4 CUMULATIVE IMPACTS

4.1 INTRODUCTION TO THE CUMULATIVE ANALYSIS

This Draft EIR provides an analysis of cumulative impacts of the proposed New Zoo at Elk Grove Project, as required by Section 15130 of the State CEQA Guidelines. The goal of such an exercise is twofold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant, and second, to determine whether the incremental contribution to any such cumulatively significant impacts of the Project would be "cumulatively considerable" (and thus significant). (See State CEQA Guidelines Sections 15130[a]–[b], Section 15355[b], Section 15064[h], and Section 15065[c]; and Communities for a Better Environment v. California Resources Agency [2002] 103 Cal. App. 4th 98, 120.) In other words, the required analysis intends first to create a broad context in which to assess cumulative impacts, viewed on a geographic scale beyond the Project site itself, and then to determine whether the Project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., "cumulatively considerable").

Cumulative impacts are defined in State CEQA Guidelines Section 15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." A cumulative impact occurs from "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects." Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (State CEQA Guidelines Section 15355[b]).

4.2 CUMULATIVE IMPACT METHODOLOGY

Consistent with State CEQA Guidelines Section 15130, the discussion of cumulative impacts in this Draft EIR focuses on significant and potentially significant cumulative impacts. Section 15130(b) of the State CEQA Guidelines provides, in part, the following:

[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. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

A proposed Project is considered to have a significant cumulative effect if:

- the cumulative effects of development without the project are not significant and the project's additional impact is substantial enough, when added to the cumulative effects, to result in a significant impact, or
- the cumulative effects of development without the project are already significant and the project contributes measurably to the effect.

The term "measurably" is subject to interpretation. The standards used herein to determine measurability are that the impact must be noticeable to a reasonable person or must exceed an established threshold of significance (defined throughout the resource sections in Chapter 3 of this Draft EIR). This cumulative analysis also assumes that all mitigation measures identified in Chapter 3 to mitigate Project impacts are adopted and implemented and that all elements of the design-build performance criteria that would minimize environmental effects are implemented.

The State CEQA Guidelines (Section 15130) identify two basic methods for establishing the cumulative environment in which the project is to be considered: the use of a list of past, present, and probable future projects or the use of adopted projections from a general plan, other regional planning document, or a certified EIR for such a planning document. This analysis uses a combination of the list and planning document approach, as described further below.

4.3 CUMULATIVE SETTING

4.3.1 Geographic Scope

The geographic area that could be affected by the project and is appropriate for a cumulative impact analysis varies depending on the environmental resource topic, as presented in Table 4-1.

Table 4-1 Geographic Scope of Cumulative Impacts

Resource Topic	Geographic Area
Aesthetics	Project site and City General Plan planning area
Air Quality	Sacramento Valley Air Basin and Sacramento County within the jurisdiction of the Sacramento Metropolitan Air Quality Management District, and immediate Project vicinity (pollutant emissions that are localized)
Biological Resources	Greater Project area vicinity, including adjacent migration and movement corridors
Cultural, and Tribal Cultural Resources	City and surrounding Sacramento Valley region (historical resources), former territory of the Nisenan and Plains Miwok (archaeological resources, human remains, and tribal cultural resources)
Energy	Sacramento Municipal Utility District (SMUD) and Pacific Gas and Electric Company (PG&E) service areas
Geology and Soils	Flood terraces of the Sacramento River and its tributaries within the Riverbank and Modesto geologic formations (unique paleontological and geological resources)
Greenhouse Gas Emissions and Climate Change	Global/Statewide
Hazards and Hazardous Materials	City
Hydrology and Water Quality	South Stone Lake–Snodgrass Slough watershed for surface waters and the central South American Subbasin for groundwaters
Land Use and Planning	City and immediate Project vicinity
Noise and Vibration	Project site and immediate vicinity
Public Services and Recreation	Local service areas (e.g., Cosumnes Community Services District Fire Department and Elk Grove Police Department
Transportation	City and City General Plan planning area
Utilities and Service Systems	Local service areas (e.g. Sacramento County Water Agency, Sacramento Regional County Sanitation District, Sacramento Area Sewer District) and service areas for landfills that serve the City, SMUD, and PG&E)

Source: Compiled by Ascent Environmental in 2023

4.3.2 Regional Planning Environment

City of Elk Grove General Plan

The 2019 City of Elk Grove General Plan is a broad framework for planning the future of the City. It is the official policy statement of the City Council that is used to guide the private and public development of the City in a manner to gain the maximum social and economic benefit to the citizens. The Planning Area for the General Plan includes both land within City boundaries (37 square miles, or 23,453 acres) and lands outside the City in unincorporated Sacramento County to the south and east (12.2 square miles, or 7,795 acres) in four study areas.

Development within the current City limits is anticipated to generate a maximum of 72,262 dwelling units, 233,406 residents, and 81,784 jobs. According to the most recent General Plan amendment approved in December 2023, and assuming future annexation and development of the study areas, buildout under the 2019 General Plan would result

in a maximum of 103,428 dwelling units, 334,078 residents, and 121,885 jobs (City of Elk Grove 2023). The 2023 amendments to the General Plan did not alter the planned development footprint of the City and Planning Area established under the 2019 General Plan. The EIR for the General Plan and Subsequent EIR (SEIR) for the General Plan Amendments and Update to VMT Standards (State Clearinghouse No. 2022020463) analyzes the full development potential of the General Plan Land Use Diagram, including the study areas, compared to existing (2015) conditions (City of Elk Grove 2018 and 2023).

4.3.3 Related Projects

A list of probable future projects is provided below. Probable future projects are those in the Project vicinity that have the possibility of interacting with the Project to generate a cumulative impact (based on proximity and construction schedule) and either:

- are partially occupied or under construction,
- have received final discretionary approvals,
- have applications accepted as complete by local agencies and are currently undergoing environmental review, or
- ▶ are proposed projects that have been discussed publicly by an applicant or that otherwise have become known to a local agency and for which sufficient information about the project has been provided to allow at least a general analysis of environmental impacts.

Past and present projects in the vicinity are also considered as part of the cumulative analysis because they contribute to the existing conditions upon which the Project's and probable future projects' environmental effects are considered.

Table 4-2 briefly summarizes reasonably foreseeable projects within approximately 5 miles of the Project site in the City of Elk Grove and unincorporated Sacramento County with the potential to contribute to the cumulative condition.

Table 4-2 Related Projects

#	Project	Location	Description	Status
1	Wilton Rancheria Casino Resort Project	Northwest portion of the intersection of Grant Line Road and Highway 99, Elk Grove	Casino, events center, hotel, and associated facilities	Under construction, partially complete
2	Dignity Health Hospital	Elk Grove Town Center	Six-story, 456,719 square-foot, 330-bed hospital; a three-story, 65,000 square-foot medical office building; a five-level, 169,520 square-foot parking structure; and additional supporting facilities for the hospital	On hold pending updated entitlement approvals
3	Elliot Springs	Intersection of Bond Road and Waterman Road	New 230 Acre Residential community, up to 660 single-family residences and 125 assisted living units	Under construction
4	McGeary Ranch Village	East side of Bruceville Road at Machado Ranch Drive	New 33-acre subdivision with 241 single family homes	Under construction
5	Poppy Keys Southwest	South of Poppy Ridge Road, Elk Grove	267 single-family residential lots on 61 acres	Approved
6	Sterling Meadows Subdivision	Northeast corner of Kammerer Road and Lotz Parkway, Elk Grove	Single-family homes	Under construction, partially complete
7	Mendes Subdivision	Bilby Road, Elk Grove	216 single-family residential lots, two office lots, a school, and park on 80 acres	Under construction

