contribute to each other to expose a substantial number of people to odors. The proposed General Plan Update would have **no cumulative** impact due to the emissions of odors.

5.2.3.5 GREENHOUSE GAS EMISSIONS

Section 4.5 of this EIR considers the cumulative contribution of implementation of the General Plan to the significant cumulative impact of climate change, and concludes that impacts are **cumulatively significant and unavoidable**.

5.2.3.6 NOISE AND VIBRATION

Short-Term Noise: Construction

Construction noise is generally a localized impact that does not have regional or cumulative considerations. Because it is localized and short-term, construction noise in the Planning area would not combine with construction noise sources outside of the Planning area to create a cumulative increase in noise, and therefore this impact would be **less than cumulatively considerable**.

Long-Term Noise: Operational Traffic Noise

Development forecast under the MTP/SCS would generate and attract vehicular travel along roadways located throughout the region, including within and near the Planning Area, which would combine with traffic associated with development in the Planning Area to increase vehicular traffic noise in areas directly adjacent to roadways. As explained in Section 4.6 of this EIR for roadways within the Planning Area, the traffic volumes used to estimate future noise levels include traffic contributed by developments outside the Planning Area. Buildout of the General Plan would involve a substantial amount of additional new future development and associated travel demand within the Planning Area. The residences and other sensitive land uses located along the region’s roadways that would be affected by buildout of the General Plan are currently affected by existing traffic noise. Traffic associated with buildout of General Plan, along with regional growth will increase noise levels along regional thoroughfares. While in most cases, the increase in noise levels attributable to traffic associated with buildout of the General Plan would be imperceptible, as shown in Table 4.6-9 (please see Section 4.6 of this EIR, “Noise and Vibration”), traffic associated with buildout of the General Plan and regional growth is expected to increase noise levels along City streets and regional thoroughfares throughout the Planning Area, and the traffic noise level increase would be substantial in some areas compared to existing conditions. Traffic generated by the

proposed General Plan Update would have a **cumulatively significant and unavoidable** impact. Mitigation to offset this impact is available in future development areas because setbacks, walls, and other features can be incorporated into development designs, but in many existing areas of the City mitigation is infeasible.

Long-Term Noise: Stationary Sources

Noise sources associated with regional planning efforts in the SACOG region include landscape and building maintenance activities, mechanical equipment, solid waste collection, parking lots, commercial, office, and industrial activities, and residential, school, and recreation activities and events. Noise sources that are adjacent to one another could combine to increase cumulative noise levels. However, stationary noise sources within the Planning Area would not generally combine with noise sources outside the Planning Area to create a cumulative increase in stationary noise. Ambient noise is increasing in urbanized areas over time as a result of increased development, and because cumulative noise increases could occur where site-specific projects are in close proximity to one another, cumulative regional planning efforts would result in a **cumulatively significant and unavoidable** impact.

Ground-Borne Vibration

Construction activities associated with the regional planning efforts would result in varying degrees of temporary ground-borne vibration, depending on the specific construction equipment used and activities involved. Although detailed information is not currently available, construction would be anticipated to result in maximum ground-borne vibration levels associated with bulldozing, and with blasting and vibratory jackhammer activities in hard rock (such as the Mehrten Formation). Sensitive receptors could be located within the threshold distances established by the FTA; therefore, the regional planning efforts could result in a significant cumulative impact.

Site-specific projects envisioned under the proposed General Plan Update could result in a significant impact from temporary, short-term ground-borne vibration levels. However, the City does not anticipate multiple, adjacent, large-scale infill projects occurring simultaneously adjacent to vibration-sensitive uses that would generate any impact that is cumulatively more severe than the impacts described under Impact 4.6-3. Impacts associated with vibration are localized; therefore, the contribution of the proposed General Plan Update to this impact would be **less than cumulatively considerable**.

5.2.3.7 GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

The geographic context for geology, soils, and paleontological resources encompasses the western Placer County region, which is part of two different geomorphic provinces: the Central Valley and the Sierra Nevada. Specifically, the western Placer County region is located in the eastern margin of the Sacramento Valley and the western margin of the Sierra Nevada foothills. Because the geologic formations and soil types vary widely depending on project location, and are site-specific, the regional planning efforts would have no cumulative impacts related to geology and soils.

Seismic Ground Shaking

The western Placer County region is not seismically active. Thus, there is a low probability that the projects considered in this cumulative analysis, or the proposed project, would experience damage from seismic hazards such as surface fault rupture, strong seismic ground shaking, or liquefaction. Furthermore, each project considered in this cumulative analysis, along with the project developed as a part of buildout of the General Plan, must

individually meet the requirements of the California Building Standards Code (CBC) as well as the requirements of local City and County building codes, ordinances, and policies (e.g., grading and erosion control plans), all of which are specifically designed to reduce damage from seismic hazards. Finally, the potential for damage from seismic hazards is site-specific, and thus there is no additive effect. Therefore, there would be **no cumulative** impact due to seismic ground shaking.

Soil Erosion

Please see the cumulative impact analysis below under the heading “Water Quality, Erosion, and Conflicts with Water Quality Planning,” in Subsection 5.2.3.13, “Hydrology and Water Quality.”

Unstable or Expansive Soils

Portions of the western Placer County region are in areas with a high soil shrink-swell potential, which can result in damage to building, road, and bridge foundations, as well as underground pipelines. Furthermore, areas of steep slopes are present throughout the region. Construction within, or at the top or base of, steep slopes can result in landslide hazards from unstable rock or soil. Depending on the location of the projects considered in this cumulative analysis, damage from these geologic and soils hazards could occur. Portions of the Planning Area could also be subject to these hazards. However, the projects considered in this cumulative analysis, along with projects developed under the General Plan, are required to comply with the CBC and local building codes, which regulate construction in expansive and unstable soils. Compliance with state and local building codes, in addition to compliance with proposed General Plan Update policies and programs, would reduce the potential for damage from these potential hazards. Furthermore, the potential for damage is site-specific, and thus there is no additive effect. Therefore, there would be **no cumulative** impact due to unstable or expansive soils.

Paleontological Resources

Fossil discoveries resulting from excavation and earth-moving activities associated with development are occurring with increasing frequency throughout the state. The value or importance of different fossil groups varies depending on the age and depositional environment of the rock unit that contains the fossils, their rarity, the extent to which they have already been identified and documented, and the ability to recover similar materials under more controlled conditions (such as for a research project). Unique, scientifically-important fossil discoveries are relatively rare, and the likelihood of encountering them is site-specific and is based on the specific geologic rock formations that are present at any given project site. These geologic formations vary from location to location.

The western Placer County region includes rock formations such as the Modesto, Riverbank, Turlock Lake, Mehrten, and Ione (among others). Due to the large number of vertebrate fossils and plant fossil assemblages that have recovered from these rock formations, they are considered paleontologically sensitive. Therefore, earthmoving activities associated with the projects considered in this cumulative analysis could damage or destroy unique paleontological resources that may be present in these rock formations, and potentially within other paleontologically sensitive formations as well. Therefore, regional planning efforts could result in a significant cumulative impact.

Buildout of the General Plan would also result in earthmoving activities in the paleontologically sensitive Modesto, Riverbank, Turlock Lake, Mehrten, and Ione Formations. Implementation of Policy OS4.11, requiring

education of construction workers about fossils prior to the start of earthmoving activities, and consulting with a qualified paleontologist who would recommend appropriate actions if fossils are encountered. Therefore, the proposed General Plan Update would have a **less-than-cumulatively considerable** impact on paleontological resources.

5.2.3.8 BIOLOGICAL RESOURCES

The cumulative context for the evaluation of impacts on biological resources is regional development, particularly western Placer County, which contains habitat very similar to the Planning Area. Over the past few decades, tens of thousands of acres of grasslands have been developed or designated for development in western Placer County. Development has occurred in and around the cities of Roseville, Lincoln, and Rocklin. Development has also occurred to the south in grasslands of Sacramento County. Future development would result in the further decline of native plant communities, including vernal pool habitat. The proximity of urban development also would contribute to the distribution of non-native plant and wildlife species, which would further degrade the habitat and available niches for native species in the surrounding region (City of Roseville 2016). Therefore, the impacts of the regional planning efforts on biological resources are cumulatively significant.

