# **SECTION 4: CUMULATIVE EFFECTS**

#### 4.1 - Introduction

CEQA Guidelines Section 15130 requires the consideration of cumulative impacts within an EIR when a project's incremental effects are cumulatively considerable. Cumulatively considerable means that "the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." In identifying projects that may contribute to cumulative impacts, the CEQA Guidelines allow the use of a list of past, present, and reasonably anticipated future projects, producing related or cumulative impacts, including those that are outside of the control of the lead agency.

In accordance with CEQA Guidelines Section 15130(b), "the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, the discussion need not provide as great [a level of] detail as is provided for the effects attributable to the project alone." The discussion should be guided by standards of practicality and reasonableness, and it should focus on the cumulative impact to which the identified other projects contribute rather than on the attributes of other projects that do not contribute to the cumulative impact.

In compliance with CEQA, Sacramento LAFCo establishes the following standard in its Policies, Standards, and Procedures Manual:

- Chapter 4, General Standards
  - 5. An EIR completed on a project subject to LAFCo review shall contain a discussion of the following topics:
    - a. County-wide or cumulative impacts which concern LAFCo.

The proposed project's cumulative impacts were considered in conjunction with other proposed and approved projects in Sacramento County that concern or have some level of involvement or authority with LAFCo. Table 4-1 provides a list of the projects considered in the cumulative analysis.

Jurisdiction	Project	Characteristics	Location	Status
Sacramento County	City of Galt Sphere of Influence EIR	Consists of both an added area of approximately 1,053 acres and the detachment of territory of approximately 1,613 acres from the current SOI. The amended SOI would result in a net decrease of approximately 560 acres from the existing SOI.	Sacramento County	Completed
	RE Kammerer Road Solar Facility	15-megawatt solar farm facility consisting of ground-mounted photovoltaic solar modular array panel blocks on 115 acres of an approximately 160-net- acre site	8212 Kammerer Road (within the proposed SOIA Area)	Pending
	Grundman/Wilkinson Solar Farm	18-megawatt solar farm facility (ground-mounted photovoltaic solar array panels) on 139.2 acres of an approximately 154.82- net-acre site	10743 Bruceville Road (within the proposed SOIA Area)	Pending
	RE Bruceville Road Solar Facility	15-megawatt solar facility consisting of ground-mounted photovoltaic solar modular array panel blocks on 115 acres of an approximately 119.67- net-acre site	11281 Bruceville Road	Pending
	Point Pleasant Road Solar Facility	1-megawatt solar facility (ground-mounted photovoltaic solar array panels) on approximately 9.7 acres of an approximately 67.306 net-acre site	6116 Point Pleasant Road	Pending
	City of Sacramento General Plan and EIR	General Plan Update	City of Sacramento	Completed
	County of Sacramento General Plan and EIR	General Plan Update	County of Sacramento	Pending

# Table 4-1: Cumulative Projects

Jurisdiction	Project	Characteristics	Location	Status
Multiple Jurisdictions	Southeast Connector DEIR	The proposed project is a 35-mile multi-modal transportation facility that will link communities in Sacramento and El Dorado Counties, including Elk Grove, Rancho Cordova, Folsom, and El Dorado Hills.	Multiple locations	Pending
North San Joaquin Valley	Sacramento Area Council of Governments Metropolitan Transportation Plan 2035	Comprehensive long- range transportation plan for the region's multi- modal transportation system and one of SACOG's primary statutory responsibilities as the region's MPO	Sacramento Metropolitan Planning Area	Completed

#### Table 4-1 (cont.): Cumulative Projects

#### 4.2 - Cumulative Impact Analysis

The cumulative impact analysis below is guided by the requirements of CEQA Guidelines Section 15130. Key principles established by this section include:

- A cumulative impact only occurs from impacts caused by the proposed project and other projects. An EIR should not discuss impacts that do not result from the proposed project.
- When the combined cumulative impact from the increment associated with the proposed project and other projects is not significant, an EIR need only briefly explain why the impact is not significant; detailed explanation is not required.
- An EIR may determine that a project's contribution to a cumulative effect impact would be rendered less than cumulatively considerable if a project is required to implement or fund its fair share of mitigation intended to alleviate the cumulative impact.

The cumulative impact analysis that follows relies on these principles as the basis for determining the significance of the proposed project's cumulative contribution to various impacts.