#	Project	Project Location Description		Status
8	Bruceview Meadows Subdivision	10425 Bruceville Road, Elk Grove	332 single-family homes	Under construction
9	Madeira South (Poppy Lane)	North and South of Poppy Ridge Road, Elk Grove	460 single-family homes	Under construction
10	Kammerer Road Extension Project	Kammerer Road, near the City of Elk Grove's southern boundary	Widen and extend Kammerer Road from State Route 99 to Interstate 5	Approved
11	Buscher House- Point Pleasant United Methodist Church	8550 Twin Cities Road, Walnut Grove	Request for a Substantial Compliance determination that activities under review are compliant with conditions placed on past site entitlement approvals.	Pending
12	Tuscan Ridge West	South of Poppy Ridge Road and Knotts Drive	A new 20 acre subdivision with 100 single-family homes	Under construction
13	Abor Ranch Large Lot	Bilby road and Big Horn boulevard	Tentative parcel map to subdivide arbor ranch into four large lot subdivision for the purposes for the Arbor Ranch small lot map to be constructed pursuant to the approved layout, including all necessary infrastructure and public improvements, subject to the conditions of approval	Approved
14	Telos Greens TSM and Rezone	South of Bilby Road east of Montaria way	Create 85 single family residential lots on 26 acres and a SPA and Community Plan Amendment for minor changes to land uses	Approved
15	Bruceville Meadows Townhomes	Southeast corner of Bruceville road and Bilby Road	26 buildings containing a total of 157 units at the southeast corner of Bruceville and Bilby roads	Approved
16	Poppy Grove Apartments	Southeastern corner of Bruceville road and Poppy Ridge Road	Apartment development consisting of 387 units developed in three phases. Tentative parcel map and tree removal permit	Under construction
17	Quail Run II	South side of Quail run lane and Tuzza court intersection	108 unit apartment complex, along with associated site improvements including parking and landscaping	Complete
18	Sheldon Farms North	South of Sheldon Road between Bruceville road and Lewis Stein road	Subdivide 79 acres to develop 55 acres with up to 391 single family residential units, 5 acres with up to 126 multi family residential units, 5 acres of commercial, and 10 acres of parks and open space	Under construction
19	The Lyla	Northwest corner of Laguna boulevard and Bruceville road	Apartment complex with 294 affordable units.	Under construction
20	Cornerstone Village	9270 Bruceville road	Multi-family development consisting of 84 units. Also includes parcel map to subdivide site into two parcels and a Density Bonus	Under construction
21	Tegan Estate	5201 Tegan Road	Request to subdivide 3 existing parcels totaling 11.6 acres into 41 parcels and one remainder lot for residential development	Approved

Note: sq. ft. = square feet.

Sources: Compiled by Ascent Environmental in July 2023 based on review of City of Elk Grove 2023 and Sacramento County 2023

ANALYSIS OF CUMULATIVE IMPACTS 4.4

The following sections contain a discussion of the cumulative effects anticipated from implementation of the New Zoo at Elk Grove Project, together with related projects and planned development in the City of Elk Grove and Sacramento County, for each of the 14 environmental issue areas evaluated in this Draft EIR. The analysis conforms with Section 15130(b) of the State CEQA Guidelines, which specifies that the "discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

When considered in relation to other reasonable foreseeable projects, cumulative impacts to some resources would be significant and more severe than those caused by the Project alone.

For purposes of this EIR, the project would result in a significant cumulative effect if:

- the cumulative effects of related projects (past, current, and probable future projects) are not significant and the incremental impact of implementing the New Zoo at Elk Grove Project is substantial enough, when added to the cumulative effects of related projects, to result in a new cumulatively significant impact; or
- the cumulative effects of related projects (past, current, and probable future projects) are already significant and implementation of the New Zoo at Elk Grove Project makes a considerable contribution to the effect. The standards used herein to determine a considerable contribution are that either the impact must be substantial or must exceed an established threshold of significance.

This cumulative analysis assumes that all mitigation measures identified in Chapter 3 to mitigate project impacts are adopted and implemented, and all elements of the design build performance criteria that would minimize environmental effects are implemented. The analysis herein analyzes whether, after implementation of projectspecific mitigation and performance criteria that minimize environmental effects, the residual impacts of the Project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects. Where the Project would so contribute, additional mitigation is recommended where feasible.

4.4.1 **Aesthetics**

The geographic context for cumulative impacts related to aesthetics is confined to those areas that would be visible in the landscape in the vicinity of the Project. For a project to contribute to a cumulative impact with respect to visual resources or aesthetics, the project would need to be visible within the same views or viewshed as other contributing projects, with the combination of multiple projects within the views creating an adverse visual effect. The City General Plan EIR identified visual character and lighting/glare impacts from buildout of the City and planning area as cumulatively considerable and significant and unavoidable (City of Elk Grove 2019). The SEIR prepared for the General Plan Amendments and Update to VMT Standards made similar findings as those identified in the General Plan EIR (City of Elk Grove 2023).

Aesthetic impacts related to visual character and quality impacts and light and glare identified for the Project are summarized below. As discussed in Section 3.1, "Aesthetics," implementing the Project would not result in impacts on scenic vistas or scenic resources (scenic roadways and highways) and would therefore not combine to create considerable changes and cumulative effects on visual resources. Therefore, impacts related to scenic vistas or scenic resources are not discussed further.

Impact 4-1: Contribute to Cumulative Visual Character Impacts

As identified in Impact 3.1-1, the Project site is in the Livable Employment Area (LEA) Community Plan Area, which is in an area planned for urban development that was evaluated in the General Plan EIR as well as in the General Plan Amendments and Update to VMT Standards SEIR. Development of the proposed New Zoo would convert the rural

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visual character of the site to an urban/suburban developed character. However, as described in Impact 3.1-1 the Project would be compatible with proposed future urban development envisioned in the LEA Community Plan Area. Proposed development surrounding the Project site, such as residences to the north and east, along with construction of the Project would result in continued development of the area as an urban center. The overall architectural design of the New Zoo would incorporate the use of neutral tones in varying shades and material types used to break up the massing of large building façades to make the site consistent with existing and proposed surrounding development. Surrounding development proposed around the site would be of similar scale and color as the Project and would be required to adhere to the LEA Community Plan development standards. Therefore, the Project's contribution to the significant cumulative impact would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required.

Impact 4-2: Contribute to Cumulative Light and Glare Impacts

Continued urbanization of the region introduces additional sources of nighttime light and glare. Overall, continued development increases skyglow and other nighttime illumination within the region. However new development projects in the City, such as those surrounding the site listed in Table 4-2, are required to comply with the design guidelines and with Elk Grove Municipal Code (EGMC) Chapter 23.56 for lighting standards and the City's adopted Design Guidelines, which reduce light and glare impacts. Although the Project would contribute to ambient light levels, the Project would conform to the design guidelines in the City's General Plan, EGMC Chapter 23.56, and the Zoological Park SPA, which requires the New Zoo to include non-reflective surfaces and shielded lighting to reduce glare and off-site spillage. Development near the site listed in Table 4-2 would similarly be subject to the LEA Community Plan design standards and EGMC Chapter 23.56 to reduce light and glare. Therefore, the Project would not contribute to cumulative effects of light and glare. The Project's contribution to the significant cumulative impact would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required.

4.4.2 Air Quality

The geographic context for cumulative impacts related to air quality is regional for criteria air pollutant and ozone precursors and includes the Sacramento Valley Air Basin (SVAB) and Sacramento County within the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD), and the context is local for toxic air contaminants (TACs) and odors. Cumulative development in the region will continue to increase the concentration of pollutants from construction activities, traffic, natural gas combustion in buildings, area sources, and stationary sources, but this increase would be partially offset by State and federal policies that set emissions standards for mobile and nonmobile sources.

The City General Plan EIR and the General Plan Amendments and Update to VMT Standards SEIR identified cumulative air quality impacts from buildout of the City and planning area as cumulatively considerable and significant and unavoidable (City of Elk Grove 2019). The General Plan Amendments and Update to VMT Standards SEIR identified additional mitigation for the LEA Community Plan Area to reduce NO_X emissions and determined that long-term operational air quality emissions would be greater than those identified in the General Plan EIR (City of Elk Grove 2023).

Toxic air contaminants, carbon monoxide (CO) hotspots, and odor are localized impacts for the Project area. There are no existing or planned land uses adjacent to the Project that would be a large stationary sources of local TACs or odors. SMAQMD's CEQA Guide, CO emissions are "predominately generated in the form of mobile-source exhaust from vehicle trips. These vehicle trips occur throughout a paved network of roads, and therefore, associated exhaust emissions of [CO] are not generated in a single location where high concentrations could be formed" (SMAQMD 2020:4-7). A CO hotspot impact is not anticipated unless an intersection experiences more than 31,600 vehicles per

hour. Cumulative traffic volumes at intersections near the Project would not exceed 31,600 vehicles per hour (see Appendix H). The reader is referred to Section 3.2, "Air Quality."