Special-Status Plants, Loss or Degradation of Riparian Habitat/Sensitive Natural Communities or Wetlands and Other Waters

According to the USFWS, Placer County contains almost 35 percent of all vernal pools within the southeastern Sacramento vernal pool region. The Placer County Conservation Plan (PCCP) covers most of South Placer, excluding the Cities of Roseville, Rocklin, Loomis, and Auburn. The Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) prepared for the PCCP indicates that the south Placer region includes over 40,000 acres of vernal pool complex habitat, over 3,000 acres of other wetland complexes, over 30,000 acres of grassland, over 1,000 acres of valley oak woodland, and over 6,000 acres of riparian habitat. Although the purpose of the PCCP will be to preserve large, contiguous habitat areas, the EIS/EIR indicates cumulative regional development will nonetheless result in the loss of more than half of the vernal pool and wetland habitat area in the PCCP, most of the grassland habitat, and significant portions of other habitats.

Full buildout of the General Plan would allow conversion of 3,025 acres of annual grassland, 141 acres of oak woodland/savannah, 251 acres of riparian woodland/wetlands, 53 acres of vernal pool complexes, and 3 acres of open water, for a total of 3,473 acres of habitat loss. This habitat loss could result in loss of special-status plants either through direct removal or through habitat degradation.

Furthermore, development in these areas could result in removal of vegetation or further habitat degradation from pollutants transported by urban runoff, changes in vegetation as a result of changes in land use and management practices, as well as altered site hydrology from the construction of adjacent urban development and roadways. The loss of this habitat will contribute to cumulative habitat losses in the region. Therefore, the impact of the proposed General Plan Update on special status plant species would be **cumulatively significant and unavoidable**.

Special-Status Wildlife Species

Based on information from the CNDDDB, potential habitat for Swainson's hawk, burrowing owl, other special status birds, and special status mammals are widely distributed within Placer and adjacent counties. As stated in

the section above, regional planning is anticipated to result in the loss of significant habitat acreage in south Placer County, and could result in direct mortality of individuals. Therefore, the regional planning efforts considered in this cumulative analysis would result in cumulatively significant impacts.

Compliance with the MBTA and Section 3503 of the California Fish and Game Code would ensure that nesting raptors and other birds are not adversely affected because this requires project applicants to avoid disturbing or destroying active bird nests either directly or indirectly. Project applicants would be required to conduct preconstruction nesting bird surveys for any work conducted during the nesting season, which is generally considered to be February 1–September 15, and avoid removing or destroying active nests, or disturbing nesting birds in such a way that it results in nest abandonment. Compliance with the federal ESA and CESA would reduce potential impacts on vernal pool fairy shrimp, vernal pool tadpole shrimp, valley elderberry longhorn beetle, steelhead, tricolored blackbird, Swainson’s hawk and California black rail because it would require that these State and/or federally listed species be avoided or that any loss of these species be fully mitigated as a condition of take authorization.

No direct impact on special-status fish habitat (i.e., removal) would occur from the proposed General Plan Update. However, buildout of the General Plan would allow for some new residential, commercial, and parks/recreation development in vacant lands adjacent to existing development in the vicinity of Dry Creek, Antelope Creek, Linda Creek, Secret Ravine, and Miners Ravine. Indirect impacts could occur from increased sediment load in the creeks due to increased urban development. This impact would be reduced through required compliance with the City’s MS4 permit and the State Water Resources Control Board’s Construction General Permit, both of which require implementation of Best Management Practices to prevent pollutant transport in waterways.

Full buildout of the proposed General Plan Update would result in the permanent loss of habitat for special-status species, which are present within the Planning Area. Even with implementation of existing and proposed General Plan Update goals, policies, and mitigation measures, a substantial change in habitat conditions would result as a consequence of development, transitioning from a rural to an urban environment particularly in the northern and western portions of the Planning Area. The amount of undeveloped habitat available for wildlife use will decrease as development occurs and as the amount of habitat decreases, wildlife species that are incompatible with urban development will be displaced. Development in the Planning Area would result in the loss of substantial grasslands and cropland, both of which provide habitat for many special status species. In addition, direct mortality of individuals could also occur. The impact of the proposed General Plan Update on special status wildlife species would be **cumulatively significant and unavoidable**.

Interference with Wildlife Movement Corridors and Nursery Sites

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by changes in vegetation or human disturbance. The fragmentation of open space areas by urbanization creates isolated islands of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, may not persist over time because fragmentation prohibits the infusion of new individuals and genetic information. Implementation of regional planning efforts would result in an increase in conversion of rural areas to urban development, which would result in a loss of wildlife movement corridors. Therefore, the impact of the regional planning efforts is considered cumulatively significant.

Implementation of General Plan goals, policies, and mitigation measures combined with current laws and regulations, would reduce the level of impact because these provisions would require projects to identify, avoid, and preserve habitats that function as wildlife migration corridors, including riparian areas and wetlands, or provide compensation for loss of habitat in coordination with state and federal agencies. Therefore, although regional development will adversely impact wildlife movement, the proposed General Plan Update does not contribute significantly to this impact; therefore, impacts due to interference with wildlife movement corridors and nursery sites would be **less than cumulatively considerable**.

Conflict with Local Ordinances Protecting Biological Resources

Local city and county jurisdictions that are part of regional planning efforts all have tree preservation ordinances. Site-specific project applicants are required by law to follow these requirements, which include preparing a tree preservation plan that must be approved by the local jurisdiction, planting replacement trees for any trees over a certain size that are lost, and obtaining a permit prior to pruning or cutting down an existing protected tree. The City of Roseville Tree Preservation Ordinance (Municipal Code Chapter 19.66) regulates the removal and preservation of trees within the City. Protected trees include native oak trees equal to or greater than six inches diameter at breast height. The City's Tree Preservation Ordinance require a permit for the removal of any protected tree. The City's Tree Preservation Ordinance also requires that applications for development projects with activity occurring within the protected zone of a protected tree obtain a permit prior to construction, and must to identify measures that will aide in the preservation of native oak trees. The impact of the proposed General Plan Update would not conflict with local ordinances protecting biological resources, and this impact would be **less-than-cumulatively considerable**.

Conflict with Provisions of an Adopted Habitat Conservation Plan, Natural Conservation Community Plan, or Other Approved Conservation Plan

There is no adopted HCP, NCCP, or other approved local, regional, or State HCP that applies to the Planning Area. If/when the County's PCCP is adopted, the City may choose to participate and may be included in the PCCP as a special entity. Implementation of the proposed General Plan Update would help protect biological resources throughout the Planning Area, including resources associated with the proposed Western Placer County HCP/NCCP, if and when it is adopted. Therefore, the impact of the proposed General Plan Update due to conflicts with an adopted HCP, NCCP, or other approved habitat plan would be **less-than-cumulatively considerable**.

5.2.3.9 CULTURAL AND TRIBAL CULTURAL RESOURCES

Cultural resources in the region generally consist of prehistoric sites, historic sites, historic structures, and isolated artifacts. These may be historical, archeological, and/or tribal cultural resources, and may involve human remains (collectively "resources"). During the 19th and 20th centuries, localized urbanization and intensive agricultural use in the region caused the destruction or disturbance of numerous prehistoric sites, while many structures now considered to be historic were erected. From the latter half of the 20th century to the present, prehistoric and historic structures have been disturbed and destroyed. During this period, the creation and enforcement of various regulations protecting cultural resources have substantially reduced the rate and intensity of these impacts. However, even with these regulations, cultural resources are still degraded or destroyed as cumulative development in the region proceeds. Development of projects and plans in the region has the potential to result in the discovery of undocumented subsurface cultural resources or unmarked historic-era or prehistoric Native American burials. Cumulative gains in population, households, and jobs would require a commensurate increase

in infrastructure, capital facilities, services, housing, and commercial uses in the region. Each of these increases carries with it a corresponding increase in the magnitude of ground disturbance and the construction of new buildings and structures and other site development activities. The impact on archaeological deposits, human remains, tribal cultural resources, and potential historic resources would be substantial given the past extent of urban development, and anticipated gains in population, jobs, and housing. Therefore, the regional planning efforts would result in a potentially significant cumulative impact on cultural and tribal cultural resources.