#### 4.2.1 - Aesthetics

The geographic scope of the cumulative aesthetics, light, and glare analysis is the area surrounding the project area. This is the area within view of the project; therefore, the area most likely to experience changes in visual character or experience light and glare impacts.

The land use designations surrounding the project area include primarily agricultural uses to the south, east, and west, and urban uses to the north. Other planned or reasonably foreseeable roadway improvement projects in the immediate area include Kammerer Road and Grant Line Road that form the proposed Sphere of Influence (SOIA) Area's north and northeastern boundaries, respectively. In addition, two solar facilities are proposed within the SOIA Area as separate applications (not part of the proposed project), and one application is proposed immediately south of the SOIA Area.

The project, in combination with planned and reasonably foreseeable projects, could result in substantial changes to the aesthetic character of the study area. The project would replace rural setting with urban character. Other planned and reasonably foreseeable projects would introduce structures that would reduce the intactness and unity of the agricultural and rural visual landscape, as well as introduce substantial new sources of light and glare resulting in a cumulative impact on visual quality. Mitigation is proposed requiring the City of Elk Grove to develop a light and glare reduction plan for the SOIA Area prior to annexation activities, or demonstrate that implementation of existing policies and ordinances would reduce outdoor lighting and glare through standards and screening.

Cumulative impacts would be reduced through design measures incorporated into future development to be sensitive to the rural and agricultural views. In addition, general plan policies would have the effect of reducing cumulative visual change, such as the creation of open space areas and view corridors to preserve key visual elements, and would result in development that is aesthetically pleasing. However, alteration of visual character from agricultural to urban uses would be an unavoidable and cumulatively significant impact.

## 4.2.2 - Agricultural Resources

The geographic scope of the cumulative agricultural resources analysis is focused on Sacramento County. Agricultural resources are most commonly evaluated in the context of countywide resources; in addition, Sacramento LAFCo's authority is limited to the extent of Sacramento County. Therefore, it is most appropriate to use the Sacramento County boundary as the basis for assessing cumulative impacts.

Development and land use activities within both the SOIA Area and nearby areas have the potential to result in the conversion of agricultural land to non-agricultural use, conflict with Williamson Act contracts, and creation of pressures that cause the premature conversion of agricultural land. In addition, implementation of the Southeast Connector would have the potential to directly impact farmland.

Future development of the SOIA Area may result in the conversion of approximately 400 acres of Prime Farmland, 132 acres of Unique Farmland, and 5,236.6 acres of Farmland of Statewide Importance. These conversions would make up approximately 2.5 percent of the total important farmland acreage known to exist in Sacramento County in 2000 (approximately 234,120 acres) (Elk Grove DEIR 2003). Mitigation is proposed requiring development to demonstrate application of and compliance with City of Elk Grove's General Plan policies governing agricultural land conversions and avoidance of conflicts with Williamson Act lands. Given the statewide conversion of important farmland areas and the extent of conversion in Sacramento County anticipated as a result of potential development of the SOIA Area, the project's contribution to this cumulative impact is considered significant.

# 4.2.3 - Air Quality

The geographic scope of the cumulative air quality analysis is the Sacramento Valley Air Basin. Air pollution is regarded as a regional issue; therefore, this area would be the area most likely to be impacted by project emissions.

All of the projects listed in Table 4-1 would result in new air emissions, during construction or operations (or both). Future annexation and development activities within the proposed project area could accommodate more population and jobs than anticipated by the Sacramento Valley Air Quality Management District (SMAQMD) air quality attainment plan and Sacramento Area Council of Government's (SACOG) Metropolitan Transportation Plan's growth assumptions and, therefore, would be inconsistent with the SMAQMD's air quality attainment plan. Mitigation is proposed requiring an Air Quality Mitigation Plan (AQMP) that reduces the estimated ozone precursor emissions of the SOIA Area by 35 percent when compared with the potential emissions that could occur in the SOIA Area in the absence of the policies and measures in the AQMP, and coordinate development of the AQMP with SMAQMD and SACOG. This would reduce the potential impact to less than significant, and it would support growth within the project area that is consistent with the SMAQMD air quality attainment plan. Therefore, a significant impact associated with air quality violations (construction and operations) and air quality attainment plan consistency would not occur. Operational activities associated with other planned and approved projects would emit air pollutants, which, depending on the nature of the project, may or may not exceed SMAQMD thresholds. However, because the proposed project would not exceed SMAQMD growth consistency thresholds, its air emissions would be within the regional air emissions budget; therefore, it can be assumed not to be cumulatively considerable.