Ozone impacts are the result of cumulative emissions from numerous sources in the region and transport from outside the region. Ozone is formed in chemical reactions involving NO_X, reactive organic gases (ROG), and sunlight. All but the largest individual sources emit NO_X and ROG in amounts too small to have a measurable effect on ambient ozone concentrations by themselves. However, when all sources throughout the region are combined, they can result in cumulative ambient concentrations of ozone that exceed the NAAQS and CAAQS.

 PM_{10} and $PM_{2.5}$ have similar regional cumulative impacts when particulates are entrained in the air and build to unhealthful concentrations over time. Operational PM_{10} and $PM_{2.5}$ are less likely to result in local cumulative impacts because operational sources of PM_{10} and $PM_{2.5}$ tend to be spread throughout the region (i.e., vehicles traveling on roads), not concentrating at one receptor.

Impact 4-3: Generate Short-Term Construction-Related Emissions of ROG, NO_X, CO, SO_X, PM_{10} , and $PM_{2.5}$

In accordance with SMAQMD guidance, the Project was evaluated quantitatively and compared to SMADMD's daily mass emission thresholds of significance for consistency with the most recently adopted air quality plan in the region. These thresholds are inherently tied to long-term regional air quality planning and demonstrate that the Project would not conflict with the applicable air quality plans. After implementation of SMAQMD's best management practices (BMPs) for construction provided in Mitigation Measure 3.2-1, the Project was determined to be consistent with the applicable air quality plans.

Sacramento County and the SVAB are in nonattainment for ozone and respirable particulate matter (PM₁₀) with respect to the California ambient air quality standards (CAAQS) and for ozone and fine particulate matter (PM_{2.5}) with respect to the national ambient air quality standards (NAAQS). Construction activities in the region would emit additional particulate matter and ozone precursors that may conflict with attainment efforts in the county. Because the region is in nonattainment, the existing cumulative condition is adverse, and any additional emissions would exacerbate that condition. However, SMAQMD has established construction emission thresholds for development projects that determine whether that particular project's emissions would be cumulatively considerable. As detailed in Section 3.2, "Air Quality," Project construction emissions would not exceed the applicable mass emission threshold established by SMAQMD. However, Mitigation Measure 3.2-1 requires the incorporation of construction emission BMPs that would reduce emissions. All other criteria air pollutants would remain below the SMAQMD thresholds. Other cumulate projects would similarly be subject to SMAQMD's basic management practices for construction pursuant to Rule 403. Therefore, the Project's construction-related contribution to criteria air pollutant or precursor emissions would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

Impact 4-4: Generate Long-Term Operational Emissions of ROG, NO_X, CO, SO_X, PM₁₀, and PM_{2.5} SMAQMD's operational thresholds of significance apply at the project level and are cumulative in nature; that is, they identify the level of project-generated emissions above which impacts would be cumulatively considerable. Thus, they represent the level at which emissions of a given project would impede the air basin from achieving ambient air quality standards, considering anticipated growth and associated emissions in the region.

Implementation of the Project would result in a new zoo in the City of Elk Grove, which would in turn increase criteria air pollutants and ozone precursors in an area that is currently designated as nonattainment for several of the NAAQS and CAAQS. The Project would not generate emissions of ROG, NO_X, PM₁₀, and PM_{2.5} in exceedance of SMAQMD's mass emissions thresholds with compliance with the mandatory provisions of Parts 6 and 11 of the Title 24 California Building Code. Other cumulative projects would similarly be subject to SMAQMD's operational emissions thresholds and Parts 6 and 11 of the Title 24 California Building Code to reduce operational emissions. Therefore,

operational emissions would not exceed the thresholds of significance for criteria air pollutants or precursor emissions and would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

Impact 4-5: Contribute to Cumulative Long-Term Operational Criteria Air Pollutant or Precursor Emissions

SMAQMD has established operational emission criteria thresholds for individual projects beyond which a particular project's emissions would be cumulatively considerable. These thresholds of significance are determined using growth projections for the SVAB and are inherently cumulative. A project that operates below these thresholds is generally considered not to contribute to a cumulatively significant air quality impact, and those that operate above the thresholds would contribute to a cumulative impact.

As noted above, the Project is consistent with applicable local air quality plans designed to reduce regional emissions. Nonetheless, overall emissions associated with the Project would increase over existing conditions. The analysis included in Impact 3.2-2 shows that operation of the Project would result in the generation of additional ROG, NO_X, PM_{2.5}, and PM₁₀, which are criteria air pollutants and precursors that form the basis for the region's nonattainment status and the existing adverse cumulative condition in the air basin. The Project would not conflict with the policies and strategies included in the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* to address attainment of the NAAQS and CAAQS for ozone, respectively, and the Project would not exceed SMAQMD's project-level operational emissions threshold. Other cumulative projects would be required to be consistent with strategies in SMAQMD's attainment plan and operational emission thresholds. Therefore, the Project would not contribute to a net increase in long-term operational criteria air pollutant and precursor emissions that form the basis for the region's nonattainment status would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

4.4.3 Biological Resources

The geographic context for cumulative impacts related to biological resources is the greater Project vicinity, including adjacent vacant parcels used for agriculture. Surrounded by single-family residences to the east, agriculture to the south and west, and active construction of a new residential subdivision to the north. Impacts to biological resources of buildout under the General Plan were determined to be significant and unavoidable under cumulative conditions in the General Plan EIR (City of Elk Grove 2019). The SEIR prepared for the General Plan Amendments and Update to VMT Standards made similar biological resources findings as those identified in the General Plan EIR (City of Elk Grove 2023).

The area surrounding the site is planned for development as part of the LEA Community Plan and conversion of undeveloped and agricultural land will continue throughout the region within the vicinity of the Project. Development in the vicinity of the Project can be placed into two categories: (1) commercial and residential development and (2) roadway construction and widening (see Table 4-2). Past development in the region, including conversion of natural land to residential uses and agriculture, has resulted in a substantial loss of native habitat. The overall effect of this land conversion on special-status plants and wildlife and on sensitive habitat has been decidedly negative. Therefore, the cumulative condition for special-status species and sensitive habitats in the vicinity of the Project is already adverse.

As discussed in Section 3.3, "Biological Resources," implementing the Project would not result in impacts on special-status plants, sensitive natural communities or riparian habitat, or State-protected or federally protected wetlands and therefore would not combine to create considerable changes to and cumulative effects on biological resources. Therefore, impacts on special-status plants, sensitive natural communities or riparian habitat, and State-protected or federally protected wetlands are not discussed further.

Impact 4-6: Contribute to Cumulative Impacts on Biological Resources

Project construction activities (e.g., operation of vehicles and equipment, presence of construction crews) may produce levels of noise and novel visual stimulus that may result in disturbance to wildlife species in the vicinity of the Project site. Construction of the related projects presented in Table 4-2 would result in similar conditions during construction activities, and impacts on special-status wildlife species in the vicinity of those projects would be the same as or similar to those described in Section 3.3, "Biological Resources," of this EIR.

As described in Section 3.3, Project construction may result in impacts on Swainson's hawk, white-tailed kite, burrowing owl, and other nesting birds. Implementation of Mitigation Measures 3.3-1a, 3.3-1b, 3.3-1c, and 3.3-1d would offset Project impacts under cumulative conditions through preconstruction protection measures (surveys and avoidance of identified species). Development around the Project site, as listed in Table 4-2, would be subject to biological resources protection measures in the EGMC as well as State and federal requirements to protect biological resources. Therefore, the Project's contribution to substantial effects on special-status wildlife or habitat would not be cumulatively considerable

Mitigation Measures

No mitigation is required.

4.4.4 Cultural, Historical, and Tribal Cultural Resources

The geographic scope for the analysis of cumulative impacts to archaeological resources, tribal cultural resources, and human remains is the historic lands of the Plains Miwok people. The Plains Miwok lived in the Sacramento Valley along the Sacramento, Cosumnes, and Mokelumne rivers. Impacts to cultural resources of buildout under the General Plan were determined not to be cumulatively considerable in the General Plan EIR (City of Elk Grove 2019). The SEIR prepared for the General Plan Amendments and Update to VMT Standards made similar cultural resources findings as those identified in the General Plan EIR (City of Elk Grove 2023).