Due to the nature of cultural resources, adverse impacts are site-specific and need to be determined on a project-by-project basis. As discussed in Section 4.9, future development and infrastructure improvements associated with buildout of the General Plan could result in significant impacts to resources through either direct physical impacts or by indirect impacts. Direct physical impacts would result from activity such as excavation, demolition, grading, or ground compaction required for construction of new land uses. Indirect impacts would occur if these activities change the setting in a way that diminishes the integrity of a resource.

Ground-disturbing construction would result from buildout of property in areas where the City anticipates infill development will happen during the planning horizon, as well as in the Specific Plan Areas. Specific Plan Areas are primarily used for agricultural purposes, consisting of relatively large, rural, open, and minimally developed parcels and agricultural fields. When projects occur in these undeveloped areas, impacts are more likely to occur as a result of unanticipated discovery of buried resources during construction activities. When projects occur in existing developed areas, and depending on the context, development could add incompatible architectural elements; diminish the historic integrity of a cultural resources setting, feeling, or association; or destroy the historic character of a property. The City has numerous buildings and structures that are either individually significant or contributors to a historic district as well as buildings, structures, and infrastructure that could represent historic resources. These properties are representative of numerous development patterns, property types (residential, civic/cultural, commercial), and architectural styles important to the City's past, and are listed in or eligible for listing in a federal, State, or local register. Although resources have a different character and context in a greenfield setting when compared to a developed setting, if preservation-oriented policies are not in place, new development in greenfield areas could also diminish the historic integrity of a cultural resources setting, feeling, or association, or destroy the historic character of a property in a greenfield setting.

The goals, policies, and mitigation measures in the proposed General Plan Update will minimize the severity of significant impacts associated with the above described changes; however, impacts to cultural and tribal cultural resources cannot altogether be avoided. Therefore, the proposed General Plan Update would combine with impacts occurring in the broader region and result in a **cumulatively significant and unavoidable** impact.

5.2.3.10 HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE

Routine Transport, Use, and Disposal/Construction in Hazardous Materials Sites/Hazardous Materials within One-Quarter Mile of a School/Interference with Emergency Access

All of the regional planning efforts considered in this cumulative analysis could expose people or the environment to hazardous materials present in the underlying soils and groundwater; or through the routine use, transport, or disposal of hazardous materials typically associated with construction, and with operation of commercial and industrial facilities that handle hazardous materials. For cumulative projects involving improvements to or development of a site where soil or groundwater contamination has already occurred, the potential exists for a release of hazardous materials during construction and/or remediation of those sites. Some of the cumulative

projects could occur in areas with known existing contamination, and other projects may encounter previously unknown contamination issues. Exposure to hazardous materials also includes toxic air contaminants (which consist primarily of diesel particulate matter and fugitive dust), which are of particular concern where the cumulative projects would take place within 0.25 mile of a K–12 school. Finally, site-specific projects could result in interference with emergency access or evacuation routes. Therefore, the cumulative planning efforts could result in potentially significant cumulative impact.

Buildout of the General Plan could also expose people or the environment to all of the same hazards discussed above. Compliance with local, state, and federal regulations for transport, use, and disposal of hazardous materials and adherence to the mandatory stormwater pollution prevention plan (SWPPP) would address impacts associated with construction-related handling of hazardous materials. Site-specific investigations for projects developed under the proposed General Plan Update will be required to address hazardous materials conditions. These activities would be conducted during subsequent environmental reviews, required for future development activities. For example, Phase I environmental site assessments would be required for projects where the presence of hazardous materials is known or suspected, and (if necessary), subsequent Phase II soil/groundwater testing and remediation could be required before development on a site-specific basis. Remediation of contaminated soil and groundwater is regulated by the local Certified Unified Program Agency (CUPA), the State Water Resources Control Board (SWRCB) and the Regional Water Resources Control Boards, and the California Department of Toxic Substances Control (DTSC). Cleanup at federally-designated Superfund sites is regulated by the U.S. Environmental Protection Agency (EPA). The City would continue to require Hazardous Materials Management Plans and, where necessary, Risk Management Prevention Plans pursuant to state law. The use of toxic or hazardous materials requiring the filing of a business plan for emergency response pursuant to Section 25503.5 of the California Health and Safety Code, or materials identified in Section 5194, Title 8 of the California Code of Regulations, which would be analyzed by the City’s Planning Division when considering the request for permit applicants for any land use. The California Department of Education (CDE) enforces school siting requirements, and new school facilities would not be constructed within 0.25 mile of facilities emitting or handling materials based on CDE requirements. Furthermore, permitting requirements for individual hazardous material handlers or emitters, including enforcement of Public Resources Code Section 21151.4 requires notification to schools where potential hazardous materials handling and emissions could occur in proximity, allowing to consultation to reduce potential hazards. The City of Roseville Design and Construction Standards contain a variety of requirements that must be implemented by all projects, which are intended to provide safe access to property and on streets throughout the City for emergency vehicles and evacuation routes including driveways, turn lanes, streets, and traffic lights. Compliance with the above-listed regulatory standards, along with policies contained in the proposed General Plan Update that would further regulate the emissions, cleanup, and development of land uses in relationship to hazardous material, would result in a **less than cumulatively significant** impact.

Wildland Fire Hazard

Wildland fire hazards are present throughout the state where large areas of heavy vegetation are present. The largest concentration of these areas is in the National Forests, which are administered by the U.S. Forest Service. Smaller areas of heavy vegetation are also present throughout California on state- and privately-owned land. Areas where large trees are mixed with heavy understory shrubs are particularly subject to wildland fire hazards. All of the regional planning efforts considered in this cumulative analysis include policies and program to reduce wildland fire hazards, where they occur. Active fuels reduction programs throughout California, including the

regional planning area, are ongoing at both the federal, state, and local level. Therefore, the regional planning efforts would not result in a significant cumulative impact.

Areas at risk for extreme wildfires are designated by the California Department of Forestry and Fire Protection (CAL FIRE) as those lands where dense vegetation with severe burning potential prevails, as well as areas with limited access due to topography or lack of roads. The central and eastern portions of the Planning Area are heavily urbanized. The western and northwestern portions of the Planning Area consist of agricultural land, including row crops and orchards. The Planning Area is not located in or near any designated State Responsibility Areas or land classified as Very High Fire Hazard Severity Zones. The Planning Area is designated by CAL FIRE as a Local Responsibility Area, and there are no Very High Fire Hazard Severity Zones in or adjacent to the Planning Area. Therefore, the wildfire hazard risk for the City is considered low, and the proposed General Plan Update would result in a **less-than-cumulatively considerable** impact.

5.2.3.11 PUBLIC SERVICES AND RECREATION

Buildout of the proposed General Plan Update would increase demands on public services and recreation facilities. In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public services and recreation facilities within their service boundaries. Fire protection services would be provided by the Roseville Fire Department and police protection services would be provided by the Roseville Police Department. School services in Roseville are provided by the Roseville City School District, Eureka Union School District, Dry Creek Joint Elementary School District, Center Joint Unified School District, and Roseville Joint Union High School District. Parks and recreation facilities are provided by the City of Roseville. Because the provision of public services and recreational facilities is specific to each local jurisdiction and each local service provider, the regional planning efforts would not result in a cumulative impact.

Fire Protection Services

The Roseville Fire Department provides fire protection services for the City. Buildout of the General Plan would result in additional population and structures within the Planning Area that would create additional demands for fire protection services over current demand levels. Fire stations, equipment, and personnel must be planned in coordination with development to ensure adequate fire suppression in the City's growing areas. New fire stations have been planned for the North Industrial Planning Area (Station No. 8), the Sierra Vista Specific Plan Area (Station No. 10), and the Amoruso Ranch Specific Plan Area (Station No. 11) to meet new demands for fire suppression and maintain adequate response times.

New fire protection facilities would be constructed within the footprint of development envisioned as part of buildout of the General Plan. The locations of Station No. 8, Station No. 10, and Station No. 11 were identified in the Campus Oaks Master Plan Addendum and Initial Study, the Sierra Vista Specific Plan EIR, and the Amoruso Ranch Specific Plan EIR, respectively, and the environmental impacts of the construction and operation of these stations were analyzed at a programmatic level in those CEQA documents (City of Roseville 2010, City of Roseville 2015, City of Roseville 2016). Besides the development assumed as a part of the General Plan Update, there is no additional development that would create the need for new or expanded facilities, the construction of which could have a significant impact. Therefore, the proposed General Plan Update would result in a **less-than-cumulatively considerable** impact.

