July 28, 2017

Kammerer Road/Highway 99 Sphere of Influence Amendment ***Recirculated*** Draft Environmental Impact Report

LAFC#07-15
State Clearinghouse Number: 2016032015



Prepared for:

Sacramento Local Agency Formation Commission

AECOM

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ACRONYMS AND OTHER ABBREVIATIONS

2030 General Plan	Sacramento County General Plan of 2005–2030
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
ACMs	asbestos-containing materials
ACS	American Community Survey
ACWA	Association of California Water Agencies
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
af	acre-feet
afy	acre-feet per year
AG-80	Agricultural, 80-acre minimum
Application Area	Kammerer/99 Sphere of Influence Amendment
APSA	Aboveground Petroleum Storage Act
Basin Plan	Sacramento River and San Joaquin River Basins
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BMPs	best management practices
CAFE	Corporate Average Fuel Economy
Cal EMA	California Emergency Management Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal OSHA	California Occupational Safety and Health Administration
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CALGreen Code	California Green Building Standards Code
CalRecycle	California Integrated Waste Management Board
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPSA	California Aboveground Petroleum Storage Act
CCR	California Code of Regulations
CCSD	Cosumnes Community Services District
CDE	California Department of Education
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDP	Census Designated Place
CEC	California Energy Commission
Central Sacramento County GMP	Central Sacramento County Groundwater Management Plan
CEQA	California Environmental Quality Act
CEQA Guidelines	California Environmental Quality Act Guidelines
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CESA	California Endangered Species Act
CFC	California Fire Code
CFD	Community Facilities District
CFR	Code of Federal Regulations
CHP	California Highway Patrol

City	City of Elk Grove
CIWMA	California Integrated Waste Management Act
CKH Act	Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CVP	Central Valley Project
CWA	Clean Water Act
CWC	California Water Code
CWHR	California Wildlife Habitat Relationships
dbh	diameter at breast height
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DEHP	di[2-ethylhexyl]phthalate
Delta	Sacramento-San Joaquin Delta
dioxin	2,3,7,8-TCDD
DOC	California Department of Conservation
DOF	California Department of Finance
DOT	Sacramento County Department of Transportation
DPR	California Department of Pesticide Regulation
Draft EIR	previously circulated Draft Environmental Impact Report
DTSC	California Department of Toxic Substances Control
DWQ	Division of Water Quality
DWR	California Department of Water Resources
ECOS	Environmental Council of Sacramento
EDD	Employment Development Department
EGPD	City of Elk Grove's Police Department
EGUSD	Elk Grove Unified School District
EMA	Emergency Management Agency
EMD	Environmental Management Department
EMTs	emergency medical technicians
EPA	U.S. Environmental Protection Agency
EPAct	Energy Policy Act of 1992
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Federal Endangered Species Act
ez-tran	e-Tran neighborhood shuttle service
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FOSH	Friends of the Swainson's Hawk
FRA	Federal Railroad Association
GHG	greenhouse gas
GIS	geographic information system
GWh	gigawatt hours
HMBPs	Hazardous Materials Management Business Plans
HOV	high occupancy vehicle

HVAC	heating, ventilation, and air conditioning
I-5	Interstate 5
IEPR	Integrated Energy Policy Report
IGR	Intergovernmental Relations
Important Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
IPaC	Information, Planning, and Conservation System
ITS	intelligent transportation system
JPA	Joint Powers Authority
kBtu	British thermal units
kWh	million kilowatt-hours
LAFCo	Sacramento Local Agency Formation Commission
LEAs	local enforcement agencies
LID	low impact development
LOS	level of service
LRA	local responsibility area
LRSP	Laguna Ridge Specific Plan
LUPs	Linear Underground/Overhead Projects
Manual	Policy, Standards, and Procedures Manual
Master Plan	*Facilities Master Plan 2015–2025 Update*
Master Plan	Elk Grove Bicycle, Pedestrian, and Trails Master Plan
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MM therms	million therms
MMRP	Mitigation Monitoring and Reporting Program for the Connector Project
MPOs	Metropolitan Planning Organizations
MSDS	Material Safety Data Sheets
MSR	Municipal Services Review
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
MTP	Metropolitan Transportation Plan
MUN	Municipal and domestic supply
MW	megawatts
NAL	Numeric Action Levels
NEL	Numeric Effluent Limitations
NFPA	National Fire Protection Association
NHTSA	National Highway Traffic and Safety Administration
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
NTU	Nephelometric Turbidity Units
OES	California Office of Emergency Services
OPR	Governor's Office of Planning and Research
OSFM	Office of the State Fire Marshal
OSHA	U.S. Department of Labor, Occupational Safety and Health Administration
P.E.	Professional Engineer
PCBs	polychlorinated biphenyls

PG&E	Pacific Gas and Electric Company
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
POU	Place of Use Agreement
ppd	pounds per day
Preserve	Cosumnes River Preserve
proposed project	proposed Sphere of Influence Amendment
PSM	Process Safety Management
PUC	California Public Utilities Commission
RCRA	Resource Conservation and Recovery Act of 1976
REAP	Rain Event Action Plan
RMP	Risk Management Plan
RRS	Renewable Portfolio Standard
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
Sacramento LAFCo	Sacramento Local Agency Formation Commission
SARA	Superfund Amendments and Reauthorization Act of 1986
SASD	Sacramento Area Sewer District
SB	Senate Bill
SCS	Sustainable Communities Strategy
SCSD	Sacramento County Sheriff's Department
SCWA	Sacramento County Water Agency
SEPA	Southeast Policy Area
SFD	City of Sacramento Fire Department
SFPD	School Facilities Planning Division
SGMA	Sustainable Groundwater Management Act
SHMP	State Hazard Mitigation Plan
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMFD	Sacramento Metro Fire District
SMUD	Sacramento Municipal Utility District
SOI	Sphere of Influence
SOIA	Sphere of Influence Amendment
SOIA Area	Sphere of Influence Amendment Area
SPCC	Spill Prevention, Control, and Countermeasure
SR	State Route
SRCSD	Sacramento Regional County Sanitation District
SRWTP	Sacramento Regional Wastewater Treatment Plant
SSHCP	South Sacramento Habitat Conservation Plan
STA	Sacramento Transportation Authority
SWP	State Water Project
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TCR	Transportation Concept Report
TDM	Transportation Demand Management Program
TFS	Tank Facility Statements
TMDL	total maximum daily loads
U.S. EPA	U.S. Environmental Protection Agency
UDA	Urban Development Area
Unified Program	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

UPA	Sacramento County Urban Policy Area
USACE	United States Army Corps of Engineers
USB	Sacramento County Urban Services Boundary
USC	U.S. Code
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
UWMP	Urban Water Management Plan
v/c	volume/capacity ratio
VMT	vehicle miles traveled
WDRs	Waste Discharge Requirements
WFA	Water Forum Agreement
WPCP	Water Pollution Control Plan
WRF	Water Reclamation Facility
WSIP	Water System Infrastructure Plan
WSMP	*Water Supply Master Plan*
WTP	Water Treatment Plant
ZNE	zero net energy
Zone 40 WSIP	*Zone 40 Water System Infrastructure Plan*
Zone 41 UWMP	*2010 Zone 41 Urban Water Management Plan*

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EXECUTIVE SUMMARY

ES.1 PURPOSE

This Recirculated Draft Environmental Impact Report is part of the ongoing environmental review process for the proposed Sphere of Influence (SOI) Amendment (SOIA) (proposed project) and was prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the project (LAFC #07-15, State Clearinghouse Number 2016032015). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.).

Where an agency decides to recirculate a document, the agency can reissue only the revised part or parts of the EIR, rather than a whole new document. As noted in CEQA Guidelines, Section 15088.5(c), "If the revision is limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified." This document is a *partially* recirculated EIR because new information has been added or changed in portions of the Draft EIR after it was initially circulated for public comment in February 2017.

The environmental impacts of the proposed project are analyzed in the Recirculated Draft EIR to the degree of specificity appropriate, in accordance with CEQA Guidelines Section 15146. This document addresses the potentially significant adverse environmental impacts that may be directly or indirectly associated with the proposed SOIA expansion. There are no specific land use entitlements proposed at this time in conjunction with the proposed SOIA. No physical development is proposed in conjunction with the proposed application. However, this Recirculated Draft EIR acknowledges that future urbanization of the project area may occur as an indirect result of this SOIA; therefore, this Recirculated Draft EIR contains an analysis of indirect environmental impacts attributable to, or which could result from the proposed project. This Recirculated Draft EIR is intended to serve as an informational document for the public agency decision makers and the public regarding the proposed project.

Recirculation of an EIR requires notice pursuant to CEQA Guidelines Section 15087 and consultation pursuant to CEQA Guidelines Section 15086.

ES.2 PROJECT SUMMARY

ES.2.1 PROJECT SETTING

The proposed project site is located in the unincorporated area of Sacramento County, California. The affected territory includes a 1,156-acre area that abuts the southern portion of the City of Elk Grove's existing jurisdictional boundary. Exhibit ES-1 depicts the SOIA Area's regional location, which is to the southwest of the existing City of Elk Grove boundary. Exhibit ES-2 depicts the SOIA Area. The SOIA Area consists of approximately 1,156 acres west of State Route 99 (SR 99), south of Kammerer Road, and east of McMillan Road (future Big Horn Boulevard). The SOIA Area is depicted on the Bruceville U.S. Geologic Survey (USGS) 7.5-minute topographic map, Township 6 North, Range 5 East, Sections 13, 14, and portions of Sections 22 and 23 and Galt USGS 7.5-minute topographic map, Township 6 North, Range 6 East, Section 18 and a portion of Section 19.

The SOIA Area is currently within the jurisdiction of the County of Sacramento and is entirely outside of the County's General Plan Urban Services Boundary.

The SOIA Area is not impacted by any airport overflight restrictions, is naturally outside of both regional (Cosumnes River) and local 100-year floodplains. While it is outside the County's Urban Services Boundary, the boundary of the SOIA Area is adjacent to existing municipal ~~urban~~ services facilities for sanitary sewer, water, storm drainage, transportation, power, and communication utility systems.

The SOIA Area is primarily utilized for extensive dry farmed and irrigated croplands and vineyard operations. A cluster of buildings supporting the agricultural operations exists on the most easterly parcel.

The SOIA Area has been disturbed and leveled over decades to facilitate commercial farming operations. Drainage has been achieved via a series of highly maintained agricultural ditches which generally follow field boundaries. Irrigation to the eastern vineyards is achieved by an old SR 99 borrow pit modified as a storm/irrigation runoff holding facility that is fully maintained on the most easterly parcel.

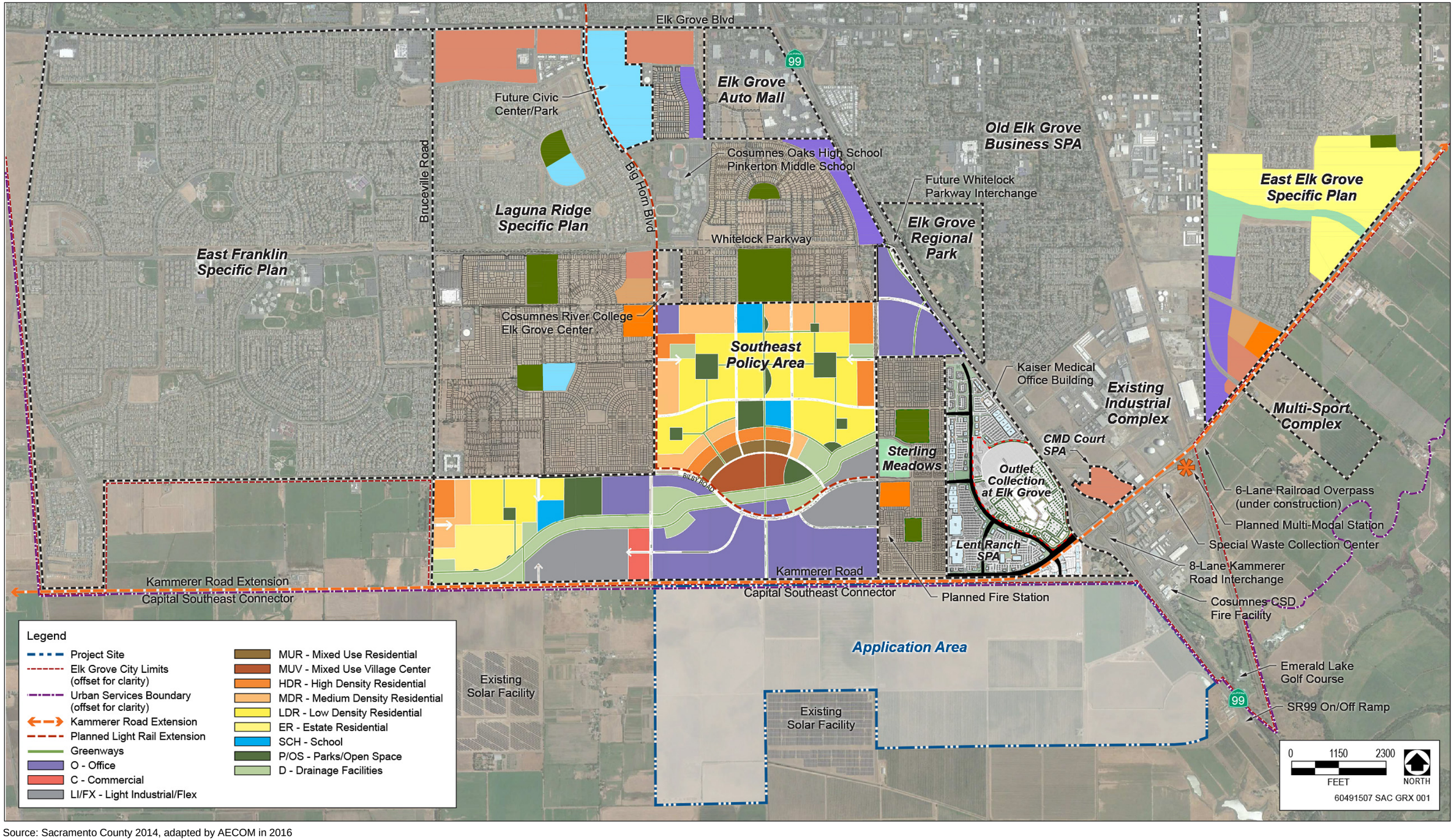
ES.2.2 PROJECT DESCRIPTION

The proposed project is a landowner initiated proposal to amend the City of Elk Grove SOI, the Sacramento Area Sewer District (SASD) SOI, and the Sacramento Regional County Sanitation District (SRCSD) SOI to add approximately 1,156 acres in an area just south of, and adjacent to the City of Elk Grove's current City limits. The current City boundaries encompass 27,032 acres. The proposed SOIA would expand the existing coterminous SOI, not City limits, by 1,156 acres, or 4.1 percent, to a total SOI area of 28,188 acres.

Sacramento LAFCo is the CEQA lead agency for the proposed SOIA. A SOI is defined by Government Code Section 56425 as a plan for the probable physical boundary and service area of a local governmental agency, including areas adjacent to the existing service area of a jurisdiction where services might reasonably be expected to be provided in the next 20 years.

As previously stated, the project does not include any development proposal and does not provide for any changes in land use. Any future City of Elk Grove development would first require an annexation request to Sacramento LAFCo. Annexation may occur in multiple phases or under a single application, depending on the timing and nature of future project applications. There are no changes in the existing land use proposed at this time; existing Sacramento County General Plan and zoning designations will remain in place even if LAFCo were to approve the requested SOIA. The City would use the amended SOI boundary in discussions with future applicants, Sacramento County, affected service providers, landowners, residents, and stakeholders.

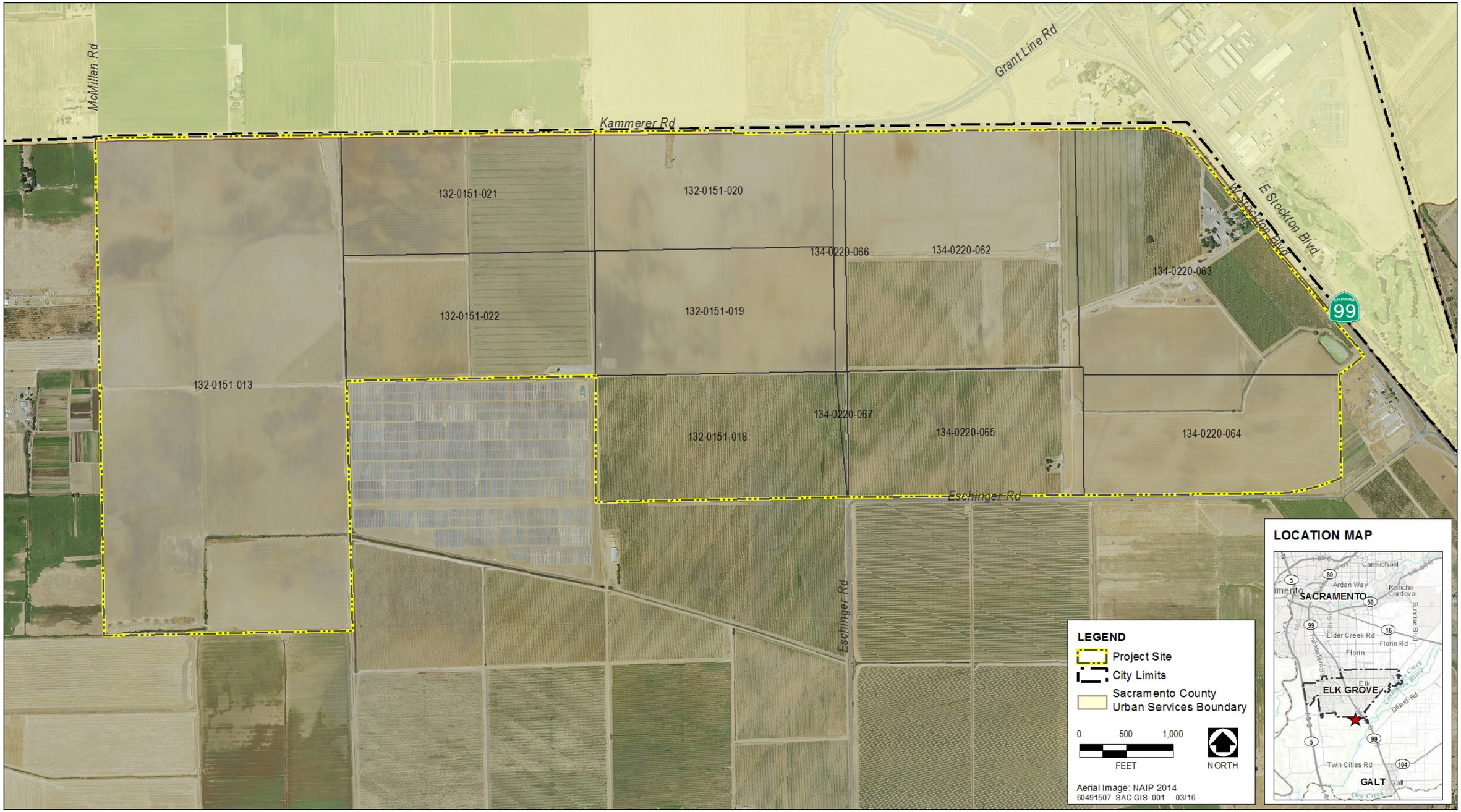
The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH) includes provisions for amending spheres of influence. This SOIA would allow the City of Elk Grove and other service providers to plan for future urbanization, but it does not authorize changes in land use or governance. Lands within an amended SOI would not be under the City's jurisdiction until future pre-zoning and/or development applications are received and requests for annexation of those parcels are approved by Sacramento LAFCo. The proposed project does not include an annexation request. There will not be any change to the land use ~~or taxation~~ jurisdiction, in the event that LAFCo approves the proposed SOIA.



Source: Sacramento County 2014, adapted by AECOM in 2016

Exhibit ES-1 **Regional Location Map**

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Source: Sacramento County 2014, adapted by AECOM in 2016

Exhibit ES-2

Elk Grove Proposed Sphere of Influence Amendment Area

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LAND USE SCENARIO

While there are no changes to land uses proposed as part of this project, in order to facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario.

The applicant-proposed array of land uses has been derived from the recently approved Southeast Policy Area (SEPA) land use distribution adjacent to the north, in order to facilitate project analysis. The applicant estimates that the project site could accommodate development that could provide 18,000 to 20,000 jobs in office, industrial, and commercial settings. The SOIA application identifies a jobs-to-housing ratio ranging from 3.6:1 to 5.0:1. Development could include a significant employment component near the Grant Line Road/SR 99 interchange and along the Kammerer Road (future Capital Southeast Connector) corridor. Additionally, for the purposes of analysis, the applicant has identified that the project site could accommodate the development of a broad array of housing types, with a total of 4,000 to 5,000 dwelling units. For the purposes of analysis, the applicant notes that future proposed development would involve supportive infrastructure, public lands, and retail development that is oriented to future employment areas.

Since the project is a SOIA only, it does not include any land use plan or pre-zoning. LAFCo has no land use authority. If the SOIA is approved and annexation to the City of Elk Grove is subsequently proposed, land use planning would occur under the City's jurisdiction. Pre-zoning of the affected territory by the City would be required prior to any application for annexation.

The project also does not include any indication of any timeline of development or phasing for future development.

MUNICIPAL SERVICES REVIEW

The CKH requires completion and Commission acceptance of a Municipal Service Review (MSR) to assess the adequacy of required infrastructure and services capacity and availability of means of financing prior to any modification of an SOI boundary. The MSR is not a project subject to CEQA review. The MSR is being prepared concurrently with this EIR. This document will evaluate potential options for providing municipal services and the actions required to change the service boundaries of municipal service providers. While the MSR is not subject to CEQA review, it may serve to inform the environmental review process.

INFRASTRUCTURE AND SERVICES

The proposed SOIA application includes amendments to the Sacramento Area Sewer District (SASD) and Sacramento Regional County Sanitation District (SRCSD) SOIs. The review process affords the opportunity for potential service providers to provide input to LAFCo regarding future infrastructure and service demand for the proposal. Annexation of the affected territory would be required to enable service to be provided. If the proposed SOIA Area were annexed to the City of Elk Grove and proposed for development, this would require the full complement of municipal services, including water, wastewater collection and treatment, flood protection, solid waste and recycling, police, fire, library services, transportation facilities and maintenance, street lighting, electricity, natural gas, communications, and parks and recreation. Each of these items is to be examined more fully in the MSR.

ES.2.3 PROJECT OBJECTIVES

This Kammerer/99 SOIA requests Sacramento Local Agency Formation Commission's (Sacramento LAFCo) approval to amend the City's SOI, which is coterminous with its current City boundary, to include approximately 1,156 acres adjacent to the City's southern boundary.

A key policy benefit ~~The purpose~~ of a city SOI is to provide estimated holding capacity for a city to be able to plan for employment opportunities and an expanding population. The nature of this project – a SOIA request – has important implications for the project objectives, as does LAFCo's role as the lead agency for this project. As detailed in Chapter 2 of this EIR, "Project Description," the project is a landowner initiated proposal to amend the SOIs of the City of Elk Grove, SASD, and the SRCSD. The project does not propose land use change or development. Therefore, project objectives do not focus on outcomes that relate to land use, development type or scale, or spatially specific planning components within the proposed SOIA Area. Also, LAFCo has the authority to approve, modify and approve, or disapprove applications, and to impose mitigation measures and conditions of approval, but cannot impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements. Consistent with LAFCo's role, the project objectives do not dictate outcomes related to future land use, density, development intensity, or related topics that are the purview of local land use entitlement authorities in California.

Specific, project-related objectives include the following:

- Amend the SOI boundary beyond the existing Elk Grove City limits to accommodate orderly and sustainable growth consistent with the City's General Plan.
- Implement the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 consistent with public service conditions present or reasonably foreseeable in the proposed SOIA Area.
- Establish a logical boundary within which future annexation requests into the City of Elk Grove may be considered.
- Consider providing land to accommodate a jobs-housing ratio for the City of Elk Grove that provides for sufficient residential and employment-generating lands uses to minimize the need for commuting to or from other jurisdictions.
- Establish an SOI for the City of Elk Grove that will facilitate the protection of important environmental, cultural, and agricultural resources.

ES.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table ES-1 summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project in this Recirculated Draft EIR (i.e., Agricultural Resources; Biological Resources; Energy; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use, Population, Housing, Employment, Environmental Justice, and Disadvantaged Unincorporated Communities; Public Services and Recreation; Transportation; and Utilities and Service Systems). The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding section of this Recirculated Draft EIR. Table ES-1 is included in the Recirculated Draft EIR as required by CEQA Guidelines Section 15123(b)(1).

Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
3.2 Agricultural Resources			
3.2-1: Direct loss of agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance	S	**3.2-1: Preserve Agricultural Land** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require that applicants protect one (1) acre of existing farmland land of equal or higher quality for each acre of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance that would be developed as a result of the project. This protection may consist of the establishment of a farmland conservation easement, farmland deed restriction, or other appropriate farmland conservation mechanism to ensure the preservation of the land from conversion in perpetuity, but may also be utilized for compatible wildlife habitat conservation efforts (e.g., Swainson's hawk foraging habitat mitigation) that substantially impairs or diminishes the agricultural productivity of the land. The farmland/wildlife habitat land to be preserved must have adequate water supply to support agricultural use. The City shall consider the benefits of preserving farmlands in proximity to other protected lands. <u>The preservation of farmland may be done at one time, or in increments with the buildout of the SOIA Area.</u> The total acres of land conserved will be based on the total on-site agriculture acreage converted to urban uses. Conserved agriculture areas may include areas on the project site, lands secured for permanent habitat enhancement (e.g., giant garter snake habitat, Swainson's hawk habitat), or additional land identified by the City. The City shall attempt to locate preserved farmland within 5 miles of the SOIA Area; however, the preserved farmland shall at a minimum be located inside Sacramento County. The City shall impose the conservation easement content standards to include, at a minimum: land encumberance documentation; documentation that the easements are permanent, monitored, and appropriately endowed <u>for administration, monitoring, and enforcement of the easements</u>; prohibition of activity which substantially impairs or diminishes the agricultural productivity of the land; and protection of water rights. In addition, the City shall impose the following <u>or equally effective</u> minimum conservation easement content standards: a) All owners of the agricultural/wildlife habitat mitigation land shall execute the document encumbering the land. b) The document shall be recordable and contain an accurate legal description of the agricultural/wildlife habitat mitigation land. c) The document shall prohibit any activity that substantially impairs or diminishes the agricultural productivity of the land. If the conservation easement is also proposed for wildlife habitat mitigation purposes, the document shall also prohibit any activity that substantially impairs or diminishes the wildlife habitat suitability of the land. d) The document shall protect any existing water rights necessary to maintain agricultural uses on the land covered by the document and retain such water rights for ongoing use on the	SU

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		agricultural/wildlife habitat mitigation land. e) Interests in agricultural/habitat mitigation land shall be held in trust by an entity acceptable to the City and/or by the City in perpetuity. The entity shall not sell, lease, or convey any interest in agricultural/wildlife habitat mitigation land that it acquires without the City's prior written approval. f) The applicant shall pay to the City an agricultural/wildlife habitat mitigation monitoring fee to cover the costs of administering, monitoring, and enforcing the document in an amount determined by the receiving entity, in an amount determined by the City. g) The City shall be named a beneficiary under any document conveying the interest in the agricultural/wildlife habitat mitigation land to an entity acceptable to the City. h) If any qualifying entity owning an interest in agricultural/wildlife habitat mitigation land ceases to exist, the duty to hold, administer, monitor, and enforce the interest shall be transferred to another entity acceptable to the City or transferred to the City. Before committing to the preservation of any particular farmland pursuant to this measure, the project proponent shall obtain the City's approval of the farmland proposed for preservation.	
3.2-2: Indirect loss of adjacent agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Local Importance or Lands Under Williamson Act Contract	S	**3.2-2: Prepare an Agricultural Land Use Compatibility Plan** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall prepare an agricultural land use compatibility plan for the SOIA Area. The plan shall include implementation of the City's Agricultural Activities ordinance (Municipal Code, Chapter 14.05, "Agricultural Activities"), as required under Elk Grove General Plan Policy CAQ-4-Action 1, site design, screening, fencing, landscaping, and setbacks. Prospective buyers of property adjacent to agricultural land shall be notified through the title report that they could be subject to inconvenience or discomfort resulting from accepted farming activities as per provisions of the City's Agricultural Activities ordinance (City of Elk Grove Municipal Code Chapter 14.05).	SU
3.4 Biological Resources			
3.4-1: Special-status plants	PS	**3.4-1: Conduct Special-status Plant Surveys; Implement Compensatory Mitigation for Special-status Plants** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of special-status plant species: • Retain a qualified botanist to conduct protocol-level preconstruction special-status plant surveys for potentially occurring species for each future proposed project following the CDFW rare plant survey protocols (CDFG 2009) or the most recent CDFW rare plant survey protocols. All plant species encountered on the project site shall be identified to the	LTS

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		taxonomic level necessary to determine species status. The surveys shall be conducted no more than 5 years prior and no later than the blooming period immediately preceding the approval of a grading or improvement plan or any ground disturbing activities, including grubbing or clearing. • Notify CDFW, as required by the California Native Plant Protection Act, if any special-status plants are found on the project site. Notify the USFWS if any plant species listed under the Endangered Species Act are found. • Develop a mitigation and monitoring plan to compensate for the loss of special-status plant species found during preconstruction surveys, if any. The mitigation and monitoring plan shall be submitted to CDFW or USFWS, as appropriate depending on species status, for review and comment. The City shall ~~consult~~ coordinate with these entities, as appropriate depending on species status, before approval of the plan to determine the appropriate mitigation measures for impacts on any special-status plant population. Mitigation measures may include preserving and enhancing existing on-site populations, creation of off-site populations on project mitigation sites through seed collection or transplantation, and/or preserving occupied habitat off-site in sufficient quantities to offset loss of occupied habitat or individuals. • If transplantation is part of the mitigation plan, the plan shall include a description and map of mitigation sites, details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements, and sources of funding to purchase, manage, and preserve the sites. The following performance standards shall be applied: The extent of occupied area and the flower density in compensatory reestablished populations shall be equal to or greater than the affected occupied habitat and shall be self-producing. • Reestablished populations shall be considered self-producing when: – plants re-establish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and – re-established habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types. • If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, and other details, as appropriate to target the preservation of long term viable populations.	