Impact 4-7: Contribute to Cumulative Impacts on Cultural, Historical, and Tribal Cultural Resources

Because all significant cultural resources are unique and nonrenewable members of finite classes, meaning there are a limited number of significant cultural resources, all adverse effects erode a dwindling resource base. The loss of any one archaeological site could affect the scientific value of others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains in the region. Development in the Sacramento region has resulted in an existing significant adverse effect on archaeological resources, tribal cultural resources, and human remains. Cumulative development, including projects described in Table 4-2, continues to contribute to the disturbance of cultural resources. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of cultural resources, rather than on a single project or parcel boundary.

No known unique archaeological resources, tribal cultural resources, or human remains are located within the boundaries of the proposed Project area; nonetheless, Project-related earth-disturbing activities could damage undiscovered archaeological resources, tribal cultural resources or human remains. The Project, in combination with other developments in the region, could contribute to ongoing substantial adverse changes in the significance of unique archaeological resources resulting from urban development and conversion of natural lands. Cumulative development could result in potentially significant archaeological resource impacts. Implementation of Mitigation Measure 3.4-1a would ensure that the proposed Project's contribution to cumulatively significant archaeological resources and tribal cultural resources impacts would not be considerable by requiring construction work to cease in the event of an accidental find and the appropriate treatment of discovered resources, in accordance with pertinent laws and regulations. With implementation of this mitigation measure, the Project's contribution to these impacts would be offset. Mitigation Measures 3.4-2b would require cultural awareness training and Mitigation Measure 3.4-2c would require Native American monitoring ensure that the Project's contribution to cumulatively significant tribal

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cultural resources impacts would not be considerable by training construction employees and staff and inviting Native American monitors. Further, cumulative development would be required to implement similar mitigation to avoid/reduce impacts to archaeological resources and tribal cultural resources. Compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097 would ensure that treatment and disposition of the remains occurs in a manner consistent with state guidelines and California Native American Heritage Commission guidance. Proposed development surrounding the Project site, as included in Table 4-2, would be subject to individual environmental analysis and mitigation impacts and would be required to comply with federal, state, and local requirements related to cultural resources. Therefore, the Project would not have a considerable contribution to any significant cumulative impact related to archaeological resources, tribal cultural resources, or human remains.

Mitigation Measures

No mitigation is required.

4.4.5 Energy

The geographic area considered for cumulative impacts related to energy use includes the Sacramento Municipal Utility District (SMUD) and Pacific Gas and Electric Company (PG&E) service areas. SMUD and PG&E employ various programs and mechanisms to support the provision of electricity and natural gas services to new development and recoup costs of new infrastructure. Connection fees are typically charged through standard billing for services.

Several other currently planned and approved projects identified in Table 4-2 would also receive electricity service from SMUD and natural gas service from PG&E. These projects would also consume energy related to transportation (i.e., gasoline and diesel consumption for passenger vehicles, trucks, buses, and other vehicles) and construction. These projects would be required to implement energy efficiency measures in accordance with Part 6 of the Title 24 California Building Code (California Energy Code) to reduce energy demand from buildings. There is no evidence to suggest that implementation of development would result in a significant cumulative energy impact related to the wasteful or inefficient use of energy.

The City General Plan EIR identified less than cumulatively considerable energy impacts from buildout of the City and planning area (City of Elk Grove 2019). The SEIR prepared for the General Plan Amendments and Update to VMT Standards made similar energy findings as those identified in the General Plan EIR (City of Elk Grove 2023).

Impact 4-8: Contribute to Cumulative Energy Impacts

Impact 3.5-1 concludes that the Project would not result in the wasteful or inefficient use of energy and that a 20-kilowatt (kW) solar array would be installed on the proposed retail building and a 14-kW array would be installed on the proposed office building. The Project would not use natural gas or natural gas infrastructure, complying with the California Energy Code and the City of Elk Grove Climate Action Plan's (CAP) direction to minimize natural gas consumption, would include 120 bicycle parking stalls, 327 total EV parking spaces (87 of which would be EV ready and 240 of which would be EV-capable parking spaces).

Impact 3.5-2 concludes that the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The Project would incorporate various design features that are similar to the GHG reduction measures included in the City's CAP, such as prohibiting on-site natural gas infrastructure, including 327 total EV parking spaces and infrastructure to support 120 bicycle stalls, and including on-site solar photovoltaic systems. Proposed development surrounding the Project site, as included in Table 4-2, would be subject to individual environmental analysis and mitigation impacts and would be required to comply with federal, state, and local requirements related to energy. Because implementing the Project would not result in the wasteful or inefficient use of energy and the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, the Project's contribution to cumulative energy use would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

4.4.6 Geology and Soils

Development of the Project would have a significant effect on the environment if it, in combination with other projects, would contribute to a significant cumulative impact related to geology and soils. The following sections describe the potential for the Project to result in a cumulatively considerable contribution to impacts related to seismic and geologic hazards, erosion and loss of topsoil, and paleontological resources. Impacts to geology and soils from buildout under the General Plan were determined to be less than cumulatively considerable in the General Plan EIR (City of Elk Grove 2019). The SEIR prepared for the General Plan Amendments and Update to VMT Standards made similar geology and soils findings as those identified in the General Plan EIR (City of Elk Grove 2023).

Impact 4-9: Cumulative Seismic Groundshaking

As described in Section 3.6, "Geology and Soils," the Project site, which comprises the cumulative setting, would potentially be susceptible to hazards from seismic ground shaking and expansive soils. Surface fault rupture, liquefaction, landslides, lateral spreading, subsidence, and collapse are not anticipated to be a concern within the cumulative setting. Impacts related to seismic and geologic hazards would not be cumulatively considerable because the geographic context is generally site-specific, rather than cumulative in nature. Notwithstanding, past development within the cumulative setting has been regulated by the California Building Code (CBC) and local building codes, which ensure that structures are designed and engineered to site-specific conditions. Each site where present and reasonably foreseeable projects would occur has unique geologic considerations that would also be subject to uniform site development and construction standards consistent with the CBC and local building codes. As discussed in Section 3.6, a site-specific geotechnical study has been prepared for the Project (Geocon Consultants, Inc. 2023). The Project would incorporate the design and engineering recommendations contained in the geotechnical study, which would account for the unique geotechnical factors affecting the Project site and conform to the requirements of the CBC and local building code requirements. Proposed development surrounding the Project site, as included in Table 4-2, would be subject to individual environmental analysis and mitigation impacts and would be required to comply with the requirements of the CBC. Therefore, implementation of the Project would result in a less than cumulatively considerable contribution to impacts related to seismic and geologic hazards.

Impact 4-10: Contribute to Cumulative Soil Erosion and Loss of Topsoil

As described in Section 3.6, "Geology and Soils," the Project site, which comprises the cumulative setting, is relatively flat with no major slopes. However, development in the cumulative setting involving substantial ground disturbance and earth-moving activities or changes to drainage patterns would have potential to result in soil erosion or the loss of topsoil.

Past construction activities within the cumulative setting have been regulated by the National Pollutant Discharge Elimination System (NPDES) permit program, which includes requirements to minimize erosion from construction sites and from operational activities associated with past development. Therefore, the contribution of past projects to cumulative erosion impacts has been negligible.

The present and reasonably foreseeable projects listed in Section 4.2.4, "Related Projects," include development, transportation, infrastructure, and public works projects. These types of projects generally require temporary construction activities involving ground disturbance, which have potential to contribute to erosion and loss of topsoil throughout the cumulative setting. Under the NPDES permit program, projects that disturb more than 1 acre of land are required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and implement associated best management practices (BMPs) that are specifically designed to reduce construction-related erosion. The SWPPP and BMPs would be submitted to the Central Valley Regional Water Quality Control Board in compliance with the statewide *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit) (Order 2009-009-DWQ as amended by Order 2012-0006-DWQ). The Project would also be required to obtain and comply with a grading and erosion control permit from the City. In addition, construction activities would be subject to Sacramento Metropolitan Air Quality Management District (SMAQMD) rules regarding dust control, which would reduce the potential for erosion and sedimentation. Once operational, the potential for erosion would be reduced because areas of bare ground would be

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developed with structure, pavement, and landscaping and projects would be required to incorporate post-construction stormwater management strategies to reduce the potential for erosion from new development and redevelopment. Therefore, the contribution to cumulative erosion impacts from present and reasonably foreseeable projects would be negligible.