# 4.2.4 - Biological Resources

The geographic scope of the cumulative agricultural resources analysis is the SOIA Area and areas within 2 miles of the project area. Generally, biological resource impacts tend to be localized, depending on the species or habitat being considered; therefore, a 2-mile buffer around the SOIA Area provides for a conservative evaluation of cumulative impacts.

#### **Cumulative Effects**

Development and land use activities within both the SOIA Area and nearby areas have the potential to result in impacts to special-status plant and animal species, sensitive natural habitat, and trees. Mitigation is included that requires project-level biological surveys; avoidance, preparation and implementation of a Habitat Conservation Management Plan (HCMP); a tree survey, and a tree preservation and monitoring plan; Swainson's hawk and other raptor preconstruction surveys and avoidance actions; and permitting compliance with federal and state wetlands, waterways and streambed alterations and wetland habitat mitigation that would reduce impacts to less than significant level. All other project-related biological impacts were found to be less than significant and did not require mitigation. Other projects that result in similar impacts would be required to mitigate for their impacts. Although the proposed project can mitigate all of its biological impacts to a level of less than significant, it would have a significant and unavoidable cumulative effect when considered with growth and development on a regional scale.

#### 4.2.5 - Cultural Resources

The geographic scope of the cumulative cultural resources analysis is the SOIA Area and areas within 1 mile of the project area. Generally, cultural resource impacts tend to be localized; therefore, a 1-mile buffer around the SOIA Area provides a conservative evaluation of cumulative impacts.

Future development and land use activities within both the SOIA Area and nearby areas have the potential to result in impacts to documented and undiscovered cultural resources such as artifacts, fossils, and burial sites. The general plan, other long-term planning documents, and regulatory agency guidance establish policies that require mitigation for impacts on potential cultural resources (e.g., evaluation requirements and inadvertent discovery procedures). Furthermore, these documents call for protection of known historic resources and mitigation in instances where previously undiscovered resources are encountered. Mitigation is proposed requiring a comprehensive cultural survey and paleontological resources survey would reduce the impact to less than significant. Because the proposed project can mitigate all of its cultural and paleontological impacts to a level of less than significant, it would not have a related cumulative considerable impact.

## 4.2.6 - Geology, Soils, and Seismicity

The geographic scope of the cumulative geology, soils, and seismicity analysis is the SOIA Area and areas within 2 mile of the project area. Geologic, soil, and seismic impacts tend to be localized; therefore, a 1-mile buffer around the SOIA Area provides for a conservative evaluation of cumulative impacts.

Future development and land use activities within both the SOIA Area and nearby areas have the potential to result in impacts to seismic hazards (e.g., fault rupture, ground shaking, liquefaction, landsliding), erosion, unstable soils and geologic units, and expansive soils. The general plan, other long-term planning documents, and regulatory agency guidance establish policies that require compliance with building code standards, the preparation of geotechnical and soil studies for new

development, and avoidance of geologically unstable areas. In addition, mitigation is proposed requiring the City to demonstrate compliance with City General Plan policies, develop a Master Stormwater Pollution Prevention Plan, and develop a Stormwater Quality Plan that would reduce the impacts to less than significant. Because the proposed project can mitigate all of its geologic impacts to a level of less than significant, it would not have a related cumulative considerable impact.

# 4.2.7 - Greenhouse Gas Emissions

The geographic scope of the cumulative greenhouse gas analysis is the San Joaquin Valley Air Basin. Air pollution is regarded as a regional issue; therefore, this area would be the area most likely to be impacted by project emissions.

All of the projects listed in Table 4-1 would result in new air emissions. The proposed project would have significant impacts related to greenhouse gas generation and greenhouse gas plan consistency. Combined, the project and other projects within the Sacramento Valley Air Basin would have a significant cumulative impact. However, the project would implement mitigation to reduce its impacts to a less than significant level; therefore, the project's cumulative contribution would also be less than significant because greenhouse gas impacts are a cumulative impact. Other projects that result in similar impacts would be required to mitigate for their impacts.

# 4.2.8 - Hazards and Hazardous Materials

The geographic scope of the cumulative hazards and hazardous materials analysis is the SOIA Area and areas within 2 miles of the project area. Hazard impacts tend to be localized; therefore, a 2-mile buffer around the SOIA Area provides for a conservative evaluation of cumulative impacts.