Police Protection Services

Law enforcement services in Roseville are provided by the Roseville Police Department. Future land uses consistent with the proposed General Plan Update would accommodate the development of new homes, businesses, and facilities within the Planning Area, which would result in additional population and visitors coming to the City. The increase in the number of people in the City and amount of development would require additional Roseville Police Department staff in order for the department to maintain its present level of service. The addition of new staff would not result in the need for new or physically altered police protection facilities, the construction of which could potentially have adverse impacts on the physical environment, to maintain acceptable response times or other performance objectives for police protection. Besides the development assumed as a part of the General Plan Update, there is no additional development that would create the need for new or expanded facilities, the construction of which could have a significant impact. Therefore, the proposed General Plan Update would result in a **less-than-cumulatively considerable** impact.

Public Schools

Buildout of the General Plan could accommodate the construction of between 20,000 to 25,000 housing units that generate approximately 10,000 additional K–12 students. School services in Roseville are provided by the Roseville City School District, Eureka Union School District, Dry Creek Joint Elementary School District, Center Joint Unified School District, and Roseville Joint Union High School District.

Based upon the growth projections, it is anticipated that the Roseville City School District will require an additional six elementary schools and one middle school in the West Roseville, Creekview, Amoruso Ranch Specific Plan areas, and the Center Joint Unified School District will require an additional two elementary schools and one middle school in the Sierra Vista Specific Plan area to meet growth demands associated with the current General Plan land use allocation. Locations for these facilities have been identified in the West Roseville, Creekview, Amoruso Ranch, and Sierra Vista Specific Plans.

New school facilities would be constructed within the footprint of development envisioned as part of buildout of the General Plan. The locations of new schools have been identified in the West Roseville, Creekview, Amoruso Ranch, and Sierra Vista Specific Plan Areas and the environmental impacts of the construction and operation of these school facilities were analyzed at a programmatic level in CEQA documents prepared for those specific plans. Besides the development assumed as a part of the General Plan Update, there is no additional development that would create the need for new or expanded facilities, the construction of which could have a significant impact.

School impact fees would be collected in accordance with SB 50 to ensure the development of adequate school facilities, and the California Legislature has declared that payment of the State-mandated school impact fee is deemed to be full and adequate mitigation under CEQA (California Government Code Section 65996). Therefore, the proposed General Plan Update would result in a **less-than-cumulatively considerable** impact.

It is possible that future residential development within the City would generate demand for school facilities that cannot be met within the City or cannot be met for some period of time while additional schools are under construction. Transportation of future students to schools with additional capacity could result in indirect cumulative impacts related to transportation, such as air pollutant emissions, greenhouse gas emissions, and transportation noise. The timing and specifics necessary to fully evaluate construction of school projects are

unknown and would be determined by the respective school districts. It is speculative to gauge the extent to which this would create any cumulative impact that is distinct from the analysis of proposed General Plan Update impacts provided in this EIR.

Parks and Recreation

Buildout of the General Plan could accommodate the construction of between 23,200 housing units that generate approximately 198,000 persons. This new population would increase demand for new and existing parks, as well as recreation facilities. As the Planning Area's population increases and demographics shift, continual assessment will be required to determine whether the quantity of parklands and quality of recreational programs are meeting the changing needs of City residents. The proposed General Plan Update identifies the City's policy approach to ensuring adequate provision of parkland as the City grows. This will ensure against overuse of existing facilities that may cause their deterioration. The proposed General Plan Update establishes the overall parkland standard as nine acres of park land per 1,000 residents. General Plan policies and measures provide flexibility in applying parks standards, in terms of size, facilities, and service areas, so that existing and future needs can be met. As a method to achieve the City's park land standards, alternative land dedications may be considered for lands that provide active and passive recreational value and/or by the payment of in-lieu fees. In-lieu fees provided by new development could also be used by the City to improve, expand, and maintain existing city parks to ensure that accelerated deterioration does not occur. In addition, implementation measures would ensure new development provides park lands dedication or pays in-lieu fees and requires Specific Plans to include parks facilities consistent with proposed General Plan Update policies and consider future recreation needs based on projected population (see Appendix A of the existing General Plan).

There would be no additional significant impact related to construction of parks beyond that which is comprehensively analyzed throughout this EIR. Therefore, the proposed General Plan Update would result in a **less-than-cumulatively considerable** impact.

5.2.3.12 UTILITIES AND SERVICE SYSTEMS

Buildout of the proposed General Plan Update would increase demands on utilities and service systems. In terms of cumulative impacts, appropriate service providers are responsible for ensuring adequate provision of utilities and service system within their service boundaries. Water and wastewater services would be provided by the City of Roseville. Electrical service would be provided by the City of Roseville Electric Department and natural gas service would be provided by Pacific Gas and Electric Company (PG&E).

New or Expanded Utilities and Service Systems Facilities

Buildout of the General Plan could require relocation of or construction of new or expanded utilities and service systems. Buildout of the General Plan could result in the expansion of the existing Dry Creek WWTP. Water supply infrastructure, such as water transmission mains, pumping stations, and storage tanks; wastewater conveyance infrastructure, such as gravity sewer pipelines, force mains, and pumping stations; and stormwater drainage facilities will be required in currently undeveloped areas where no such infrastructure currently exists. The impacts of construction of these facilities have been analyzed throughout this EIR. The proposed General Plan Update includes mitigating policies and measures, where necessary, that would reduce or avoid impacts. There is no additional significant impact related to construction of new or expanded utilities and service systems within the footprint of the Planning Area beyond the construction impacts that are analyzed throughout this EIR;

therefore, any remaining impacts of the proposed General Plan Update with regard to new or expanded utilities and service systems would be **less than cumulatively considerable**.

Long-term water treatment plant capacity would be provided by the construction of the Ophir water treatment plant by the Placer County Water Agency, which would be built on a site just south of the existing City of Auburn wastewater treatment plant. The construction of the Ophir water treatment plant (previously referred to as the Foothill Phase II WTP and Pipeline Project) was addressed in the Foothill Phase II Water Treatment Plant and Pipeline Final EIR (Placer County Water Agency 2005). The findings of the Ophir water treatment plant EIR were that construction-related activities (including site grading) would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions, which would adversely affect air quality. These impacts to air quality were determined to be cumulatively significant and unavoidable. Because buildout of the General Plan would contribute to the need to develop the Ophir water treatment plant, new development under the General Plan would contribute to the cumulatively significant and unavoidable construction-related air quality impacts. There are no additional feasible mitigation measures that could be imposed by the City to further mitigate these short-term impacts from construction of the Ophir WTP. Therefore, indirect impacts from the proposed General Plan Update with regard to new water treatment facilities would be **cumulatively significant and unavoidable**.

Water Supply

Buildout of the General Plan would increase potable and non-potable water demands. The City of Roseville provides water service to the majority of residents within the City limits, and the City's Urban Water Management Plan (UWMP) addresses water supply and demand issues, water supply reliability, water conservation, water shortage contingencies, and recycled water use within the City's service area. It accounts for existing and future land uses in Roseville and its Planning Area (West Yost 2016).

The City's water supply consists of surface water, groundwater in dry years or in times of emergencies, and recycled water for irrigation. The City operates an Aquifer Storage and Recovery (ASR) program allows the City to maximize sustained use of the groundwater basin in conjunction with surface water supplies, while providing a strong backup water supply during critically dry years consistent with the City's commitments contained in the Water Forum Agreement. (Additional analysis related to groundwater is provided below in Subsection 5.2.3.13.) The City currently has contracts for up to 66,000 acre-feet of American River water supplies diverted from the Folsom Reservoir. In addition, the City intends to purchase 1,500 afy of surface water supplies beginning in 2030 from the future PCWA Ophir water treatment plant project. Existing and projected water demands in the City service area will be met by contract entitlements for each agency are summarized in Table 4.12-1 in Section 4.12. The City, as a signatory to the Water Forum Agreement,¹ has agreed to ensure that water conservation and demand management—necessary steps to achieve Water Forum Agreement objectives—are integrated into future growth and water planning activities in its service area.