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
3.4-2: Special-status raptors and other nesting raptors	S	**3.4-2a: Avoid Direct Loss of Swainson's Hawk and Other Raptors** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of nesting Swainson's hawks and other nesting raptors: • Tree and vegetation removal shall be completed during the nonbreeding season for raptors (September 1–February ~~31~~15). • To avoid, minimize, and mitigate potential impacts on Swainson's hawk and other raptors (not including burrowing owl) nesting on or adjacent to the SOIA Area or possible off-site improvement areas, retain a qualified biologist to conduct preconstruction surveys and identify active nests on and within 0.5 mile of the project site for construction activities conducted during the breeding season (March 1–~~August 31~~September 15). The surveys shall be conducted before the approval of grading and/or improvement plans (as applicable) and no less than 14 days and no more than 30 days before the beginning of construction. Guidelines provided in *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley* (Swainson's Hawk Technical Advisory Committee 2000) shall be followed for surveys for Swainson's hawk. If no nests are found, no further mitigation will be required. • Impacts on nesting Swainson's hawks and other raptors shall be avoided by establishing appropriate buffers around active nest sites identified during preconstruction raptor surveys. No project activity shall commence within the buffer areas until a qualified biologist has determined, in coordination with CDFW, the young have fledged, the nest is no longer active, or reducing the buffer would not result in nest abandonment. ~~CDFW guidelines recommend implementation of 0.25- or 0.5-mile-wide buffers for Swainson's hawk nests, but the~~ The buffer distance for Swainson's Hawk nests shall be determined by ~~size of the buffer may be decreased if~~ a qualified biologist and the City, in ~~consultation~~ coordination with CDFW, ~~determine that such an adjustment would not be likely to adversely affect the nest~~ based on the distance required to avoid adversely affecting the nest(s). • The appropriate no-disturbance buffer for other raptor nests (i.e., species other than Swainson's hawk) shall be determined by a qualified biologist based on site-specific conditions, the species of nesting bird, nature of the project activity, visibility of the disturbance from the nest site, and other relevant circumstances. • Monitoring of all active raptor nests by a qualified biologist during construction activities will be required if the activity has potential to adversely affect the nest. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. The qualified biologist will have the authority to shut down construction activities within a portion or all of a construction site if necessary to avoid nest	SU – Swainson's Hawk LTS – all others

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		abandonment or take of individuals. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined appropriate by a qualified biologist. **3.4-2b: Avoid Loss of Burrowing Owl** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of burrowing owl: • To avoid, minimize, and mitigate potential impacts on burrowing owl, applicants for each future project shall retain a qualified biologist to conduct focused breeding and nonbreeding season surveys for burrowing owls in areas of suitable habitat on and within 1,500 feet of the project site. Surveys will be conducted prior to the start of construction activities for each project and in accordance with Appendix D of CDFW's Staff Report on Burrowing Owl Mitigation (2012) or the most recent CDFW protocols. • If no occupied burrows are found, a letter report documenting the survey methods and results will be submitted to the City and CDFW and no further mitigation will be required. • If an active burrow is found during the nonbreeding season (September 1 through January 31), owls will be relocated to suitable habitat outside of the project area using passive or active methodologies developed in ~~consultation~~ coordination with CDFW and may include active relocation to preserve areas if approved by CDFW and the preserve managers. No burrowing owls will be excluded from occupied burrows until a burrowing owl exclusion and relocation plan is developed by the project applicant and approved by CDFW. • If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows will not be disturbed and will be provided with a 150- to 1,500-foot protective buffer unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer will depend on the time of year and level of disturbance, as outlined in the CDFW Staff Report (2012, pg 9) or the most recent CDFW protocols. Once the fledglings are capable of independent survival, the owls will be relocated to suitable habitat outside the project area in accordance with a burrowing owl exclusion and relocation plan developed in ~~consultation~~ coordination with CDFW and the burrow will be destroyed to prevent owls from reoccupying it. No burrowing owls will be excluded from occupied burrows until a burrowing owl exclusion and relocation plan is approved by CDFW. Following owl exclusion and burrow demolition, the site shall be monitored by a qualified biologist to ensure burrowing owls do not recolonize the site prior to construction. • If active burrowing owl nests are found on the project site and these nest sites are lost as a result of implementing the project, the project applicant shall mitigate the loss through preservation of other known nest sites in Sacramento County, at a minimum ratio of 1:1. The	

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		applicant shall develop a mitigation and monitoring plan for the compensatory mitigation areas. • The mitigation and monitoring plan will include detailed information on the habitats present within the preservation areas, the long-term management and monitoring of these habitats, legal protection for the preservation areas (e.g., conservation easement, declaration of restrictions), and funding mechanism information (e.g., endowment). All burrowing owl mitigation lands shall be preserved in perpetuity and incompatible land uses shall be prohibited in habitat conservation areas. • The project applicants shall transfer said burrowing owl mitigation land, through either conservation easement or fee title, to a third-party, nonprofit conservation organization (Conservation Operator), with the City and CDFW named as third-party beneficiaries. The Conservation Operator shall be a qualified conservation easement land manager that manages land as its primary function. Additionally, the Conservation Operator shall be a tax-exempt nonprofit conservation organization that meets the criteria of Civil Code Section 815.3(a) and shall be selected or approved by the City, after ~~consultation~~ coordination with CDFW. The City, after ~~consultation~~ coordination with CDFW and the Conservation Operator, shall approve the content and form of the conservation easement. The City, CDFW, and the Conservation Operator shall each have the power to enforce the terms of the conservation easement. The Conservation Operator shall monitor the easement in perpetuity to ensure compliance with the terms of the easement. **3.4-2c: Prepare and Implement a Swainson's Hawk Foraging Habitat Mitigation Plan** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of Swainson's hawk foraging habitat: • Before the approval of grading and improvement plans or before any ground-disturbing activities, whichever occurs first, preserve suitable Swainson's hawk foraging habitat to ensure 1:1 mitigation for Swainson's hawk foraging habitat value lost as a result of the project. ~~Because the SOIA Area is currently zoned Ag 80, it is deemed to provide 100 percent foraging habitat value and the entire acreage must therefore be compensated at a 1:1 ratio.~~ Loss of foraging habitat resulting from possible future off-site improvements shall be compensated by preserving suitable Swainson's hawk foraging habitat to ensure 1:1 replacement of habitat value, based on zoning of the affected land, lost as a result of the project. The suitability of preservation habitat shall be determined by the City after ~~consultation~~ coordination with CDFW and a qualified biologist and shall be located within the geographical foraging area of the local nesting population as determined acceptable to CDFW.	

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		• Before approval of such proposed mitigation, the City shall ~~consult~~ coordinate with CDFW regarding the appropriateness of the mitigation. If mitigation is accomplished through conservation easement, then such an easement shall ensure the continued management of the land to maintain Swainson's hawk foraging values, including but not limited to ongoing agricultural uses and the maintenance of all existing water rights associated with the land. The conservation easement shall be recordable and shall prohibit any activity that substantially impairs or diminishes the land's capacity as suitable Swainson's hawk foraging habitat. • The project applicants shall transfer said Swainson's hawk mitigation land, through either conservation easement or fee title, to a third-party, nonprofit conservation organization (Conservation Operator), with the City and CDFW named as third-party beneficiaries. The Conservation Operator shall be a qualified conservation easement land manager that manages land as its primary function. Additionally, the Conservation Operator shall be a tax-exempt nonprofit conservation organization that meets the criteria of Civil Code Section 815.3(a) and shall be selected or approved by the City, after ~~consultation~~ coordination with CDFW. The City, after ~~consultation~~ coordination with CDFW and the Conservation Operator, shall approve the content and form of the conservation easement. The City, CDFW, and the Conservation Operator shall each have the power to enforce the terms of the conservation easement. The Conservation Operator shall monitor the easement in perpetuity to assure compliance with the terms of the easement. • The project applicants, after ~~consultation~~ coordination with the City, CDFW, and the Conservation Operator, shall establish an endowment or some other financial mechanism that is sufficient to fund in perpetuity the operation, maintenance, management, and enforcement of the conservation easement. If an endowment is used, either the endowment funds shall be submitted to the City to be distributed to an appropriate third-party nonprofit conservation agency, or they shall be submitted directly to the third-party nonprofit conservation agency in exchange for an agreement to manage and maintain the lands in perpetuity. The Conservation Operator shall not sell, lease, or transfer any interest of any conservation easement or mitigation land it acquires without prior written approval of the City and CDFW. • If the Conservation Operator ceases to exist, the duty to hold, administer, manage, maintain, and enforce the interest shall be transferred to another entity acceptable to the City and CDFW. The City shall ensure that mitigation habitat is properly established and is functioning as habitat by conducting regular monitoring of the mitigation site(s) for the first 10 years after establishment of the easement. • For development projects of less than 40 acres, project proponents may mitigate for the loss of Swainson's hawk foraging habitat through payment of an impact mitigation fee that will	

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		provide funds to acquire available land with suitable Swainson's hawk foraging habitat values as determined by the City in ~~consultation~~ coordination with CDFW.	
3.4.3a: Loggerhead shrike, Modesto song sparrow, tricolored blackbird, and common nesting birds	PS	**3.4-3a: Avoid Direct Loss of Loggerhead Shrike, Modesto Song Sparrow, and Protected Bird Nests** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~future project~~ that applicants ~~to~~ implement the following measures to mitigate the potential loss of protected bird nests: • To the extent feasible, vegetation removal, grading, and other ground disturbing activities will be carried out during the nonbreeding season for protected bird species in this region (generally September 1–January 31). • For any project activity that would occur during the nesting season (February 1–August 31), the project applicant shall conduct a preconstruction survey. The preconstruction survey shall be conducted by a qualified biologist before any activity occurring within 500 feet of suitable nesting habitat for any protected bird species. The survey shall be conducted within 14 days before project activity begins. • If an active nest of loggerhead shrike, song sparrow, other special-status bird species, or common bird species protected by the Migratory Bird Treaty Act or California Fish and Game Code is found, the qualified biologist shall establish a buffer around the nest. No construction activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active. The size of the buffer shall be determined in ~~consultation~~ coordination with CDFW. Buffer size is anticipated to range from 50 to 500 feet, depending on the species of bird, nature of the project activity, the extent of existing disturbance in the area, and other relevant circumstances, as determined by a qualified biologist in ~~consultation~~ coordination with CDFW. • Monitoring of all protected nests by a qualified biologist during construction activities will be required if the activity has potential to adversely affect the nest. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist.	LTS
3.4-3b: Tricolored blackbirds	PS	**3.4-3b: Avoid Impacts on Tricolored Blackbird Colonies** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require that applicants implement the following measures to mitigate the potential impacts on nesting colonies of tricolored blackbirds: • A qualified biologist shall conduct pre-construction surveys to determine if active tricolored	LTS

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		blackbird nests are present within a project footprint or within 500 feet of a project footprint. The biologist shall conduct pre-construction surveys within 30 days and within 3 days of ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. Pre-construction surveys shall be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities. • If active nests are found within the project footprint or within 500 feet of any project-related activity, a 500-foot temporary buffer around the active nest shall be maintained until the young have fledged. A qualified biologist experienced with tricolored blackbird behavior shall monitor the nest throughout the nesting season and to determine when the young have fledged. The biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction shall cease until the buffer size is increased to a distance necessary to result in no harm or harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with CDFW will be held to determine the best course of action to avoid nest abandonment or take of individuals. The biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone).	
3.4-4: Sandhill crane winter foraging habitat	PS	**3.4-4: Prepare and Implement a Sandhill Crane Foraging Habitat Mitigation Plan** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~future project~~ that applicants ~~to~~ implement the following measures to mitigate the potential loss of greater sandhill crane foraging habitat: • Before the approval of grading and improvement plans or before any ground-disturbing activities, whichever occurs first, preserve suitable sandhill crane foraging habitat to ensure 1:1 mitigation for foraging habitat lost as a result of the project. The suitability of preservation habitat shall be determined by the City after ~~consultation~~ coordination with CDFW and a qualified biologist and shall be located within five miles of the Cosumnes River Floodplain wintering population site. • Before approval of such proposed mitigation, the City shall ~~consult~~ coordinate with CDFW regarding the appropriateness of the mitigation. If mitigation is accomplished through conservation easement, then such an easement shall ensure the continued management of the land to maintain sandhill crane foraging values, including but not limited to ongoing agricultural uses and the maintenance of all existing water rights associated with the land.	LTS

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		The conservation easement shall be recordable and shall prohibit any activity that substantially impairs or diminishes the land's capacity as suitable sandhill crane foraging habitat. • The project applicants shall transfer said sandhill crane mitigation land, through either conservation easement or fee title, to a third-party, nonprofit conservation organization (Conservation Operator), with the City and CDFW named as third-party beneficiaries. The Conservation Operator shall be a qualified conservation easement land manager that manages land as its primary function. Additionally, the Conservation Operator shall be a tax-exempt nonprofit conservation organization that meets the criteria of Civil Code Section 815.3(a) and shall be selected or approved by the City, after ~~consultation~~ coordination with CDFW. The City, after ~~consultation~~ coordination with CDFW and the Conservation Operator, shall approve the content and form of the conservation easement. The City, CDFW, and the Conservation Operator shall each have the power to enforce the terms of the conservation easement. The Conservation Operator shall monitor the easement in perpetuity to assure compliance with the terms of the easement. • The project applicants, after consultation with the City, CDFW, and the Conservation Operator, shall establish an endowment or some other financial mechanism that is sufficient to fund in perpetuity the operation, maintenance, management, and enforcement of the conservation easement. If an endowment is used, either the endowment funds shall be submitted to the City to be distributed to an appropriate third-party nonprofit conservation agency, or they shall be submitted directly to the third-party nonprofit conservation agency in exchange for an agreement to manage and maintain the lands in perpetuity. The Conservation Operator shall not sell, lease, or transfer any interest of any conservation easement or mitigation land it acquires without prior written approval of the City and CDFW. • If the Conservation Operator ceases to exist, the duty to hold, administer, manage, maintain, and enforce the interest shall be transferred to another entity acceptable to the City and CDFW. The City shall ensure that mitigation habitat is properly established and is functioning as habitat by conducting regular monitoring of the mitigation site(s) for the first 10 years after establishment of the easement.	
3.4-5: Western pond turtle	PS	**3.4-5: Avoid Take of Western Pond Turtles** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~future project~~ that applicants ~~to~~ implement the following measures to avoid the potential loss of western pond turtles: • Off-site improvements shall be planned and designed to avoid aquatic habitats that could support western pond turtle to the extent that is technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the habitat may be	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		preserved onsite while still obtaining the project purpose and objectives and if the preserved habitat features (i.e., aquatic habitats) could reasonably be expected to continue to function as suitable habitat for western pond turtle following project implementation. • A preconstruction survey for western pond turtle shall be conducted by a qualified biologist prior to work in suitable aquatic habitat. If no pond turtles are observed, no further mitigation is necessary. • If pond turtles are observed, a qualified biologist, with approval from CDFW, shall relocate pond turtles from to the nearest area with suitable aquatic habitat that will not be disturbed by project-related construction activities. • Construction within 500 feet of aquatic habitat known to support western pond turtles shall be conducted outside of the nesting season (March-August) unless a nesting survey conducted by a qualified biologist determines there are no active nests or hatchlings present in the proposed construction area.	
3.4-6: Giant garter snake	PS	**3.4-6: Implement Avoidance Measures, Secure Incidental Take Authorization for Federally Listed Giant Garter Snake and Implement all Conditions of the Take Authorization** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects~~ that applicants ~~to~~ implement the following measures to mitigate impacts on giant garter snake: • Off-site improvements shall be planned and designed to avoid aquatic habitats that could support giant garter snake to the maximum extent it is if technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the habitat may be preserved onsite while still obtaining the project purpose and objectives and if the preserved habitat features (i.e., aquatic habitats) could reasonably be expected to continue to function as suitable habitat for giant garter snake following project implementation. • All construction activities within ~~200~~ 300 feet of aquatic habitat suitable for giant garter snakes shall be conducted during the snake's active season of May 1 to ~~October 1~~September 15 so that snakes can move and avoid danger. For any construction outside of this period, USFWS will be consulted to determine whether additional measures are necessary to avoid or minimize potential impacts during the inactive season and avoid take. • In areas where irrigation ditches, or other potential giant garter snake habitats are being retained on the site: – A qualified biologist shall install temporary exclusion fencing around suitable upland habitat within ~~200~~ 300 feet of aquatic habitat to prevent giant garter snakes from entering the work area during construction. The fencing shall be maintained for the duration of the construction activities; – Ground disturbance, spoils, and equipment storage and other project activities shall not be	LTS

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		allowed within the fenced area; and – The water quality shall be maintained and construction runoff into wetland areas shall be limited through the use of hay bales, filter fences, vegetative buffer strips, or other accepted equivalents. However, no plastic, monofilament, jute, or similar matting to control erosion that could entangle snakes shall be placed in the project area. • If ~~wetlands, irrigation ditches, or other~~ potential giant garter snake aquatic habitat would be filled, the aquatic habitats shall be dewatered at least 15 days before fill. Dewatering of aquatic habitat for construction purposes shall not occur between October 1 and April 15, with the exception of any areas within a cofferdam, unless authorized by USFWS. Any dewatered habitat must remain dry for at least 15 consecutive days after April 15 and before excavation or filling of the dewatered habitat. • If the project involves any ground-disturbing activities in or within 200 feet of waterways that may support giant garter snake, and take of giant garter snake may occur, the project proponent/s shall obtain incidental take authorization from the USFWS and CDFW pursuant to ESA and CESA, and shall abide by all conditions in the take authorization, including conservation and minimization measures, intended to be completed before on-site construction. Conservation and minimization measures are expected to include requirements for preparing supporting documentation describing methods to protect existing habitat during and after project construction, methods for determining impact ratios, a detailed monitoring plan, and reporting requirements. CDFW may issue a Consistency Determination under Section 2080.1 of CESA if the applicant(s) obtains take authorization from USFWS and submits the federal opinion take statement to the Director of Fish and Game. CDFW must determine that conditions specified in the Federal take authorization are consistent with CESA. If a Consistency Determination is not obtained, the applicants shall obtain a separate incidental take permit under Section 2081(b) of CESA.	
3.4-7: Federally protected waters of the US	PS	**3.4-7: Avoid, Minimize, or Compensate for Loss of Waters of the United States and Waters of the State** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of waters: • Conduct a delineation of waters of the United States according to methods established in the USACE wetlands delineation manual (Environmental Laboratories 1987) and Arid West Supplement (Environmental Laboratories 2008). The delineation shall map and quantify the acreage of all aquatic habitats in the SOIA Area and associated off-site improvement areas, and shall be submitted to USACE for verification and jurisdictional determination. • Off-site improvements shall be planned and designed to avoid waters of the United States,	LTS

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		including wetlands, and waters of the state to the maximum extent technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the habitat may be preserved onsite while still obtaining the project purpose and objectives and if the preserved aquatic habitat could reasonably be expected to continue to provide the same habitat functions following project implementation. • The project applicant for each project requiring fill of waters shall replace or restore on a "no-net-loss" basis the function of all wetlands and other waters that would be removed as a result of implementing the respective project. Wetland habitat will be restored or replaced at an acreage and location and by methods agreeable to USACE and the Central Valley RWQCB, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes. • Mitigation methods may consist of establishment of aquatic resources in upland habitats where they did not exist previously, reestablishment (restoration) of natural historic functions to a former aquatic resource, enhancement of an existing aquatic resource to heighten, intensify, or improve aquatic resource functions, or a combination thereof. The compensatory mitigation may be accomplished through purchase of credits from a USACE-approved mitigation bank, payment into a USACE-approved in-lieu fee fund, or through permittee-responsible on-site or off-site establishment, reestablishment, or enhancement, depending on availability of mitigation credits. • If applicable, project applicants shall obtain a USACE Section 404 Individual Permit and Central Valley RWQCB Section 401 water quality certification before any groundbreaking activity within 50 feet of waters <u>of the United States</u> or discharge of fill or dredge material into any water of the United States<u>,</u> or <u>meet waste discharge requirements for impacts to waters of the</u> state. • The project applicant shall have a qualified biologist prepare a wetland mitigation plan to describe how the loss of aquatic functions for each project will be replaced. The mitigation plan will describe compensation ratios for acres filled, and mitigation sites, a monitoring protocol, annual performance standards and final success criteria for created or restored habitats, and corrective measures to be applied if performance standards are not met. • Permittee-responsible mitigation habitat shall be monitored for a minimum of 5 years from completion of mitigation, or human intervention (including recontouring and grading), or until the success criteria identified in the approved mitigation plan have been met, whichever is longer. • Water quality certification pursuant to Section 401 of the CWA, or waste discharge requirements (for waters of the state), will be required before ~~issuance of the record of decision and before~~ issuance of a Section 404 permit. Before construction in any areas containing aquatic features <u>that are waters of the United States</u>, the project applicant(s) shall	

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		obtain water quality certification for the project. Any measures required as part of the issuance of water quality certification and/or waste discharge requirements (for waters of the state), shall be implemented. Project applicant(s) shall obtain a General Construction Stormwater Permit from the Central Valley RWQCB, prepare a stormwater pollution prevention plan (SWPPP), and implement best management practices (BMPs) to reduce water quality effects during construction.	
3.4-8: Conflicts with local policies and ordinances protecting biological resources	PS	**3.4-8a: Implement Mitigation Measures 3.4-2c, 3.4-4, 3.4-6, and 3.4-7** **3.4-8b: Avoid, Minimize, or Compensate for Loss of Protected Trees and Aquatic and Streamside Habitats** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall demonstrate that it will require ~~all discretionary projects to~~ that applicants avoid tree removal and removal or fill of waterways that provide important habitat to special-status species, if technically feasible and appropriate, through incorporation of these features into project design and planning. Avoidance shall be deemed technically feasible and appropriate if the features may be preserved onsite while still obtaining the project purpose and objectives and if the preserved habitat features (i.e., trees and aquatic habitats) could reasonably be expected to continue to function as suitable habitat following project implementation. All trees retained onsite shall be protected from construction-related impacts by placing exclusion fencing around the drip line of retained trees and maintaining said fencing through the duration of construction. If it is not technically feasible to retain trees on the project site, trees protected under City ordinance or General Plan policy shall be replaced at a 1:1 ratio (1 new inch dbh of tree for each inch dbh lost), unless alternative mitigation is approved by the City pursuant to Section 19.12.160 of the City code. Replacement trees may be planted onsite to areas that would not be developed or to nearby offsite open space areas. Alternatively, if approved by the City, trees to be removed may be transplanted to other open space areas in proximity to the SOIA Area. Payment of an in-lieu fee to a tree preservation fund may also be allowed to compensate for tree loss.	LTS
3.4-9. Conflicts with the provisions of an adopted habitat conservation plan	LTS	None required.	
Mitigation Measures for Possible Future Off-Site Improvements: **3.4-10:** Riparian habitat and sensitive natural communities	PS	**3.4-10: Avoid, Minimize, or Compensate for Loss of Riparian Habitat and Sensitive Natural Communities** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall demonstrate that it will require ~~all discretionary projects that require~~ off-site improvements to retain a qualified botanist to identify, map, and quantify riparian habitat and other sensitive natural communities in proposed off-site improvement areas before final project design is completed. Off-site improvement projects shall be planned and designed to avoid loss	LTS

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		or substantial degradation of riparian habitat and other sensitive natural communities, if technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the features may be preserved onsite while still obtaining the project purpose and objectives and if the preserved habitat/community could reasonably be expected to provide comparable habitat functions following project implementation. The avoidance measures shall include relocating off-site improvement components, as necessary and where practicable alternatives are available, to prevent direct loss of riparian habitats and other sensitive natural communities. If riparian habitat or other sensitive natural communities are present in off-site improvement areas and cannot feasibly be avoided, the project applicant shall ~~consult~~ coordinate with the City of Elk Grove and CDFW to determine appropriate mitigation for removal of riparian habitat and sensitive natural communities resulting from project implementation. Mitigation measures may include restoration of affected habitat onsite, habitat restoration offsite, or preservation and enhancement of existing habitat/natural community offsite. The compensation habitat shall be similar in composition and structure to the habitat/natural community to be removed and shall be at ratios adequate to offset the loss of habitat functions in the affected off-site improvement area. If required, the project applicants shall obtain a Section 1602 streambed alteration agreement from CDFW and comply with all conditions of the agreement.	
3.4-11: Additional special-status wildlife	S	**3.4-11a: Implement Mitigation Measures 3.4-5, 3.4-6, 3.4-7, 3.4-8b, and 3.4-9** **3.4-11b: Identify Potential Species Habitat, Implement Avoidance Measures, Secure Incidental Take Authorization for Federally Listed Species and Implement all Conditions of the Take Authorization, Compensate for Loss of Habitat** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall demonstrate that it will require ~~all discretionary projects to~~ that applicants conduct biological review and analysis for off-site improvement projects to identify potential special-status species habitat. Off-site improvement projects shall be planned and designed to avoid adverse effects to special-status wildlife species, if technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the species and its habitat may be preserved onsite while still obtaining the project purpose and objectives and if the preserved species habitat could reasonably be expected to continue to function as suitable habitat for the affected species following project implementation. If, after examining all feasible means to avoid impacts to potential special-status species habitat through project site planning and design, adverse effects cannot be avoided, then impacts shall be mitigated in accordance with guidance from the appropriate state or federal agency charged with the protection of the subject species, including surveys conducted according to applicable standards and protocols, where necessary, implementation of impact minimization measures based on accepted standards and guidelines and best available science, and compensatory	LTS

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		mitigation for unavoidable loss of special-status species habitats through preservation and enhancement of existing occupied habitat, relocating individuals or populations to other suitable habitat, and/or restoring or creating suitable replacement habitat in sufficient quantities to offset the loss of occupied habitat and individuals. Purchase of mitigation credits at an agency-approved mitigation bank (i.e., approved by the agency with jurisdiction over the affected species or habitat) in Sacramento County, will also be acceptable for compensatory mitigation. If the project would result in take of state or federally listed species, then the City will require project proponent/s to obtain take authorization from the U.S. Fish & Wildlife Service or the California Department of Fish and Wildlife, as appropriate, depending on species status, and comply with all conditions of the take authorization. The City will require project applicants to develop a mitigation and monitoring plan to compensate for the loss of special-status species and their habitats. The mitigation and monitoring plan will describe in detail how loss of special-status species and their habitats shall be avoided or offset, including details on restoration and creation of habitat, compensation for the temporal loss of habitat, success criteria ensuring habitat function goals and objectives are met, performance standards to ensure success, and remedial actions if performance standards are not met. The plan will include detailed information on the habitats present within the preservation and mitigation areas, the long-term management and monitoring of these habitats, legal protection for the preservation and mitigation areas (e.g., conservation easement, declaration of restrictions), and funding mechanism information (e.g., endowment).	
3.4-12: Wildlife nursery sites or migratory routes	LTS	None Required.	LTS
3.6 Energy			
3.6-1: Energy efficiency	S	**Mitigation Measure 3.6-1: Implement Mitigation Measures 3.3-2a and 3.3-2b**	SU
3.6-2: New or expanded electrical and natural gas utilities	S	**Mitigation Measure 3.6-2: Prepare Utility Service Plans that Demonstrate Adequate Electrical and Natural Gas Supplies and Infrastructure are Available before the Annexation of Territory within the SOIA** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall prepare utility service plans that identify the projected electrical and natural gas demands and that note appropriate infrastructure sizing and locations to serve future development will be provided within the annexation territory. The utility service plans shall demonstrate that SMUD will have adequate electrical supplies and infrastructure. Project applicants shall provide utility service plans to SMUD for any improvements that are proposed within the SMUD transmission line easement. ~~and~~ In addition, the utility service plans shall demonstrate that PG&E will have adequate natural gas supplies and infrastructure available for the amount of future development proposed within the annexation territory. If SMUD or PG&E must construct or	SU

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		expand facilities, environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of mitigation measures. Such measures should include those necessary to avoid or reduce environmental impacts associated with, but not limited to, air quality, noise, traffic, biological resources, cultural resources, GHG emissions, hydrology and water quality, and others that apply to specific construction or expansion of natural gas and electric facilities projects.	
3.9 Hazards and Hazardous Materials			
3.9-1: Routine transport, use, or disposal of hazardous materials	LTS	None Required.	LTS
3.9-2: Potential human health hazards from exposure to existing on-site hazardous materials	PS	**3.9-2: Hazardous Materials Identification and Remediation** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require an environmental analysis, including an updated review of environmental risk databases, for the presence of potential hazardous materials. This evaluation should consider the SOIA Area and any off-site improvement areas, and if this assessment indicates the presence or likely presence of contamination, Phase I environmental site assessments and/or Phase II soil/groundwater testing and remediation shall be required before development. The sampling program developed as a part of the Phase II EA shall be conducted to determine the degree and location of contamination, if any, exists. If contamination is determined to exist in the SOIA Area or any off-site improvements, it will be fully remediated, by qualified personnel, in accordance with federal, State, and local regulations and guideline established for the treatment of hazardous substances. The designation of encountered contamination will be based on the chemicals present and chemical concentrations detected through laboratory analysis. Based on the analytical results, appropriate disposal of the material in accordance with EPA, Department of Toxic Substances Control, and Regional Water Quality Control Board guidelines shall be implemented. Any land disturbance near potential hazardous sites should occur only after the remediation and clean-up of the existing site is complete.	LTS
3.9-3: Upset and accident conditions	LTS	None Required.	LTS
3.9-4: Interfere with emergency response or evacuation plan	S	**3.9-4: Traffic Control Plans** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall ~~impose a condition on all discretionary projects~~ require applicants to prepare and implement traffic control plans for construction activities that may affect road rights-of-way during construction of future development and off-site improvements. The traffic control plans shall be designed to avoid traffic-related hazards and maintain emergency access during construction phases. The traffic control plan will illustrate the location of the proposed work area; provide a diagram showing the location of areas where the public right-of-way would be closed or obstructed and the placement of traffic control devices necessary to perform the work; show	LTS

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		the proposed phases of traffic control; and identify the time periods when traffic control would be in effect and the time periods when work would prohibit access to private property from a public right-of-way. The plan may be modified in order to eliminate or avoid traffic conditions that are hazardous to the safety of the public. Traffic control plans should be submitted to the City of Elk Grove, Sacramento County, and/or the California Department of Transportation, as appropriate, for review and approval before approval of improvement plans, where future construction may cause impacts on traffic.	
3.9-5: Risks from wildfires	LTS	None Required.	LTS
3.9-6: Hazardous emissions or handling of hazardous materials, substances, or waste within one-quarter mile of a school	LTS	None Required.	LTS
3.10 Hydrology and Water Quality			
3.10-1: Degradation/violation of water quality standards	PS	**3.10-1: Implement Mitigation Measure 3.9-2**	LTS
3.10-2: Depletion of groundwater supplies	S	**3.10-2~~a~~: Implement Mitigation Measure 3.15-1** **~~3.10-2b: Assure Consistency with the Central Basin Groundwater Management Plan~~** ~~At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require discretionary project to demonstrate consistency with the Central Basin Groundwater Management Plan.~~	SU
3.10-3: Erosion, siltation, downstream flooding, or increased stormwater runoff volumes.	PS	**3.10-3: Prepare a Drainage Master Plan** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects~~ applicants to plan for drainage through preparation of a ~~to prepare a~~ Drainage Master Plan or update to an areawide or city drainage master plan. The Drainage Master Plan shall disclose where stormwater is designed to be released into waterway crossings at State Route 99 facilities. The Drainage Master Plan shall include a review, analysis, and disclosure of locations where channel capacity inadequacies lie; identify the capacities of bridges crossing State Route 99; and identify the need for additional bridge capacity, if necessary. City shall develop measures to minimize, avoid, reduce, or compensate for potential impacts to roadway facilities in consultation with the California Department of Transportation. The City shall provide proof of consultation with the California Department of Transportation to LAFCo. In addition, the Master Drainage Plan shall identify areas of potential impacts due to encroachments on channels, measures to provide improvements or maintenance where development in the SOIA Area would affect channels. The Drainage Master Plan that demonstrates attainment of pre-project stormwater runoff rates and describe the volume reduction measures and treatment controls used to reach attainment. The	LTS

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Master Drainage Plan shall identify all expected flows from the project area and the location, size, and type of facilities used to retain and treat the runoff volumes and peak flows to meet pre-project conditions. The Master Drainage Plan shall also include the geotechnical report verifying groundwater elevation for the regional basins.	
3.10-4: Structures or housing within flood hazard area	LTS	None Required.	LTS
3.10-5: Loss, injury, or death from flooding	LTS	None Required.	LTS
3.11 Land Use, Population, Housing, Employment, Environmental Justice, and Unincorporated Disadvantaged Communities			
3.11-1: Consistency with Sacramento County zoning ordinances or City of Elk Grove zoning ordinances	LTS	None Required.	LTS
3.11-2: Consistency with adopted Sacramento County General Plan or Elk Grove General Plan policies and land use designations	LTS	None Required.	LTS
3.11-3: Consistency with LAFCo policies, standards, and procedures guidelines	NI	None Required.	NI
3.11-4: Consistency with the SACOG 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy	S	None Feasible.	SU
3.11-5: Conversion of open space	S	**3.11-5: Implement Mitigation Measure 3.2-1**	SU
3.11-6: Induce population growth	S	None Feasible.	SU
3.11-7: Jobs-housing balance	LTS	None Required.	LTS
3.13 Public Services and Recreation			
3.13-1: Increased demand on fire protection and emergency medical services	S	**3.13-1: Demonstrate Adequate Fire Protection Facilities are Available before the Annexation of Territory within the SIOA Area.** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall demonstrate that CCSD fire protection and life safety facilities will meet the service demands of development identified for the annexation territory, or that fair-share funding will be provided for the construction of new or expansion of existing fire protection facilities, as needed, to accommodate the increase in demand resulting from development of the annexation territory. The City of Elk Grove shall demonstrate future development has incorporated adequate	SU

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Table ES-1. Summary of Project Impacts and Mitigation Measures

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		water supply and pressure, fire hydrants, and access to structures by firefighting equipment and personnel and where appropriate, identified on-site fire suppression systems for all new commercial and industrial development into design plans consistent with General Plan polices PF-7, PF-21, and SA-32 and Action SA-32-Action 1, SA-32-Action 2, and SA-32-Action 4. Any expansion of service shall not adversely impact current service levels.	
3.13-2: Increased demand for law enforcement services	S	**3.13-2: Prepare a Plan for Service that Demonstrates Adequate Police Protection Facilities are Available before the Annexation of Territory within the SOIA Area.** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall demonstrate that EGPD police protection and public safety facilities will meet the service demands of development identified for the annexation territory, or that fair-share funding will be provided for the construction of new on-site or off-site police protection facilities or expansion of existing police protection facilities, as needed, to accommodate the increase in demand resulting from development of the annexation territory. Any expansion of service shall not adversely impact current service levels.	SU
3.13-3: Increased demand for schools	LTS	None Required.	LTS
3.13-4: Increased demand for park and recreation facilities	LTS	None Required.	LTS
3.14 Transportation			
3.14-1: Conflict with an applicable transportation plan, ordinance, policy, or congestion management program	S	**3.14-1: Impacted Roadway and Freeway Segments Improvement** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall consult with affected agencies ~~Sacramento County and Caltrans~~ to establish transportation ~~improvement~~ plans and funding mechanisms to provide service levels consistent with the City's and County's General Plans. Future development within the SOIA Area will be responsible for constructing or contributing on a fair-share basis to roadway improvements necessary to serve development within the SOIA Area. In addition, a detailed traffic study will be completed after a more defined land use plan has been developed. Improvements needed as a result of development in the SOIA Area will be established by subsequent traffic studies and LOS standards of affected agencies. Annexation and development activity within the SOIA Area will require the preparation of traffic impact report/s to establish the fair share and costing of required improvements. **3.14-1b: Implement Mitigation Measure 3.3-2a** **3.14-1c: Implement Mitigation Measure 3.3-2b** **3.14-1d: Implement Mitigation Measure 3.8-1**	SU

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
3.14-2: Hazards due to a design feature.	LTS	None Required.	LTS
3.14-3: Inadequate emergency access	LTS	None required.	LTS
3.14-4: Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities	PS	**3.14-4: Implement Mitigation Measure 3.3-2b**	LTS
3.15 Utilities and Service Systems			
3.15-1: Increased demand for water supplies and water system facilities	S	**3.15-1: Prepare a Plan for Service that Demonstrates Adequate Water Supplies and On-Site and Off-Site Water System Facilities are Available Before the Annexation of Territory within the SOIA Area.** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall prepare a Plan for Services as required by Government Code Section 56430, or its successor. The Plan for Services shall demonstrate that SCWA water supplies are adequate to serve the amount of future development identified in the annexation territory in addition to existing and planned development under normal, single dry, and multiple dry years, without adverse impacts to existing ratepayers. The Plan for Services shall demonstrate that the SCWA is a signatory to the Water Forum Agreement, that groundwater management would occur consistent with the Central Sacramento County Groundwater Management Plan, and that groundwater will be provided in a manner that ensures no overdraft will occur. The Plan for Services shall depict the locations and appropriate sizes of all on-site water system facilities to accommodate the amount of development identified for the annexation territory, demonstrate SCWA has modified its service area boundary to include the territory ~~into~~within its Zone 40 and Zone 41 service area~~s boundaries~~, and demonstrate adequate SCWA off-site water facilities are available to accommodate the amount of development identified in the annexation territory or that fair share funding will be provided for the construction of new or expansion and/or improvement of existing off-site water system facilities with no adverse impacts on existing ratepayers.	SU

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Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
3.15-2: Increased demand for wastewater collection, conveyance, and treatment facilities	S	**3.15-2: Prepare a Plan for Service that Demonstrates Adequate On-Site and Off-Site Wastewater Collection and Conveyance Facilities and Wastewater Treatment Facilities are Available Before the Annexation of Territory within the SOIA Area.** At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall provide a Plan for Services that that depicts the locations and appropriate sizes of wastewater collection and conveyance facilities to accommodate the amount of development identified for the annexation territory. The Plan for Services shall demonstrate SCSD and SRCSD have annexed the territory into their respective service areas. The Plan for Services shall demonstrates that SCSD and SRCSD wastewater collection and conveyance facilities and that the SRWTP will have sufficient capacity to accommodate the amount of development identified for the annexation territory or that fair-share funding will be provided for the expansion and/or improvement of existing wastewater facilities, as needed, to accommodate the increase in demand resulting from development of the annexation territory with no adverse impact to existing ratepayers	SU
3.15-3: Increased generation of solid waste and compliance with solid waste regulations	LTS	None Required.	LTS

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ES.4 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Section 15226.2(b) of the CEQA Guidelines requires EIRs to include a discussion of any significant environmental impacts that cannot be avoided if the proposed project is implemented.