Future development and land use activities within both the SOIA Area and nearby areas have the potential to result in impacts associated with hazardous materials usage, risk of upset, exposure of schools, emergency evacuation, and wildfires. The general plan, other long-term planning documents, and regulatory agency guidance establish policies that require compliance with hazardous materials handling regulations, inspection and reporting requirements, first responder training, identification of evacuation and response procedures, and wildfire protection measures. Therefore, the proposed project would not have cumulatively considerable hazard and hazardous material impacts.

# 4.2.9 - Hydrology and Water Quality

The geographic scope of the cumulative hydrology and water quality analysis consists of the two watersheds the SOIA Area straddles (American River and Cosumnes River). Hydrologic and water quality issues have the potential to affect downstream areas; therefore, using watersheds as a basis for analysis provides for a conservative evaluation of cumulative impacts.

#### Cumulative Effects

Future development and land use activities within both the SOIA Area and nearby areas have the potential to create adverse impacts associated with water quality, groundwater, flooding, and drainage. Mitigation is included that may require preparation of a Stormwater Pollution Prevention Plan (SWPPP), comprehensive drainage plan, and storm water quality control plan that would reduce impacts to less than significant level. In addition, mitigation to demonstrate a Plan for Services would reduce the project's potential to deplete groundwater supplies to less than significant. All other project-related hydrological impacts were found to be less than significant and did not require mitigation. Other projects that result in similar impacts would be required to mitigate for their impacts. Because the proposed project can mitigate all of its hydrologic impacts to a level of less than significant through implementing Best Management Practices during construction, implementing drainage plans to identify and reduce pollutants before they reach surface waters, ensuring sufficient and sustainable water supplies to serve increased demand, reducing contribution to downstream flood elevations, and eliminating potential for structures to be located within a flood plain, it would not have a related cumulative considerable impact.

#### 4.2.10 - Land Use and Planning

The geographic scope of the cumulative land use analysis is the SOIA Area and jurisdictions that border the project area. Land use decisions are made at the jurisdictional level; therefore, the use of jurisdictions constitutes an appropriate geographic scope.

Future development and land use activities within both the SOIA Area and neighboring jurisdictions have the potential to create adverse impacts associated with division of an established community and inconsistency with adopted land use plans. The general plan, other long-term planning documents, and regulatory agency guidance establish policies that require the evaluation of land use compatibility and compliance with applicable requirements. It should be noted that development and land use activities are required to be consistent with the General Plan and Zoning Ordinance. Since approval of an SOIA by LAFCo indicates that the Commission has designated the revised SOIA Area for future urbanization, impacts related to permanent conversion of agricultural uses to urban uses would be potentially significant. In addition, impacts related to permanent conversion of open space uses to urban uses would be potentially significant. Implementation of Mitigation Measure AG-1 would reduce the conversion of open space and agricultural resources, but impacts would remain significant and unavoidable.

#### 4.2.11 - Mineral Resources

The geographic scope of the cumulative mineral resources analysis is Sacramento County. Mineral resources are most commonly evaluated in the context of countywide resources; therefore, it is most appropriate to use this as the basis for assessing cumulative impacts.

Future development within the County will contribute to the continuing loss of mineral resources. This loss will result from urban development and conversion of Mineral Resource Zones to urban uses. However, the SOIA Area is not located in areas that have been designated as mineral resources zone. Therefore, future urbanization of proposed project would not have cumulatively considerable mineral resource impacts.

#### 4.2.12 - Noise

The geographic scope of the cumulative noise analysis is the project vicinity, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the area within 0.5-mile of the project site would be the area most affected by project activities.

Development within the SOIA Area would result in increased traffic noise along roadways used by project-generated traffic. As indicated in Section 3.12, Noise, the traffic noise increases associated with such development would range from 0 to 10 dB L<sub>dn</sub> relative to cumulative conditions without the project. The project-related increases would exceed the project thresholds of significance on nine roadway segments. As a result, this impact is considered significant. While repaying the affected segments using open-graded asphalt, rubberized asphalt, or similar material could reduce traffic noise levels 4 dB, thereby reducing this impact to a level of insignificance along some segments, this measure would not provide the required to degree of noise reduction to fully mitigate this impact along all affected roadway segments. In addition, because of driveway access requirements and other physical constraints, the construction of solid noise barriers at the existing residences located along these impacted sections is similarly considered infeasible. The Sacramento County General Plan Policy NO-9 pertains to increased traffic noise levels that result from capacity-enhancing roadway improvement projects. However, this policy does not appear to be applicable to the general citywide increase in traffic noise levels that would result from future buildout of the SOIA Area. Other projects shown in Table 4-1 would generate trips that contribute to this cumulative impact. As such, the proposed project would have a cumulatively considerable impact.