Water supply is projected to be sufficient in normal water years over the UWMP's 20-year planning period (i.e., 2015 to 2035) (see Table 4.12-6 in Section 4.12). However, in single-dry years, and in certain multiple dry years, a water supply deficit may occur. The City has identified water conservation as one potential strategy to alleviate

¹ The coequal objectives of the Water Forum Agreement are (1) to provide a reliable and safe water supply for the region's economic health and planned development through the year 2030; and (2) to preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.

the potential water deficits that could occur in single-dry years and multiple dry years. As shown on Table 4.12-4, assuming a 20 percent of normal year demand consistent with the Roseville Water Conservation and Drought Mitigation Ordinance would alleviate potential water supply deficits in single-dry and some multiple-dry years. In the future, groundwater pumping could be available to alleviate water supply deficits (West Yost 2016). State law requires demonstration of adequate long-term water supply for large development as defined by Senate Bill 610 (i.e., more than 500 dwelling units or nonresidential equivalent) through preparation of a Water Supply Assessment that discusses the system's total projected water supplies available during normal, single-dry, and multiple-dry water years during a 20-year projection and discloses that water supplies would meet the project's water demand in addition to the system's existing and planned future uses. Therefore, the City would have sufficient water supplies available to serve buildout of the General Plan from existing or permitted entitlements in normal, single-dry, and multiple-dry water years. The impact of the proposed General Plan Update due to adequacy of water supplies would be **less-than-cumulatively considerable**.

Wastewater Treatment

Wastewater from the City is currently treated at the Dry Creek Wastewater Treatment Plant (WWTP) and the Pleasant Grove WWTP. Both regional facilities are owned and operated by the City of Roseville on behalf of the Regional Partners consisting of the City, the South Placer Municipal Utility District (SPMUD), and portions of unincorporated Placer County (primarily Morgan Creek, Granite Bay and Sunset Industrial Area).

The South Placer Wastewater Authority (SPWA) Wastewater Systems Evaluation provided baseline and projected characterizations of its regional wastewater and recycled water systems. The Wastewater Systems Evaluation determined that buildout of the 2005 service area boundary, which includes areas within Roseville, Rocklin, Loomis, and portions of Granite Bay and unincorporated Placer County, would result in 16.34 million gallons per day (mgd) average dry weather flow at the Dry Creek WWTP and 16.52 average dry weather flow at the Pleasant Grove WWTP. Buildout of the ultimate SPWA service area, which includes the 2005 service area boundary and Urban Growth Areas, would result in 32,86 mgd average dry weather flow.

Dry Creek Wastewater Treatment Plant

The current average dry weather flow is approximately 9.3 mgd, of which approximately 6.0 mgd is generated by the City. As stated above, buildout of the Dry Creek WWTP service area boundary, which includes areas within Roseville, Rocklin, Loomis, and portions of Granite Bay and unincorporated Placer County, would result in 16.34 mgd average dry weather flow at the Dry Creek WWTP. Thus, in the future, the Dry Creek WWTP could require upgrades to provide adequate capacity to serve demand from buildout of the proposed General Plan Update in addition to their existing commitments. The cumulative physical environmental effects from the potential expansion of the Dry Creek WWTP are discussed above under "New or Expanded Utilities."

Individual development projects in unincorporated Placer County would be required to assess impacts related to wastewater treatment capacity during the environmental review process to ensure that the Dry Creek WWTP has sufficient capacity to meet demand. Specific plans prepared for areas within the City limits analyzed wastewater treatment demands and capacity at a programmatic level in their respective CEQA documents. The proposed General Plan Update requires any development proposal that has an impact on the wastewater system to submit project plans to the Environmental Utilities Department for review and comment, and projects are required to identify wastewater treatment plant capacity and potential alternatives to treatment and discharge. Specific Plans are required to specify total projected wastewater generation, impacts, and treated wastewater use potential based

on land use designations within their plan area, and through development agreements, identify the provision of expanded wastewater treatment capacity. By adhering to the goals, policies, and implementation measures in the proposed General Plan Update, the City would ensure adequate wastewater treatment capacity is available to meet future demand. Therefore, the City would ensure sufficient long-term wastewater treatment is available to treat wastewater flows generated by buildout of the General Plan. Therefore, impacts related to wastewater treatment capacity at the Dry Creek WWTP from the proposed General Plan Update would be **less-than-cumulatively considerable**.

Pleasant Grove Wastewater Treatment Plant

The Pleasant Grove WWTP currently serves the north and northwest areas of the City of Roseville, the Stanford Ranch area of the SPMUD service area, the Sunset Industrial Area of Placer County, and will serve the City of Roseville's approved Creekview Specific Plan and Amoruso Ranch Specific Plan Areas. Recent and anticipated acceleration of growth within the SPWA service area resulted in the need to expand the Pleasant Grove WWTP's treatment capacity. Based on growth projections for the SPWA service area, average dry weather flows are projected to exceed 9 mgd around 2025 and be equal to or exceed the Pleasant Grove WWTP's treatment capacity of 9.5 mgd by 2027 (City of Roseville 2017). As a result, the City proposed an increase treatment capacity of the existing Pleasant Grove WWTP so that it can meet its original 12 mgd design capacity (City of Roseville 2017). Increasing treatment capacity of the existing Pleasant Grove WWTP will accommodate the anticipated wastewater treatment demands through approximately 2040 (City of Roseville 2017). The expansion project is currently under construction and is anticipated to be complete in 2020 (City of Roseville 2018). Therefore, **no cumulative** impact related to wastewater treatment capacity at the Pleasant Grove WWTP would occur under the proposed General Plan Update.

Solid Waste

The primary landfill that serves Roseville is the Western Regional Sanitary Landfill, which also accepts wastes from Placer County as well as the cities of Lincoln and Rocklin. Development of new land uses within these areas would increase the amount of solid waste disposal at the Western Regional Sanitary Landfill.

Buildout of the General Plan would generate approximately 305 to 428 tons per day (tpd) of solid waste that would be disposed of at the Western Regional Sanitary Landfill. This landfill has a maximum permitted throughput of 1,900 tpd, has a total maximum permitted capacity of approximately 36.4 million cubic yards, and has a remaining capacity of approximately 29.1 million cubic yards. The Western Regional Sanitary Landfill is anticipated to meet solid waste disposal needs within its service area through January 1, 2058. Therefore, the Western Regional Sanitary Landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for buildout of the future General Plan Update and existing and future development in its disposal area. Therefore, the proposed General Plan Update would have **no significant cumulative** impact with regard to solid waste disposal capacity.

5.2.3.13 HYDROLOGY AND WATER QUALITY

The cumulative context for hydrology and water quality includes waterbodies within the Planning Area that could be affected by projects associated with buildout of the General Plan, and includes downstream waterbodies that receive flows from the Planning Area, such as the Pleasant Grove Creek Canal, Natomas East Main Drainage Canal/Steelhead Creek, and the Sacramento River.

Water Quality, Erosion, and Conflicts with Water Quality Planning

Earthmoving activities associated with regional planning efforts considered in this cumulative analysis have the potential to increase erosion and for accidental spills of hazardous materials during construction. During winter storm events, disturbed soils and hazardous materials could be transported to downstream receiving water bodies, resulting in degradation of water quality from sedimentation and materials such as fuels, lubricants, and paints. This could degrade water quality due to an increase in impervious surfaces (which would increase the amount of stormwater runoff) and handling of hazardous materials (which could contaminate the stormwater runoff). Increases in stormwater runoff could cause downstream erosion, sedimentation, and increase turbidity in receiving waters, depending on waterway conditions. Contaminated stormwater runoff would result in increased pollutant loading due to contact with petroleum and other contaminants deposited on impervious surfaces. In addition, cumulative industrial projects would increase the potential for leakage of diesel, oil, and grease, and for accidental spills of herbicides, that could further degrade surface water quality. Substantial degradation of water quality would result in conflicts with the water quality control plan. Therefore, the regional planning efforts could result in significant cumulative water quality impacts during construction and operation.