Chapter 3 of this Recirculated Draft EIR provides a detailed analysis of significant and potentially significant environmental impacts related to approval of the SOIA and future development; identifies feasible mitigation measures, where available, that could avoid or reduce these significant and potentially significant impacts; and presents a determination whether these mitigation measures would reduce these impacts to less-than-significant levels.

Following is a listing of significant and unavoidable impacts associated with implementation of the SOIA were identified in this Recirculated Draft EIR. Cumulative impacts associated with the SOIA, including significant impacts, are summarized in Section 5.3.

Section 3.2, Agricultural Resources

- **Impact 3.2-1:** Direct loss of agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance or Farmland under Williamson Act Contract
- **Impact 3.2-2:** Indirect loss of adjacent agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Local Importance or Lands Under Williamson Act Contract

Section 3.4, Biological Resources

- **Impact 3.4-2:** Special-status raptors and other nesting raptors

Section 3.6, Energy

- **Impact 3.6-1:** Energy efficiency
- **Impact 3.6-2:** New or expanded electrical, alternative energy and natural gas utilities

Section 3.10, Hydrology and Water Quality

- **Impact 3.10-2:** Depletion of groundwater supplies

Section 3.11, Land Use, Population, Housing, Employment, Environmental Justice, and Unincorporated Disadvantaged Communities

- **Impact 3.11-4:** Consistency with the SACOG 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy
- **Impact 3.11-5:** Conversion of open space
- **Impact 3.11-6:** Induce population growth

Section 3.13, Public Services and Recreation

- **Impact 3.13-1:** Increased demand on fire protection and emergency medical services
- **Impact 3.13-2:** Increased demand for law enforcement services

Section 3.14, Transportation

- **Impact 3.14-1:** Conflict with an applicable transportation plan, ordinance, policy, or congestion management program

Section 3.15, Utilities and Service Systems

- **Impact 3.15-1:** Increased demand for water supplies and water system facilities
- **Impact 3.15-2:** Increased demand for wastewater collection, conveyance, and treatment facilities.

There are also significant and unavoidable cumulative impacts to the following:

- Agricultural Resources
- Biological Resources
- Energy
- Hydrology and Water Quality
- Land Use and Planning / Population / Housing
- Public Services and Recreation
- Transportation and Traffic
- Utilities and Service Systems

ES.5 SUMMARY OF PROJECT ALTERNATIVES

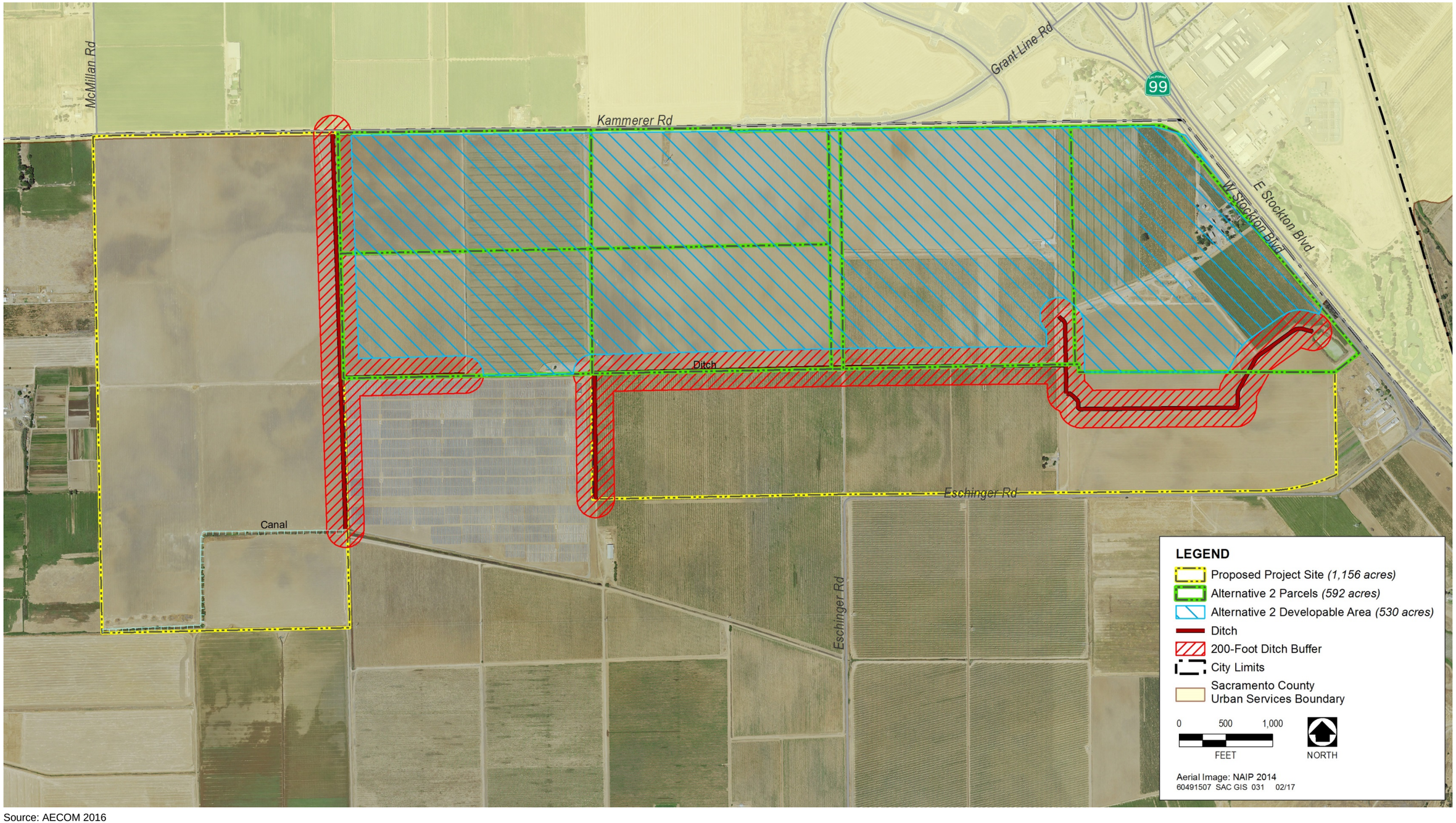
Below is a summary of the alternatives to the proposed project considered in Section 5, Alternatives to the Proposed Project.

ES.5.1 ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) states that a discussion of the "No Project" alternative must consider "what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans." The project site is zoned and designated by Sacramento County to be used for agriculture and the majority of the site is currently used for agriculture. Therefore, the No-Project Alternative for purposes of this analysis consists of continued agricultural use.

ES.5.2 ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Instead of the 1,156-acre proposed SOIA Area, Alternative 2 is a reduced size alternative that would avoid the ditches as shown on Exhibit ES-3. The ditches may be sensitive for biological resources, including giant garter snake, Sanford's arrowhead (and other special-status plants), and western pond turtle. In addition, the waters may be subject to federal protection under Section 404 of the CWA due to ultimate connectivity to the Sacramento-San Joaquin River Delta via South Stone Lake thence Snodgrass Slough; however, a jurisdictional determination has not been completed for the SOIA Area. Avoidance of the ditches would reduce the project site to 530 acres, less than half the size of the proposed project.



Source: AECOM 2016

Exhibit ES-3

Alternative 2 Reduced Size Alternative

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ES.6 AREAS OF CONTROVERSY

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects. A Notice of Preparation (NOP) for the project was issued on March 7, 2016. The NOP describing the project and issues to be addressed in the EIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period, extending from March 7, 2016 through April 8, 2016. During the 30-day comment period, LAFCo held public scoping meetings on March 22, 2016 in Elk Grove and April 6, 2016 at the regularly scheduled Commission meeting in the County of Sacramento Board Chambers in the city of Sacramento. Based on the NOP responses and review by the Sacramento LAFCo, the lead agency has determined that there could be significant environmental impacts involving the following resource areas and they require further analysis in the Draft EIR:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, Minerals, and Paleontological Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use, Population, Housing, Employment, Environmental Justice, and Disadvantaged Unincorporated Communities
- Noise and Vibration
- Public Services and Recreation
- Transportation
- Utilities and Service Systems

The Draft EIR was received on February 15, 2017 by the State Clearinghouse. The Draft EIR was circulated for a 45-day public review period, which concluded on March 31, 2017. In addition to written comments, Sacramento LAFCo also accepted verbal comments related to the Draft EIR at an open house on March 10, 2017. Based on the Draft EIR responses and review by the Sacramento LAFCo, the lead agency has determined that there could be significant environmental impacts involving the following resource areas and they require further analysis in the Recirculated Draft EIR:

- Agricultural Resources
- Biological Resources
- Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use, Population, Housing, Employment, Environmental Justice, and Disadvantaged Unincorporated Communities
- Public Services and Recreation
- Transportation
- Utilities and Service Systems

ES.6.1 DISAGREEMENT AMONG EXPERTS

This Recirculated Draft EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although Sacramento LAFCo is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide the standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information to allow the public and decision makers to make an informed judgment about the environmental consequences of the proposed project.

ES.6.2 SUBSTANTIAL EVIDENCE

As defined by CEQA Section 21080(e) and CEQA Guidelines Section 156044, substantial evidence includes fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact. Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment. Evidence of economic and social impacts that do not contribute to or are not caused by physical changes in the environment is not substantial evidence that the project may have a significant effect on the environment.

ES.6.3 POTENTIALLY CONTROVERSIAL ISSUES

Based on the Draft EIR responses and review by the Sacramento LAFCo, the lead agency has determined that the following potentially controversial issues require further analysis in the Recirculated Draft EIR. For more detail, see Chapter 1.0, "Introduction."

- Farmland, including compatibility
- Biological impacts, including the South Sacramento Habitat Conservation Plan
- Public services, including school impacts
- Information related to Elk Grove's General Plan Update and annexation policies
- Hazards associated with the Suburban Propane facility
- Water supply and groundwater extraction
- Transportation and traffic concerns related to Senate Bill (SB) 743

It is also possible that evidence will be presented during the 45 ~~60~~-day Recirculated Draft EIR public review period that may create disagreement. Decision makers would consider this evidence during the public hearing process.

In rendering a decision on a project where there is disagreement among experts, the decision makers are not obligated to select the most environmentally preferable viewpoint. Decision makers are vested with the ability to choose whatever viewpoint is preferable and need not resolve a dispute among experts. In their proceedings, decision makers must consider comments received concerning the adequacy of the Draft EIR and address any objections raised in these comments. However, decision makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on the Recirculated Draft EIR, and can certify the Final EIR without needing to resolve disagreements among experts.

ES.7 PUBLIC REVIEW OF THE RECIRCULATED DRAFT EIR

Upon completion of the Recirculated Draft EIR, the Sacramento LAFCo filed a notice of completion (NOC) with the Governor's Office of Planning and Research to begin the public review period (Public Resources Code Section 21161). Concurrent with the NOC, this Recirculated Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as to all parties requesting a copy of the Recirculated Draft EIR, in accordance with Public Resources Code Section 21092(b)(3). During the public review period, the Recirculated Draft EIR, including the technical appendices, is available for review at the Sacramento LAFCo offices, located at the address provided below. Agencies, organizations, and interested parties not previously contacted or who provided comments on the NOP or draft EIR currently have the opportunity to comment on the Recirculated Draft EIR during the public review period on the Recirculated Draft EIR. Comments should be focused on the resource sections included in this Recirculated Draft (CEQA Guidelines Section 15088.5(f)(2)). Written comments on this Recirculated Draft EIR should be addressed to:

Don Lockhart, AICP, Executive Officer
Sacramento Local Agency Formation Commission
1112 I Street, Suite 100
Sacramento, CA 95814
Phone: (916) 874-2937
Fax: (916) 854-2939
Email: Don.Lockhart@SacLAFCo.org

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to comments will be prepared and made available for review by the commenting agencies at least 10 days before the public hearings before the Commission, at which the certification of the final EIR will be considered. The final EIR will incorporate responses to comments received on the sections of the Draft EIR that were not recirculated and the comments received on the sections in this Recirculated Draft EIR during the public review period for the Recirculated Draft EIR. The comments and responses will be included as part of the record for consideration by the Commission.

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1 INTRODUCTION

This Recirculated Draft Environmental Impact Report is part of the ongoing environmental review process for the proposed Sphere of Influence (SOI) Amendment (SOIA) (proposed project) and was prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the project (LAFC #07-15, State Clearinghouse Number 2016032015). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.). For purposes of clarity, this document is referred to as the Recirculated Draft Environmental Impact Report (Recirculated Draft EIR), and the previously circulated Draft Environmental Impact Report is referred to as the Draft EIR.

After the February 16, 2017, release of the Draft EIR, a public review draft of the South Sacramento Habitat Conservation Plan (SSHCP) and Implementing Agreement, accompanying joint draft Environmental Impact Statement/draft Environmental Impact Report, and draft Aquatic Resources Program, were released (Sacramento County 2017a and 2017b) on June 2, 2017. At the time the original Draft EIR was drafted, the SSHCP was still being developed and details of the proposed plan were not available. Also after the release of the Draft EIR, on June 23, 2017, the City of Elk Grove released a Notice of Preparation (NOP) for an EIR to address impacts associated with a General Plan update and an update to the City's Climate Action Plan. The City's NOP includes information about the proposed SOIA Area, which is identified as the "South Study Area" (City of Elk Grove 2017), as well as preliminary indications of policy direction for the South Study Area and other policies that will be relevant for the proposed SOIA. Sacramento County Water Agency, in response to the Draft Municipal Services Review, also provided LAFCo with new water supply information after the Draft EIR was published. LAFCo has elected to recirculate portions of the EIR to include this and other new information for public review.

Recirculation can include all of a CEQA document or only portions of the document that contain new information (CEQA Guidelines, Section 15088.5[c]). This document is a *partially* recirculated EIR because new information has been added or changed in portions of the Draft EIR after it was initially circulated for public comment in February 2017.

1.1 PROPOSED PROJECT

The project is a landowner-initiated proposal to amend the SOIs of the City of Elk Grove, the Sacramento Area Sewer District, and the Sacramento Regional County Sanitation District to include the 1,156-acre proposed SOIA Area that abuts the southern portion of the City of Elk Grove's existing jurisdictional boundary. Throughout this EIR, this area is also called "the project site" or the "SOIA Area." The project vicinity is shown on Exhibit 1-1 and the project location map is shown in Exhibit 1-2.

1.1.1 PREVIOUS SOIA PROPOSAL

In 2008, the City of Elk Grove (City) applied to Sacramento Local Agency Formation Commission (Sacramento LAFCo) for a Sphere of Influence Amendment (LAFC#04-08) to the south and east of its current boundary consisting of approximately 10,536 acres, which was subsequently closed and a new application (LAFC#09-10) submitted by the City for 7,869 acres. The City withdrew its application in 2013. Both of these larger areas included the proposed SOIA Area addressed by the *current* proposed project. This project is separate and distinct from the previous proposals.

1.2 OVERVIEW OF THE CEQA PROCESS

1.2.1 PURPOSE AND AUTHORITY

A lead agency recirculates an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification (15088.5). The term "information" can include changes in the project or environmental setting, as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement.

"Significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

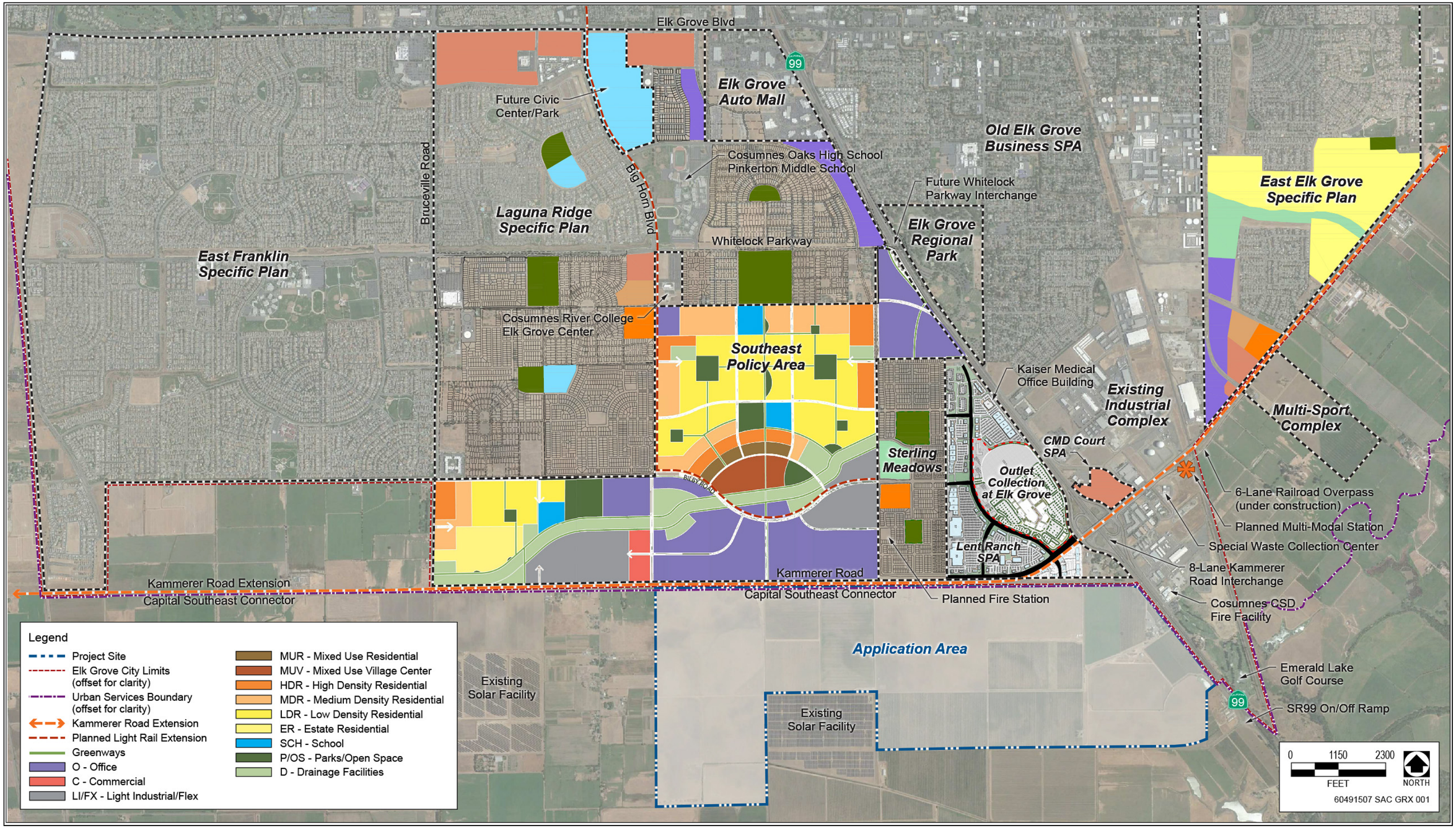
(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043)

The Draft EIR for the proposed project was circulated for public comment for a public review period, beginning on February 15, 2017, and ending March 31, 2017. After the close of the public comment period, LAFCo staff elected to add new information to the Draft EIR associated with the City of Elk Grove's General Plan Update and new annexation policies, the publicly available *South Sacramento Habitat Conservation Plan*, water supply information provided by the Sacramento County Water Agency, and requirements of the Sustainable Groundwater Management Act.

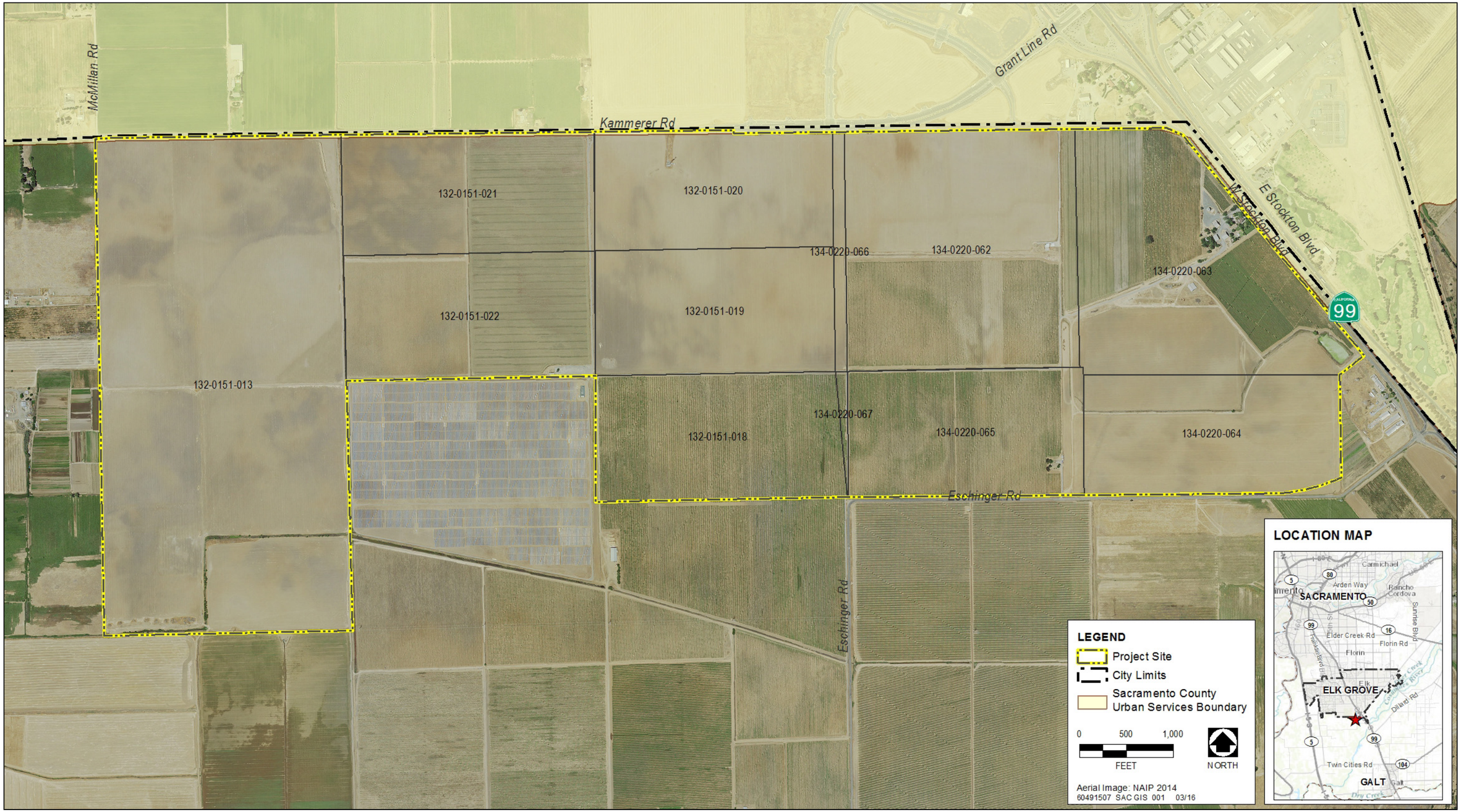
The environmental impacts of the proposed project are analyzed in the Recirculated Draft EIR to the degree of specificity appropriate, in accordance with CEQA Guidelines Section 15146. As with the original Draft EIR, the Recirculated Draft EIR addresses the potentially significant adverse environmental impacts that may be directly or indirectly associated with the proposed SOIA expansion. There are no specific land use entitlements proposed at this time in conjunction with the proposed SOIA. No physical development is proposed in conjunction with the proposed application. However, this EIR acknowledges that future urbanization of the project area may occur in the future as an indirect result of this SOIA; therefore, this EIR contains an analysis of indirect environmental impacts attributable to, or which could result from the proposed project based on a theoretical land use scenario developed exclusively for the purposes of analysis. This EIR is intended to serve as an informational document for the public agency decision makers and the public regarding the possible future implications of the proposed project if the SOIA Area were to be proposed for development in the future.



Source: City of Elk Grove 2016 and Sacramento County 2014 adapted by AECOM in 2016

Exhibit 1-1 **Project Vicinity**

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Source: Sacramento County 2014 adapted by AECOM in 2016

Exhibit 1-2 **Project Location Map**

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Recirculation of an EIR requires notice pursuant to CEQA Guidelines Section 15087 and consultation pursuant to CEQA Guidelines Section 15086.

This Recirculated Draft EIR was prepared by AECOM through a contract with LAFCo. The document was reviewed by LAFCo before its release and reflects the independent judgment of LAFCo (see Chapter 7 of this EIR, "List of Preparers").

1.2.2 LAFCo Lead Agency Authority and Procedure

LAFCo's authority is defined in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH Act). Government Code Section 56300 requires that each LAFCo establish policies to provide well-planned urban development, preservation of open space, and orderly formation of local agencies. Therefore, the proposed SOIA must be reviewed and approved by LAFCo (Government Code Section 56425[a], Public Resources Code Section 21067). The CHK Act contains the following specific "policy elements" for LAFCo review:

- Encourage orderly growth and development patterns (Government Code Section 56001);
- Discourage urban sprawl, preserve open-space and prime agricultural lands, efficiently provide government services, and encourage the orderly formation and development of local agencies based upon local conditions and circumstances (Government Code Section 56301); and
- Guide development away from open space and prime agricultural land uses unless such action would not promote planned, orderly, and efficient development (Government Code Section 56377).

LAFCo has review authority for annexations to, or detachment from, cities or special districts; formation or dissolution of districts; incorporation or disincorporation of cities; consolidation or reorganization of cities or districts; establishment of subsidiary districts; and development of, and amendments to SOIs. LAFCo can approve, modify and approve, or disapprove applications and impose terms and conditions (Government Code Section 56885.5).

Sacramento LAFCo has adopted a *Policy, Standards, and Procedures Manual* (Manual) to guide its decision-making process on municipal annexations and other changes in municipal organization. The Manual includes both general standards for LAFCo decisions and standards specific to municipal annexations. LAFCo may make exceptions to its policies and standards if it determines that such exceptions are necessary because of unique circumstances or conflicts between general and specific standards; if the exceptions would result in improved quality or lower cost of services available; or if no feasible or logical alternative exists.

The factors considered by Sacramento LAFCo when reviewing a proposed SOIA are identified in Government Code Section 56425:

(a) In order to carry out its purposes and responsibilities for planning and shaping the logical and orderly development and coordination of local governmental agencies subject to the jurisdiction of the commission to advantageously provide for the present and future needs of the county and its communities, the commission shall develop and determine the sphere of influence of each city and each special district, as defined by Section 56036, within the county and enact policies designed to promote the logical and orderly development of areas within the sphere.

(b) Prior to a city submitting an application to the commission to update its sphere of influence, representatives from the city and representatives from the county shall meet to discuss the proposed new boundaries of the sphere and explore methods to reach agreement on development standards and planning and zoning requirements within the sphere to ensure that development within the sphere occurs in a manner that reflects the concerns of the affected city and is accomplished in a manner that promotes the logical and orderly development of areas within the sphere. If an agreement is reached between the city and county, the city shall forward the agreement in writing to the commission, along with the application to update the sphere of influence. The commission shall consider and adopt a sphere of influence for the city consistent with the policies adopted by the commission pursuant to this section, and the commission shall give great weight to the agreement to the extent that it is consistent with commission policies in its final determination of the city sphere.

(c) If the commission's final determination is consistent with the agreement reached between the city and county pursuant to subdivision (b), the agreement shall be adopted by both the city and county after a noticed public hearing. Once the agreement has been adopted by the affected local agencies and their respective general plans reflect that agreement, then any development approved by the county within the sphere shall be consistent with the terms of that agreement.

(d) If no agreement is reached pursuant to subdivision (b), the application may be submitted to the commission and the commission shall consider a sphere of influence for the city consistent with the policies adopted by the commission pursuant to this section.

(e) In determining the sphere of influence of each local agency, the commission shall consider and prepare a written statement of its determinations with respect to each of the following:

(1) The present and planned land uses in the area, including agricultural and open-space lands.

(2) The present and probable need for public facilities and services in the area.

(3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

(4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

(5) For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, that occurs pursuant to subdivision (g) on or after July 1, 2012, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

(f) Upon determination of a sphere of influence, the commission shall adopt that sphere.

(g) On or before January 1, 2008, and every five years thereafter, the commission shall, as necessary, review and update each sphere of influence.

(h) In determining a sphere of influence, the commission may assess the feasibility of governmental reorganization of particular agencies and recommend reorganization of those agencies when reorganization is found to be feasible and if reorganization will further the goals of orderly development and efficient and affordable service delivery. The commission shall make all reasonable efforts to ensure wide public dissemination of the recommendations.

(i) When adopting, amending, or updating a sphere of influence for a special district, the commission shall establish the nature, location, and extent of any functions or classes of services provided by existing districts.

(j) When adopting, amending, or updating a sphere of influence for a special district, the commission may require existing districts to file written statements with the commission specifying the functions or classes of services provided by those districts.

1.2.3 LAFCo CEQA Policies

Policies, Standards, and Procedures Manual

Sacramento LAFCo's Manual contains policies and procedures for implementing CEQA review and a list of standards for determining the significance of environmental impacts. The applicable policies for CEQA review and SOIA proposals are listed below (Sacramento LAFCo 2007).

Chapter III, "LAFCo General Policies"

- **Policy 1.** LAFCo will encourage participation in its decision-making process. LAFCo will contact community members through community councils, give published notice, and, where LAFCo determines appropriate, give mailed notice to the owners of property within 500 feet of a project site.

- **Policy 2.** LAFCo will encourage communication on actions among the County, cities, and special districts.

- **Policy 5.** CEQA requires that LAFCo assess the environmental consequences of its actions and decisions, and take actions to avoid or minimize a project's adverse environmental impacts, if feasible, or approve a project despite significant effects because it finds overriding considerations exist. To comply with CEQA, the LAFCo will take one or more of the following actions:

  a. At its discretion, approve a project without changes if environmental impacts are insignificant;
  b. Require an applicant to modify a project;
  c. Establish mitigating measures as a condition of its approval of the proposal;
  d. Deny the proposal because of unacceptable adverse environmental impacts; or
  e. Approve the project despite its significant effects by making findings of overriding concern.

- **Policy 7.** LAFCo will favorably consider those applications which improve the balance between jobs and housing.

Chapter IV, "General Standards"

Section A. Spheres of Influence

- **Standard A.3.** LAFCo will require that any agency making a proposal for action through LAFCo must have an updated Master Service Element [municipal services review] of its Spheres of Influence Plan. LAFCo will approve a proposal only if the proposed service provider is the most efficient provider of services with an acceptable cost, as demonstrated in the provider's Master Service Element.

Section B. Conformance with Applicable General and Specific Plans

- **Standard B.1.** LAFCo will approve changes of organization of reorganization only if the proposal is consistent with the General Plan and applicable Specific Plans of the applicable planning jurisdiction.

- **Standard B.2.** For purposes of the above policy, the applicable jurisdiction is as follows:

  a. For annexations to a city, the applicable jurisdiction is the city to which annexation is proposed;

  b. For applications for annexation to or detachment from a district all of whose territory lies within an adopted Sphere of Influence of a city, the General Plans of the city;

  c. For an application for annexation to a special district for lands outside an adopted city Sphere of Influence, the Sacramento County General Plan;

  d. For an application for annexation or detachment from a district whose territory lies in both the city and the unincorporated area of the county, the General Plan of the city unless the project lies outside of the city's Sphere of Influence; and

  e. For application for incorporations, this standard is inapplicable.

- **Standard B.3.** For the purposes of this standard, the proposal shall be deemed consistent if the proposed use is consistent with the applicable General Plan designation and text, the applicable General Plan is legally adequate and internally consistent and the anticipated types of services to be provided are appropriate to the land use designated for the area.