In combination with past, present, and reasonably foreseeable projects discussed above, development of the Project would not exacerbate the potential for erosion and loss of topsoil within the cumulative setting. Impacts related to erosion and loss of topsoil would be negligible because the development under the Project would be subject to the NPDES permit program, City grading and erosion control permit, and SMAQMD requirements described above. The Project would not involve operational activities with potential to result in erosion or loss of topsoil. Proposed development surrounding the Project site, as included in Table 4-2, would be subject to individual environmental analysis and mitigation impacts and would be required to comply with federal, state, and local requirements related to soil erosion and loss of topsoil. Therefore, Project implementation would result in a less than cumulatively considerable contribution to impacts related to erosion and loss of topsoil.

Impact 4-11: Contribute to Cumulative Impacts to Paleontological Resources

Geologic deposits that underlie the Central Valley, which comprises the cumulative setting, have a high paleontological sensitivity. Construction of development projects within the cumulative setting would potentially require ground disturbance within previously undisturbed soils and in areas of high sensitivity for paleontological resources.

Before the adoption of regulations pertaining to the protection of paleontological resources (e.g., California Public Resources Code sections 5097.5 and 30244), past development within the cumulative setting has contributed to the loss of important paleontological resources. Therefore, the contribution of past projects to cumulative paleontological resources impacts has been significant.

The present and reasonably foreseeable projects listed in Section 4.2.4, "Related Projects," include development, transportation, infrastructure, and public works projects. These types of projects generally require temporary construction activities involving ground disturbance, which have potential to occur within previously undisturbed soils and contribute to the destruction of paleontological resources. Therefore, the potential impact from cumulative development would be potentially significant.

In combination with past, present, and reasonably foreseeable projects discussed above, Project construction would increase the potential for destruction of paleontological resources within the cumulative setting. However, the Project would be required to comply with Mitigation 3.6-5, which specifies procedures to protect paleontological resources. Under Mitigation 3.6-5, a qualified paleontologist would develop a recovery plan for any paleontological resources that are encountered during Project construction. Other future development projects would be required to implement similar measures in compliance with California Public Resources Code sections 5097.5 and 30244 and other local regulations governing the protection of paleontological resources. Therefore, Project implementation would result in a less than cumulatively considerable contribution to impacts related to paleontological resources.

4.4.7 Greenhouse Gas Emissions and Climate Change

Climate change is a global problem. Greenhouse gases (GHGs) are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any GHG molecule depends on multiple variables and cannot be determined with any certainty, it is understood that more carbon dioxide (CO₂) is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO₂ emissions, approximately 55 percent are estimated to be sequestered through ocean and land uptake every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remain stored in the atmosphere (IPCC 2013:467).

No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

The City General Plan EIR identified cumulative GHG impacts from buildout of the City and planning area as cumulatively considerable and significant and unavoidable by 2050 (City of Elk Grove 2019). A substantial increase in severity of this cumulative impact was identified in the General Plan Amendments and Update of VMT Standards SEIR (City of Elk Grove 2023).

Impact 4-12: Contribute to Cumulative Impacts Related to Greenhouse Gas Emissions and Climate Change

As described in Section 3.7, "Greenhouse Gas Emissions and Climate Change," the discussion of GHG emissions associated with the Project for Impact 3.7-1 is inherently a cumulative impact analysis. GHG emissions from one project cannot, on their own, result in changes in climatic conditions. Therefore, the emissions from one project must be considered in the context of their contribution to cumulative global emissions. Implementation of Mitigation Measures 3.7-1 and 3.13-2a and 3.13-2b would reduce the Project's GHG emissions, but it cannot be assured that the Project, with mitigation, would produce emissions sufficiently low enough to not conflict with the state's long-term GHG reduction goal of carbon neutrality by 2045 established by AB 1279. Therefore, the Project's contribution to substantial effects related to GHG emissions would be cumulatively considerable and significant and unavoidable.

Mitigation Measures

No mitigation is required.

4.4.8 Hazardous Materials and Public Health

In the cumulative condition, development of the City could result in increased use of potentially hazardous materials. Facilities that use hazardous materials would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. The storage, use, disposal, and transport of hazardous materials are extensively regulated by various federal, State, and local agencies. Therefore, construction companies and businesses that would handle any hazardous substances would be required by law to implement and comply with these existing hazardous-materials regulations. Development of City would increase the extent of population that would need to be accommodated for emergency response and evacuation. The City General Plan EIR identified less than cumulatively considerable hazard impacts from buildout of the City and Planning Area (City of Elk Grove 2019). The SEIR prepared for the General Plan Amendments and Update to VMT Standards made similar hazardous materials findings as those identified in the General Plan EIR (City of Elk Grove 2023).

As discussed in Section 3.8, "Hazards and Hazardous Materials," the Project would have no impact on existing or proposed schools associated with the handling or emission of hazardous materials; no potential to create a significant hazard to the public or the environment from known contamination on or near the Project site; no impact associated with exposing future employees to potential safety hazards or excessive noise generated by established aviation uses in the area; and no potential to increase wildland fire on or near the Project site. Therefore, implementation of the Project would not combine with other related projects to create cumulative impact under these impact areas.

Impact 4-13: Cumulative Transport, Use, Storage, and Disposal of Hazardous Materials

Future development in the Project vicinity, as shown in Table 4-2, would be required to comply with applicable hazardous materials management laws and regulations adopted at the federal, State, and local level including but not limited to Titles 10, 29, 40, and 49 of the CFR, which regulate the handling (including transportation), storage, and disposal of hazardous materials and wastes; and Titles 8, 22, and 26 of the CCR, which address the handling, storage, disposal and management (including workplace safety) of hazardous materials and wastes. Compliance with these regulations would be monitored during construction and occupancy of new projects through a variety of agencies.

Therefore, the Project would not combine with other related projects to create cumulative impacts related to the transport, use, storage, and disposal of hazardous materials.

As identified in Impact 3.8-1, Project construction and operation would involve the use of materials that could create a hazard if released into the environment. The proposed Project and projects listed in Table 4-2 would be required to comply with applicable federal, State, and local regulations and policies regarding hazardous materials and waste. Use, transport, and disposal of materials in compliance with established regulations would effectively address hazards associated with the use of these materials. Therefore, the Project would not result in a new or greater contribution to cumulative effects related to hazardous materials. The Project's contribution to substantial effects related to hazardous materials would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required.

Impact 4-14: Contribute to Cumulative Impacts Related to Impairment of or Physical Interference with an Adopted Emergency Response or Emergency Evacuation Plan.

Project construction activities (e.g., operation of vehicles and equipment, presence of construction crews) could temporarily affect roadways and increase the number of people who may need to evacuate the region in the event of an emergency. These activities could result in the need for lane closures or narrowing, however such impacts tend to be localized, would be short-term, and would not combine to produce a significant cumulative effect. Construction traffic control plans are typically used for individual projects to mitigate potential effects. Therefore, the cumulative impact would not be significant.

As identified in Impact 3.8-2, the proposed Project would be located on existing parcels within the City and is not anticipated to encroach on or obstruct any existing evacuation routes. Proposed development in the Project vicinity would be required to comply with existing fire codes regarding emergency access as included in Chapter 17.04 of the EGMC. The Project would not result in a new or greater contribution to cumulative effects related to adopted emergency responses or emergency evacuation plans. Therefore, the Project's contribution to substantial effects related to adopted emergency responses or emergency evacuation plans would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required.

4.4.9 Hydrology and Water Quality

The geographic context for cumulative impacts related to Hydrology and Water Quality is the local watershed. Groundwater quality in the central South American Subbasin is generally good (SCWA 2016); however, a portion of the northeastern side of the subbasin has been contaminated with industrial pollutants. Intensive groundwater pumping and remediation are conducted at the spill sites to prevent contaminated groundwater from spreading and mixing with the general aquifer. Intensive groundwater extraction over the past 60 years has resulted in a lowering of groundwater elevations centered near Elk Grove. Groundwater elevations in the subbasin have been monitored and extraction limited since the Water Forum Agreement in 2000. Although groundwater elevations have recovered to some extent, the problem persists, resulting in an existing cumulative adverse condition related to groundwater elevations.

The City General Plan EIR identified less than cumulatively considerable water quality and flooding impacts from the buildout of the City and planning area (City of Elk Grove 2019). However, the General Plan EIR identified a cumulatively considerable and significant and unavoidable impact on groundwater resources from future water supply demands that may result in impacts on surface water features (City of Elk Grove 2019). The SEIR prepared for the General Plan Amendments and Update to VMT Standards made similar hydrology and water quality findings as those identified in the General Plan EIR (City of Elk Grove 2023).