Construction activities associated with future projects associated with buildout of the General Plan would involve grading and movement of earth. Construction-related alteration of site-specific drainages could result in soil erosion and stormwater discharges of suspended solids, increased turbidity, and potential mobilization of other pollutants from project-related construction sites. This contaminated runoff could enter local drainage channels and ultimately drain into the Sacramento River. Accidental spills of construction-related contaminants, such as fuels, oils, paints, solvents, cleaners, and concrete, could occur during site-specific construction activities, resulting in surface soil contamination. However, project applicants that disturb more than 1 acre of land must prepare Stormwater Pollution Prevention Plans (SWPPPs) and implement Best Management Practices (BMPs) that are consistent with Central Valley Regional Water Quality Control Board (RWQCB) requirements as part of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. Implementation of these regulatory requirements would substantially reduce water quality and erosion impacts from construction activities, in compliance with the Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins. Therefore, construction-related impacts on water quality and potential conflicts with a water quality control plan from the proposed General Plan Update would be **less-than-cumulatively considerable**.

Development accommodated under buildout of the General Plan would create new impervious surfaces and landscape features that would increase the volume of runoff that could cause or contribute to long-term discharges of urban contaminants (e.g., sediment, oil and grease, fuel, trash, pesticides, fertilizer). This increase in impervious surface would increase the peak discharge rate of stormwater runoff generated from new development. However, compliance with the West Placer Stormwater Quality Design Manual, Stormwater Quality BMP Guidance Manual for Construction, and the City of Roseville Stormwater Management Program to reduce post-construction runoff through the incorporation of BMPs, Low Impact Development (LID) design features, and hydromodification management techniques. These measures to protect water quality are intended to support the City's compliance with the Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins. Furthermore, industrial or commercial facilities require appropriate NPDES permits/waste discharge requirements, and implementation of BMPs consistent with the California Stormwater Quality Association's Industrial/Commercial BMP Handbook or its equivalent, including annual reporting of any structural control measures and treatment systems. Compliance with these regulations and permit terms, along with the policies in the proposed General Plan Update, would substantially reduce water quality and erosion

impacts from an increase in stormwater runoff. Therefore, operational impacts on water quality and potential conflicts with a water quality control plan from the proposed General Plan Update would be **less-than-cumulatively considerable**.

Stormwater Drainage Systems, Pollutant Transport, and Flooding

The regional planning efforts considered in this cumulative analysis include new and infill urban development that could substantially alter drainage courses and runoff patterns from existing conditions. Compacting soils and constructing impervious surfaces can reduce the net amount of infiltration of rain water into the soil, thereby increasing runoff rates and volumes, which can result in exceedance of stormwater drainage facilities and localized or downstream flooding. Increased impervious surfaces can also result in additional transport of urban pollutants in stormwater runoff. Therefore, the regional planning efforts could result in significant cumulative impacts from alteration of drainages leading to exceedance of the capacity stormwater drainage systems, increased pollutant transport, and flooding.

Expansion of impervious surfaces in the Planning Area would increase the peak discharge rate of stormwater runoff and could result in erosion, sedimentation, and on-site or downstream flooding. Increased volumes of stormwater runoff may exceed drainage system capacities, exacerbate erosion in overland flow and drainage swales and creeks, and result in downstream sedimentation. The City has been developed with a pattern of open space preservation, particularly around the creeks that flow westward through the Planning Area from the Sierra Nevada foothills. All of the creeks are part of the City's Regulatory Floodplain, which includes both 100- and 200-year flood hazard zones. All projects in the Planning Area are required to comply with the West Placer Stormwater Quality Design Manual to reduce the rate of post-construction runoff and control urban runoff pollution in compliance with of the City's Phase II MS4 permit through the incorporation of BMPs, LID, and hydromodification management techniques. Compliance with the City's Urban Stormwater Quality Management and Discharge Control Ordinance requires project applicants to prepare and implement a stormwater management plan and a stormwater BMP maintenance plan. New development must also comply with the City's Design and Construction Standards; Section 10, Drainage, contains the drainage analysis requirements and design criteria for development in the City. The adopted City's Open Space Preserve Overarching Management Plan includes specific requirements and adopted mitigation measures related to open space management, maintenance, and monitoring that are related to drainage, flooding, and water quality. The proposed General Plan Update contains policies that regulate development in the City's Regulatory Floodplain—new development is not allowed with the regulatory floodway. The City's Flood Damage Prevention Ordinance sets standards to minimize public and private losses due to flood conditions. The City of Roseville Municipal Code (Section 19.18.040) prohibits the stockpiling or storage of any buoyant, flammable, toxic, or explosive materials in a designated flood zone; and any materials that are stored must be removed from the area if a flood warning is issued. Compliance with policies in the proposed General Plan Update that are designed to regulate stormwater flows is also required for all projects. In Addition, the City is developing substantial new downstream stormwater detention capacity in new detention basins at the Al Johnson Wildlife Area. When completed, these new facilities will be sufficient to detain stormwater flows generated by full buildout of the proposed General Plan Update such that downstream flooding in Sutter County does not occur. Therefore, the impacts of the proposed General Plan Update related to alteration of drainages such that stormwater drainage system capacity would be exceeded, increased pollutant transport, and downstream flooding, would be **less-than-cumulatively considerable**.

Groundwater Recharge, Groundwater Supplies, and Conflicts with Groundwater Sustainability Plans

Development of the regional planning efforts considered in this cumulative analysis, depending on their size and location, could result in substantial increases in impervious surfaces over large tracts of land and thereby reducing the amount of natural groundwater recharge. These planning efforts could also result in the need for additional potable water supplies through drilling of new groundwater wells. Substantial loss of groundwater recharge and/or substantial depletion of groundwater supplies could conflict with a groundwater sustainability plan (GSP). Therefore, the regional planning efforts considered in this analysis could have a significant cumulative impact.

Full buildout of the General Plan would result in a net increase in impervious area and an associated potential reduction in groundwater recharge potential. However, soils in the central and western portions of the Planning Area where most of the new and infill development are anticipated have a high clay content and a cemented hardpan, which substantially impedes groundwater recharge. Most of the natural recharge occurs in the eastern portion of the Planning Area, and in stream channels throughout the Planning Area. The proposed General Plan Update includes policies that continue to require stream channels to be preserved as open space and for flood control purposes. Placer County conducted a study to determine potential locations for future groundwater recharge, and 12 potential sites have been identified in the Planning Area. The City has plans to construct additional groundwater wells, which would be used for backup water supply and to improve water supply reliability during drought and emergency conditions. The City's ongoing Aquifer Storage and Recovery (ASR) program is designed to inject and store surplus drinking water in the underlying aquifer during periods of normal and above normal precipitation. This stored drinking water would be extracted and used to meet peak demands during dry years. The City's plan for additional groundwater wells and the ongoing ASR program were developed in conjunction with the Western Placer County Groundwater Management Plan, which provides planned and coordinated monitoring, operation, and administration of the local groundwater basins with the goal of long-term groundwater resource sustainability. Development of the GSP for the North American basin (as required by the Sustainable Groundwater Management Act) is underway as a coordinated effort among the West Placer, Sacramento, South Sutter, Sutter County, and Recreation District 1001 groundwater sustainability agencies. The GSP will include plans to provide for safe yield and groundwater sustainability to meet the needs of all of the coordinating agencies (including the Planning Area). Therefore, the impacts of the proposed General Plan Update related to groundwater recharge, depletion of groundwater supplies, and conflicts with a GSP would be **less-than-cumulatively considerable**.

5.2.3.14 AESTHETICS

The cumulative context for aesthetics consists of the areas where additional growth and new development is projected to occur in the western Placer County region. Growth and development in the western Placer County region as a whole would change visual conditions in certain discrete areas as open viewsheds on the urban fringe are replaced with urban development. New development would also lead to increased nighttime light and glare in the region and more limited views of the nighttime sky and skyglow effects. With changes in energy efficiency requirements and the use of different types of lighting, such as light-emitting diode (LED) lighting, skyglow effects may incrementally change in Roseville and nearby communities. Although general plans and other adopted community design standards include design, architectural, development, and lighting standards to ensure that development in the region complies within certain aesthetic guidelines, there is no mechanism to allow regional development, while also avoiding the conversion of local viewsheds to urban development. The change

in visual character in the region attributable to urban development and supportive infrastructure and the associated increase in nighttime light and glare from implementation of the regional planning efforts considered in this analysis are considered significant cumulative impacts.