Section E. Agricultural Land Conservation

- **Standard E.1.** LAFCo will approve a change of organization or reorganization, which will result in the conversion of prime agricultural land in open space use to other uses, only if the Commission finds that the proposal will lead to the planned, orderly, and efficient development of an area. For purposes of this standard, a proposal leads to the planned, orderly, and efficient development of an area only if all of the following criteria are met:

  a. The land subject to the change of organization or reorganization is contiguous to either lands developed with an urban use or lands which have received all discretionary approvals for urban development;

  b. The proposed development of the subject lands is consistent with the Spheres of Influence Plan, including the Master Services Element of the affected agency or agencies;

  c. Development of all, or a substantial portion of, the subject land is likely to occur within five years. In the case of very large developments, annexation should be phased whenever feasible. If the Commission finds phasing infeasible for the specific reasons, it may approve annexation if all or a substantial portion of the subject land is likely to develop within a reasonable period of time;

  d. Insufficient vacant, non-prime lands exists within the applicable Spheres of Influence that are planned, accessible, and developable for the same general type of use;

e. The proposal will have no significant adverse effect on the physical and economic integrity of other agricultural lands. In making this determination, LAFCo will consider the following factors:

1. The agricultural significance of the subject and adjacent areas relative to other agricultural lands in the region;

2. The use of the subject and the adjacent areas;

3. Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of adjacent or nearby agricultural land, or will be extended through or adjacent to, any other agricultural lands which lie between the project site and existing facilities;

4. Whether natural or man-made barriers serve to buffer adjacent or nearby agricultural land from the effects of the proposed development; and

5. Applicable provisions of the General Plan open space and land use elements, applicable growth-management policies, or other statutory provisions designed to protect agriculture.

- **Standard E.2.** LAFCo will not make the affirmative findings that the proposed development of the subject lands is consistent with the Spheres of Influence in the absence of an approved Sphere of Influence Plan. LAFCo will not make the affirmative findings that sufficient non- prime land exists within the Spheres of Influence Plan unless the applicable jurisdiction has:

a. Identified within its Spheres of Influence all "prime agricultural land" as defined herein;

b. Enacted measures to preserve prime agricultural land identified within its Sphere of Influence for agricultural use; and

c. Adopted as part of its General Plan specific measures to facilitate and encourage infill development as an alternative to development of agricultural lands.

Section F. Application of the California Environmental Quality Act to Changes of Organization or Reorganization and Spheres of Influence

The following standards will apply to LAFCo's implementation of the California Environmental Quality Act ("CEQA") in reviewing requests for changes of organization or reorganization and spheres of influence. …

- **Standard F.1.** In general, LAFCo will function as a Lead Agency in situations where:

a. LAFCo is the first agency in time to act;
b. The primary decision relates to a change of organization or reorganization or sphere of influence;
c. The applicant agency is unable to act as the Lead Agency; or
d. There are no underlying land use approvals involved.

- **Standard F.2.** The Executive Officer shall have the authority to prepare or cause to be prepared the appropriate environmental documentation. LAFCo will not act upon any proposal for a change of organization until environmental documentation has been completed which adequately addresses the

requirements of CEQA. The Executive Officer of LAFCo shall serve as LAFCo's Environmental Coordinator and shall make an environmental determination per the requirements of CEQA.

- **Standard F.3.** LAFCo shall use its authority to comment on the Notice of Preparation and the EIR to ensure that an EIR prepared by another agency on a project which LAFCo will review complies with standard number 4 listed below. If the Lead Agency fails to notify LAFCo through the Notice of Preparation or provide substantially equivalent notification, LAFCo may assume the lead agency role (CEQA Guidelines sections 15052, 15096). Applicants for projects which will require LAFCo approval are encouraged to consult with LAFCo early in the application process and independently notify LAFCo of the initiation of environmental review.

- **Standard F.4.** In preparing an Initial Study for a project subject to LAFCo review, LAFCo will generally consider the project to have the potential to significantly affect the environment if one or more of the following situations exists:

  a. Any of the circumstances referred to in Appendix G of the State CEQA Guidelines exist;

  b. If buildout of the project may result in the capacity of any public service or facility being exceeded or substantially affected[1];

  c. If the project would physically divide an existing community or other area having identifiable social and economic homogeneity;

  d. If the project is inconsistent with the applicable Spheres of Influence and no amendment is applied for;

  e. If the project has substantial growth-inducing potential because it would result in:

     1. extending a major roadway into an undeveloped area;

     2. extending a sewer trunk line to a substantial area not currently served;

     3. extending water service to a substantial area not currently served;

     4. providing electric service to a substantial area not currently served;

     5. providing or requiring flood control or other public facility which will protect the public safety so as to permit new development in an area substantially larger than the proposed project;

     6. providing any other public service or facility to a substantial area which could not grow without such service; and

     7. encouraging or fostering growth in a substantial area;

[1] For purposes of this provision, public facilities or services include, but are not limited to: sewage disposal, water service, flood control facilities, drainage facilities, law enforcement, fire protection, school, parks, libraries, gas and electric service and solid waste disposal. A public service or facility shall be considered "substantially affected" if the additional demand generated by the project would result in the facility or service exceeding 110 percent of its design capacity, or 120 percent of the available capacity.

f. If the project, in conjunction with other past, present and reasonably foreseeable future projects would result in significant cumulative environmental impacts;

g. If the project would result in substantial noncontiguous urban development; and

h. If the project would conflict with open space goals and policies of a community.

- **Standard F.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; and

  b. Where the EIR identifies significant effects, a description of the range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project. The range of alternatives to be considered shall include, at a minimum, the "no-action" alternative, alternative boundary locations, and a discussion of using other agencies to provide the facility or service proposed to be provided as a result of the proposed change of organization or reorganization.

Chapter V, "Specific Standards by Type of Action"

Section H. Sphere of Influence Plans

A Sphere of Influence plan is a plan for the probable, ultimate physical boundaries and service areas of a local agency. This section of the LAFCo Manual sets forth the required contents of a Sphere of Influence Plan, the procedures for submittal and approval of Sphere of Influence Plans and amendments thereto, and the use of Sphere of Influence Plans in LAFCo determinations.

- **Standard H.1:** The Sphere of Influence Plan for all government agencies within the LAFCo's jurisdiction, shall contain the following:

  a. A map defining the probable boundary of its service area;

  b. A statement of the present and planned land uses in the area, including agricultural and open space lands;

  c. The present and probable need for public facilities and services in the area;

  d. The present capacity of public facilities and adequacy of public services, which the agency provides or is authorized to provide;

  e. The existence of any relevant social or economic communities of interest in the area; and

  f. With respect to all cities, sewer districts, water districts, community service districts, drainage districts, and multi-purpose districts within the jurisdiction of Sacramento LAFCo, a Master Services Element as defined in paragraph H.2 below. Other agencies may prepare a Master Services Element.

- **Standard H.2.** A Master Service Element shall contain the following:

  a. A projection of the geographic extent of service capabilities during the next 20 years denominated in 5-year increments. In the case of cities, a shorter time frame may be appropriate if the applicable General Plan has a shorter planning period.

  b. Projected level of service capabilities in the same time frames and geographical areas.

  c. Actual and projected costs of services to consumers. This shall include a statement of actual and projected allocation of the cost of services between existing and new residents.

  d. The Service Element shall contain sufficient information concerning current and projected capital improvement programs, revenues, costs, rate structures and financing, and other information necessary to support the projected service capabilities for those areas set forth in the element.

- **Standard H.3.** LAFCo may, at its discretion, designate a geographic area beyond the Sphere of Influence as an Area of Concern to the local agency. An Area of Concern is a geographic area beyond the Sphere of Influence in which land use decisions or other governmental actions of the County impact directly or indirectly upon the local agency. For example, a development project outside the limits or Sphere of Influence of a local agency may result in that local agency providing services or adjusting its planning assumptions.

- **Standard H.4.** LAFCo will adopt, amend, or revise Sphere of Influence Plans after a public hearing and pursuant to the procedures set forth in section 56427 and 56428 of the Cortese-Knox Act. Sphere of Influence Plans shall be revised as necessary, but in all cases at least every five years.

- **Standard H.10.** In the case of a Sphere of Influence Plan which contains a Master Services Element, if the evidence demonstrates that an agency is unable to provide an adequate level of service within a portion of its ultimate service area boundaries, the Sphere of Influence Plan shall be amended pursuant to the procedures for periodic review such that the ultimate service boundaries are consistent with the Master Services Element. If the Master Services Element projections demonstrate an adequate level of service beyond the ultimate service boundary, the Sphere of Influence Plan may be amended accordingly.

Section I. Amendments to Spheres of Influence

- **Standard I.1.** The LAFCo will generally treat a proposed amendment to an agency's Sphere of Influence similarly to an application for approval of a Sphere of Influence. The LAFCo's policies will be applied to applications planned for the mid- to long-range future. For that reason, each of the following sets of policies will apply to applications for amendment to Spheres of Influence:

  a. General policies;
  b. Specific policies and standards for annexations to cities and special districts; and
  c. Specific policies and standards for amendments for amendments to Spheres of Influence.

- **Standard I.2.** The Sphere of Influence Master Services Element must be current before additions to a Sphere of Influence will be approved by LAFCo.

- **Standard I.3.** The Sphere of Influence amendments shall precede applications for annexations.

- **Standard I.7.** A phased plan for annexation of Sphere of Influence territory should be included in the Sphere of Influence proposal.

- **Standard I.8.** No amendments to a Sphere of Influence Plan will be approved unless a Master Services Element of the Sphere of Influence Plan exists that has been prepared by a local agency and adopted by LAFCo if required.

- **Standard I.10.** The LAFCo will approve a proposed amendment to a Sphere of Influence only if the subject agency will be the most logical and prospectively most efficient provider of services to the subject territory.

LAFCO DEFINITION OF OPEN SPACE

Sacramento LAFCo uses the following criteria to define open space:

- According to Section 56059, "Open Space," of the Cortese-Knox Act, open space means any parcel or area of land or water which is substantially unimproved and devoted to an open-space use, as defined in Section 65560.

- Section 65560 of the *Planning, Zoning, and Development Laws 2011* further defines open space as follows:

  a. "Local open-space plan" is "the open-space element of a county or city general plan adopted by the board or council. …"

  b. "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional or state open-space plan as any of the following:

     1. Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.

     2. Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

     3. Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.

     4. Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the

protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.

1.3 SCOPE OF THE EIR

Sacramento LAFCo reviewed and considered all comments received on the notice of preparation (NOP) for the proposed project and submitted on the Draft EIR. As relevant and appropriate, this Recirculated Draft EIR addresses those comments.

A NOP was issued on March 7, 2016. The NOP, describing the project and issues to be addressed in the EIR, was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period, extending from March 7, 2016 through April 8, 2016. The NOP comments on the scope and content of the EIR are contained in Appendix A of this Recirculated Draft EIR and are listed in Table 1 of Appendix A.

The Draft EIR was received on February 15, 2017 by the State Clearinghouse. The Draft EIR was circulated for a 45-day public review period, which concluded on March 31, 2017. In addition to written comments, Sacramento LAFCo also accepted verbal comments related to the Draft EIR at the regularly scheduled Commission meeting on March 1, 2017, and at an open house on March 10, 2017. Verbal and written comments were received in response to the Draft EIR. They are listed in Table 1-1 and provided in Appendix B of this Recirculated Draft EIR.

Table 1-1
Comments Received on the Draft EIR

Letter #	Commenter	Date Received
Agencies/Tribes		
A-1	Sacramento Regional County Sanitation District/Sacramento Area Sanitation District	February 15, 2017
A-2	Sacramento Area Council of Governments (SACOG)	March 7, 2017
A-3	California Department of Fish and Game (CDFW)	March 8, 2017
A-4	United Auburn Indian Community of the Auburn Rancheria	March 17, 2017
A-5	Sacramento County	March 21, 2017
A-6	California Department of Conservation, Division of Oil, Gas, and Geothermal Resources	March 27, 2017
A-7	California Department of Transportation (Caltrans)	March 29, 2017
A-8	Sacramento Metropolitan Air Quality Management District (SMAQMD)	March 30, 2017
A-9	Cosumnes Community Services District (CCSD)	March 31, 2017
A-10	Elk Grove Unified School District (EGUSD)	March 31, 2017
A-11	Sacramento Municipal Utility District (SMUD)	March 31, 2017
A-12	California Office of Planning and Research, State Clearinghouse and Planning Unit	April 5, 2017
Organizations		
O-1	Friends of the Swainson's Hawk (FOSH)	March 31, 2017
O-2	Environmental Council of Sacramento (ECOS)	April 3, 2017
O-3	Friends of Stone Lakes National Wildlife Refuge	April 3, 2017
Individuals		
I-1	Public Comments Received at the Open House	March 15, 2017
I-2	Paul Lindsay	March 15, 2017
I-3	Diane Owen	March 29, 2017
I-4	Suzanne Pecci	March 31, 2017
I-5	Applicants: Martin Feletto and Gerry Kamilos	April 3, 2017
I-6	Grant Lynes	April 3, 2017
I-7	Lynn Wheat	April 3, 2017

1.4 FORMAT OF RECIRCULATED DRAFT EIR

This Recirculated Draft EIR focuses on updates to the agricultural resources; biological resources; hazards and hazardous materials; hydrology and water quality; land use, population, housing, employment, environmental justice, and unincorporated disadvantaged communities; public services and recreation; transporation; and utilities and service systems analyses that was presented in the Draft EIR, as well as related revisions to Chapter 4, Alternatives, and Chapter 5, Other CEQA Considerations. Changes to the Draft EIR text are indicated by ~~strikethrough~~, which indicates the deletion of text from the Draft EIR, and underline, which indicates new text added to the Recirculated Draft EIR. Text within this Recirculated Draft EIR that appears without strikethrough or underline indicates that it is the same as in the Draft EIR.

1.5 ORGANIZATION OF THE EIR

This Recirculated Draft EIR is organized into the following main sections:

- **Executive Summary.** This section orients the reader to the LAFCo-specific matters of jurisdiction and concern. It also includes a summary of the proposed project and alternatives addressed in the Recirculated Draft EIR, as well as a summary of the project's environmental impacts, required mitigation measures, and level of significance after mitigation associated with those resource sections included in the Recirculated Draft EIR.

- **Chapter 1, "Introduction."** This chapter provides an introduction and overview describing the purpose of this Recirculated Draft EIR, its scope and components, and its review and certification process.

- **Chapter 2, "Project Description."** This chapter includes a detailed description of the proposed project, including its location and land use assumptions developed for the purpose of analysis in this EIR. It also describes the intended uses of the EIR, potential responsible agencies, and the needed permits and approvals.

- **Chapter 3, "Environmental Impact Analysis."** This chapter analyzes the environmental impacts of the proposed project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures, and significance after mitigation. The following specific environmental topics are addressed in Chapter 3:

  - **3.2 Agricultural Resources**— The Recirculated Draft EIR provides City policies that are intended to avoid incompatibilities that could adversely affect ongoing agricultural operations and provides new information related to potential future annexation areas, percentages of different uses for these growth areas, and rural transition areas in the vicinity of Eschinger Road. In addition, an error was revised on Exhibit 3.2-1 and Exhibit 3.2-5.

  - **3.4 Biological Resources**—The Recirculated Draft EIR defines the biological resources in the vicinity of the SOIA Area and surrounding habitats and evaluates potential effects on wetlands, other sensitive natural communities (e.g., riparian habitat), and special-status species (e.g., raptors and other migratory birds). This section also addresses the relationship between the proposed project and the public review draft of the *South Sacramento Habitat Conservation Plan*, which has become available since circulation of the Draft EIR. This section of the Reciriculated Draft EIR identifies mitigation measures that are consistent with the avoidance, minimization, and mitigation measures for covered species described in the draft SSHCP; discusses how implementation of these mitigation measures will ensure future development

is not likely to conflict with the provisions of the SSHCP; describes how the South Sacramento Habitat Conservation Plan characterizes agricultural lands in Elk Grove and surrounding areas; and determines how these lands are proposed to be integrated with the South Sacramento Habitat Conservation Plan system of planned preserves.

- **3.6 Energy**—The Recirculated Draft EIR incorporates new information provided by SMUD, which identifies existing infrastructure within and adjacent to the SOIA Area and SMUD's requirements for construction of new infrastructure.

- **3.9 Hazards and Hazardous Materials**—The Recirculated Draft EIR includes additional regulatory requirements and updates information related to the Suburban Propane facility.

- **3.10 Hydrology and Water Quality**—The Recirculated Draft EIR incorporates new information in the existing setting and regulatory framework from the Sacramento Central Groundwater Authority's *South American Subbasin Alternative Submittal*, which analyzes the change in groundwater storage and groundwater extraction, and updates the groundwater analysis based on this information.

- **3.11 Land Use, Population, Housing, Employment, Environmental Justice, and Unincorporated Disadvantaged Communities**—The Recirculated Draft EIR summarizes new information related to Elk Grove's General Plan update EIR NOP, draft annexation policies, and preliminary information from the General Plan update process related to absorption and phasing, particularly as it relates to the proposed "South Study Area" and rural transition areas in the vicinity of Eschinger Road.

- **3.13 Public Services and Recreation**—The Recirculated Draft EIR updates the existing setting, the regulatory framework, and environmental impacts of the proposed project related to fire protection, law enforcement, public schools, and parks and recreation based on new informatoinn provided by the City, Cosumnes Community Service District, and Elk Grove Unified School District.

- **3.14 Transportation**—The Recirculated Draft EIR evaluates existing traffic conditions and potential traffic impacts related to a conflict with one or more applicable transportation plans, ordinances, or policies; conflicts with applicable congestion management plans; hazards due to a design feature or incompatible use; inadequate emergency access; or conflicts with adopted plans, policies, or programs regarding public transit, bicycle, or pedestrian facilities. In 2013, Senate Bill (SB) 743 was passed, which required the Governor's Office of Planning and Research (OPR) to revise the CEQA Guidelines to replace LOS with an alternative method of transportation impact analysis. The recommended method is to analyze vehicle miles travelled (VMT) in lieu of LOS. The Recirculated Draft EIR adds information related to transportation facility maintenance and vehicle miles traveled.

- **3.15 Utilities and Service Systems**—The Recirculated Draft EIR updates the water supply and demand analysis based on new information provided by the Sacramento County Water Agency.

► **Chapter 4, "Alternatives."** This chapter compares the impacts of the proposed project with two alternatives: the No Project Alternative and a Reduced Size Alternative. An environmentally superior alternative is identified.

- **Chapter 5, "Other CEQA Considerations."** This chapter provides a summary of significant environmental impacts; significant and unavoidable impacts; growth-inducing effects; and cumulative impacts.

- **Chapter 6, "References."** This chapter contains the list of references used in preparing the EIR.

- **Chapter 7, "Preparers."** This chapter contains a list of preparers of the EIR.

- **Appendices:** The appendices include notices and other procedural documents pertinent to the Recirculated Draft EIR, as well as technical material prepared to support the analysis.

1.6 REVIEW OF THE RECIRCULATED DRAFT EIR

Upon completion of the Recirculated Draft EIR, the Sacramento LAFCo filed a notice of completion (NOC) with the Governor's Office of Planning and Research to begin the public review period (Public Resources Code Section 21161). Concurrent with the NOC, this Recirculated Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as to all parties requesting a copy of the Recirculated Draft EIR, in accordance with Public Resources Code Section 21092(b)(3).

During the public review period, the Recirculated Draft EIR, including the technical appendices, is available for review at the Sacramento LAFCo offices, located at the address provided below. Agencies, organizations, and interested parties not previously contacted or who provided comments on the NOP or draft EIR have the opportunity to comment on the Recirculated Draft EIR during the public review period on the Recirculated Draft EIR. Comments should be focused on the sections included in this Recirculated Draft (CEQA Guidelines Section 15088.5[f][2]). Written comments on this Recirculated Draft EIR should be addressed to:

Don Lockhart, AICP, Executive Officer
Sacramento Local Agency Formation Commission
1112 I Street, Suite 100
Sacramento, CA 95814
Phone: (916) 874-2937
Fax: (916) 854-2939
Email: Don.Lockhart@SacLAFCo.org

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to comments on the Recirculated Draft, as well as responses to comments on the portions of the original Draft EIR that were not recirculated, will be prepared and made available for review by the commenting agencies at least 10 days before the public hearing before the Commission, at which the certification of the Final EIR will be considered. The Final EIR will incorporate responses to comments received on the sections of the Draft EIR that were not recirculated and the comments received on the sections in this Recirculated Draft EIR. The comments and responses will be included as part of the record for consideration by the Commission.

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2 PROJECT DESCRIPTION

The project is a landowner-initiated proposal to amend:

1. the City of Elk Grove Sphere of Influence (SOI);
2. the Sacramento Area Sewer District (SASD) SOI; and
3. the Sacramento Regional County Sanitation District (SRCSD) SOI.

The affected territory includes a 1,156-acre area that abuts the southern portion of the City of Elk Grove's existing jurisdictional boundary. This is called the proposed Sphere of Influence Amendment Area (SOIA Area) or "the project site." This proposed SOI Amendment (SOIA) requires approval by the Sacramento Local Agency Formation Commission (LAFCo), which has sole discretion on the establishment and amendment of SOI boundaries. LAFCo is charged with oversight of changes in governmental organization and has the authority to consider (LAFCo 2007):

- Annexations to, or detachments from cities or districts;
- The formation or dissolution of districts;
- The incorporation or disincorporation of cities;
- The consolidation or reorganization of cities or districts;
- The establishment of subsidiary districts; and
- The development of, and amendments to, Spheres of Influence.

LAFCo has the authority to approve, modify and approve, or disapprove applications, and to impose mitigation measures and conditions of approval. Per statute, LAFCo cannot impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements.

2.1 PROJECT LOCATION AND SETTING

Elk Grove is located in the southwestern part of Sacramento County. Exhibit 2-1 depicts the SOIA Area's regional location, which is to the south of the existing City of Elk Grove boundary. Exhibit 2-2 depicts the SOIA Area. The SOIA Area consists of approximately 1,156 acres west of State Route 99 (SR 99), south of Kammerer Road, and east of McMillan Road (future Big Horn Boulevard). The SOIA Area is currently within the jurisdiction of the County of Sacramento and is entirely outside of the County's General Plan Urban Services Boundary. While it is outside the County's Urban Services Boundary, the boundary of the SOIA Area is adjacent to existing urban services for sanitary sewer, water, drainage, transportation, power, and communication utility systems.

The SOIA Area is not impacted by any airport overflight restrictions, is naturally outside of both regional (Cosumnes River) and local 100-year floodplains.

The SOIA Area is primarily used for extensive dry farmed and irrigated croplands and vineyard operations. A cluster of buildings supporting the agricultural operations exists on the most easterly parcel.

The SOIA Area has been disturbed and leveled over decades to facilitate commercial farming operations. Drainage has been achieved via a series of highly maintained agricultural ditches, which generally follow field

boundaries. Irrigation to the eastern vineyards is achieved by an old SR 99 borrow pit modified as a storm/irrigation runoff holding facility that is fully maintained on the most easterly parcel of the SOIA Area.

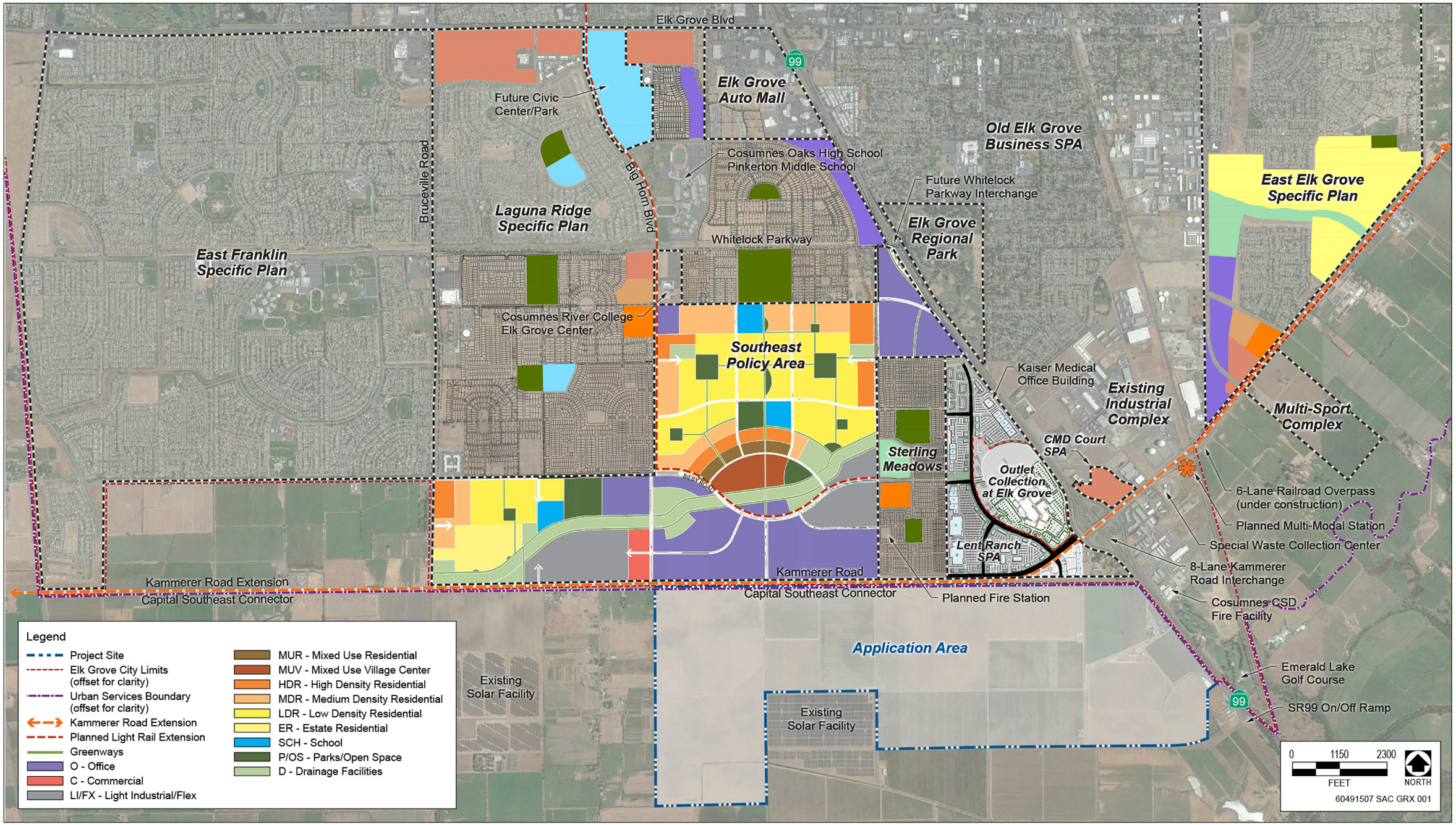
Following is a description of the vicinity of the SOIA Area.

- **North:** Existing Kammerer Road (south boundary of the City of Elk Grove) and the planned Capital Southeast Connector, a 35-mile, multi-lane, limited access roadway connecting I-5 at the Hood-Franklin interchange south of Elk Grove to U.S. Highway 50 at the Silva Valley Parkway interchange in El Dorado Hills. Existing and approved development within the city along this boundary includes: (1) the 295-acre Lent Ranch Marketplace Special Planning Area consisting of a proposed regional shopping center, community commercial, medical, office, entertainment, visitor commercial and high-density residential land uses; (2) the 200-acre Sterling Meadows residential subdivision; and (3) the approximately 1,200-acre Southeast Policy Area, consisting of about 350 acres of office, light industrial, and commercial land uses bordering the Capital Southeast Connector alignment. The Grant Line Road/Kammerer Road/Highway 99 interchange is located just northeast of the project site and was constructed in 2008 to accommodate 8 lanes of traffic. In addition, the Federal Bureau of Indian Affairs has identified the northwest portion of the intersection of Grant Line Road and SR 99 as the preferred location for the Wilton Rancheria Casino Resort. A draft of the Environmental Impact Statement has been released for this possible future project. The Elk Grove alternative consists of a proposed 611,055 square-foot hospitality and entertainment facility, including a 12-story, 302-room hotel, a 48,150 square-foot convention center, six restaurants and bars, and a 110,260 square-foot gaming floor (City of Elk Grove 2016).

- **East:** SR 99 (also part of the south boundary of Elk Grove). Existing development within the city along the east side of SR 99 includes commercial, heavy rail-served industrial and public facilities, including the Suburban Propane refrigerated storage facility, the Cosumnes CSD fire training facility, and recreational facilities. In late 2014, the City relocated its proposed rail/multimodal transportation station into this area. An area southeast of the existing City limits and northeast of the SOIA Area is identified by the City's General Plan update EIR Notice of Preparation as the East Study Area. It encompasses approximately 1,773 acres of land southeast of Grant Line Road and east of the Union Pacific Railroad. The Elk Grove Multi-Sports Complex is proposed for the western portion of the East Study Area and the proposal includes a multi-sports complex with associated sports fields and amphitheater. Although no future development beyond the sports complex is proposed, future development could consist primarily of commercial and industrial uses. In the central and northeastern portions of the East Study Area, uses would transition to more residential in nature (City of Elk Grove 2017).

- **South:** Eschinger Road, agricultural operations, and solar energy generation facilities.

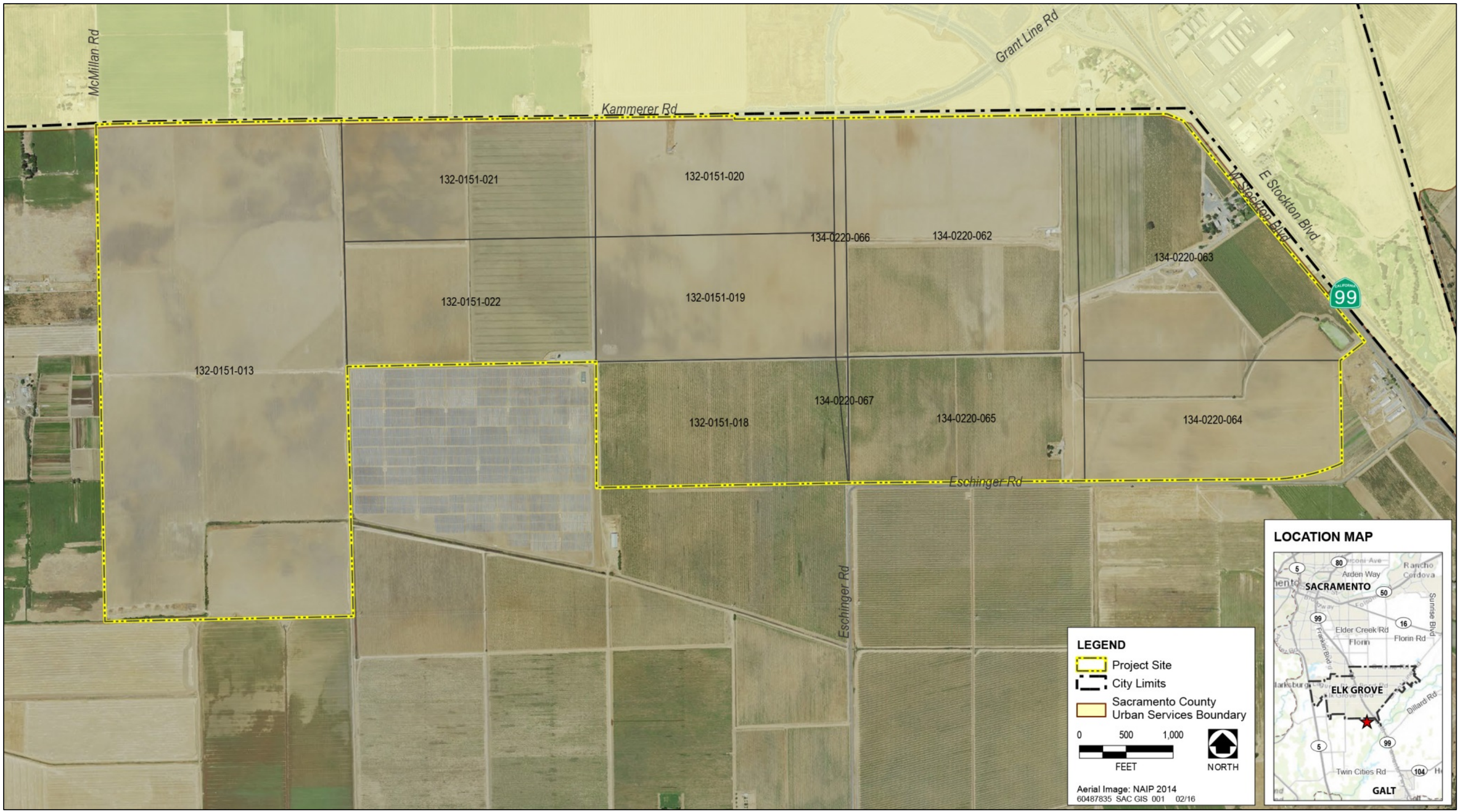
- **West:** Future extension of McMillan Road/Big Horn Boulevard, and agricultural/residential land uses. West of the existing City limits and west of the SOIA Area is an area identified by the City's General Plan update EIR Notice of Preparation as the West Study Area. It comprises 1,982 acres outside the existing City limits and is bound by Bilby Road on the north, the Union Pacific Railroad on the west, Bruceville Road on the east, and Core and Eschinger Roads on the south. An application has been submitted to LAFCo for the Bilby Ridge SOIA (Sacramento LAFCo Application #04-16). The Bilby Ridge SOIA Area is north of Kammerer Road, and is proposed to include a range of residential densities, including medium-density residential apartments and townhomes, low-density residential development, and Estate Residential development; commercial uses; and light industrial uses (City of Elk Grove 2017). The City has defined Estate Residential development as having densities between 1 and 4 units per acre.