Impact 4-15: Contribute to Cumulative Water Quality Impacts

Implementing the Project and other development projects would result in construction and ground disturbance that would increase the potential for soil erosion and sediment pollution of waterways. The equipment required for construction would use fuel, solvents, lubricants, and other potentially hazardous materials that may degrade surface water and groundwater quality through accidental spills. However, the Project and other foreseeable development would also be required to comply with Central Valley Regional Water Quality Control Board (Central Valley RWQCB) National Pollutant Discharge Elimination System (NPDES) permit conditions that include preparation of a stormwater pollution prevention plan and a hazardous materials spill response plan. Improvement plans provided to the City before authorization for each construction phase would be required to conform to provisions of Municipal Code Chapter 16.44 (Land Grading and Erosion Control) and Chapter 15.12 (Drainage Control) that are in effect at the time of submittal and that include water quality control measures, such as the use of filter fences, fiber rolls, erosion control blankets, mulch, temporary drainage swales, settling basins, and fuel spill containment features. This would offset the Project's construction-related contribution to cumulative water quality impacts. Therefore, the Project's contribution to cumulative construction water quality impacts would not be cumulatively considerable.

Continued urban development creates the potential for accidental discharge of household or commercial products, improper use of pesticides, and runoff carrying oil and roadway residue. The Project and other regional development projects would create new urban areas and may increase the potential for contaminated urban runoff to reach surface waters and groundwaters, degrading water quality and affecting beneficial uses. The Central Valley RWQCB works to protect water quality from urban runoff through NPDES programs for municipal stormwater and industrial uses.

The Project and the cumulative projects would be required to meet the conditions of the Sacramento Region Stormwater Quality Design Manual, which implements the Central Valley RWQCB municipal NPDES permits. These permit conditions apply to projects within the Cities of Elk Grove and Sacramento, as well as projects permitted by Sacramento County. Low-impact development (LID) design measures have been well studied by governmental and research institutions and, when properly implemented, can substantially reduce water quality degradation when compared with conventional stormwater management systems. Examples of minimum LID measures include isolation requirements for fueling areas and waste disposal areas, disconnection of impervious surfaces to allow infiltration of runoff on-site, identification signs and marking on storm drains to discourage improper use, and stormwater filtration and treatment where applicable. Each development project would be required to demonstrate compliance with LID measures as a condition of permit approval. In addition, the Project would implement specific LID measures as described in Impact 3.9-2. Implementation of LID measures, including directing stormwater into a bioretention basin west of the Project site, would prevent the contamination of stormwater and infiltrate the majority of stormwater on-site and avoid water quality impacts during flood events. The reader is referred to Section 3.9, "Hydrology and Water Quality," for further details on water quality controls.

Therefore, the Project's contribution to cumulative water quality impairments from urban runoff **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Impact 4-16: Contribute to Cumulative Impacts Related to Drainage

As discussed in Impact 3.9-2, implementation of the Project would include directing stormwater into a bioretention basin west of the Project site. Other Project LID features would further reduce peak stormwater flow. Proposed stormwater control methods included in the Stormwater Quality Management Plan have been designed to allow water to percolate and recharge local aquifers (Kimley Horn 2023). Therefore, the Project would not result in off-site flooding from inadequate drainage that in combination with nearby projects could flood the storm drain or deplete the aquifer. Proposed development surrounding the Project site, as included in Table 4-2, would be subject to individual environmental analysis and mitigation impacts and would be required to comply with federal, state, and local requirements related to drainage. The Project's contribution to cumulative increases in drainage flows and flooding would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

Impact 4-15: Contribute to Cumulative Groundwater Impacts

Increased groundwater extraction to support new development may deplete groundwater resources. The Project and the cumulative development projects listed in Table 4-1 would increase the demand for potable water in the Sacramento County Water Agency (SCWA) and Elk Grove Water District service areas. The cumulative development projects are consistent with the City General Plan (City of Elk Grove 2018). Groundwater represents a substantial part of the SCWA's water supply portfolio to meet projected demand, particularly for the area that includes the City. The SCWA UWMP provides projections of "reasonably available" groundwater volume, based on groundwater supply capacity, with safe yield not quantified. The reasonably available groundwater volume would remain the same for normal, single-dry, and multiple-dry year scenarios, ranging from 41,000 AFY in 2025, increasing to 46,000 acre feet per year (AFY) in 2030, and 56,000 AFY in 2035, 2040, and 2045 (SCWA 2021). Therefore, to meet demand during dry years, the SCWA would seek to supplement its reduced supplies with the use of other surface water supplies. The SASb GSP identifies that the long-term sustainable groundwater yield of the South American Subbasin is 235,000 AFY (SCWA 2021).

Implementing the Project and the cumulative development projects listed in Table 4-2 would result in increased extraction of groundwater, which may further deplete groundwater resources. The Project would result in additional water demands and associated groundwater impacts beyond what was considered in the City General Plan EIR because it would increase the amount of water demand from the vacant site. As discussed in Section 3.9, "Hydrology and Water Quality," at buildout, the total annual water demand for the Project is 240 acre-AFY. Additionally, according to the Water Supply Assessment prepared for the Project, SCWA has sufficient water supply to serve the Project without pumping additional groundwater (SCWA 2023). Therefore, the Project's contribution to cumulative groundwater impacts would **not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

4.4.10 Land Use

The geographic context for cumulative impacts related to land use consist of the City and immediate Project vicinity. The cumulative projects listed in Table 4-2 would contribute to further development within the City of Elk Grove. The City General Plan EIR identified no cumulatively considerable land use impacts from buildout of the City and Planning Area (City of Elk Grove 2019).

As discussed in Section 3.5, "Land Use," implementing the Project would not physically divide the existing community and would not combine to create considerable changes and cumulative effects on the cohesiveness of the existing community. This impact is not further discussed.

Impact 4-16: Contribute to Cumulative Impacts on Land Use Plans, Policies, or Regulations As identified in Impact 3.10-1, the Project site is located in the LEA Community Plan, which is in an area planned for urban development in the General Plan EIR. While development of the Project would convert the vacant site to an urban/suburban developed land use, the Project would be compatible with proposed future development envisioned in the LEA. In addition to provisions in the LEA Community Plan, the Project would implement the goals and policies of the General Plan, be consistent with City General Plan policies that address environmental effects and the EGMC regulations, as well as the SACOG 2020 MTP/SCS. The Project's contribution to the significant cumulative impact would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required.

4.4.11 Noise

The geographic context for cumulative impacts related to noise is the local Project vicinity. The City General Plan EIR identified traffic noise impacts from buildout of the City and planning area as cumulatively considerable and significant and unavoidable (City of Elk Grove 2019). A substantial increase in severity of this cumulative impact was identified in the General Plan Amendments and Update of VMT Standards SEIR associated with changes in traffic volumes along certain roadway segments (City of Elk Grove 2023).

As discussed in Section 3.11, "Noise and Vibration," implementing the Project would not result in the exposure of people to excessive noise levels associated with airport activity or adverse vibration effects on off-site receivers. Therefore, the Project would not combine to create considerable changes and cumulative impacts related to these issues, and these impacts are not discussed further.

Impact 4-17: Contribute to Cumulative Construction Noise Impacts

Cumulative impacts from construction-generated noise may result if other future planned construction activities were to take place close to the Project site and cumulatively combine with construction noise from the Project. The Souza Dairy property (development of single family residences) is currently ongoing construction adjacent to the Project site to the north (Figure 4-1). As discussed in Impact 3.11-1, Project construction activities would involve the use of heavyduty construction equipment occurring over an approximately 36 month construction period for Phase 1 and may combine with construction of single-family residences in Sterling Meadows to simultaneously affect the same residential receptors east of the Project site along Lotz Parkway. Construction of on the Souza Dairy property would likely be more than 50 percent complete before Project construction. Development of the Souza Dairy north of the site is subject to construction noise hours contained in the EGMC and construction noise reduction mitigation measures contained in the Southeast Policy Area EIR (SCH No. 2013042054). Project construction noise impacts were determined to be less than significant with implementation of Mitigation Measure 3.11-1 (construction noise controls), as discussed in Impact 3.11-1. Implementation of Mitigation Measure 3.11-1 would reduce construction noise levels and ensure that exposure from on-site construction at off-site noise-sensitive receivers would be minimized and would not contribute substantially to a cumulative impact. This impact would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required.