Degradation of Visual Character/Increased Light and Glare

Buildout of the General Plan would incrementally contribute to changes in regional visual character and lighting. There are no scenic vistas, and no state- or locally-designated scenic highways within the Planning Area, nor is the Planning Area located within the viewshed of any such areas. Most new development would occur in the western and northwestern portions of the Planning Area (where new development is already occurring), and most of this development would consist of residential, open space, and parks, with commercial centers. Infill development would also occur in the Planning Area, and policies in the proposed General Plan Update, as well implementing documents, establish standards for design and compatibility with a project's surroundings. In addition to adding uses and density, new investment in urban infill areas typically improves visual quality by developing vacant or underutilized properties and improving maintenance of existing structures and yards. New development of high-quality design can enhance the built environment with new architecture that is in character with or complements existing structures.

The City's Community Design Standards address a variety of topics related to design, including site planning and architectural design standards; landscaping and screening techniques to preserve and enhance visual quality; signage; streetscape improvements such as street trees, landscaped medians, and street furnishings; and lighting design and provisions to promote public safety and reduce glare and light spillover onto adjacent properties. The Community Design Guidelines provide a list of specific recommendations and requirements for inclusion in site-specific project design, and which are evaluated on a graded scale for level of compliance during each project-specific review process.

The proposed General Plan Update would be consistent with the City's Zoning Ordinance and Municipal Code, all of which contain specific, enforceable provisions related to the preservation of open space, high-quality architectural design, building setbacks and height requirements, landscaping, signage, and lighting. Regardless, buildout of the General Plan would result in a change in visual character, particularly in the non-urbanized northern and western portions of the Planning Area. No feasible mitigation beyond the policies and programs of the proposed General Plan Update and compliance with the City's Community Design Guidelines is available that could fully address impacts associated with the change to the existing visual character, particularly in the non-urbanized areas. Therefore, the proposed General Plan Update would result in a **cumulatively significant and unavoidable** impact due to changes in visual character.

Site-specific projects envisioned under the proposed General Plan Update would result in additional light and glare and skyglow effects. Compliance with the City's Community Design Guidelines would help to reduce light and glare effects. Implementation of Mitigation Measure 4.14-3 would result in the addition of a new policy to the proposed General Plan Update that would require all new development to control artificial lighting to avoid spillover lighting and preserve the night sky, and to use anti-reflective architectural materials and coatings to prevent glare. No feasible mitigation beyond the policies and programs of the proposed General Plan Update is available that could fully address impacts associated with the contribution of nighttime lighting and daytime glare, while also accommodating long-term growth needs of the City. Therefore, the proposed General Plan Update would result in a **cumulatively significant and unavoidable** impact from new sources of light and glare.

5.2.3.15 ENERGY

Increased demand for electrical and natural gas supplies and infrastructure is a byproduct of all future land uses and development in Roseville, Placer County, and the region. Energy is consumed for heating, cooling, and electricity in homes and businesses; for public infrastructure and service operations; and for agriculture, industry, and commercial uses. Each service provider is responsible for ensuring adequate provision of these utilities within their jurisdictional boundaries and would be responsible for upgrading their existing electrical and natural gas distribution systems or constructing new distribution systems to meet the demands of individual projects. Placer County and the cities within the county implement general plans that include goals and policies to reduce energy demands through the use of design features, building materials, and building practices; encourage the use of renewable energy sources; promote land uses and patterns that would not cause wasteful, inefficient, and unnecessary consumption of energy; and ensure adequate electricity and natural gas and related distribution systems are available to meet energy demands. In addition, service providers encourage energy conservation through programs, such as offering rebates for installation of energy efficient appliances and lighting fixtures. The California Public Utilities Commission and California Energy Commission have roles in regulating energy supply and ensuring reliable and sufficient supplies as the state grows.

As dictated by the governing legislation, a primary focus of SACOG's MTP/SCS is the reduction of GHG emissions. This has a co-benefit of reducing transportation energy demand, which would avoid a significant cumulative impact related to consumption of energy at the regional level. Transportation is, by far, the largest energy consuming sector in California, accounting for approximately 39 percent of all energy use in the state (U.S. Energy Information Administration 2020). Because transportation accounts for more energy consumption than heating, cooling, and powering of buildings, powering industry, or any other use, the overall efficiency of energy use in the region will depend importantly on the ability of local lead agencies to plan in a way that reduces travel demand. SACOG's 2020 MTP/SCS demonstrates an increase in energy efficiency in relation to transportation energy use – household generated vehicle miles traveled (VMT) per capita is forecast to decrease (SACOG 2020b).

Energy efficiency will also increase in relation to heating and cooling of buildings. The State of California adopted the California Green Building Standards Code (CALGreen Code), which establishes mandatory standards for all buildings in California, including for energy efficiency. This Code is updated over time and in each instance, the energy efficiency standards are increased.

Because regional transportation and building energy use will become more efficient between present and the SACOG MTP/SCS planning horizon, the regional planning efforts would result in a less-than-cumulatively considerable impact. Because the proposed General Plan Update incorporates appropriate goals and policies to conserve energy, the proposed General Plan Update would result in a **less-than-cumulatively considerable** energy efficiency impact.

5.3 GROWTH-INDUCING IMPACTS

CEQA (*CEQA Guidelines*, CCR Section 15126.2[d]) requires an examination of the direct and indirect impacts of the proposed project, including the potential of the project to induce growth leading to changes in land use patterns and population densities and related impacts on environmental resources. Specifically, CEQA states that the EIR shall:

[d]iscuss ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring the construction of new facilities that could cause significant environmental effects. Also discuss characteristics of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Direct growth-inducement would result if a project involved construction of new housing. Indirect growth-inducement would result, for instance, if implementing a project resulted in any of the following:

- ▶ substantial new permanent employment opportunities (*e.g.*, commercial, industrial, or governmental enterprises);
- ▶ a construction effort with substantial short-term employment opportunities that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; or,
- ▶ removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (*e.g.*, construction of a major sewer line with excess capacity through an undeveloped area) or adding development adjacent to undeveloped land.

Growth-inducement itself is not an environmental effect, but it may lead to foreseeable environmental effects. These 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 animal habitats, or conversion of agricultural and open space land to urban uses.

5.3.1 GROWTH-INDUCING IMPACTS OF THE PROPOSED GENERAL PLAN UPDATE

Based on Section 65300 of the Government Code, the proposed General Plan Update is required to serve as a comprehensive, long-term plan for physical development and conservation in the City's Planning Area. The proposed General Plan Update provides a framework for the orderly and efficient long-term growth within Roseville through the year 2035. The General Plan Update proposes new and revised General Plan goals, policies, and implementation measures, all of which have been developed under the proposed General Plan Update to help reduce VMT, provide more detailed and updated implementation measures that can reduce potential impacts, comply with State law changes, add clarity to the goals and policies, and incorporate best practices in planning. The City is not pursuing changes to the Land Use Map or Sphere of Influence as a part of this Update, and therefore does not propose new growth.

The Growth Management Component of the proposed General Plan Update focuses on the development of performance standards rather than time lines or growth rates for future development. This approach has resulted in goals and policies that emphasize performance (*e.g.*, maintaining levels of service, providing adequate park acreage, financing needed school facilities, etc.) rather than on specified growth rates or dates by which plans should be built out. The performance standards provide the criteria for planning and managing growth by requiring the mitigation of growth impacts and the provision of both tangible and intangible benefits to the

community. Therefore, the City's policies ensure that as buildout of the General Plan proceeds, all impacts to services and facilities will be addressed.

Within the City limits, there are 16 subareas that have been defined for planning purposes, as well as the Infill Area and the North Industrial Area. Buildout of the General Plan would include development of currently undeveloped areas, including the Amoruso Ranch Specific Plan, Creekview Specific Plan, and Sierra Vista Specific Plan areas, which would result in infrastructure being extended into areas in locations that are currently undeveloped. The areas that are not designated for Open Space in the Planning Area are assumed for development under the existing General Plan and development proposed in the Amoruso Ranch Specific Plan, Creekview Specific Plan, and Sierra Vista Specific Plan areas has undergone program-level environmental review. Furthermore, these approved plans provide for new and expanded infrastructure that is intended to meet demands for new development and would not create additional utility capacity in the Planning Area beyond what would be necessary to serve the adopted Specific Plan development.