Source: Sacramento County 2014, adapted by AECOM in 2016

Exhibit 2-1 **Regional Location Map**

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Source: Sacramento County 2014, adapted by AECOM in 2015

Exhibit 2-2 **Proposed Sphere of Influence Amendment Area**

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2.2 REGIONAL PLANNING

2.2.1 SACRAMENTO AREA COUNCIL OF GOVERNMENTS' BLUEPRINT

In 2002, the Sacramento Area Council of Governments (SACOG) convened a regional discussion regarding future growth with local governments, the building and development industry, key stakeholders, and the greater community at large. This discussion of growth centered on the then-accepted statistics the region would grow by more than 1.7 million people and add 1 million new jobs by 2050. To assist in solving the many challenges associated with that degree of growth, SACOG initiated the Sacramento Region Blueprint Project (Blueprint), an extensive study of the long-term linkages between transportation, land use, and air quality, which led to the adoption of Blueprint Principles.

The Blueprint was designed to be a resource of data for local governments to make informed land use decisions. The Blueprint provides high-quality data and modeling tools to aid decision makers in analyzing future growth and its effects on quality of life issues, such as traffic congestion and air pollution. In addition to developing detailed land-use and travel data, an extensive community outreach effort was conducted to develop and assess guiding principles for the region's long-term growth.

The SACOG Board of Directors adopted the Preferred Blueprint Scenario in December 2004. The Preferred Blueprint Scenario does not regulate land use in SACOG jurisdictions, but does include a conceptual land use diagram that helps to illustrate Blueprint Principles. In December of 2004, the SACOG Board of Directors unanimously adopted a Preferred Scenario for the Blueprint. This Preferred Scenario designated lands south of the city of Elk Grove, including the SOIA Area, as "Vacant Urban Designated Lands."

2.2.2 METROPOLITAN TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

In 2016, the Sacramento Area Council of Governments (SACOG) approved the 2036 Metropolitan Transportation Plan (MTP)/Sustainable Communities Strategy (SCS), which is a regional transportation plan and land use strategy designed to support good growth patterns, including:

- Increased housing and transportation options;
- Inwardly-focused growth and improved economic viability of rural areas;
- Minimized direct and indirect transportation impacts on the environment;
- A transportation system that delivers cost-effective results and is feasible to construct and maintain;
- Effective connections between people and jobs;
- Improved opportunities for businesses and citizens to easily access goods, jobs, services, and housing; and
- Real, viable choices for methods of travel.

The MTP/SCS built on the foundation provided by the Blueprint project and includes a land use strategy to improve mobility and reduce travel demand from passenger vehicles by prioritizing compact and transit-oriented development, reducing the growth in vehicle miles traveled (VMT) and associated GHG emissions. The MTP/SCS projects regional growth to include 811,000 more people and 439,000 new jobs by 2036 and also includes projections for the location of growth within the region, between jurisdictions, and among different community types.

The 2016 MTP/SCS designates the project site as "Blueprint Vacant Urban Designated Lands Not Identified for Development in the MTP/SCS Planning Period," which is 2036 for the 2016 MTP/SCS (SACOG 2016). SACOG updates this plan approximately every four years.

2.3 LOCAL PLANNING

2.3.1 SACRAMENTO COUNTY

Sacramento County's General Plan designates the project site for Agricultural Cropland. The current County zoning designation for the site is Agricultural, 80-acre minimum (AG-80).

URBAN SERVICES BOUNDARY AND URBAN POLICY AREA

The Sacramento County General Plan designates two boundaries that guide development: The Urban Services Boundary (USB) and the Urban Policy Area (UPA). The USB is used to indicate the ultimate boundary of the urban area in the unincorporated area of Sacramento County. The UPA is intended to indicate the geographic areas where urban development is expected to occur during the projected buildout of the General Plan (2030). The SOIA Area is outside of, and adjacent to both of these boundaries.

2.3.2 SOUTH SACRAMENTO HABITAT CONSERVATION PLAN

The SOIA Area is located within the proposed South Sacramento Habitat Conservation Plan (SSHCP) area. A public review draft of the SSHCP and Implementing Agreement, accompanying joint draft Environmental Impact Statement/draft Environmental Impact Report, and draft Aquatic Resources Program, were released on June 2, 2017, opening a 90-day public comment period that runs until September 5, 2017. Public hearings will be held on proposed adoption of the final SSHCP, final EIS/EIR, final Aquatic Resources Program, and final Implementing Agreement in fall and winter of 2017–2018, and an Incidental Take Permit is expected to be issued in Spring 2018 (Sacramento County 2017). Agencies applying for an Incidental Take Permit under the draft HCP include Sacramento County, the cities of Galt and Rancho Cordova, the Sacramento County Water Agency, the Capital Southeast Connector Joint Powers Authority, and the future South Sacramento Conservation Agency.

2.3.3 CITY OF ELK GROVE

The project site is outside the area governed by the City's existing General Plan and zoning ordinance. The 2003 General Plan land use diagram designates the area for "future study." Areas to the north and adjacent to the project site are designated for development under the City's Southeast Policy Area, and for medium-density residential development and commercial development under the City's General Plan. ~~The General Plan included "urban study areas" as locations outside the current City limits where "future study should be done in order to determine the extent to which urban growth should occur and in what form growth should be permitted" (City of Elk Grove 2015). The SOIA Area is identified by the City as "Study Area 2."~~

After the Draft EIR, on June 23, 2017, the City of Elk Grove released a Notice of Preparation (NOP) for an EIR to address the City's General Plan update and an update to the City's Climate Action Plan. The SOIA Area is identified in the City's preferred alternative land use diagram as the "South Study Area." The City's intent is that the Study Areas may be developed in accordance with annexation policies that will be identified in the updated General Plan and an additional layer of more detailed planning (e.g., specific plan) (City of Elk Grove 2017).

PREVIOUS APPLICATION

In 2008, the City applied to the Sacramento LAFCo for a Sphere of Influence Amendment (LAFC#04-08) for an area to the south and east of its current boundary consisting of approximately 10,536 acres, which was subsequently closed and a new application (LAFC#09-10) submitted by the City for 7,869 acres, including the area addressed by the current proposed project. The City withdrew its application in 2013.

This project is separate and distinct from the previous proposals.

2.4 PROPOSED PROJECT

The proposed project is a landowner-initiated proposal to amend the City of Elk Grove SOI, the SASD SOI, and the SRCSD SOI to add approximately 1,156 acres in an area just south of, and adjacent to the City of Elk Grove's current City limits. A SOI is defined by Government Code Section 56425 as a plan for the probable physical boundary and service area of a local governmental agency, including areas adjacent to the existing service area of a jurisdiction where services might reasonably be expected to be provided in the next 20 years. Sacramento LAFCo is the CEQA lead agency for the proposed SOIA.

As previously stated, the project does not include any development proposal and does not provide for any changes to land use. Any future City of Elk Grove development would first require an annexation request to Sacramento LAFCo. Annexation may occur in multiple phases or under a single application, depending on the timing and nature of future project applications. There are no changes in the existing land use proposed at this time. Existing Sacramento County General Plan and zoning designations will remain in place. The City would use the amended SOI boundary in discussions with future applicants, Sacramento County, affected service providers, landowners, residents, and stakeholders.

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH Act) includes provisions for amending spheres of influence. This SOIA would allow the City of Elk Grove and other service providers to plan for future urbanization, but it does not authorize changes in land use or governance. Lands within an amended SOI would not be under the City's jurisdiction until future prezoning and/or development applications are received and requests for annexation of those parcels are approved by Sacramento LAFCo. The proposed project does not include an annexation request. There will not be any change to the land use or taxation jurisdiction, in the event that LAFCo approves the proposed SOIA.

2.4.1 LAND USE SCENARIO

While there are no changes to land use, land use designations, or zoning proposed as part of this project, in order to facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario.

The applicant-proposed assumed land use scenario ~~array of land uses~~ has been derived from the recently approved Southeast Policy Area (SEPA) land use distribution adjacent to the north, in order to facilitate project analysis. The applicant estimates that the project site could accommodate development that would provide 18,000 to 20,000 jobs in office, industrial, and commercial settings (Table 2-1). The SOIA application identifies a jobs-to-housing ratio ranging from 3.6:1 to 5.0:1. Development could include a significant employment component near the Grant Line Road/SR 99 interchange and along the Kammerer Road (future Capital Southeast Connector)

corridor. Additionally, for the purposes of analysis, the applicant has identified that the project site could accommodate the development of a broad array of housing types, with a total of 4,000 to 5,000 dwelling units. For the purposes of analysis, the applicant notes that future proposed development would involve supportive infrastructure, public lands, and retail development that is oriented to future employment areas.

Table 2-1. Conceptual Land Use Scenario

Land Use	Jobs	Acreage	Dwelling Units
Multi-Family Residential	-	90	1,790
Single-Family Residential	-	430	3,200
Commercial	1,600	50	-
Office	15,000	330	-
Industrial	3,500	130	-
School (2,696 students)	190	30	-
Parks/Open Space, Trails	-	110	-
Total	20,000	1,156	5,000

Note: Totals do not add due to rounding.
Source: AECOM 2016

Since the project is a SOIA only, it does not include any land use plan or prezoning. LAFCo has no land use authority. If the SOIA is approved and annexation to the City of Elk Grove is subsequently proposed, land use planning would occur under the City's jurisdiction. Prezoning of the affected territory by the City would be required prior to any application for annexation.

The project also does not include any indication of any timeline of development or phasing for future development.

2.4.2 MUNICIPAL SERVICES REVIEW

The CKH requires completion and Commission acceptance of a Municipal Service Review (MSR) to assess the adequacy of required infrastructure and services capacity and means of financing prior to any modification of an SOI boundary. The MSR is not a project subject to CEQA review. The MSR is being prepared concurrently with this EIR. This document will evaluate potential options for providing municipal services and the actions required to change the service boundaries of municipal service providers.

An MSR was prepared for the previous SOI expansion application that was withdrawn by the City and included the project site and the larger surrounding area (7,869 acres in total). That MSR concluded that there is adequate government structure available to provide necessary services, including those for which the City is a provider: land use planning, solid waste and recycling, transportation infrastructure, law enforcement, animal control, code enforcement, parks and recreation, and storm drainage.

The project site is currently within the Cosumnes Community Services District, which provides fire protection, life safety, and additional parks and recreation services. The MSR also identified other agencies that will need to change boundaries to serve the project site, including: Sacramento County Water Agency which is not subject to LAFCo purview, the Sacramento Area Sewer District (collection), and the Sacramento Regional County Sanitation District (conveyance and treatment).

2.4.3 INFRASTRUCTURE AND SERVICES

The proposed SOIA application includes amendments to the Sacramento Area Sewer District (SASD) and Sacramento Regional County Sanitation District (SRCSD) SOIs. The review process affords the opportunity for potential service providers to provide input to LAFCo regarding future infrastructure and service demand for the proposal. Annexation of the affected territory would be required to enable service to be provided. If the proposed SOIA Area were annexed to the City of Elk Grove and proposed for development, this would require the full complement of municipal services, including water, wastewater collection and treatment, flood protection, solid waste and recycling, police, fire, library services, transportation facilities and maintenance, street lighting, electricity, natural gas, communications, and parks and recreation. Each of these items is to be examined more fully in a MSR (under separate cover).

2.5 PROJECT OBJECTIVES

This Kammerer/99 SOIA (Application Area) requests Sacramento LAFCo approval to amend the City's SOI, which is coterminous with its current City boundary, to include approximately 1,156 acres adjacent to the City's southern boundary.

The purpose of a city SOI is to provide holding capacity for the city to be able to plan for employment opportunities and an expanding population. The nature of this project – a SOIA request – has important implications for the development of project objectives, as does LAFCo's role as the lead agency for this project. The project is a landowner-initiated proposal to amend the spheres of influence of the City of Elk Grove, Sacramento Area Sewer District (SASD), and the Sacramento Regional County Sanitation District (SRCSD). The project does not propose land use change or development. Therefore, project objectives do not focus on outcomes that relate to land use, development type or scale, or spatially specific planning components within the proposed SOIA Area. Also, LAFCo has the authority to approve, modify and approve, or disapprove applications, and to impose mitigation measures and conditions of approval, but cannot impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements. Consistent with LAFCo's role, the project objectives do not dictate outcomes related to future land use, density, development intensity, or related topics that are the purview of local land use entitlement authorities in California.

The project objectives include the following:

- Amend the SOI boundary beyond the existing Elk Grove City limits to accommodate orderly and sustainable growth consistent with the City's General Plan.
- Implement the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 consistent with public service conditions present or reasonably foreseeable in the proposed SOIA Area.
- Establish a logical boundary within which future annexation requests into the City of Elk Grove may be considered.
- Consider providing land to accommodate a jobs-housing ratio for the City of Elk Grove that provides for sufficient residential and employment-generating lands uses to minimize the need for commuting to or from other jurisdictions.

- Establish an SOI for the City of Elk Grove that will facilitate the protection of important environmental, cultural, and agricultural resources.

2.6 INTENDED USES OF THIS RECIRCULATED EIR

Approval of a SOIA is considered a "project" subject to the requirements of the California Environmental Quality Act (CEQA). In this case, the proposed SOIA requires the preparation and consideration of an Environmental Impact Report (EIR). While the proposed project does not include an annexation proposal, before an annexation proposal would be approved by LAFCo, the City of Elk Grove would be required to demonstrate to LAFCo that the mitigation measures set forth in this EIR, or equally effective measures (as determined by LAFCo), were implemented.

According to CEQA Guidelines Section 15064(f)(1), the preparation of an EIR is required whenever implementing a project may result in a potentially significant or significant environmental impact. An EIR is used to inform public agency decision makers and the general public of the potentially significant or significant environmental impacts of a project, identify possible and feasible ways to avoid or reduce the potentially significant and significant impacts, and describe reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project, while substantially lessening or avoiding any of the potentially significant or significant environmental impacts. Public agencies are required to consider the information presented in the EIR when determining whether to approve a project.

2.7 PERMITS AND APPROVALS

The proposed project does not include annexation or any development and, as such, would not require any further permits or approvals.

If in the future, annexation is approved by LAFCo, the site would be in the City's jurisdiction. Any proposed construction could require demolition and disposal of existing structures, grading and excavation, building foundations, trenching and installation of utilities, paving of parking lots and internal roadways, lighting, and construction of commercial and industrial buildings subject to review under the City's zoning regulations and design guidelines. If annexation is proposed and subsequently approved by LAFCo in the future, and there is future development, this development will require various permits and other types of approvals from agencies with a purview over land use, air quality, biological resources, water quality, public services and utilities, and other topics.

3 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

3.0 APPROACH TO THE ENVIRONMENTAL ANALYSIS

The California Environmental Quality Act Guidelines (CEQA Guidelines) require the environmental analysis for an EIR to include an evaluation of impacts associated with a proposed project and to identify mitigation for any potentially significant impacts. CEQA Guidelines Section 15126.2(a) states:

> An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected.

3.0.1 SECTION FORMAT AND CONTENTS

The environmental setting, impacts, and required mitigation measures for the proposed project are organized by issue area, corresponding to topics in the CEQA Environmental Checklist (CEQA Guidelines Appendix G, as amended). Each section follows the same format:

- The "**Environmental Setting**" subsection provides an overview of the existing physical environmental conditions (i.e., the environmental baseline) for each issue area at the time this analysis was prepared. The environmental baseline at the time of the release of the NOP (March 2016) is the context against which potential project impacts are evaluated.

- The "**Regulatory Framework**" subsection identifies the federal, State, regional, and local plans, policies, laws, regulations, and ordinances that are relevant to each issue area. This subsection describes required permits and other approvals necessary to implement the proposed project.

- The "**Environmental Impacts and Mitigation Measures**" subsection presents the following information:

  - The **"Methodology"** subsection describes the methods, process, procedures, and assumptions used to formulate and conduct the impact analysis.

  - The **"Thresholds of Significance"** subsection identifies the criteria established by the lead agency to define at what level an impact would be considered significant. Criteria may be defined by a lead agency based on examples found in CEQA or the CEQA Guidelines, scientific and factual data relative to the

lead agency jurisdiction, views of the public in the affected area, the policy/regulatory environment of affected jurisdictions, or other factors.

- If applicable, the **"Issues Not Discussed Further"** subsection identifies issues for which the proposed project would not affect the physical environment. An explanation is provided of how the determination of "no impact" was reached. These issues are not discussed further in the impact analysis that follows.

- The **"Impact Analysis"** subsection first presents a summary of the environmental impact conclusions. The impact analysis then presents an assessment of the potential direct and indirect impacts of the proposed project and specifies why impacts are found to be "significant and unavoidable," "significant," "potentially significant," or "less than significant" (see Section 3.0.2 Terminology Used in the EIR) or why there is no environmental impact.

If there is found to be a potentially significant impact, mitigation measures are provided, where available and feasible. The measures are numbered to correspond with the impacts they mitigate. In accordance with Public Resources Code Section 21081.6(b), mitigation measures must be fully enforceable through permit conditions, agreements, other legally binding instruments, or by incorporating the measures into the project design. Section 15370 of the CEQA Guidelines defines mitigation as:

- avoiding the impact altogether by not taking a certain action or parts of an action;
- minimizing impacts by limiting the degree of magnitude of the action and its implementation;
- rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- reducing or eliminating the impact over time by preservation and maintenance operation during the life of the action; or
- compensating for the impacts by replacing or providing substitute resources or environments.

Where no feasible mitigation is available to reduce impacts to a less-than-significant level, the impacts are identified as significant and unavoidable. (The analysis of cumulative impacts is presented in Chapter 5, along with the analysis of growth-inducing impacts.)

3.0.2 TERMINOLOGY USED IN THIS RECIRCULATED EIR

IMPACT LEVELS

This EIR uses the following terminology to denote the significance of environmental impacts of the proposed project:

- ***No impact*** would occur if the construction, operation, and maintenance of the proposed project would not have any direct or indirect effects on the environment. It means that no change from existing conditions would result. This impact level does not require mitigation.
- A ***less-than-significant impact*** is one that is not a substantial and adverse change in the physical environment. This impact level does not require mitigation, even if feasible mitigation measures are available.

- A ***significant impact*** is defined by Public Resources Code Section 21068 as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project." Mitigation measures or alternatives to the proposed project must be identified, where applicable and feasible, in an attempt to avoid, minimize, or reduce the magnitude of significant impacts.

- A ***potentially significant impact*** is one that, if it were to occur, would be considered a significant impact as described above; however, the occurrence of the impact cannot be immediately determined with certainty. For CEQA purposes, a potentially significant impact is treated (i.e., mitigated) as if it were a significant impact.

- A ***significant and unavoidable impact*** is a substantial or potentially substantial adverse effect on the environment that cannot be reduced to a less-than-significant level even with implementation of feasible mitigation. A project with significant and unavoidable impacts could proceed, but the lead agency would be required to required (i) to conclude in findings that there are no feasible means of substantially lessening or avoiding the significant impact in accordance with CEQA Guidelines Section 15091(a)(3) and (ii) to prepare a statement of overriding considerations, in accordance with CEQA Guidelines Section 15093, explaining why the CEQA lead agency has chosen to proceed with the project in spite of the potential for significant impacts.

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3.2 AGRICULTURAL RESOURCES

This section addresses agricultural resources within the project site and surrounding areas. It describes Sacramento County's agricultural land uses; describes the significance, quality, and extent of agricultural land on-site and within the County, including Important Farmland; and describes the factors that could potentially contribute to the conversion of irrigated agricultural land to non-irrigated uses.

3.2.1 ENVIRONMENTAL SETTING

Sacramento County is the state's 25th largest in terms of agricultural production. The gross valuation for all agricultural commodities produced in Sacramento County in 2015 was approximately $470 million, which represents a 6.4 percent decrease from the adjusted 2014 figure of $502 million, a record high. Wine grapes had the highest crop value ($128 million) and represent almost a third of Sacramento County's production value. Milk production is the number two commodity at $49 million, followed by pears ($40 million), poultry ($39 million), and aquaculture ($33 million) (Sacramento County Agricultural Commissioner 2015).

SACRAMENTO COUNTY FARMLAND CONVERSION

The California Department of Conservation's Important Farmland classifications—Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance—identify the land's suitability for agricultural production by considering physical characteristics of the soil, such as soil temperature range, depth of the groundwater table, flooding potential, rock fragment content, and rooting depth. The classifications also consider location, growing season, and moisture available to sustain high-yield crops. (See "Regulatory Framework" below, for detailed descriptions of Important Farmland classifications.)

Table 3.2-1 summarizes acreages of agricultural land in Sacramento County between 2004 and 2014 and shows the net change in acreage over that 10-year period. The Department of Conservation estimated that Sacramento County included 384,653 acres of agricultural land in 2004, of which 221,480 acres (57.6 percent) were classified as Important Farmland and 163,173 acres (42.4 percent) were classified as Grazing Land (DOC 2014a). Overall, the total acreage of Important Farmland decreased by approximately 5.8 percent over the 10 years between 2004 and 2014, and the total acreage of agricultural land decreased by 5.9 percent (Table 3.2-1). However, the most productive categories of farmland (Prime Farmland and Farmland of Statewide Importance) experienced a steep decline between 2004 and 2014 (-17.0 percent and -23.2 percent respectively).

The Department of Conservation field reports for Sacramento County identify the factors contributing to changes in agricultural land uses. Between 2004 and 2008, most of the conversion of irrigated Important Farmland (i.e., Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) was to urban land uses in the cities of Elk Grove, Rancho Cordova, Folsom, Galt; and in the Natomas area of the City of Sacramento (see Exhibit 3.2-3) (DOC 2014a). No recent annexation activity contributed to this conversion activity.

According to the Department of Conservation's most recent 2014 Field Report, Conversion of Important Farmland to Other Land resulted from land that was left idle for three or more update cycles, as well as the construction of rural residences, commercial and industrial buildings, parkland, and solar facilities (DOC 2014b). Conversely, Important Farmland increased in some instances, mainly from additions of vineyards, corn, alfalfa, various row crops, and irrigated pasture in the southern part of Sacramento County; multiple rice plantings east of

the Sacramento International Airport; and corn and irrigated hay near the unincorporated County place, Twin Cities (DOC 2014b).

Table 3.2-1. Summary of Agricultural Land Conversion in Sacramento County

Important Farmland Category	Acres				Net Change (2004–2014)	Percent Change (2004–2014)	Average Annual Change (2004–2014)
	2004	2010	2012	2014			
Prime Farmland	110,278	97,476	93,916	91,568	-18,710	-17.0%	-1.7%
Farmland of Statewide Importance	56,141	45,264	43,580	43,105	-13,036	-23.2%	-2.3%
Unique Farmland	15,188	15,076	15,060	15,125	-63	-0.4%	0.0%
Farmland of Local Importance	39,873	53,928	56,981	58,852	18,979	47.6%	4.8%
Important Farmland Subtotal	**221,480**	**211,744**	**209,537**	**208,650**	-12,830	-5.8%	-0.6%
Grazing Land	163,173	155,822	154,744	153,452	-9,721	-6.0%	-0.6%
Agricultural Land Total	**384,653**	**367,566**	**364,281**	**362,102**	-22,551	-5.9%	-0.6%

Source: DOC 2014a

WILLIAMSON ACT

Under the California Land Conservation Act of 1965, also known as the Williamson Act, local governments can enter into contracts with private property owners to protect land (within agricultural preserves) for agricultural and related open space purposes. Sacramento County had approximately 178,813 acres of land under Williamson Act contracts in 2013 (the most recent year for which data are available) (DOC 2015).

The nonrenewal process is the most common mechanism for termination of Williamson Act contract lands, and most Williamson Act contracts are terminated through this process. In Sacramento County as of 2013, approximately 9,741 acres were in some stage of the nonrenewal process and the amount of contract land terminated through nonrenewal expirations was approximately 1,984 acres (DOC 2015).

Urban development of Williamson Act lands prior to contract expiration requires cancellation of the contracts pursuant to California Government Code Section 51282 (see "Regulatory Framework," below). No Williamson Act contracts in Sacramento County were cancelled in 2013 (DOC 2015). No lands within the SOIA Area have been subject to Williamson Act contracts.

FARMLAND SECURITY ZONE

There are no Farmland Security Zone properties in the vicinity of the SOIA Area. Sacramento County does not participate in the Farmland Security Zone program (DOC 2016, DOC 2015).

EXISTING AGRICULTURAL USES IN THE PROPOSED SOI AMENDMENT AREA

The proposed SOIA Area) is within unincorporated Sacramento County and is primarily used for extensive dry farmed and irrigated croplands and vineyard operations. The site also includes the McConnell Estates winery and tasting room, which hosts weddings, concerts, and other events throughout the year. Drainage is conveyed via a

series of maintained agricultural ditches. Irrigation to the eastern vineyards is achieved by an old borrow pit modified as a storm/irrigation runoff holding facility that is fully maintained on the most easterly parcel.

Important Farmland

According to the Sacramento County Important Farmland map, published by the California Division of Land Resource Protection (DOC 2014c), approximately 105 acres of land within the SOIA Area is designated as Prime Farmland, 405 acres of land within the SOIA Area is designated as Farmland of Statewide Importance, and approximately 627 acres of land is designated as Farmland of Local Importance (Exhibit 3.2-1). In addition, active agricultural fields are located surrounding the project site are designated as Prime Farmland, Farmland of Statewide Importance, and Farmland of Local Importance.

Approximately 10 acres of the SOIA Area is designated as Other Land. Approximately 7 acres of land within the SOIA Area is designated as Urban and Built-Up Land.

Williamson Act

No parcels in the project are under Williamson Act contracts. Lands under Williamson Act contracts are located north and south of the proposed SOIA Area (Exhibit 3.2-2). No parcels in the vicinity of the SOIA Area have entered the nonrenewal process. No Williamson Act contracts in Sacramento County were cancelled in 2013 (DOC 2015).

Agricultural Designations and Zoning

The project site is designed in the County's General Plan as Agricultural Cropland (Exhibit 3.2-4) and is zoned by the County as ~~AG-20~~AG-80 (see Exhibit 3.2-5) (Agricultural, ~~20~~80-acre minimum). The ~~AG-20~~AG-80 zoning designation is used to eliminate the encroachment of land uses incompatible with the long term agricultural use of land, to preserve the maximum amount of the limited supply of agricultural land in order to conserve the County's economic resources that are vital for a healthy agricultural economy, to discourage the premature and unnecessary conversion of agricultural land to urban uses, and to encourage the retention of sufficiently large agricultural lots to assure maintenance of viable agricultural units (Sacramento County 2017).

3.2.2 REGULATORY FRAMEWORK

FEDERAL AND STATE PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulation, or laws pertaining to agricultural resources are applicable to the proposed project.

California Important Farmland Inventory System and Farmland Mitigation and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) was established by the State of California in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the U.S. Soil Conservation Service (now called the Natural Resources Conservation Service (NRCS), under the U.S. Department of Agriculture). The Soil Conservation Service produced agricultural resource maps, based on soil quality and land use. The Department of Conservation sponsors the FMMP and also is responsible for establishing agricultural easements, in accordance with California Public Resources Code Sections 10250–10255.

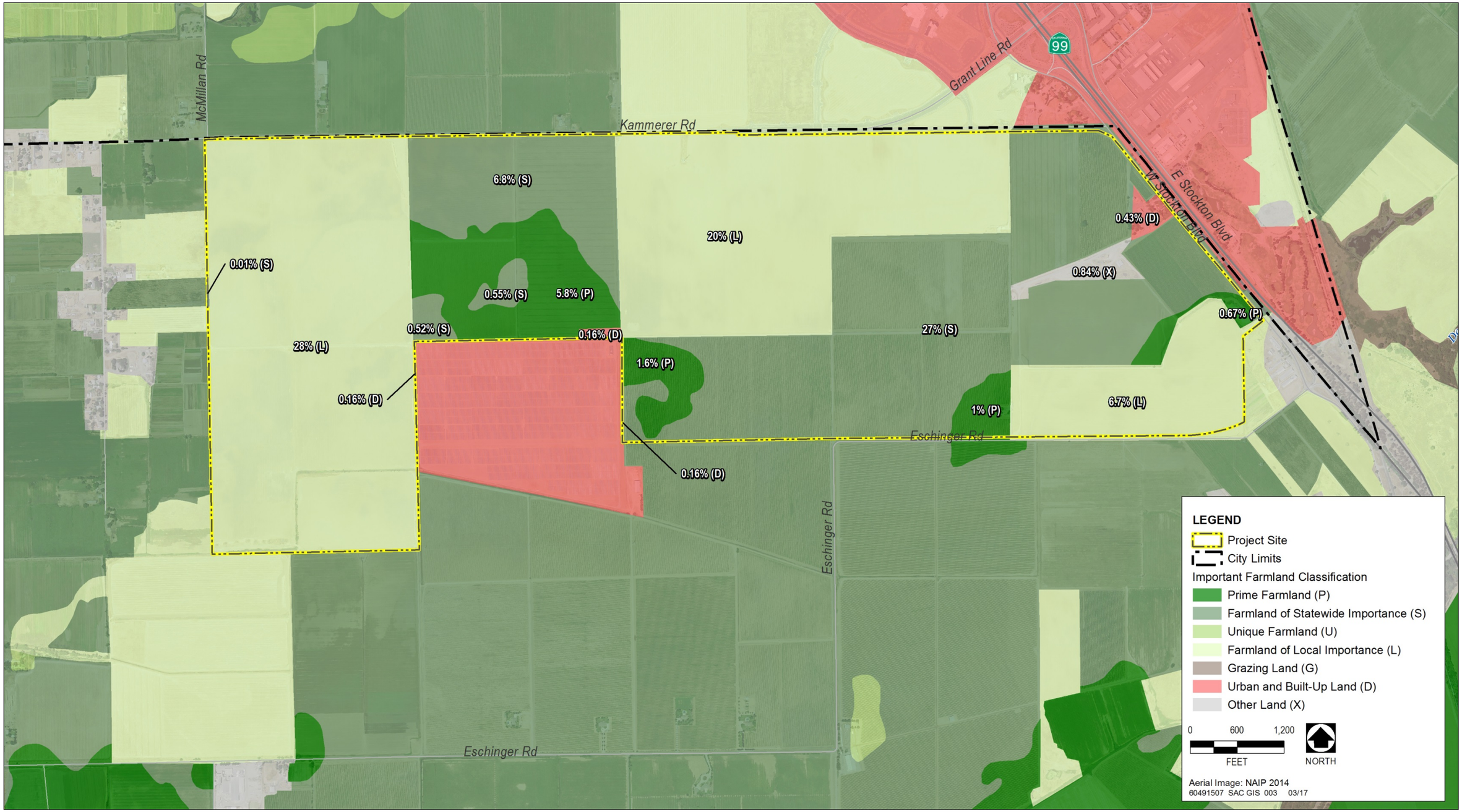
The Department of Conservation FMMP maps are updated every two years using aerial photographs, a computer mapping system, public review, and field reconnaissance. The following list provides a comprehensive description of all the categories mapped by the Department of Conservation:

- **Prime Farmland**—Land that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields.
- **Farmland of Statewide Importance**—Land similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture.
- **Unique Farmland**—Land of lesser quality soils used for the production of the state's leading agricultural cash crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California.
- **Farmland of Local Importance**—Land that is of importance to the local agricultural economy, as defined by each county's local advisory committee and adopted by its board of supervisors.
- **Grazing Land**—Land with existing vegetation that is suitable for grazing.
- **Urban and Built-Up Lands**—Land that is used for residential, industrial, commercial, institutional, and public utility structures and for other developed purposes.
- **Land Committed to Nonagricultural Use**—Land that has a permanent commitment to development but has an existing land use of agricultural or grazing lands.
- **Other Lands**—Land that does not meet the criteria of any of the previously described categories and generally includes low-density rural developments, vegetative and riparian areas not suitable for livestock grazing, confined-animal agriculture facilities, strip mines, borrow pits, and vacant and nonagricultural land surrounded on all sides by urban development.

Important Farmland is classified by the Department of Conservation as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. Under CEQA, the designations for Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are defined as "agricultural land" or "farmland" (California Public Resources Code Sections 21060.1 and 21095, and CEQA Guidelines Appendix G).