Impact 4-18: Contribute to Cumulative Traffic Noise Impacts

Table 4-3 summarizes weekday and weekend traffic noise levels along roadway segments serving the Project site under existing and cumulative conditions and the associated incremental increases.

Table 4-3 **Summary of Modeled Traffic Noise Levels**

	L _{dn} at Nearest Residential Land Use (Exterior, dB) ^{1,2}				Incremental Increase (dB)		
Roadway Segment	Existing Conditions	Cumulative	Cumulative Plus Full Buildout	Applicable Incremental Noise Standard (dB)	Cumulative Increase	Full Buildout Increase over Cumulative	
Weekday Noise Levels	Weekday Noise Levels						
Lotz Parkway, north of Classical Way	55.6	70.2	70.3	5	14.7	0.1	
Kammerer Road, west of Lotz Parkway	68.5	75.6	75.6	1.5	7.1	0	
Kammerer Road, Lotz Parkway to Lent Ranch Parkway	68.6	75.8	75.9	1.5	7.3	0.1	

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	L _{dn} at Nearest Residential Land Use (Exterior, dB) ^{1,2}				Incremental Increase (dB)	
Roadway Segment	Existing Conditions	Cumulative	Cumulative Plus Full Buildout	Applicable Incremental Noise Standard (dB)	Cumulative Increase	Full Buildout Increase over Cumulative
Kammerer Road, Lent Ranch Parkway to Promenade Parkway	68.6	76.7	76.8	1.5	8.2	0.1
Kammerer Road, Promenade Parkway to SR 99 southbound ramps	72.7	78.0	78.0	1.5	5.3	0
Weekend Noise Levels	Weekend Noise Levels					
Lotz Parkway, north of Classical Way	55.5	70.1	70.2	5	14.7	0.1
Kammerer Road, west of Lotz Parkway	68.3	75.4	75.4	1.5	7.1	0
Kammerer Road, Lotz Parkway to Lent Ranch Parkway	68.5	75.6	75.9	1.5	7.4	0.3
Kammerer Road, Lent Ranch Parkway to Promenade Parkway	68.4	76.6	76.8	1.5	8.4	0.2
Kammerer Road, Promenade Parkway to SR 99 southbound ramps	72.6	77.8	77.9	1.5	5.3	0.1

Notes: dB = decibel; L_{dn} = day-night level.

Source: Noise levels modeled by Ascent Environmental in 2023.

As shown in Table 4-3, under Cumulative conditions there would be a substantial increase in roadway traffic noise on all roadway segments. However, under Cumulative-Plus-Full-Buildout conditions, the Project's contribution to Cumulative-Plus-Full-Buildout conditions (cumulative base conditions) would be less than 1.5 dBA for all roadway segments. General Plan Policy N-2-2 establishes an incremental noise increase threshold of 5 dBA L_{dn} (day-night average sound level) when base noise levels are below 60 dBA L_{dn} and 1.5 dB L_{dn} when base noise levels exceed 65 dBA L_{dn}. Noise level changes below 1.5 dBA would not be perceptible as increase in noise below 3 dBA are not considered perceptible by the human ear. Therefore, the Project's contribution to this cumulative impact would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

Noise levels do not account for attenuation provided by existing structures that would block the line of sight between the modeled roadway segment and adjacent land uses. Refer to Appendix G for all traffic noise modeling input data and output results.

² Modeled traffic noise levels along Kammerer Road include the distance to the roadway centerline and are presented for disclosure purposes only. Traffic noise levels along this roadway segment are not subject to any of the incremental noise increase standards established by General Plan Policy N-2-2 because, under existing conditions, there are no residential land uses along this roadway segment. Parcels along Kammerer Road near the Project site, however, are zoned for residential and mixed-use development, which allows for the future development of residential units. If multi-family residential units are developed on this parcel then, pursuant to General Plan Policies N-1 and N-2, the design of this development should comply with the exterior and interior noise standards in Table 3.11-3 (i.e., 60 dB L_{dn} at outdoor activity areas and an interior noise standard or 40 dB L_{dn}). Design measures to comply with these noise standards may include, but are not limited to, including a sound barrier along the road, setting back outdoor activity areas from the road, placing buildings between the road and outdoor activity areas to act as a noise barrier, and/or including more noise insulation to protect interior noise levels.

Impact 4-19: Contribute to Cumulative Operational Noise Impacts

Cumulative impacts related to on-site operational and stationary noise sources are site-specific, dissipate with distance from the source, and typically result in cumulative impacts only when Project-generated noise is located close to other off-site noise sources. Existing development close to the Project site does not include substantial noise sources that affect nearby sensitive receptors, and future projects would not be located close enough to the Project site for on-site operational and stationary noise to combine with other off-site noise sources to create substantial levels of noise that would affect nearby sensitive receptors. Additionally, as discussed in Impact 3.11-4 and 3.11-5, implementing Mitigation Measure 3.11-5 would reduce noise levels from on-site operational noise associated with amplification. Proposed development surrounding the Project site, as included in Table 4-2, would be subject to individual environmental analysis and mitigation impacts and would be required to comply with state and local requirements related to operational noise. Therefore, noise impacts associated with on-site operational activities, including special event noise, as discussed in Impacts 3.11-4 and 3.11-5 would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

4.4.12 Public Services and Recreation

The geographic context for cumulative impacts related to public services includes the Cosumnes Community Services District (CCSD) Fire Department and Elk Grove Police Department (EGPD) service areas, including the City.

Implementation of previously approved, proposed, or reasonably foreseeable projects in the service areas of the CCSD Fire Department and EGPD would result in increased demand for fire protection, emergency medical response, and police protection services. The increase in demand would result in the need for additional facilities, and these impacts would be cumulatively considerable. However, development projects are subject to property taxes and development impact fees. These fees, as well as other funding sources, allow for the expansion of the CCSD Fire Department and EGPD staff, equipment, and facilities to accommodate future demand. In addition, each development project will be subject to CEQA review of project-level impacts, as well as applicable regulations to reduce impacts.

The City General Plan EIR identified significant and unavoidable cumulatively considerable public service impacts related to new schools from buildout of the City and planning area (City of Elk Grove 2019). The SEIR prepared for the General Plan Amendments and Update to VMT Standards made similar public services findings as those identified in the General Plan EIR (City of Elk Grove 2023).

As discussed in Section 3.12, "Public Services," implementing the Project would not affect public schools such that construction or expansion of educational facilities would be required, would not affect libraries and other public facilities such that additional libraries or public facilities would be needed or constructed, and would not substantially increase the use of or physically affect existing parks and recreational facilities such that construction of new parks and recreational facilities would be required. Therefore, the Project would not combine to create considerable changes and cumulative effects related to educational, library, parks, recreational, or other public facilities. These impacts are not discussed further.

Impact 4-20: Contribute to Cumulative Impacts on Fire Protection and Emergency Medical Response Facilities

As described under Impact 3.12-1, implementation of the Project would result in increased demand for fire protection and emergency medical response services from the CCSD Fire Department. However, CCSD's current facilities along with operation of Station 77 (under construction and scheduled for opening in spring 2024), would be adequate to serve the Project as well as anticipated development in the Project vicinity. The CCSD is currently building Station 77 that would serve the southern portion of the City, including the Project site and surrounding developments. Development in the vicinity would also be subject to property taxes and assessment that would support expansion of

the CCSD Fire Department to provide the necessary services. Thus, the Project's impacts related to expansion of fire protection and emergency medical response facilities would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

Impact 4-21: Contribute to Cumulative Impacts on Police Protection Facilities

As described under Impact 3.12-2, implementation of the Project would result in increased demand for police protection services. However, the Project would include private on-site security services and would require minimal support from the Elk Grove Police Department. Additionally, the Project would implement security measures, including the installation of security lighting, fencing, and signage, which would thereby further reduce impacts to law enforcement. Proposed development surrounding the Project site, as included in Table 4-2, would be subject to individual environmental analysis and mitigation impacts and would be required to comply with federal, state, and local requirements for police services. Therefore, the Project's impacts related to police protection facilities would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

4.4.13 Transportation and Circulation

The geographic context for cumulative impacts related to transportation is the City and the City General Plan planning area. While the City General Plan EIR identified no cumulatively considerable impacts related to transit, bicycle, pedestrian, and traffic safety, vehicle miles travel impacts from buildout of the City and planning area were identified cumulatively considerable and significant and unavoidable because the effectiveness of VMT reductions strategies is not certain. In addition, disruptive changes occurring in transportation, such as transportation network companies (i.e., Uber, Lyft), autonomous vehicles, Mobility as a Service (i.e., ride-sharing, carsharing), Amazon (increased deliveries), may increase VMT (City of Elk Grove 2019:3.15-60). A substantial increase in severity of this cumulative impact was identified in the General Plan Amendments and Update of VMT Standards SEIR (City of Elk Grove 2023).