As stated above, the proposed General Plan Update does not specify a maximum growth rate. In general, development in the city would be expected to follow regional and national economic trends. It is possible that the City's objectives to expand its employment base will be very successful during the proposed General Plan Update time horizon and that either the number or type of jobs would involve employees that do not live within the Planning Area. This could lead to a secondary growth-inducing impact related to demand for housing and goods and services associated with the population beyond that planned as a part of the proposed General Plan Update. However, as discussed previously, the regional planning context already includes adopted Specific Plans within Placer County on the northern, western, and southern boundaries of the City which could be the source for these secondary demands.

Whether or not obstacles to growth are eliminated relates to the extent to which the General Plan Update would increase infrastructure capacity or change the regulatory structure such that additional development beyond that assumed in this EIR would be facilitated. A physical obstacle to growth typically involves the lack of infrastructure and public service 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 proposed General Plan includes policies for both infill and new development that would avoid unplanned development that could be induced through infrastructure expansions into new growth areas.

The majority of new and expanded infrastructure facilities are within the Amoruso Ranch Specific Plan, Creekview Specific Plan, and Sierra Vista Specific Plan areas. Existing infrastructure could require upgrades to serve development – particularly Downtown, along Riverside Avenue, Douglas Boulevard, Harding Boulevard, and other areas where the City is encouraging infill development as a part of this proposed General Plan Update. New and expanded infrastructure would be intended to meet demands for new development and would not create additional utility capacity in the Planning Area beyond what would be necessary to serve new development

The proposed General Plan Update does not include changes to the Land Use Map or Sphere of Influence, and does not propose any new growth. As described above, the proposed General Plan Update policies ensure services are maintained throughout buildout of the General Plan; infrastructure is sized to serve adopted land uses, not provide additional capacity; and currently vacant lands on the City's northern, western, and southern boundaries

are already within adopted Placer County Specific Plans which plan for urbanization. Therefore, the proposed General Plan Update does not have the potential to induce unplanned growth, and growth inducing impacts would be **less than cumulatively considerable**.

5.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA requires that irreversible and irretrievable commitment of resources be addressed for certain categories of projects, including the “[t]he adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency” (State CEQA Guidelines Sections 15126.2[d] and 15127[a]). Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that this use could have on future generations. Irreversible effects result primarily from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural resource).

There are several resources, both natural and built, that would be expended in the construction and operation of the proposed project. These resources include the building materials used in the construction future site-specific projects under the proposed General Plan Update, and energy in the form of natural gas, petroleum products, and electricity consumed during construction and operation of residential, commercial, industrial, and public/quasi public land uses. Loss of these resources is considered irreversible because their reuse for some other purpose than General Plan buildout would be impossible or highly unlikely. Proposed urban development under the proposed General Plan Update constitutes an irreversible and irretrievable commitment of the land resource, thereby rendering land use for other purposes infeasible, except where existing open space resources would be preserved. For the same reason, urban development would also result in an irreversible and irretrievable loss of plant and wildlife habitat area, because some areas would still be lost to development even after the implementation of mitigation measures to preserve habitat and open space where feasible and practicable. Finally, although the proposed General Plan Update would preserve cultural and tribal resources to the maximum extent that is feasible and practicable, these resources could still be lost as a result of urban development; loss of cultural and tribal resources is considered irreversible.

5.5 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

Section 15126.2(c) of the State CEQA Guidelines requires EIRs to include a discussion of any significant environmental impacts that cannot be avoided if the project is implemented. Chapter 4 of this EIR provides a detailed analysis of all significant and potentially significant environmental impacts related to implementing the proposed project; identifies feasible mitigation measures, where available, that could avoid or reduce these significant and potentially significant impacts; and presents a determination whether these mitigation measures would reduce these impacts to less-than-significant levels. Section 5.3 of this EIR identifies the significant cumulative impacts resulting from the combined effects of the proposed project and related projects. If an impact cannot be fully reduced to a less-than-significant level, it is considered a significant and unavoidable adverse impact.

As listed in Table 5-2, project implementation would result in significant and unavoidable adverse impacts related to transportation, air quality, noise, cultural and tribal cultural resources, utilities and service systems, and

aesthetics, and significant cumulative effects related to greenhouse gas emissions, air quality, noise, biological resources, cultural and tribal cultural resources, utilities and service systems, and aesthetics.

Table 5-2. Summary of Significant and Unavoidable Impacts		
Chapter Name/Issue Area	Impact Number	Impact Title
Transportation	4.3-1	VMT Per Capita Exceeds the Threshold of 15 Percent Below the City Baseline
Air Quality	4.4-1	Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors for Which the Project Region is in Nonattainment, and Conflict with or Obstruct an Air Quality Plan
	4.4-2	Generation of Long-Term Operational Emissions of Criteria Air Pollutants and Precursors for Which the Project Region is in Nonattainment, and Conflict with or Obstruct an Air Quality Plan
	4.4-3	Expose Sensitive Receptors to Substantial Pollutant Concentrations (long-term operation only)
	4.4-5	Result in Other Emissions (Such as Those Leading to Odors) Adversely Affecting a Substantial Number of People (long-term operation only)
Noise and Vibration	4.6-1	Potential for Substantial Temporary, Short-Term Exposure to Construction Noise
	4.6-2	Potential for Long-Term Noise Exposure
Cultural and Tribal Cultural Resources	4.9-1	Cause a Substantial Adverse Change in the Significance of a Historical Resource Pursuant to Section 15064.5
	4.9-2	Cause a Substantial Adverse Change in the Significance of an Archaeological Resource pursuant to Section 15064.5
	4.9-3	Disturb any Human Remains, Including Those Interred Outside of Formal Cemeteries
	4.9-4	Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource
Utilities and Service Systems	4.12-1	Require or Result in the Relocation of or the Construction of New or Expanded Utilities and Service Systems Facilities, the Construction of Which Could Cause Significant Environmental Effects (indirect short-term impacts only, related to construction of the Ophir Water Treatment Plant)
Aesthetics	4.14-2	In a Non-Urbanized Area, Substantially Degrade the Existing Visual Character or Quality of the Site and its Surroundings
	4.14-3	Create a New Source of Substantial Light or Glare that Would Adversely Affect Day or Nighttime Views in the Area
Significant and Unavoidable Cumulative Impacts		
Greenhouse Gas Emissions	4.5-1	Generation of Greenhouse Gas Emissions
Transportation	Contribution to Increased VMT Per Capita	
Air Quality	Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors for Which the Project Region is in Nonattainment, and Conflict with or Obstruct an Air Quality Plan	
	Generation of Long-Term Operational Emissions of Criteria Air Pollutants and Precursors for Which the Project Region is in Nonattainment, and Conflict with or Obstruct an Air Quality Plan	
	Expose Sensitive Receptors to Substantial Pollutant Concentrations (long-term operation only)	
Noise and Vibration	Long-Term Noise: Operational Traffic Noise and Long-Term Noise: Stationary Sources	
Biological Resources	Special-Status Plants, Loss or Degradation of Riparian Habitat/Sensitive Natural Communities or Wetlands and Other Waters	
	Loss of Habitat and Special-Status Wildlife Species	

Table 5-2. Summary of Significant and Unavoidable Impacts	
Chapter Name/Issue Area	Impact Title
Cultural and Tribal Cultural Resources	Cause a Substantial Adverse Change in the Significance of a Historical Resource Pursuant to Section 15064.5
	Cause a Substantial Adverse Change in the Significance of an Archaeological Resource pursuant to Section 15064.5
	Disturb any Human Remains, Including Those Interred Outside of Formal Cemeteries
	Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource
Utilities and Service Systems	Indirect Short-Term Impacts Related to Construction of the Ophir Water Treatment Plant
Aesthetics	In a Non-Urbanized Area, Substantially Degrade the Existing Visual Character or Quality of the Site and its Surroundings
	Create a New Source of Substantial Light or Glare that Would Adversely Affect Day or Nighttime Views in the Area
Source: Data compiled by AECOM in 2020	