Williamson Act

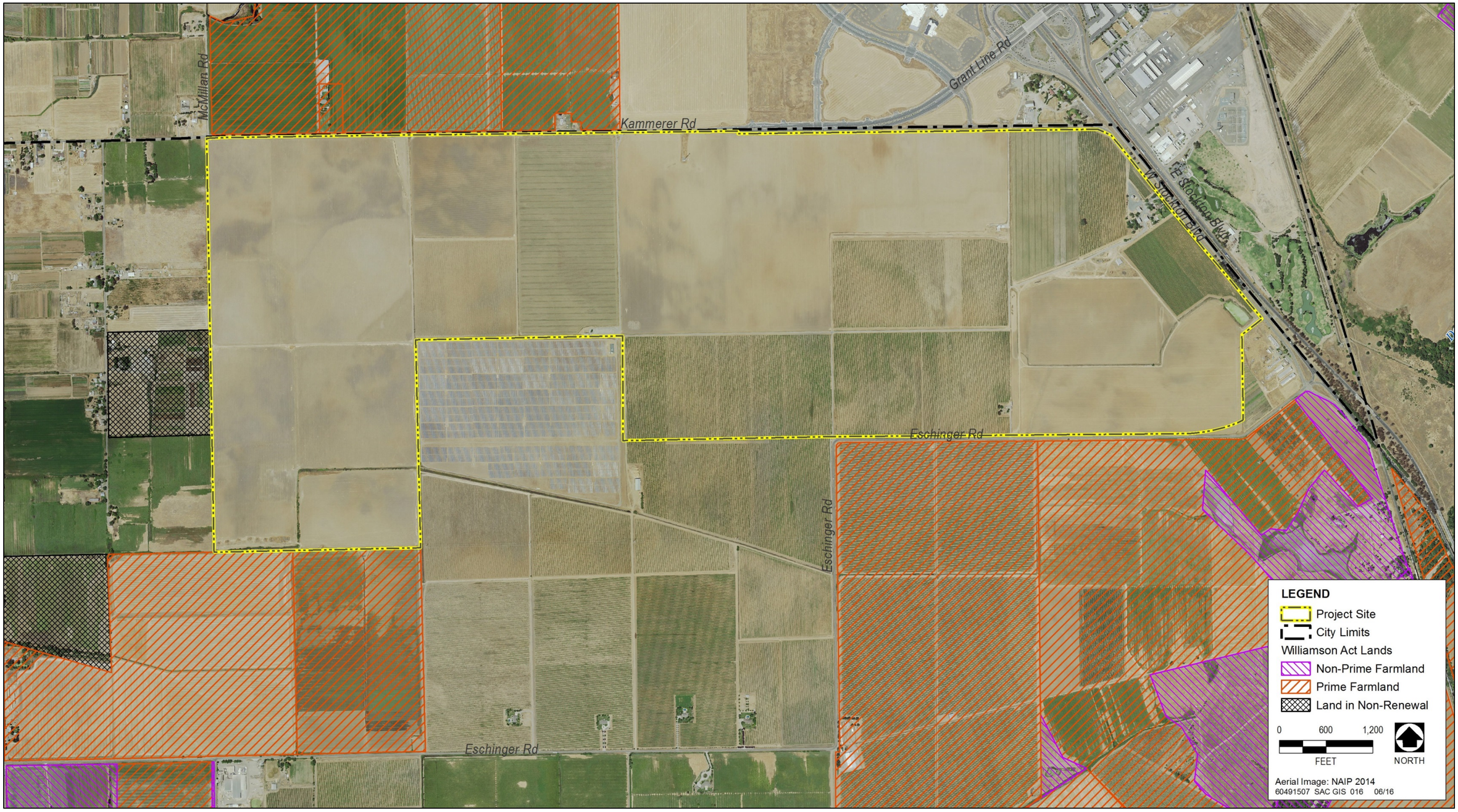
The California Land Conservation Act of 1965, commonly known as the Williamson Act, enables local governments to form contracts with private landowners to promote the continued use of the relevant land in agricultural or related open space use. As noted previously, there are no active Williamson Act or nonrenewal contracts affecting land in the SOIA Area.



Source: DOC 2014c, Sacramento County 2014 adapted by AECOM in 2016

Exhibit 3.2-1 **Important Farmland Map**

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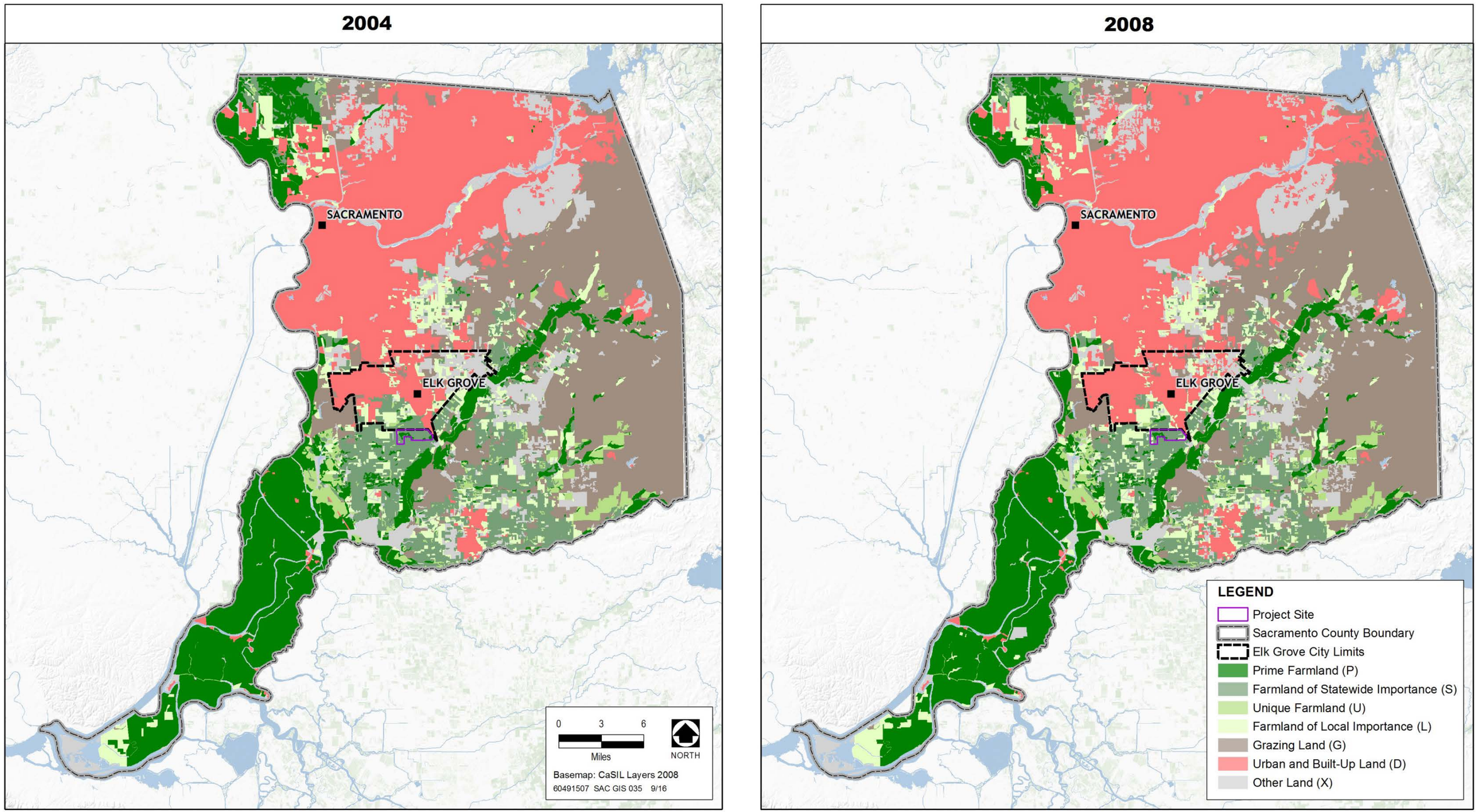


Source: DOC 2009 and 2015, Sacramento County 2014 adapted by AECOM in 2016

Exhibit 3.2-2

Lands under Williamson Act Contract Map

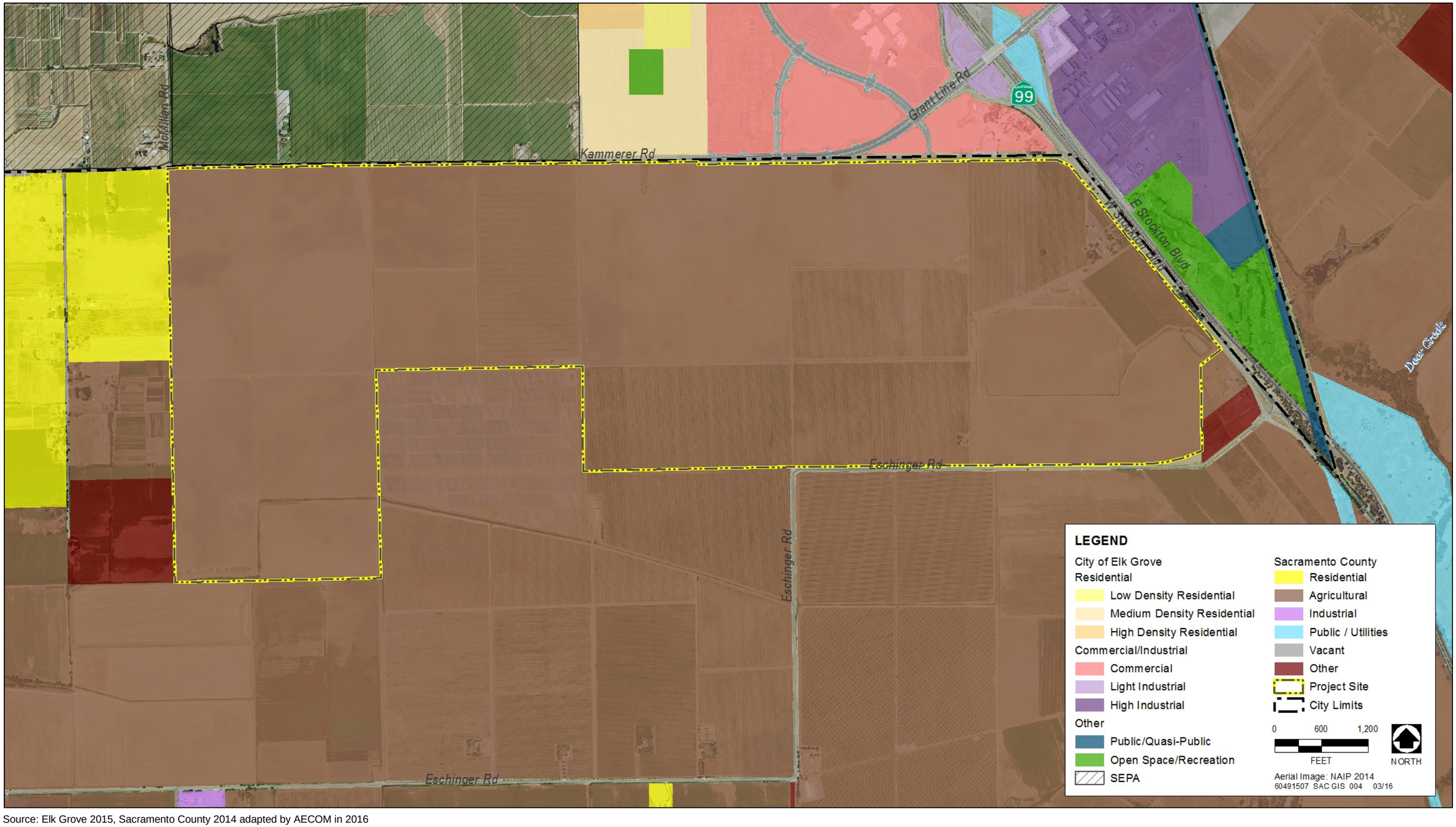
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Source: FMMP 2004 and 2008, County of Sacramento 2016

Exhibit 3.2-3 **Changes in Important Farmland**

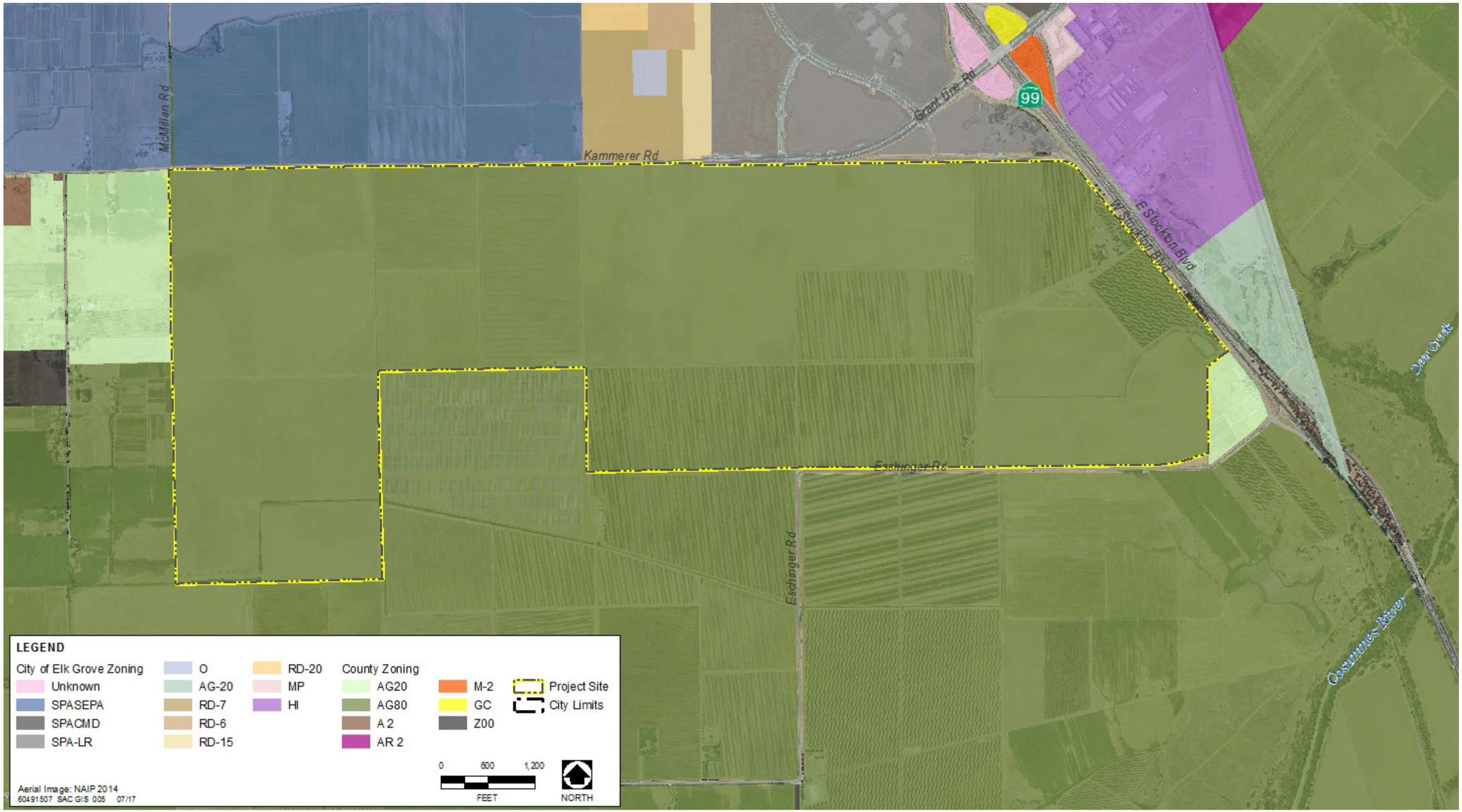
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Source: Elk Grove 2015, Sacramento County 2014 adapted by AECOM in 2016

Exhibit 3.2-4 **General Plan Land Use Designations**

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Source: Elk Grove 2015~~7~~, Sacramento County 2014 adapted by AECOM in 2016

Exhibit 3.2-5 **Zoning Map**

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REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS

Sacramento County Local Agency Formation Commission

The proposed project would be subject to the following standards from the Policies, Standards, and Procedures Manual (Sacramento Local Agency Formation Commission [LAFCo] 2007) related to agricultural resources. The SOIA is not a change of organization. The following standards in Section E, "Agricultural Land Conservation," of Chapter ~~III~~IV: ~~General Policies "~~General Standards" would apply:~~.~~ ~~This chapter contains the general policies that will apply to all LAFCo considerations of application for changes of organization or reorganization and Sphere of Influence determinations.~~

- **Standard E.1.** LAFCo will approve a change of organization or reorganization, which will result in the conversion of prime agricultural land in open space use to other uses, only if the Commission finds that the proposal will lead to the planned, orderly, and efficient development of an area. For purposes of this standard, a proposal leads to the planned, orderly, and efficient development of an area only if all of the following criteria are met:

  a. The land subject to the change of organization or reorganization is contiguous to either lands developed with an urban use or lands which have received all discretionary approvals for urban development;

  b. The proposed development of the subject lands is consistent with the Spheres of Influence Plan, including the Master Services Element of the affected agency or agencies;

  c. Development of all, or a substantial portion of, the subject land is likely to occur within five years. In the case of very large developments, annexation should be phased whenever feasible. If the Commission finds phasing infeasible for the specific reasons, it may approve annexation if all or a substantial portion of the subject land is likely to develop within a reasonable period of time;

  d. Insufficient vacant, non-prime lands exists within the applicable Spheres of Influence that are planned, accessible, and developable for the same general type of use;

  e. The proposal will have no significant adverse effect on the physical and economic integrity of other agricultural lands. In making this determination, LAFCo will consider the following factors:

     1. The agricultural significance of the subject and adjacent areas relative to other agricultural lands in the region;

     2. The use of the subject and the adjacent areas;

     3. Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of adjacent or nearby agricultural land, or will be extended through or adjacent to, any other agricultural lands which lie between the project site and existing facilities;

     4. Whether natural or man-made barriers serve to buffer adjacent or nearby agricultural land from the effects of the proposed development; and

5. Applicable provisions of the General Plan open space and land use elements, applicable growth-management policies, or other statutory provisions designed to protect agriculture.

- **Standard E.2.** LAFCo will not make the affirmative findings that the proposed development of the subject lands is consistent with the Spheres of Influence in the absence of an approved Sphere of Influence Plan. LAFCo will not make the affirmative findings that sufficient non- prime land exists within the Spheres of Influence Plan unless the applicable jurisdiction has:

  a. Identified within its Spheres of Influence all "prime agricultural land" as defined herein;

  b. Enacted measures to preserve prime agricultural land identified within its Sphere of Influence for agricultural use; and

  c. Adopted as part of its General Plan specific measures to facilitate and encourage infill development as an alternative to development of agricultural lands.

City of Elk Grove General Plan

If there is future development in the proposed SOIA Area, it would be subject to the following policies from the *Elk Grove General Plan* Conservation and Air Quality Element (City of Elk Grove 2015) related to agricultural resources.

- **Policy CAQ-2:** The loss of agricultural productivity on lands designated for urban uses within the city limits as of January 2004 is accepted as a consequence of the development of Elk Grove. As discussed in the Land Use Element, the City's land use concept for the Planning Area outside the 2004 city limits anticipates the retention of significant areas of agricultural production outside the current city limits.

- **Policy CAQ-3:** The City of Elk Grove considers the only mitigation for the loss of agricultural land to consist of the creation of new agricultural land in the Sacramento region equal in area, productivity, and other characteristics to the area that would be lost due to development. The protection of existing agricultural land through the purchase of fee title or easements is not considered by the City to provide mitigation, since programs of this type result in a net loss of farmland.

- **Policy CAQ-4:** While agricultural uses are anticipated to be phased out within the city limits, the City recognizes the right of these uses to continue as long as individual owners/farmers desire. The City shall not require buffers between farmland and urban uses, relying instead on the following actions to address the impacts of farming on urban uses:

  - **CAQ-4-Action 1:** Implement the City's "Right to Farm" ordinance.[1]

  - **CAQ-4-Action 2:** Prospective buyers of property adjacent to agricultural land shall be notified through the title report that they could be subject to inconvenience or discomfort resulting from accepted farming activities as per provisions of the City's right-to-farm ordinance.

[1] The "Right to Farm" ordinance referenced in this General Plan policy is now referred to as the "Agricultural Activities" ordinance.

As discussed further in Section 3.11, "Land Use, Population, Housing, Employment, Environmental Justice, and Unincorporated Disadvantaged Communities" of this Recirculated Draft EIR, the City of Elk Grove is currently updating its General Plan. The City intends to include an annexation strategy as a part of this update process that provides policies related to providing buffers between urban development and active agricultural operations. In addition, the City currently intends to retain areas located in the 100-year or 200-year floodplain for agriculture, if the agricultural use is economically viable and would not result in the islanding of higher-density land uses (City of Elk Grove 2017).

City of Elk Grove Municipal Code 14.05

Chapter 14.05, "Agricultural Activities," of the City of Elk Grove Municipal Code ensures that agricultural operations that are operated in a manner consistent with proper and accepted customs and standards are allowed to continue and requires that notification be provided to residents of property located near properties designated for agricultural use; that these agricultural uses are encouraged; that accepted agricultural practices may continue; and that efforts to prohibit, ban, restrict, or otherwise eliminate established agricultural uses will not be favorably received. It also includes notification and mediation procedures for cases in which agricultural activities are not being conducted in a reasonable manner, or when the operator of an agricultural operation is not using currently acceptable methods in the conduct of the farm.

3.2.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

The evaluation of the potential impacts of the proposed project on agricultural resources was based on a review of field conditions, aerial photographs, and policy guidance from the Sacramento LAFCo's Policies, Standards, and Procedures (Sacramento LAFCo 2007).

The Important Farmland Map for Sacramento County, produced by the Department of Conservation Division of Land Resource Protection (DOC 2014c), and Williamson Act Contract Map (DOC 2009) for Sacramento County was used to evaluate the agricultural significance of the lands on the project site. Geographic information system (GIS) data were used to determine the potential acreage of impacts on designated farmland.

Appendix G of the CEQA Guidelines focuses the analysis on conversion of agricultural land on Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.

According to Government Code Section 56668, the Sacramento LAFCo must evaluate effects on maintaining the physical and economic integrity of agricultural lands based on five factors identified in Standard E.1 below, and this EIR has considered all of the factors outlined in that policy below.

- **Factor 1.** The agricultural significance of the subject and adjacent areas relative to other agricultural lands in the region.

    - **Discussion 1.** As discussed in the Environmental Setting and displayed in Exhibit 3.2-1, the SOIA Area and surrounding areas contain lands classified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance, with 1,137 acres or approximately 99 percent of the SOIA Area categorized under one of these classifications.

- **Factor 2.** The use of the subject and adjacent areas.

    - **Discussion 2.** As previously described, the project site is primarily used for extensive dry farmed and irrigated croplands and vineyard operations. Surrounding land uses north, south, and west of the SOIA Area are substantially similar to the SOIA Area, although the west also has a solar array and several rural residences. East of the project site is commercial/industrial development. Surrounding uses are disclosed and considered in the EIR analysis.

- **Factor 3.** Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of adjacent or nearby agricultural land, or will be extended through or adjacent to any other agricultural lands which lie between the project site and existing facilities.

    - **Discussion 3.** The project does not involve any changes to land use nor propose specific public facilities. Possible growth-inducing effects of the proposed SOIA are discussed in Chapter 5 of this EIR, "Other CEQA Considerations."

- **Factor 4.** Whether natural or man-made barriers serve to buffer adjacent or nearby agricultural lands from the effects of the proposed development.

    - **Discussion 4.** The SOIA Area is bounded on the north and east by the City of Elk Grove and urban development. However, areas south and west of the SOIA Area boundary do not contain natural or man-made barriers to buffer adjacent or nearby agricultural lands from potential impacts of future~~, indirect growth~~ development within the SOIA Area.

- **Factor 5.** Applicable provisions of the General Plan open space and land use elements, applicable growth-management policies, or other statutory provisions designed to protect agriculture.

    - **Discussion 5.** The City of Elk Grove General Plan policies are provided in the Regulatory Framework subsection. In addition, a General Plan consistency analysis is provided in Section 3.11 of this EIR, "Land Use and Planning, Population, Housing, and Environmental Justice," for project consistency with the County of Sacramento General Plan, the City of Elk Grove General Plan, and the Sacramento LAFCo policies and standards in Table 3.11-1, Table 3.11-2, and Table 3.11-3, respectively.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the CEQA Guidelines, an impact related to agricultural and forestry resources is considered significant if the proposed project would:

- convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to nonagricultural use;

- conflict with existing zoning for agricultural use or a Williamson Act contract;

- conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]);

- result in the loss of forestland or conversion of forestland to nonforest use; or
- involve other changes in the existing environment that, because of their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to nonforest use.

ISSUES NOT DISCUSSED FURTHER

- **Conflict with Existing Zoning for Agricultural Use**—The project site is zoned by the County as AG-~~20~~80. In general, the AG-~~20~~ 80 zoning designation is intended to promote long-term agricultural use. The proposed project would not change the zoning designations. The project would not allow land use change that would be inconsistent with this zoning designation. The project would not change any land use authority. Thus, the proposed project would not conflict with zoning for agricultural use (see Section 3.11, "Land Use and Planning, Population, Housing, and Environmental Justice" for further discussion). Therefore, this issue is not evaluated further in this document.
- **Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production**—The project site is not zoned as forestland, timberland, or a Timberland Production Zone. Thus, implementing the proposed project would not conflict with existing zoning for, or cause rezoning of, forestry resources and this issue is not evaluated further in this document.
- **Result in the Loss of Forest Land or Conversion of Forest Land to Non-Forest Use**—The project site does not contain timberland as defined by Public Resources Code Section 4526 or contain 10 percent native tree cover that would be classified as forestland under Public Resources Code Section 12220(g). Thus, implementation of the proposed project would not result in conversion of forest land to non-forest use. Therefore, this issue is not evaluated further in this document.
- **Conflict with Williamson Act Contract in the SOIA Area**— No parcels in the SOIA Area are under Williamson Act contracts. Therefore, this issue is not evaluated further in this document. Lands under Williamson Act contracts are located north and east of the SOIA Area. Conversion of adjacent agricultural lands, including lands under Williamson Act contract, is discussed under Impact 3.2-2.

IMPACT ANALYSIS

IMPACT 3.2-1 Direct loss of agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. *Future development within the SOIA Area could result in the direct conversion of agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural urban uses. This impact is considered* ***significant****.*

The SOIA Area and surrounding parcels are under agricultural production. The SOIA Area has an estimated 510 acres of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. Although the project does not propose any land use changes or development, future development could occur if the property is annexed.

Future development could take place on the entire project site, or could take place on individual parcels such that the parcels would become fragmented, reduced in size, or irregularly shaped to such a degree that continuing agricultural land uses could be difficult or infeasible.

In addition, off-site improvements to roads, sewer lines, drainage facilities, and water lines could also be required if future development were to occur in the SOIA Area. While some of the off-site improvements may occur within existing rights-of-way that are not under agricultural cultivation, other off-site improvements may occur in areas that are in agricultural production. Although it cannot be determined where these improvements would be located or how extensive the disturbance would be, it is possible that these improvements could take place on agricultural lands, including Important Farmland.

It is likely that future development within the proposed SOIA Area and associated off-site improvements would require the conversion of active agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Due to the potential for direct conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance and active agricultural lands on the project site resulting from future development, this impact is considered **significant**.

Mitigation Measures

Mitigation Measure 3.2-1: Preserve Agricultural Land

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require that applicants protect one (1) acre of existing farmland land of equal or higher quality for each acre of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance that would be developed as a result of the project. This protection may consist of the establishment of a farmland conservation easement, farmland deed restriction, or other appropriate farmland conservation mechanism to ensure the preservation of the land from conversion in perpetuity, but may also be utilized for compatible wildlife habitat conservation efforts (e.g., Swainson's hawk foraging habitat mitigation) that substantially impairs or diminishes the agricultural productivity of the land. The farmland/wildlife habitat land to be preserved must have adequate water supply to support agricultural use. The City shall consider the benefits of preserving farmlands in proximity to other protected lands. <u>The preservation of farmland may be done at one time, or in increments with the buildout of the SOIA Area.</u>

The total acres of land conserved will be based on the total on-site agriculture acreage converted to urban uses. Conserved agriculture areas may include areas on the project site, lands secured for permanent habitat enhancement (e.g., giant garter snake habitat, Swainson's hawk habitat), or additional land identified by the City. The City shall attempt to locate preserved farmland within 5 miles of the SOIA Area; however, the preserved farmland shall at a minimum be located inside Sacramento County. The City shall impose the conservation easement content standards to include, at a minimum: land encumbrance documentation; documentation that the easements are permanent, monitored, and appropriately endowed <u>for administration, monitoring, and enforcement of the easements</u>; prohibition of activity which substantially impairs or diminishes the agricultural productivity of the land; and protection of water rights.

In addition, the City shall impose the following <u>or equally effective</u> minimum conservation easement content standards:

a) All owners of the agricultural/wildlife habitat mitigation land shall execute the document encumbering the land.

b) The document shall be recordable and contain an accurate legal description of the agricultural/wildlife habitat mitigation land.

c) The document shall prohibit any activity that substantially impairs or diminishes the agricultural productivity of the land. If the conservation easement is also proposed for wildlife habitat mitigation purposes, the document shall also prohibit any activity that substantially impairs or diminishes the wildlife habitat suitability of the land.

d) The document shall protect any existing water rights necessary to maintain agricultural uses on the land covered by the document and retain such water rights for ongoing use on the agricultural/wildlife habitat mitigation land.

e) Interests in agricultural/habitat mitigation land shall be held in trust by an entity acceptable to the City and/or by the City in perpetuity. The entity shall not sell, lease, or convey any interest in agricultural/wildlife habitat mitigation land that it acquires without the City's prior written approval.

f) The applicant shall pay to the City an agricultural/wildlife habitat mitigation monitoring fee to cover the costs of administering, monitoring, and enforcing the document in an amount determined by the receiving entity, in an amount determined by the City.

g) The City shall be named a beneficiary under any document conveying the interest in the agricultural/wildlife habitat mitigation land to an entity acceptable to the City.

h) If any qualifying entity owning an interest in agricultural/wildlife habitat mitigation land ceases to exist, the duty to hold, administer, monitor, and enforce the interest shall be transferred to another entity acceptable to the City or transferred to the City.

Before committing to the preservation of any particular farmland pursuant to this measure, the project proponent shall obtain the City's approval of the farmland proposed for preservation.

Significance after Mitigation

Should the SOIA Area become developed, the City of Elk Grove would be the land use entitlement agency. Elk Grove General Plan Policy CAQ-2 indicates that the City accepts the loss of agricultural land within the City limits as of 2004, which does not include the SOIA Area. Policy CAQ-3 indicates that the City only considers the creation of new agricultural land to be mitigation for the loss of agricultural land and that the City does not consider the purchase of land for agricultural use or conservation easements to be mitigation. The City's General Plan does not indicate in what circumstances the City would apply the mitigation strategy of creating new agricultural land.

In *Masonite Corp. v. the County of Mendocino*, the First District Court of Appeals (Court) examined whether conservation easements represent feasible mitigation for the loss of agricultural land (Masonite Corp. v. County of Mendocino (2013) 218 Cal.App.4th 230). In an EIR that involved loss of agricultural land, the County of Mendocino suggested that conservation easements only mitigate indirect and cumulative effects, not direct effects. However, the Court found that conservation easements may appropriately mitigate for the direct loss of

farmland, even though this would not replace farmland. While there could be other reasons that agricultural conservation easements could be infeasible for a given project, based on the Court's direction, infeasibility should not be based on the idea that easements do not provide mitigation. The City of Elk Grove has recently identified 1:1 mitigation for the loss of agricultural lands through conservation easements or other similar mechanisms (City of Elk Grove 2014).

While conservation easements for the same area and quality of farmland placed elsewhere in the region could partially offset the direct conversion of agricultural land, including Prime Farmland, Unique Farmland, and Farmland of Statewide Importance attributable to future development that could occur within the SOIA Area, this approach would not create new farmland to replace farmland that could be lost. There is no additional feasible mitigation. The impact is **significant and unavoidable**.

IMPACT 3.2-2 Indirect loss of adjacent agricultural land, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance or Lands Under Williamson Act Contract. *Future development could result in the conversion of neighboring agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Local Importance or land under Williamson Act contract, to nonagricultural urban uses. This impact is considered* ***significant.***

The SOIA Area and surrounding parcels are currently under agricultural production. Farming operations that currently occur on properties adjacent to the SOIA Area include hay and alfalfa to the north; pasture, hay, grapes, cherries, and alfalfa to the west; corn and grapes to the south, and developed areas to the east. The SOIA Area and several of the surrounding parcels are designated Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance. No parcels on the project site are under Williamson Act contract; however, some parcels adjacent to the project site are under Williamson Act contracts.

Even though the project does not propose any land use changes or development, future development on the project site could occur if the property is proposed for annexation and then annexed, which could lead to conversion on neighboring agricultural lands, including those under Williamson Act contract.

If, in the future, there is an application for annexation and if annexation requests are approved, the newly-annexed property (which may be a portion of the project site) would be subject to applicable City policy consistency analysis and regulations, as described above. Compliance with the City's General Plan and Municipal Code would promote compatibility between possible future development in the SOIA Area and surrounding agricultural lands in operation at the time of development.

~~Since it is not known whether there would be annexation or development of the SOIA Area, or at what time it might occur, it is also not known whether there would be agricultural operations at the time of development in adjacent areas or if the type of agricultural operations would be prone to pressure to convert resulting from urban development. However, if there is future urban development of the SOIA Area adjacent to existing off-site agricultural lands, this could result in land use compatibility conflicts which could impair agricultural activities.~~

Agricultural-urban interfaces have the potential for conflicts between agricultural practices and adjacent landowners. Agricultural operations may create risks and nuisances for urban residences and businesses. Health risks and nuisances potentially created by agricultural operations in the project area include, but are not limited to exposure to pesticide applications; exposure to dust (from soil preparation); exposure to noise (from machinery

and trucks); odors from existing dairies, agricultural burning, and decaying rice stubble; and exposure to mosquitoes breeding in flooded fields.

Conversely, urban land uses and the associated population create operational difficulties for agriculture. Increased restrictions on agriculture processes and other aspects of encroachment on agricultural areas can lower productivity, increase costs, and otherwise impair agricultural operations (Sokolow 2003). Urban development could generate air pollution that could be harmful to crops, in certain instances. Urban activities can result in vandalism and the introduction of domestic animals that may disturb certain agricultural activities. Development would add vehicular traffic in areas where agricultural equipment uses roads, which could make it somewhat more difficult to move agricultural equipment.