## 4.2.13 - Population and Housing

The geographic scope of the cumulative population and housing analysis is Sacramento County, which is the area most likely to be affected by project activities.

Future development and land use activities within both the SOIA Area and Sacramento County would result in population and employment growth. The City of Elk Grove is proposing expansion of its SOI boundary to accommodate future population and housing growth and help in achieving jobs housing balance. However, the increase in SOI would exceed the current projected growth needs of the City. Mitigation is proposed that requires the City to demonstrate SOIA Area consistency with the adopted City Housing Element. Because the proposed project can mitigate all of its population and housing impacts to a level of less than significant, it would not have a related cumulative considerable impact.

#### 4.2.14 - Public Services

The geographic scope of the cumulative public services and recreation analysis is the SOIA Area and the service areas of the public service providers that may potentially serve the project area, such as the Cosumnes Community Services District's Fire Department, the City of Elk Grove Police Department, the City of Elk Grove and the Cosumnes Community Services District Parks Department, the Cosumnes Community Services District, the Sacramento Public Library Authority, and the Elk Grove Unified School District.

Future development and land use activities within both the SOIA Area and neighboring jurisdictions have the potential to increase demands for such public services as fire protection, emergency medical response, police protection, schools, parks, libraries, and recreational facilities. Specifically, the assumed growth projection for the SOIA would lead to an indirect increase in the need for higher levels of fire protection, including additional staffing, vehicles, and facilities, as well as enhanced level of law enforcement services. Mitigation is proposed to reduce these impacts to less than significant; therefore, the proposed project would not have cumulatively considerable public service and recreation impacts.

## 4.2.15 - Transportation/Traffic

The geographic scope of the cumulative transportation analysis is the Sacramento area.

Future development and land use activities within the SOIA Area would generate 218,000 vehicle trips per day. The traffic analysis identified several roadways that would operate at an unacceptable level of service and would require improvements should the SOIA Area become fully developed in the future. Mitigation is proposed requiring the applicant to provide fair-share impact fees to fund the future improvements. However, some of the roadways affected by this mitigation measure would not be in the jurisdiction of the City of Elk Grove. Other planned and approved projects would also add significant numbers of new trips to local roadways. Therefore, the proposed project, in conjunction with other projects, would have a cumulatively considerable contribution to unacceptable roadway and freeway operations. This would be a significant and unavoidable impact.

Future development and land use activities within the SOIA Area would implement mitigation measures that would require update to the City's Bicycle and Pedestrian Master Plan as well as its Transit Master Plan. It is reasonable to assume that other projects would also be required to provide public transit, bicycle, and pedestrian access. Therefore, the proposed project, in conjunction with other projects, would not have any cumulatively considerable impacts on these transportation-related areas.

## 4.2.16 - Utilities and Service Systems

The geographic scope of the cumulative utility systems analysis is the SOIA Area and the service areas of the utility providers that may potentially serve the project area, such as the Sacramento

County Water Agency, the Sacramento Area Sewer District, the Cosumnes Community Services District, the Sacramento Municipal Utility District, the Sacramento Regional County Sanitation District, and Pacific Gas and Electricity).

Future development and land use activities within both the SOIA Area and neighboring jurisdictions have the potential to increase demands for utilities including water, wastewater, storm drainage, solid waste, and energy. Mitigation is proposed that would require that City demonstrate that there is adequate water and wastewater treatment capacity and infrastructure planned or available prior to annexation activity. Mitigation is also proposed that would require the City to demonstrate that adequate solid waste services would be extended to the SOIA Area commensurate with and to service future development prior to annexation activity. All other impacts related to utilities were found to be less than significant and did not require mitigation. Other projects that result in similar impacts would be required to mitigate for their impacts. Because the proposed project can mitigate all of its impacts to a level of less than significant, it would not have a related cumulative considerable impact.