Impact 4-22: Contribute to Cumulative Impacts on Vehicle Miles Traveled

The VMT Memo identifies that, as long-term development in the City of Elk Grove continues, it is anticipated that the VMT impact of the Project would be most acute under opening year conditions where, if mitigated, would only become less of an impact under horizon year general plan buildout (Kimley-Horn 2023: 6). However, as detailed under Impact 3.13-2, the Project would result in an increase of net daily VMT when compared to existing conditions. Implementation of Mitigation Measures 3.13-2a and 3.13-2b, as included in Impact 3.13-2, would reduce average daily visitor VMT and employee VMT, which would reduce the total daily VMT generated by the Project. However, there would be no guarantee that the mitigation measures would reduce the total daily VMT generated by the Project to existing condition levels. Additionally, as detailed in the VMT Memo, until mitigation measures are identified and implemented in coordination with the City and a Mitigation and Monitoring Report Plan is produced, the Project's contribution would be **cumulatively considerable and significant and unavoidable**.

Mitigation Measures

No mitigation is required.

Impact 4-23: Contribute to Cumulative Impacts on Transit, Bicycle, and Pedestrian Facilities General Plan EIR Impact 5.13.7 identified that implementation of the General Plan would not result in conflicts with plans, policies or programs for transit, bicycle, and pedestrian facilities. As described in Impact 3.13-1 of this Draft EIR, the Project would include the construction of bicycle, pedestrian, and transit facilities, thus enhancing mobility within the vicinity of the Project site. Additionally, the Project would be subject to and implement General Plan and BPTMP

policies applicable to transit, bicycle, and pedestrian facilities and service, and would not adversely affect any existing or planned bicycle, pedestrian, or transit facilities in the vicinity of the Project site. Therefore, the Project would not result in a new or greater contribution to cumulative effects related to transit, bicycle, and pedestrian facilities beyond what was identified in the General Plan EIR. Proposed development surrounding the Project site, as included in Table 4-2, would be subject to individual environmental analysis and mitigation impacts and would be required to comply with federal, state, and local requirements related to transit, bicycle, and pedestrian facilities. The Project's contribution to substantial effects related to transit, bicycle, and pedestrian facilities would **not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Impact 4-24: Contribute to Cumulative Construction-Related Transportation Impacts

Cumulative impacts on transportation from Project-generated construction effects may result if other future planned construction activities were to take place close to the Project site and cumulatively combine to exacerbate the construction-related transportation impacts of the Project. The Kammerer Road Extension Project is proposed south of the Project site along Kammerer Road near the City's southern boundary. As described under Impact 3.13-3, the Project would be required to meet all City requirements related to construction activities including, but not limited to, maintaining emergency access, safe movement of construction equipment entering and leaving the Project site, and traffic controls and signage during construction. Additionally, the Project contractor would be required to develop and submit a traffic control plan to demonstrate appropriate traffic control measures to be used for vehicles, bicyclists, and pedestrians affected by construction. Other projects within the vicinity of the Project site, such as the Kammerer Road Extension Project, would also need to demonstrate to the City that they would not contribute to construction-related transportation impacts. Therefore, the impact to construction related transportation impacts would **not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Impact 4-25: Contribute to Cumulative Impacts on Emergency Access

Cumulative impacts associated with emergency access or road design are primarily a localized effect. As such, the cumulative projects with the potential to result in a significant cumulative impact associated with construction phase emergency access and road design features would be the projects located in the immediate vicinity of the Project site as emergency responders attempt to respond to emergency and as vehicles use the Project site ingress and egress locations while merging on to the primary roadways. Given that all projects within the vicinity of the Project site would need to demonstrate to the City that they would not impede emergency access or cause a potential transportation-related hazard, the impact to emergency access would **not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

4.4.14 Utilities and Service Systems

The geographic context for cumulative impacts related to utilities and service systems includes the local service areas of the SCWA, Sacramento Regional County Sanitation District (Regional San), and SacSewer, as well as the service areas for landfills that serve the City, SMUD, and PG&E.

The City General Plan EIR identified less than cumulatively considerable solid waste impacts from buildout of the City and planning area (City of Elk Grove 2019). However, the General Plan EIR identified a cumulatively considerable and significant and unavoidable impact on water supply and wastewater service (City of Elk Grove 2019). The SEIR prepared for the General Plan Amendments and Update to VMT Standards made similar utilities and service system findings as those identified in the General Plan EIR (City of Elk Grove 2023).

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As discussed in Section 3.14, "Utilities and Service Systems," the proposed Project would not require the relocation of new or expanded water, wastewater, solid waste, electricity, telecommunication equipment and availability of water supply, wastewater treatment capacity, and solid waste disposal capacity. Therefore, the Project would not combine to create considerable changes and cumulative effects related to telecommunications facilities and this impact is not further discussed.

Impact 4-26: Contribute to Cumulative Water Supply Impacts

As described in Section 3.14, "Utilities and Service Systems," SCWA provides retail water supply to the City, and the Project is located within SCWA's Zone 40 South Service Area potable water service area. The Project and the cumulative development projects listed in Table 4-2 would increase the demand for potable water in the SCWA service area.

SCWA prepared a Water Supply Assessment (SCWA 2023) for the Project in accordance with Water Code Sections 10910–10915. It demonstrates that SCWA's water supplies are sufficient to satisfy the water demands of the currently proposed Project while still meeting the current and projected water demands of existing customers in the next 20 years. However, under buildout of the Elk Grove General Plan, increased demand may exceed supplies for treated water, which may result in significant cumulative impacts.

As identified in Impact 3.14-1, the Project would result in an increase in water demand, but the increase is minor compared with projected demand, supply, and surplus. The additional water demand from implementation of the Project would not result in a new or substantially more severe impacts regarding water supply. Therefore, the Project would not result in a new or greater contribution to cumulative effects related to water service. The Project's contribution to substantial effects related to water service would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required.

Impact 4-27: Contribute to Cumulative Wastewater Impacts

As identified in Impact 3.14-2, the Project's wastewater generation of approximately 0.24 mgd average dry weather flow (ADWF) would be an increase over existing conditions on the vacant site. However, Regional San currently treats an average of 130 million gallons of wastewater per day (mgd), and the Sacramento Regional Wastewater Treatment Plant (SRWTP) has been master planned to accommodate 350 mgd ADWF (Regional San 2008). It is not anticipated that Regional San will need to consider further improvements to the SRWTP until after 2050 (Regional San 2014). Because the SRWTP has been master planned to accommodate additional growth, the Project would not result in a new or greater contribution to cumulative effects related to wastewater. The Project's contribution to substantial effects related to wastewater would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required.

Impact 4-28: Contribute to Cumulative Solid Waste Impacts

The Project would include uses that would increase the generation of municipal solid waste and medical waste, thereby increasing demand for hauling and disposal services. As shown in Section 3.14 "Utilities," Table 3.14-9 the Project's solid waste generation would be 1,021 tons per year. Municipal solid waste, medical waste, recyclable materials, and compostable food waste and animal waste would be separated on site and collected by a contracted waste hauler. The analysis concluded that the cumulative impact would not be significant and would not be cumulatively considerable.

At General Plan buildout, it is estimated that the City planning area may generate approximately 331,223 additional tons of solid waste each year. However, the City exceeds the mandated 50-percent diversion rate established under the Integrated Waste Management Act, so the amount of material reaching the landfills would be less than that amount, likely as low as 241,733 tons per year. As shown in Section 3.14 "Utilities," there is substantial remaining capacity in the landfills serving local waste haulers, with an average remaining capacity of more than 80 percent.

Therefore, the proposed Project and projects included in Table 4-2 would be served by solid waste management companies and landfills with sufficient capacity to serve the future development. Therefore, the Project's contribution to impacts related to the availability of solid waste generation and disposal capacity **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

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