The introduction of urban residents could become a constraint on adjacent agricultural operations. These constraints could result in increasing operational costs, phasing out of crops, and moving operations that create nuisances for adjacent urban areas. One or a combination of these conflicts could limit agricultural activities or encourage farmers to take their land out of agricultural production, resulting in adverse impacts to agricultural resources.

The SOIA Area is part of a larger 3,675-acre area identified in the City's EIR NOP for a General Plan update as the South Study Area. The South Study Area is south of the existing City limits and is bound by Kammerer Road on the north, State Route 99 on the east, Eschinger Road on the south, and Bruceville Road on the west. The planning objective for the South Study Area is to create a new major employment center that builds off of the proposed Southeast Policy Area's (SEPA's) business parks, comprising high-intensity office, industrial flex space, and light industrial uses. Lower-density residential neighborhoods will provide a buffer between agricultural land south of the South Study Area and the higher-intensity uses within the activity nodes (City of Elk Grove 2017a).

Buffering is intended to occur within new development areas and include interim buffers for phased development such that the physical and economic integrity of agricultural lands in maintained. Adoption of the General Plan update is anticipated in early 2018. If the SOIA Area, or a portion of it, is annexed, that area would be under City of Elk Grove jurisdiction and would be required to comply with Elk Grove General Plan policies. A draft of the City's updated General Plan is not yet available, so the existing (2003, amended 2015) General Plan policies and actions are described below. Any future development would be required to comply with the most recent General Plan.

Although the project does not allow any land use change, for the purposes of analysis in this EIR, LAFCo has assumed that future development of the SOIA Area could involve between 4,000 and 5,000 housing units and 18,000 to 20,000 jobs. It is not known whether development would occur, and the timing, location, and type of future land use is not known~~, either~~. In addition, it is also not known whether there would be agricultural operations at the time of development in adjacent areas or if the type of agricultural operations would be prone to pressure to convert resulting from urban development, or whether future urban development would be of the type that could create pressure to convert agricultural lands. For example, residential uses typically create more pressure to convert adjacent agricultural lands than employment-generating uses. This makes it difficult to understand potential impacts on adjacent agricultural lands. However, if future urban development of the SOIA Area occurs adjacent to existing off-site agricultural lands, this could result in land use compatibility conflicts,

which could impair agricultural activities. Since the timing, location, and type of future uses is unknown, LAFCo cannot speculate further on this topic.

Although the project would not construct or develop any infrastructure or structures that could result in direct physical impacts to agriculture, the future development could result in indirect effects on adjacent agricultural land. These effects may contribute to the conversion of agricultural land, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance, as well as land under Williamson Act Contracts. Thus, this impact is considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.2-2: Prepare an Agricultural Land Use Compatibility Plan

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall prepare an agricultural land use compatibility plan for the SOIA Area. The plan shall include implementation of the City's Agricultural Activities ordinance (Municipal Code, Chapter 14.05, "Agricultural Activities"), as required under Elk Grove General Plan Policy CAQ-4-Action 1, site design, screening, fencing, landscaping, and setbacks. Prospective buyers of property adjacent to agricultural land shall be notified through the title report that they could be subject to inconvenience or discomfort resulting from accepted farming activities as per provisions of the City's Agricultural Activities ordinance (City of Elk Grove Municipal Code Chapter 14.05).

Mitigation Measure 3.2-2 would reduce potential conflicts that could adversely affect agricultural operations. However, it is not feasible to fully mitigate agriculture/urban interface conflicts, especially as this relates to farm equipment and vehicle conflicts on area roadways and potential trespassing and vandalism to active farmlands and growth pressures on farmland in proximity to urban uses. No feasible mitigation measures are available to fully mitigate this impact because the process does not guarantee resolution of all conflicts. Although the timing of any future applications for development on the project site is unknown and applicants would be subject to future CEQA review and any mitigation measures imposed by the responsible jurisdiction, a significant impact could potentially occur. Thus, the impact is considered **significant and unavoidable**.

3.4 BIOLOGICAL RESOURCES

This section addresses biological resources known or with potential to occur in the SOIA Area and areas that may be affected by potential future off-site improvements needed to support potential development within the SOIA Area. The analysis includes a description of the existing environmental conditions at the time the Notice of Preparation (NOP) was issued in March 2016, the methods used for assessment, the impacts associated with implementing the proposed project, and mitigation measures proposed to reduce potentially significant impacts. This section also includes a brief overview of the federal, State, and local laws and regulations pertaining to biological resources in Sacramento County and the city of Elk Grove.

The biological resource information presented in this section is based on review of available background reports; previous studies conducted on or near the SOIA Area; biological resource databases, including the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), and the California Native Plant Society (CNPS) Inventory; aerial photography interpretation; the Sacramento County General Plan and General Plan EIR (Sacramento County 2011, Sacramento County 2010); the City of Elk Grove General Plan, General Plan Background Reports, and General Plan EIR (City of Elk Grove 2015, City of Elk Grove 2003a, City of Elk Grove 2003b, City of Elk Grove 2003c); the draft South Sacramento Habitat Conservation Plan (Sacramento County ~~2012~~2017a); the previous 7,000-acre SOI Amendment EIR that included, in part, the proposed SOIA Area (LAFCo 2013), and a reconnaissance-level site survey conducted by AECOM biologists on March 2, 2016.

3.4.1 ENVIRONMENTAL SETTING

The 1,156-acre SOIA Area is located in southern Sacramento County within the Great Central Valley Region of the California Floristic Province. It is within the Sacramento River watershed. The Cosumnes River is approximately 1.3 miles to the southeast and its tributary, Deer Creek, is 1 mile to the east. The Sacramento-San Joaquin Delta begins approximately six miles southwest of the SOIA Area.

The site is relatively flat, with an elevation range of roughly 30 to 50 feet above mean sea level, sloping generally to the southwest. The SOIA Area is comprised of agricultural land consisting of approximately 626 acres of irrigated grass hayfields, 380 acres of vineyards, 79 acres of fallow field, and 47 acres of alfalfa. The site also contains two acres of irrigation ditches and two acres of canals (less than 0.35 percent). Irrigation water is supplied to vineyards and hayfields from a two-acre pond in the easternmost parcel of the SOIA Area near West Stockton Boulevard. There are 16 acres of developed land in the SOIA Area that contains a residence, parking areas, a wine tasting room and winery operations buildings, a barn, and other buildings.

Exhibit 3.4-1 shows the habitat types present in the SOIA Area.

The surrounding areas are characterized primarily by agricultural land with urban development to the northeast and State Route 99 (SR 99) along the eastern boundary.

Stone Lakes National Wildlife Refuge is located approximately three miles west of the SOIA Area. The refuge consists of two large permanent lakes in a network of vernal pool grassland, seasonally flooded agricultural lands, and managed wetlands that provide feeding and resting habitat for thousands of migrating birds along the Pacific Flyway, as well as habitat for several special-status plant and animal species.

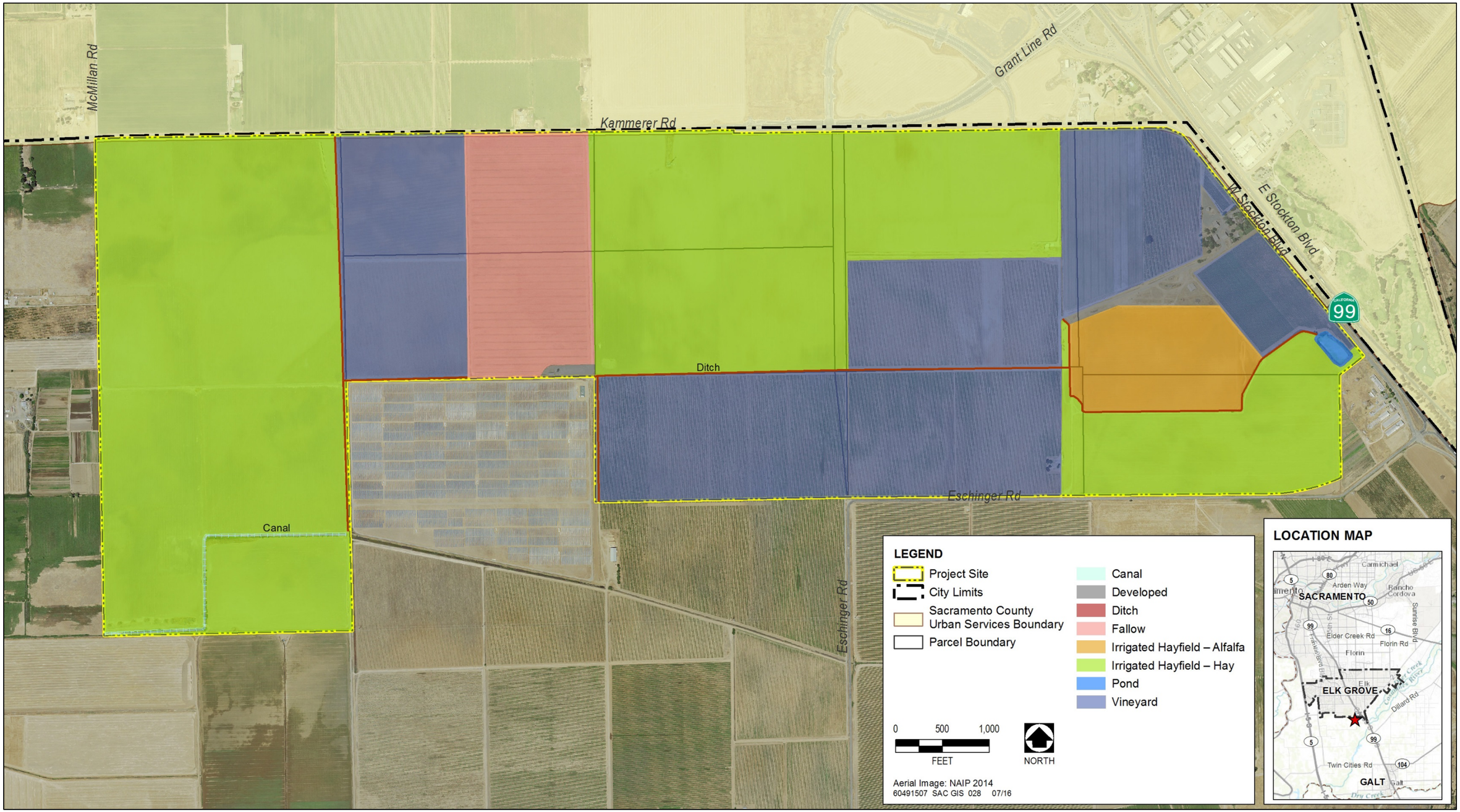
The Cosumnes River Preserve (Preserve), located approximately seven miles southwest of the SOIA Area, consists of approximately 45,859 acres of wildlife habitat and agricultural lands owned by seven land-owning partners. The Cosumnes River is one of the last large rivers in the Central Valley with relatively natural and unregulated stream flows that vary from winter-spring flood flows to reduced summer flows. The Preserve supports tens of thousands of migratory waterfowl and waterbirds, and about half of the Central Valley's wintering population of greater sandhill cranes (Cosumnes River Preserve 2008). Neo-tropical migratory songbirds, Swainson's hawks, and numerous special-status-species also occur at the Preserve.

VEGETATION

Vegetation in the SOIA Area is comprised almost exclusively of cultivated crops and has been farmed for over 50 years. Native biodiversity within agricultural lands is predictably low because cropland is generally managed with the goal of producing monotypic vegetation. Current crops cultivated in the SOIA Area consist of irrigated grass and alfalfa hayfields and vineyards. At the time of the reconnaissance survey in March 2016, there were also two fields that were fallow and characterized by sparse cover of immature weedy grasses and forbs. The irrigated grass hayfields are planted with Italian rye grass (*Festuca perennis*) and oats (*Avena* sp.) and also support occasional weeds, including wild radish (*Raphanus sativus*), field mustard (*Brassica rapa*), dove's foot geranium (*Geranium molle*), and hairy vetch (*Vicia villosa*) and very few native forbs, such as common fiddleneck (*Amsinckia intermedia*) and miner's lettuce (*Claytonia perfoliata*). The alfalfa hayfields are composed of a monoculture of cultivated alfalfa (*Medicago stiva*). Other weeds commonly found along the edges of the cultivated hayfields and along dirt farm roads include foxtail barely (*Hordeum murinum*), rattail fescue (*Festuca myuros*), bur clover (*Medicago polymorpha*), and common sowthistle (*Sonchus oleraceus*).

Vineyards are composed of rows of planted grapes climbing wire trellises. Between the rows of grapes, weedy annual species grow, including red maids (*Calandrinia menziesii*), annual bluegrass (*Poa annua*), shepherd's purse (*Capsella bursa-patoris*), and filaree (*Erodium* spp.).

The canal traversing the southwestern corner of the SOIA Area contains patches of cattail (*Typha* sp.), hardstem bulrush (*Schoenoplectus acutus*), and common rush (*Juncus effusus*) in the channel, and the banks support a suite of invasive species often found along ditches in the area including poison hemlock (*Conium maculatum*), curly dock (*Rumex crispus*), bristly ox-tongue (*Helminthotheca echioides*), and charlock mustard (*Sinapis arvensis*). The connecting ditch running north to south contains the same species as the canal, but also supports widely scattered narrowleaf willow (*Salix exigua*) shrubs within the ordinary high water line and small stands of Himalayan blackberry (*Rubus armeniacus*) on the banks. There are also planted native saltbush (*Atriplex* sp.), live oak (*Quercus wislizeni*), coyote brush (*Baccharis pilularis*), ceanothus (*Ceanothus* sp.), and manzanita (*Manzanita* sp.) at the top of bank. The native shrubs appear to be planted at the top of bank to create a screen between the SOIA Area property and the solar farm to the east of the ditch, but most of the planted shrubs are not surviving. The smaller irrigation ditches running along the perimeters of the vineyards are characterized primarily by weedy upland and facultative vegetation, such as ripgut brome (*Bromus diandrus*), bristly ox-tongue, Bermuda grass (*Cynodon dactylon*), mustards (*Brassica* spp.), and dallisgrass (*Paspalum dilatatum*). Vegetation on the banks of the on-site pond consists of Bermuda grass and other annual grasses, with patches of Himalayan blackberry and curly dock and tall flatsedge (*Cyperus eragrostis*) at the water's edge.



Source: AECOM 2016

Exhibit 3.4-1 **Habitat Map**

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Trees are confined to the eastern portion in the SOIA Area around the developed winery and residential facilities. Most of the trees are ornamental, consisting of various fruit trees, walnut hybrids (Juglans L.), olive (*Olea europaea*), deodor cedar (*Cedrus deodora*), and small, planted coast redwood trees (*Sequoia sempervirens*). There are five valley oak (*Quercus lobata*), trees on the site and some large eucalyptus (*Eucalyptus* spp.) trees directly east of the SOIA Area along West Stockton Boulevard. There are large eucalyptus, coast redwood, and valley oak trees on the parcel west of the SOIA Area. There is one large willow (*Salix* sp.) in the irrigation ditch at the mouth of the pond.

WILDLIFE

In general, the SOIA Area provides low value habitat for most wildlife species because of an overall lack of native vegetation and natural communities, and a high level of disturbance from agricultural activities and vineyard operations. The wildlife species most likely to use the SOIA Area are primarily common species that are adapted to highly disturbed, ruderal, or agricultural environments, such as mourning dove (*Zenaida macroura*), American crow (*Corvus branchyrhychos*), mockingbird (*Mimus polyglottos*), house sparrow (*Passer domesticus*), and raccoon (*Procyon lotor*). Agricultural fields, however, provide high-value foraging opportunities for a number of raptor species. Alfalfa, disked fields, fallow fields, and grain and hay crops tend to support large rodent populations and therefore provide good foraging habitat for Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), and more common raptors, such as American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), and red-tailed hawk (*Buteo jamaicensis*). A limited number of trees and shrubs around the vineyard facilities and along the canal, pond, and ditches provide nesting opportunities for raptors and other birds. Ground squirrel burrows observed in the SOIA Area provide suitable habitat for burrowing owl (*Athene cunicularia*).

The pond, canal, and ditches are known or expected to provide habitat for a number of common wildlife species including red-winged blackbird (*Ageliaeus phoeniceus*), mallard (*Anas platyrhynchos*), great blue heron (*Ardea herodias*), great egret (*Ardea alba*), American bullfrog (*Rana catesbeiana*), and Pacific chorus frog (*Pseudacris sierra*). In addition, the canal and larger ditches may support giant garter snake (*Thamnophis gigas*) or provide dispersal habitat for this species.

Wildlife species that were observed on the site during the reconnaissance survey are noted in Table 3.4-1.

SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources addressed in this section include those that are afforded consideration or protection under the California Environmental Quality Act (CEQA), California Fish and Game Code, California Endangered Species Act (CESA), Federal Endangered Species Act (ESA), Clean Water Act (CWA), and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

Table 3.4-1. Wildlife Species Observed, or whose sign was Observed, During the March 2016 Field Reconnaissance Survey	
Scientific Name	Common Name
Amphibians	
Rana catesbeiana	American bullfrog
Birds	
Agelaius phoeniceus	Red-winged blackbird
Anas platyrhynchos	Mallard
Anthus rubescens	American pipit
Branta canadensis	Canada goose
Buteo jamaicensis	Red-tailed hawk
Cathartes aura	Turkey vulture
Circus cyaneus	Northern harrier
Colaptes auratus	Northern flicker
Corvus brachyrhynchos	American crow
Elanus leucurus	White-tailed kite
Falco sparverius	American kestrel
Grus canadensis	Sandhill crane
Haemorhous mexicanus	House finch
Lanius ludovicianus	Loggerhead shrike
Melospiza melodia	Song sparrow
Passer domesticus	House sparrow
Sayornis nigricans	Black phoebe
Sturnus vulgaris	European starling
Troglodytes aedon	House wren
Turdus migratorius	American robin
Tyrannus verticalus	Western kingbird
Zenaida macroura	Mourning dove
Zonotrichia leucophrys	White-crowned sparrow
Mammals	
Canis latrans	Coyote
Lepus californicus	Black-tailed jackrabbit
Microtus californicus	California vole
Spermophilus beecheyi	California ground squirrel
Sylvilagus audubonii	Desert cottontail
Thomomys bottae	Botta's pocket gopher
Source: AECOM 2016	

Special-Status Species

Special-status species include plants and animals in the following categories:

- species officially listed by the State of California or the federal government as endangered, threatened, or rare;
- candidates for state or Federal listing as endangered or threatened;

- taxa (i.e., taxonomic categories or groups) that meet the criteria for listing, even if not currently included on any list, as described in California Code of Regulations (CCR) Section 15380 of the CEQA Guidelines;
- species identified by the California Department of Fish and Wildlife (CDFW) as species of special concern;
- species listed as fully protected under the California Fish and Game Code;
- species afforded protection under local or regional planning documents; and
- taxa considered by CDFW to be "rare, threatened, or endangered in California" and assigned a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, or 2B.

The CDFW system includes six rarity and endangerment ranks for categorizing plant species of concern, which are summarized as follows:

- CRPR 1A – Plants presumed to be extinct in California;
- CRPR 1B – Plants that are rare, threatened, or endangered in California and elsewhere;
- CRPR 2A – Plants presumed to be extinct in California, but more common elsewhere;
- CRPR 2B – Plants that are rare, threatened, or endangered in California, but more common elsewhere;
- CRPR 3 – Plants about which more information is needed (a review list); and
- CRPR 4 – Plants of limited distribution (a watch list).

All plants with a CRPR are considered "special plants" by CDFW. The term "special plants" is a broad term used by CDFW to refer to all of the plant taxa inventoried in CDFW's CNDDB, regardless of their legal or protection status. Plants ranked as CRPR 1A, 1B, 2A, and 2B may qualify as endangered, rare, or threatened species within the definition of CEQA Guidelines Section 15380. CDFW recommends that CRPR 1 and 2 species be addressed within the context of CEQA analyses and documentation. In general, CRPR 3 and 4 species do not meet the definition of endangered, rare, or threatened pursuant to CEQA Guidelines Section 15380; however, these species may be evaluated by the lead agency on a case-by-case basis to determine significance criteria under CEQA.

The term "California species of special concern" is applied by CDFW to animals not listed under the federal ESA or CESA, but that are nonetheless declining at a rate that could result in listing, or that historically occurred in low numbers, or have limited ranges, and known threats to their persistence currently exist. "Fully protected" was the first state classification used to identify and protect animal species that are rare or facing possible extinction. Most of these species were subsequently listed as threatened or endangered under CESA or ESA. The remaining fully protected species that are not officially listed under CESA or ESA are still legally protected under California Fish and Game Code, as described below in the "Regulatory Framework" section, and qualify as endangered, rare, or threatened species within the definition of CEQA Guidelines Section 15380.

A list of special-status species that could potentially occur SOIA Area or vicinity, provided suitable habitat conditions were present, was developed through review of available background reports; previous studies conducted in or near the SOIA Area; an official list obtained from the U.S. Fish and Wildlife Service Information, Planning, and Conservation System (IPaC); and CNDDB and CNPS Inventory records of previously documented occurrences of special-status species in the Bruceville, Clay, Elk Grove, Florin, Galt, Lockeford, Lodi North, Sloughhouse, and Thornton U.S. Geological Survey 7.5-minute quadrangles. Exhibit 3.4-2 shows the locations of special-status species occurrences recorded in the CNDDB that are within 5 miles of the SOIA Area.

Special-Status Plants

Based on the database searches and literature review, 21 special-status plant species have been documented or reported to occur in the general vicinity of the SOIA Area. The potential for each of these species to occur SOIA Area was evaluated based on specific habitat requirements, geographic distribution, and elevation range, as described in Table 3.4-2, which also provides the regulatory status, habitat, elevation range, and blooming period for each species. No special-status plant surveys have been conducted on the site, but virtually the entire SOIA Area has been altered by human activities and is subject to ongoing vegetation management and surface soil manipulation. These activities, which include plowing, mowing, grading, and herbicide use, preclude the establishment of natural plant communities on the majority of the site. The only exceptions are in the canal and larger ditches where a limited amount of emergent marsh and riparian vegetation has established. Therefore, only special-status plants associated with ditches and canals or disturbed freshwater marsh habitats have potential to occur in the SOIA Area. As indicated in Table 3.4-2, the one special-status plant species that has the potential to occur on the site is Sanford's arrowhead.

Table 3.4-2 Special-Status Plant Species Known or Reported and Potential for Occurrence in the SOIA Area

Species	Status[1]			Habitat and Blooming Period	Potential for Occurrence
	USFWS	CDFG	CRPR		
Watershield *Brasenia schreberi*	_	_	2.1	Freshwater marshes and swamps; 0 to 7,000 feet elevation; blooms June–September.	Unlikely to occur; the pond, canal, and irrigation ditches do not provide suitable habitat conditions for this species. The only documented occurrence in Sacramento County is a 1976 record from the Stone Lakes National Wildlife Refuge west of I-5.
Bristly sedge *Carex comosa*	_	_	2.1	Lake margin marshes; -15 to 3,300 feet elevation; blooms May–September.	Unlikely to occur; the on-site pond does not provide suitable habitat conditions for this species. The only known occurrences in Sacramento County are from the Stone Lakes National Wildlife Refuge west of I-5.
Succulent owl's clover *Castilleja campestris* ssp. *succulent*	T	E	1B.2	Vernal pools; often in acidic conditions; 80 to 2,500 feet elevation; blooms April–May.	Unlikely to occur; there are no vernal pools or other seasonal wetlands in the SOIA Area that provide suitable habitat for this species. Species not known from Sacramento County.
Bolander's water hemlock *Cicuta maculata* var. *bolanderi*	_	_	2.1	Freshwater and brackish marshes, mostly along banks of tidal creeks; 0 to 650 feet elevation; blooms July–September.	Unlikely to occur; the pond, canal, and irrigation ditches do not provide suitable habitat conditions for this species. Furthermore, the species is known only from coastal and Delta waterways west of I-5.
Peruvian dodder *Cuscuta obtusiflora* var. *glandulosa*	_	_	2.2	Freshwater marshes and swamps; 50 to 1,000 feet elevation; blooms July–October.	Unlikely to occur; the storage reservoir, basins, and irrigation ditches do not provide suitable habitat conditions for this species. Furthermore, there is only one reported occurrence from Sacramento County and it is an unconfirmed record from the Elk Grove area. Nearest confirmed occurrence is from Merced County.

Table 3.4-2 Special-Status Plant Species Known or Reported and Potential for Occurrence in the SOIA Area

Species	Status[1]			Habitat and Blooming Period	Potential for Occurrence
	USFWS	CDFG	CRPR		
Dwarf downingia *Downingia pusilla*	–	–	2.2	Vernal pools or other seasonal wetlands in annual grasslands; below 1,500 feet elevation; blooms March–May.	Unlikely to occur; there are no vernal pools or other seasonal wetlands in the SOIA Area that provide suitable habitat for this species.
Bogg's Lake hedge hyssop *Gratiola heterosepala*	–	E	1B.2	Lake margin marshes and swamps, vernal pools, and other seasonal wetlands, primarily in clay soils; 30 to 8,000 feet elevation; blooms April–August.	Unlikely to occur; the on-site pond does not provide suitable habitat conditions for this species and there are no vernal pools or other seasonal wetlands in the SOIA Area.
Woolly rose-mallow *Hibiscus lasiocarpus*	_	_	1B.2	Margins of freshwater marshes, wet riverbanks, and on low, peat islands in sloughs of the Delta; 0 to 400 feet elevation; blooms June–September.	Unlikely to occur; the pond, canal, and irrigation ditches do not provide suitable habitat conditions for this species.
Northern California black walnut *Juglans hindsii*	–	–	1B	Riparian scrub, woodland, and forest.	Unlikely to occur; no suitable habitat is present. Although this species is widely cultivated in California as rootstock for English walnut, there are only three native populations still present. This species is widely naturalized in cismontane woodland habitat, which is not present in the SOIA Area.
Delta tule pea *Lathyrus jepsonii* var. *jepsonii*	_	_	1B	Freshwater and brackish marshes, usually along the edges. Found in the San Joaquin delta region at 0 to15 feet elevation; blooms May–September.	Unlikely to occur; the pond, canal, and irrigation ditches do not provide suitable habitat conditions for this species and the species is known only from lower elevations in Delta waterways.
Greene's legenere *Legenere limosa*	–	–	1B.1	Relatively deep and wet vernal pools (Witham 2006:39); below 3,000 feet elevation; blooms April–June.	Unlikely to occur; there are no vernal pools or other seasonal wetlands in the SOIA Area that provide suitable habitat for this species.
Heckard's peppergrass *Lepidium latipes* var. *latipes*				Alkaline flats in valley and foothill grassland; 6 to 656 foot elevation. Bloom: March–May	Unlikely to occur; there is no suitable habitat for this species.
Mason's lilaeopsis *Lilaeopsis masonii*	_	R	1B.1	Flooded tidal zones on mud-banks and flats along erosional creek-banks, sloughs, and rivers with freshwater marsh, brackish marsh, or riparian scrub influenced by saline water; 0 to 35 feet elevation; blooms April–November.	Unlikely to occur; the pond, canal, and irrigation ditches do not provide suitable habitat conditions for this species, which is known only from tidally influenced waterways.

Table 3.4-2 Special-Status Plant Species Known or Reported and Potential for Occurrence in the SOIA Area

Species	Status[1]			Habitat and Blooming Period	Potential for Occurrence
	USFWS	CDFG	CRPR		
Delta mudwort *Limosella australis*	_	_	2.1	Intertidal mudflats in freshwater and brackish marshes and riparian scrub; 0 to 10 feet elevation; blooms May–August.	Unlikely to occur; the pond, canal, and irrigation ditches do not provide suitable habitat conditions for this species, which is known only from lower elevations in tidally influenced Delta waterways.
Slender Orcutt grass *Orcuttia tenuis*	T	E	1B.1	Vernal pools; 100 to 5,800 feet elevation; blooms May–October.	Unlikely to occur; there are no vernal pools or other seasonal wetlands in the SOIA Area that provide suitable habitat for this species.
Sacramento Orcutt grass *Orcuttia viscida*	E	E	1B.1	Vernal pools; 95 to 325 feet elevation; blooms April–July.	Unlikely to occur; there are no vernal pools or other seasonal wetlands in the SOIA Area that provide suitable habitat for this species.
Sanford's arrowhead *Sagittaria sanfordii*	–	–	1B.2	Shallow freshwater marshes and swamps; below 2,200 feet elevation; blooms May–October.	Could occur; the on-site canal provides marginally suitable habitat for this species.
Marsh skullcap *Scutellaria galericulata*	_	_	2.2	Freshwater marshes and swamps, meadows and seeps; 0 to 7,000 feet elevation; blooms June–September.	Unlikely to occur; the pond, canal, and irrigation ditches do not provide suitable habitat conditions for this species. The only records of this species in Sacramento County are from the Snodgrass slough area northeast of Walnut Grove.
Side-flowering skullcap *Scutellaria lateriflora*	_	_	2.2	Freshwater marshes and swamps, meadows and seeps; 0 to 7,000 feet elevation; blooms June–September.	Unlikely to occur; the pond, canal, and irrigation ditches do not provide suitable habitat conditions for this species. The only records of this species in Sacramento County are an 1892 record from Bouldin Island and a current record from Delta Meadows River Park. There are no known occurrences east of I-5.
Suisun Marsh aster *Symphyotrichum lentum*	_	_	1B.2	Brackish and freshwater marshes along the banks of sloughs and other waterways; 0–10 feet elevation; blooms May–November.	Unlikely to occur; the pond, canal, and irrigation ditches do not provide suitable habitat conditions for this species and the species is generally known from lower elevations in Delta waterways.
Saline clover *Trifolium hydrophilum*	_	_	1B.2	Salt marshes and in alkaline soils in moist valley and foothill grasslands and vernal pools; 0 to 1,000 feet elevation; blooms April–June.	Unlikely to occur; suitable habitat is not present in the SOIA Area.

Notes: USFWS = U.S. Fish and Wildlife Service; CDFG = California Department of Fish and Game; CRPR = California Rare Plant Rank; CNDDB = California Natural Diversity Database; ESA = Federal Endangered Species Act; CESA = California Endangered Species Act

[1] Legal Status Definitions

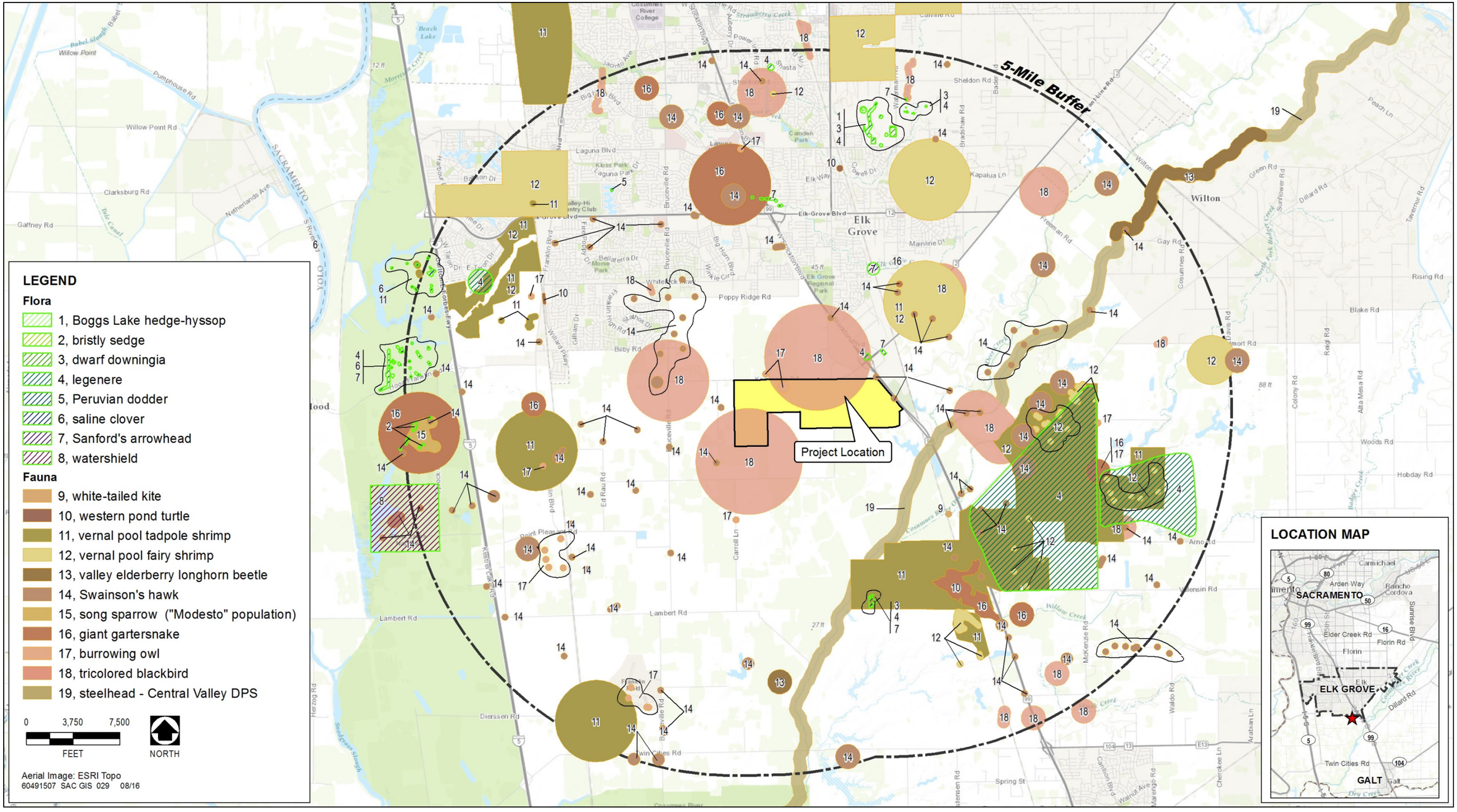
U.S. Fish and Wildlife Service:
E Endangered (legally protected)
T Threatened (legally protected)

California Department of Fish and Game:
E Endangered (legally protected)

California Rare Plant Ranks:
1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
2 Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

CRPR Extensions:
.1 Seriously endangered in California (>80% of occurrences are threatened and/or high degree and immediacy of threat)
.2 Fairly endangered in California (20 to 80% of occurrences are threatened)

Sources: CNDDB 2016; CNPS 2016; data compiled by AECOM in 2016



Source: CDFW CNDDB July 2016; Estep 2007, 2009a, 2012

Exhibit 3.4-2

Special-Status Species Occurrences within 5 Miles

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Special-Status Wildlife

Based on the database searches and literature review, 28 special-status wildlife species, not counting fish, have been documented or reported to occur in the SOIA Area or nearby within Sacramento, San Joaquin, or Yolo counties. These species are listed below in Table 3.4-3, along with their status, habitat, and potential to occur in the SOIA Area.

There are no special-status fish species that are known to occur in the SOIA Area. Two fish species listed as threatened under the ESA, Delta smelt (*Hypomesus transpacificaus*) and steelhead (*Oncorhynchus mykiss*), are identified on the USFWS official list of species that could be affected by projects in the SOIA Area. However, there are no waterways in the SOIA Area that could support steelhead or other special-status fish species. No critical habitat for special-status species is found in the SOIA Area. The nearest designated critical habitat (Delta smelt critical habitat) is located three miles southwest of the SOIA Area (USFWS 2016). Critical habitat for vernal pool tadpole shrimp is located approximately seven miles east of the SOIA Area.

Table 3.4-3. Special-Status Wildlife Known or Reported and Potential to Occur in the SOIA Area

Species	Listing Status[1]		Habitat	Potential for Occurrence[2]
	Federal	State		
Invertebrates				
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	T	–	Elderberry shrubs below 3,000 feet in elevation, typically in riparian habitats.	Unlikely to occur; no elderberry shrubs are present in the SOIA Area.
Vernal pool fairy shrimp *Branchinecta lynchi*	T	–	Vernal pools and other seasonal wetlands in valley and foothill grasslands.	Unlikely to occur; there are no vernal pools or other seasonal wetlands in the SOIA Area that provide suitable habitat for this species.
Vernal pool tadpole shrimp *Lepidurus packardi*	E	–	Vernal pools and other seasonal wetlands in valley and foothill grasslands.	Unlikely to occur; there are no vernal pools or other seasonal wetlands in the SOIA Area that provide suitable habitat for this species.
Amphibians and Reptiles				
Western pond turtle *Emys marmorata*	–	SSC	Forage in ponds, marshes, slow-moving streams, sloughs, and irrigation/drainage ditches; nest in nearby uplands with low, sparse vegetation.	Could occur; marginally suitable habitat is present in the on-site canals and pond and the species has been documented at Stone Lakes and connected ditches within approximately 3 miles of the SOIA Area.
Foothill yellow-legged frog *Rana boylii*		SSC	Shallow, perennial streams with rocky, cobble-sized substrate. Tadpoles require permanent water for a minimum of 15 weeks to complete metamorphosis.	Unlikely to occur; no suitable habitat present in the SOIA Area.
Western spadefoot *Spea hammondii*	–	SSC	Vernal pools and other seasonal ponds with a minimum 3-week inundation period in valley and foothill grasslands.	Unlikely to occur; there are no vernal pools or other seasonal wetlands in the SOIA Area that provide suitable breeding habitat for this species.

Table 3.4-3. Special-Status Wildlife Known or Reported and Potential to Occur in the SOIA Area				
Species	Listing Status[1]		Habitat	Potential for Occurrence[2]
	Federal	State		
Giant garter snake *Thamnophis gigas*	T	T	Slow-moving streams, sloughs, ponds, marshes, inundated floodplains, rice fields, and irrigation/drainage ditches on the Central Valley floor with mud bottoms, earthen banks, emergent vegetation, abundant small aquatic prey and absence or low numbers of large predatory fish. Also require upland refugia not subject to flooding during the snake's inactive season.	Could occur; marginally suitable habitat is present in the canals and ditches and the species has been documented immediately north of the SOIA Area in the Lent Ranch development area. Although individuals could be encountered on site, the site is not suitable to support breeding populations due to lack of upland refugia, periodic vegetation removal, and unreliability of water during the active season. Within the SOIA Area, the canal is deeply entrenched with very steep banks, but GGS could use this waterway for dispersal.
California tiger salamander *Ambystoma californiense*	T	T	Vernal pools and seasonal wetlands with a minimum 10-week inundation period and surrounding uplands, primarily grasslands, with burrows and other belowground refugia (e.g., rock or soil crevices).	Unlikely to occur; there are no vernal pools or other seasonal wetlands in the SOIA Area that provide suitable habitat for this species. The nearest known occurrences are from the vicinity of Clay along State Highway 104 and a 1914 record from the city of Galt that is believed to be extirpated.
Birds				
Tricolored blackbird *Agelaius tricolor* (nesting colony)	–	C	Forages in agricultural lands and grasslands; nests in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs. Requires open water and protected nesting substrate, such as flooded, spiny, or thorny vegetation (Schuford and Gardali 2008: 439).	Unlikely to nest; the agricultural fields provide foraging habitat, but no suitable nesting habitat is present. There is a 1981 record of 100 birds nesting in blackberry bushes near the intersection of Kammerer Road and Bruceville Road approximately 1 mile west of the SOIA Area. This nesting colony may still be extant, as suitable habitat still exists at that location and the immediate area has not yet been developed. Several other nesting records from the city of Elk Grove exist, but are or may be extirpated (removed) because they occur in areas that have been developed and recent surveys have not detected any tricolored blackbirds at these locations.
Grasshopper sparrow *Ammodramus savannarum* (nesting)	_	SSC	Forages and nests in dense grasslands; favors a mix of native grasses, forbs, and scattered shrubs. Nests in depressions on the ground at the bases of grass clumps. Prefers large tracts of habitat.	Unlikely to nest; habitat is marginal for this species because native grasses and scattered shrubs are absent and the grasses are harvested for hay. The nearest nesting records are from the Cosumnes River Preserve.

Table 3.4-3. Special-Status Wildlife Known or Reported and Potential to Occur in the SOIA Area				
Species	Listing Status[1]		Habitat	Potential for Occurrence[2]
	Federal	State		
Burrowing owl *Athene cunicularia* (burrow sites)	–	SSC	Nests and forages in grasslands, agricultural lands, open shrublands, and open woodlands with existing ground squirrel burrows or friable soils. Suitable burrow sites consist of short, herbaceous vegetation with only sparse cover of shrubs or taller herbs (Schuford and Gardali 2008: 221)	Likely to occur; ground squirrel burrows that provide suitable habitat for this species were observed at the edges of fields in the western portion of the site. This species has been documented at several locations within 5 miles of the SOIA Area, including a 2004 record just north of Kammerer Road along a canal berm and a 2010 record from the eastern edge of the SOIA Area. No burrowing owls were observed during the reconnaissance survey, but burrows were observed in the area where the owls were observed in 2010.
Swainson's hawk *Buteo swainsoni* (nesting)	–	T	Forages in grasslands and agricultural lands; nests in riparian and isolated trees.	Likely to occur; numerous nesting records are known in the vicinity of the project site and the SOIA Area provides high-quality foraging habitat on parcels that are not planted in vineyards. A limited number of potentially suitable nest trees are present in the eastern portion of the site, primarily around the vineyard operation buildings. There are numerous documented nest sites in the project vicinity, including two nests active as recently as 2012 along the eastern boundary of the SOIA Area (Estep 2012) .
Mountain plover *Charadrius montanus* (wintering)	_	SSC	Forages in short grasslands and plowed agricultural fields where vegetation is sparse and trees are absent.	Unlikely to occur; the SOIA Area is outside of this species' currently known wintering range, which, in Sacramento County, is restricted to areas west of Elk Grove in the Sacramento-San Joaquin River Delta west of I-5.
Northern harrier *Circus cyaneus* (nesting)	–	SSC	Nests and forages in grasslands, agricultural fields, and marshes. Nests on the ground within patches of dense, often tall, vegetation in undisturbed areas (MacWhirter and Bildstein 1996).	Known to occur; this species was observed foraging over the SOIA Area during the reconnaissance survey and is routinely observed in the project vicinity by AECOM biologists. The SOIA Area provides suitable foraging habitat and uncultivated areas may be suitable for nesting.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis* (nesting)	T	E	Nests in large blocks of deciduous riparian thickets or forests with dense, low-level or understory foliage adjacent to slow-moving watercourses, backwaters along broad, lower floodplains of larger river systems. Willow and cottonwood are almost always a component of the vegetation. In the Sacramento Valley, also utilizes adjacent walnut orchards.	Unlikely to occur; there is no suitable habitat for this species in the SOIA Area.

Table 3.4-3. Special-Status Wildlife Known or Reported and Potential to Occur in the SOIA Area				
Species	Listing Status[1]		Habitat	Potential for Occurrence[2]
	Federal	State		
White-tailed kite *Elanus leucurus* (nesting)	–	FP	Forages in grasslands and agricultural fields; nests in riparian zones, oak woodlands, and isolated trees.	Known to occur; suitable foraging habitat is present and large trees near the vineyard entrance and west of the site provide potential nest sites. This species was observed foraging over the SOIA Area during the reconnaissance survey and is routinely observed in the project vicinity by AECOM biologists. Nesting potential on-site is low due to the limited number of suitable nest trees and their proximity to the vineyard tasting room and parking area.
Lesser sandhill crane *Grus canadensis Canadensis* (wintering)	_	SSC	Annual and perennial grassland habitats, moist croplands with rice or corn stubble, and open, emergent wetlands.	Likely to occur; winters in the nearby area between Elk Grove and Galt. The SOIA Area provides suitable winter foraging habitat and sandhill cranes were observed (and heard) flying over the site during the reconnaissance survey. Does not breed in California.
Greater sandhill crane *Grus canadensis tabida* (nesting and wintering)	_	T FP	Annual and perennial grassland habitats, moist croplands with rice or corn stubble, and open, emergent wetlands. Typically nests in mounds of wetland plants or hummocks in remote portions of extensive wetlands. Sometimes nests in grass-lined depressions on dry sites.	Likely to occur; the SOIA Area provides suitable winter foraging habitat and sandhill cranes were observed (and heard) flying over the site during the reconnaissance survey. Does not breed in ~~California~~ the Central Valley.
Least bittern *Ixobrychus exilis* (nesting)	_	SSC	Nests in freshwater and brackish marshes with tall, dense emergent vegetation with clumps of woody plants over deep water.	Unlikely to occur**;** there is no suitable nesting habitat in the SOIA Area.
Loggerhead shrike *Lanius ludovicianus* (nesting)	_	SSC	Forages and nests in grasslands, shrublands, and open woodlands. Nests in trees and shrubs.	Likely to occur; sign of this species (impaled frogs) was observed on barbed-wire fence in the SOIA Area during the reconnaissance survey and there are a limited number of trees and shrubs that provide potential nest sites.
Song sparrow – "Modesto" population (*Melospiza melodia*) (year round)	_	SSC	Nests and forages primarily in emergent marsh, riparian scrub, and early successional riparian forest habitats in the north-central portion of the Central Valley; infrequently in mature riparian forest and sparsely vegetated ditches and levees. Forages primarily on exposed ground or in leaf litter.	Could occur**;** the larger ditches and canal provide marginally suitable habitat with low potential to support song sparrow nesting. Song sparrow was observed foraging over in the SOIA Area during the reconnaissance survey. There is one CNDDB record of this species in the nine-quad search area from Stone Lakes National Wildlife Refuge.

Table 3.4-3. Special-Status Wildlife Known or Reported and Potential to Occur in the SOIA Area				
Species	Listing Status[1]		Habitat	Potential for Occurrence[2]
	Federal	State		
Bank swallow *Riparia riparia* (nesting)	–	T	Nests in colonies in unvegetated vertical banks with fine-textured, sandy soils, typically next to streams, rivers, or lakes, occasionally in gravel quarries or other eroding bluffs. Forages in a variety of habitats near nests.	Unlikely to occur; there is no suitable habitat present for this species. The nearest known occurrence is on the Cosumnes River over 13 miles from the SOIA Area.
Yellow warbler *Setophaga petechia* (nesting)	_	SSC	Nests and forages in riparian communities, preferably with willow, cottonwood, aspen, sycamore, or alder.	Unlikely to occur, no woody riparian plant communities present. The only CNDDB record of this species in the region is a 1995 breeding occurrence along the Mokelumne River near Lockeford.
Yellow-headed blackbird *Xanthocephalus xanthocephalus* (nesting)	_	SSC	Nests in freshwater emergent wetlands with dense vegetation, deep water, and an abundance of large insects, typically on the edges of lakes, reservoirs, or large ponds.	Unlikely to occur; no substantial enough marsh vegetation present for nesting. The nearest documented occurrence is an 1899 record from near Freeport approximately 8 miles northwest of the SOIA Area.
Mammals				
Western red bat *Lasiurus blossevilli*	_	SSC	Roosts primarily in dense tree foliage, especially in cottonwood, sycamore, and other riparian trees or orchards (Pierson et al. 2004). Prefers habitat edges and mosaics with trees that are protected from above and open below and open areas for foraging, including grasslands, shrublands, and open woodlands.	Unlikely to occur; no suitable habitat is present.
Riparian brush rabbit *Sylvilagus bachmani riparius*	E	E	Riparian areas with dense thickets of rose, willow, and blackberry.	Unlikely to occur; there is no suitable habitat for this species in the SOIA Area and this species is known only from the San Joaquin River. The single CNDDB record of this species is from an artificial breeding program at the White Slough Wildlife Area.
American badger *Taxidea taxus*	–	SSC	Drier open shrub, forest, and herbaceous habitats with friable soils. Needs open, uncultivated land.	Unlikely to occur; although badgers could occasionally forage on the site, regular agricultural disturbance in the SOIA Area make it generally unsuitable for this species to den and the soils are not particularly friable on large portions of the site. There is only one record of this species in the nine quads containing and surrounding the SOIA Area and that is a 1938 collection from near Stone Lakes Wildlife Refuge and the Sacramento River west of I-5.

Table 3.4-3. Special-Status Wildlife Known or Reported and Potential to Occur in the SOIA Area

Species	Listing Status[1]		Habitat	Potential for Occurrence[2]
	Federal	State		

Note: CNDDB = California Natural Diversity Database; GGS = giant garter snake; SOIA = Sphere of Influence Amendment; USFWS = U.S. Fish and Wildlife Service

[1] Legal Status Definitions

Federal:
- E Endangered (legally protected)
- T Threatened (legally protected)

State:
- FP Fully protected (legally protected)
- SSC Species of special concern (no formal protection other than CEQA consideration)
- T Threatened (legally protected)
- C Candidate for listing under CESA (legally protected)

[2] Potential for Occurrence Definitions

Unlikely to occur: Species is unlikely to be present in the SOIA Area due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

Could occur: Suitable habitat is available in the SOIA Area; however, there are little to no other indicators that the species might be present.

Known to occur: The species, or evidence of its presence, was observed in the SOIA Area during reconnaissance surveys, or was reported by others.

Source: CNDDB 2016; Sacramento County General Plan EIR 2010; Shuford and Gardali 2008; California Wildlife Habitat Relationships (CWHR) 1988-1990 + updates; data compiled by AECOM in 2016

Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or are afforded specific consideration through CEQA, Section 1602 of the California Fish and Game Code, Section 404 of the CWA, and the State's Porter-Cologne Act, as discussed under "Regulatory Framework" below. Sensitive natural habitat may be of special concern to these agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special-status species.

Sensitive Natural Communities

CDFW maintains a list of plant communities that are native to California. Within that list, CDFW identifies special-status natural communities (or sensitive natural communities), which they define as communities that are of limited distribution statewide or within a county or region and often vulnerable to environmental effects of projects (CDFW 2015: xii). These communities may or may not contain special-status species or their habitat. Many wetland and riparian plant communities are included on CDFW's list of special-status plant communities. There are no riparian communities or other sensitive natural communities present in the SOIA Area; however, the pond, canal, and segments of the larger ditches provide potential habitat for wildlife species and are therefore subject to regulation under Section 1602 of the California Fish and Game Code and are considered sensitive habitats.

Waters of the United States and Waters of the State

There are approximately two acres of irrigation ditches, two acres of canal and two acres of pond in the SOIA Area. The pond is an old SR 99 borrow pit modified as a storm/irrigation runoff holding facility that is fully maintained and provides irrigation to the vineyards and hayfields. The ditches are highly maintained agricultural ditches that generally follow field boundaries. The canal is distinguished from the ditches by being wider and deeper (20 feet wide and deeply incised), originating from off-site, and conveying water for longer duration than

the ditches. The ditches range from very shallow, almost swale-like ditches that are about one foot wide, to large irrigation ditches that are about six feet wide and four feet deep. One segment of ditch running north to south along the boundary between the SOIA Area and the adjacent solar farm is approximately 18 feet wide and 4 feet wide at bank full width.

The canal and ditches, and pond may be subject to U.S. Army Corps of Engineers jurisdiction under Section 404 of the CWA due to ultimate connectivity to the Sacramento-San Joaquin River Delta via South Stone Lake thence Snodgrass Slough; however, a jurisdictional determination has not been completed for the SOIA Area. Waters that do not meet the criteria to qualify as waters of the United States and are disclaimed by the USACE would still be considered waters of the state subject to regulation by the Central Valley Regional Water Quality Control Board (RWQCB) under California's Porter-Cologne Act.

3.4.2 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Federal Endangered Species Act

Pursuant to the ESA (16 U.S.C. Section 1531 et seq.), U.S. Fish and Wildlife Service (USFWS) has regulatory authority over species listed or proposed for listing as endangered or threatened. USFWS and the National Marine Fisheries Service have authority over projects that may result in take of a species listed as threatened or endangered under ESA (i.e., a federally listed species). In general, persons subject to ESA (including private parties) are prohibited from "taking" endangered or threatened fish and wildlife species on private property, and from "taking" endangered or threatened plants in areas under federal jurisdiction or in violation of state law.

Under Section 9 of the ESA, the definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has also interpreted the definition of "harm" to include significant habitat modification that could result in take.

The take prohibition of ESA Section 9 applies only to listed species of fish and wildlife. Section 9(a)(2)(B) describes federal protection for endangered plants. In general, ESA does not protect listed plants located on nonfederal land (i.e., areas not under federal jurisdiction), unless such species are already protected by State law.

Section 7 of the ESA outlines procedures for federal interagency cooperation to protect and conserve federally listed species and designated critical habitat. Critical habitat identifies specific areas that have the physical and biological features essential to the conservation of a listed species and that may require special management considerations or protection. Section 7(a)(2) requires federal agencies to consult with USFWS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroying or adversely modifying designated critical habitat.

For projects where federal action is not involved and take of a listed species may occur, a project proponent may seek an incidental take permit under section 10(a) of the ESA. Section 10(a) of ESA allows USFWS to permit the incidental take of listed species if such take is accompanied by a habitat conservation plan that ensures minimization and mitigation of impacts associated with the take.

Section 404 of the Clean Water Act

Section 404 of the federal CWA requires a project applicant to obtain a permit from USACE before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Fill material is material placed in waters of the United States where the material has the effect of replacing any portion of a water of the United States with dry land, or changing the bottom elevation of any portion of a water of the United States. Waters of the United States include navigable waters of the United States; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; tributaries to any of these waters, and wetlands adjacent to these waters. Wetlands are defined as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Potentially jurisdictional wetlands must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Wetlands that meet the delineation criteria may be jurisdictional under Section 404 of CWA pending USACE and U.S. Environmental Protection Agency (EPA) review.

As part of the review of a project, USACE must ensure compliance with applicable federal laws, including EPA's Section 404(b)(1) Guidelines. USACE regulations require that impacts to waters of the United States are avoided and minimized to the maximum extent practicable, and that unavoidable impacts are compensated (33 Code of Federal Regulations [CFR] 320.4[r]).

In 2008, USACE and EPA issued regulations governing compensatory mitigation for activities authorized by permits issued by USACE (33 CFR 332). The rule establishes a preference for the use of mitigation banks because they provide established wetland habitats that have already met success criteria thereby reducing some of the risks and uncertainties associated with compensatory mitigation involving creation of new wetlands that cannot yet demonstrate functionality at the time of project implementation. The rule also establishes a preference for providing compensatory mitigation within the affected watershed. Ideally, compensatory mitigation would take place at a mitigation bank within the same watershed as the waters to be replaced. If mitigation banks are not available within the affected watershed, then compensatory mitigation involving creation or restoration within the affected watershed may be preferable to using a mitigation bank outside the affected watershed.

Section 401 Water Quality Certification

Under Section 401 of the CWA, an applicant for a Section 404 permit must obtain a certificate from the appropriate State agency stating that the intended dredging or filling activity is consistent with the State's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the nine RWQCBs.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703, et seq.), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it shall be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. This prohibition includes both direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of

birds, nests, or eggs. The current list of species protected by the MBTA can be found in Title 50 of the CFR, Section 10.13 (50 CFR 10.13). The list includes nearly all birds native to the United States.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Endangered Species Act

CESA (California Fish and Game Code Section 2050, *et seq.*) directs State agencies not to approve projects that would jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of a species. Furthermore, CESA states that reasonable and prudent alternatives shall be developed by CDFW, together with the project proponent and any state lead agency, consistent with conserving the species, while at the same time maintaining the project purpose to the greatest extent possible. Under CESA, project-related impacts of the authorized take must be minimized and fully mitigated, and adequate funding to implement those mitigation measures and monitor compliance with and the effectiveness of the measures must be ensured. Standard CESA issuance requirements can include land acquisition, permanent protection and management, and/or funding in perpetuity of compensatory lands.

A "take" of a species, under CESA, is defined as an activity that would directly or indirectly kill an individual of a species. The CESA definition of take does not include "harm" or "harass" as is included in the federal act. As a result, the threshold for a take under CESA may be higher than under ESA because habitat modification is not necessarily considered take under CESA. The take of State-listed species incidental to otherwise lawful activities requires a permit, pursuant to Section 2081(b) of CESA. The State has the authority to issue an incidental take permit under California Fish and Game Code Section 2081, or to coordinate with USFWS during the Section 10(a) process to make the federal permit consistent with CESA.

As under federal law, listed plants have considerably less protection than fish and wildlife under California State law. The California Native Plant Protection Act (California Fish and Game Code Section 19000 et seq.) allows landowners to take listed plant species from, among other places, a canal, lateral ditch, building site, or road, or other right-of-way, provided that the owner first notifies CDFW and gives the agency at least 10 days to retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed.

Section 1602 of the California Fish and Game Code

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. Under Section 1602, it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by CDFW, or use any material from the streambeds, without first notifying CDFW of such activity and obtaining a final agreement authorizing such activity.

"Stream" is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. CDFW's jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A CDFW streambed alteration agreement must be obtained for any project that would result in an impact on a river, stream, or lake.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act (California Water Code Section 13000, *et seq.*) requires that each of the state's nine RWQCBs prepare and periodically update basin plans for water quality control. Each basin plan sets forth water quality standards for surface water and groundwater and actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to protect wetlands through the establishment of water quality objectives. The RWQCB's jurisdiction includes federally protected waters, as well as areas that meet the definition of "waters of the state." Waters of the state is defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the discretion to take jurisdiction over areas not federally regulated under Section 401 provided they meet the definition of waters of the state. Mitigation requiring no net loss of wetlands functions and values of waters of the state is typically required by the RWQCB.

California Fish and Game Code – Fully Protected Species

Four sections of the California Fish and Game Code (Fish and Game Code Sections 3511, 4700, 5050, and 5515) list 37 fully protected species. These statutes prohibit take or possession at any time of fully protected species. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species. CDFW has informed nonfederal agencies and private parties that they must avoid take of any fully protected species in carrying out projects.

California Fish and Game Code – Protection of Bird Nests and Raptors

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal and failure of nesting attempts, resulting in loss of eggs and/or young. These violations can be caused by disturbance of nesting pairs by nearby human activity.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Elk Grove General Plan

The Conservation Element of the Elk Grove General Plan (2015) outlines policies and actions aimed at reducing development impacts on native and nonnative habitats, plants, and animals. The Parks, Trails, and Open Space Element ensures that the City's desires and/or needs for parks, recreation, and open space are recognized and addressed. The following General Plan policies may be relevant to future projects that could be developed in the future within the proposed SOIA Area.

- **CAQ-8:** Large trees (both native and nonnative) are an important aesthetic (and, in some cases, biological) resource. Trees that function as an important part of the City's or neighborhood's aesthetic character or natural habitat should be retained to the extent possible during the development of new structures, roadways (public and private, including roadway widening), parks, drainage channels, and other uses and structures.

- If trees cannot be preserved onsite, offsite mitigation or payment of in-lieu fee may be required by the City. Where possible, trees planted for mitigation should be located in the same watershed as the trees that were removed.

- Trees that cannot be protected shall be replaced either onsite or offsite as required by the City.

- **CAQ-8-Action 1** When reviewing native or non-native trees for preservation, considering the following criteria: Aesthetic value; Biological value; Shade; Water quality benefits; Runoff reduction; Air quality (pollutant reduction); Health of the tree(s); Suitability for preservation in place; Safety hazards posed by the tree(s);

- **CAQ-8-Action 2** Develop a list of trees which shall be considered generally exempt from preservation. These may include trees, which pose a threat to public safety, to native trees, or to natural habitat.

- **CAQ-8-Action 3** Develop a list of trees which may be used when providing replacement trees for the loss of native and non-native trees.

- **CAQ-8-Action 4** Implement the City's Tree Preservation Ordinance.

- **CAQ-8-Action 5** Amend the City's Tree Preservation Ordinance to conform with the policies of this General Plan and to expand protection to non-native trees.

- **CAQ-8-Action 6** Develop a list of trees that should not be planted due to their invasive nature (that is, their ability to escape cultivation or to dominate natural areas) and provide this information to the public and the development community.

- **CAQ-8-Action 7** Retain the services of a qualified arborist(s) under contract to the City to provide information to decision-makers and staff on the suitability of trees for preservation.

- **CAQ-8-Action 8** Consider the use of revised standard roadway cross-sections which do not require the removal of trees in order to provide additional roadway capacity.

► **CAQ-9:** Wetlands, vernal pools, marshland and riparian (streamside) areas are considered important resources. Impacts to these resources shall be avoided unless shown to be technically infeasible. The City shall seek to ensure that no net loss of wetland areas occurs, which may be accomplished by avoidance, revegetation, and restoration onsite or creation of riparian habitat corridors.

- **CAQ-9-Action 1** As part of the development review process, ensure that all potentially affected wetland areas are identified, and provide mitigation to ensure that no net loss occurs. Mitigation should occur within the same watershed as the impact, where feasible.

- **CAQ-9-Action 2** Coordinate with the California Department of Fish and Game and the U.S. Fish and Wildlife Service in the review of development projects.

► **CAQ-10:** Consider the adoption of habitat conservation plans for rare, threatened, or endangered species.

- **CAQ-10-Action 1** As appropriate, work with the County of Sacramento and other agencies on a Habitat Conservation Plan or other mechanism to implement this policy.

- **CAQ-11:** The City shall seek to preserve areas, where feasible, where special-status plant and animal species and critical habitat areas are known to be present or potentially occur, based on City biological resource mapping and data provided in the General Plan EIR or other technical material, and may be adversely affected by public or private development projects. Where preservation is not possible, appropriate mitigation shall be included in the public or private project. "Special-status" species are generally defined as species considered to be rare, threatened, or endangered, or otherwise protected under local, state, and/or federal policies, regulations, or laws.

    - **CAQ-11 Action 1** The City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain special-status plant and animal species based on City biological resource mapping and data provided in the General Plan EIR or other technical material. The biological resources evaluation shall determine the presence/absence of these special-status plant and animal species on the site. The surveys associated with the evaluation shall be conducted during the appropriate seasons for proper identification of the species. Such evaluation will consider the potential for significant impact on special-status plant and animal species, and will identify feasible mitigation measures to mitigate such impacts to the satisfaction of the City and appropriate governmental agencies (e.g., U.S. Fish and Wildlife Service, California Department of Fish and Game and U.S. Army Corps of Engineers) where necessary (e.g., species listed under the State and/or Federal Endangered Species Act). Mitigation measures may include, but are not limited to, the following:

        - For special-status plant species: On- or off-site preservation of existing populations from direct and indirect impacts, seed and soil collection or plant transplant that ensures that the plant population is maintained.

        - For special-status animal species: avoidance of the species and its habitat as well as the potential provision of habitat buffers, avoidance of the species during nesting or breeding seasons, replacement or restoration of habitat on- or off-site, relocation of the species to another suitable habitat area, payment of mitigation credit fees.

        - Participation in a habitat conservation plan.

- **CAQ-17:** The City recognizes the value of naturally vegetated stream corridors, commensurate with flood control and public acceptance, to assist in removal of pollutants, provide native and endangered species habitat and provide community amenities.

- **PTO-15:** The City views open space lands of all types as important resource which should be preserved in the region, and supports the establishment of multipurpose open space areas to address a variety of needs, including, but not limited to:

    - Maintenance of agricultural uses;
    - Wildlife habitat
    - Recreational open space
    - Aesthetic benefits

- Flood control

To the extent possible, lands protected in accordance with this policy should be in proximity to Elk Grove, to facilitate use of these areas by Elk Grove residents, assist in mitigation of habitat loss within the city, and provide an open space resource close to the urbanized areas of Elk Grove.

- **PTO-15-Action 1** Consider the establishment of a citywide fee and/or assessment system which would provide funding for the purchase of open space land or easements and the maintenance of these areas.

- **PTO-18:** To the extent possible, retain natural drainage courses in all cases where preservation of natural drainage is physically feasible and consistent with the need to provide flood protection.

Elk Grove Municipal Code

Title 16, "Swainson's Hawk" Chapter 16.130, "Swainson's Hawk Impact Mitigation Fees"

The City of Elk Grove recognizes that the continued expansion of urban uses into agricultural lands will, absent mitigation, result in a significant reduction of Swainson's hawk foraging habitat. The City has determined that the most effective means of mitigating such loss of foraging habitat is the direct preservation, in perpetuity, of equally suitable foraging habitat on an acre-per-acre ratio. Pursuant to this chapter, preservation should occur prior to the onset of development activities that cause the impact (i.e., land clearing and grading) and project proponents should be responsible for locating and acquiring appropriate land or legal instruments (such as conservation easements) that will ensure its preservation as Swainson's hawk foraging habitat in perpetuity. Because it may be infeasible to acquire easements of for less than 40 acres, proponents of projects less than 40 acres have the option to mitigate impacts to Swainson's hawk foraging habitat through payment of an impact mitigation fee that will provide funds to acquire available land with suitable Swainson's hawk foraging habitat values.

Title 19, "Trees," Chapter 19.12, "Tree Preservation and Protection"

The City of Elk Grove prioritizes the preservation of existing trees and the historic and aesthetic character of the community, as described in the City General Plan. The City's tree ordinance contains provisions to preserve existing trees through the development review process and a process for tree replacement where preservation is not reasonably possible. The City considers trees with a diameter at breast height (dbh) of 6 inches or greater, or multi-trunked trees with a combined dbh of 6 inches or greater, of the following species as trees of local importance (Section 19.12.040): coast live oak (*Quercus agrifolia*), valley oak (*Q. lobata*), blue oak (*Q. douglasii*), interior live oak (*Q. wislizenii*), oracle oak (*Q. X moreha*), California sycamore (*Platanus racemosa*), and California black walnut (*Juglans hindsii*). For future development projects, tree removal would be addressed as part of the project application (Section 19.12.090).

The tree ordinance requires that mitigation for tree loss be provided at a ratio of 1 new inch dbh of tree for each inch dbh lost (1:1 ratio), unless alternative mitigation is approved by the City. An applicant for future development would be required to prepare a tree mitigation plan if any trees would be removed. Mitigation options (Section 19.12.160) could include on-site or off-site replacement, payment of an in-lieu fee, preservation of existing trees, or on-site or off-site relocation.

~~Proposed~~ Draft South Sacramento Habitat Conservation Plan

The SOIA is located within the proposed South Sacramento Habitat Conservation Plan (SSHCP) area and Sacramento County is a plan partner. The City of Elk Grove is no longer a ~~participant in the~~ SSHCP plan partner ~~planning process~~.

The SSHCP is intended to provide a streamlined process for incidental take authorization under both the federal Endangered Species Act and the California Endangered Species Act, permitting under Section 404 of the federal Clean Water Act and quality certification under Section 401 of the Clean Water Act, and lake and streambed alteration agreements under Section 1602 of the Fish and Game Code. The SSHCP would provide strategies to conserve habitat for special-status plant and wildlife species that are covered under the plan. If adopted, it would serve as a multi-species, multi-habitat conservation plan addressing the biological impacts of future urban development within the Urban Services Boundary (USB) in the southern portion of the county.

The emphasis of the SSHCP is to secure large, interconnected blocks of habitat that focus on protecting intact subwatersheds, while minimizing edge effects and maximizing heterogeneity. Habitat losses within the USB would be offset primarily through the establishment of large preserves outside the USB, but core and satellite preserves may be established within the USB. As currently conceived, land developers that convert habitat within the USB would pay a defined per-acre fee to mitigate impacts. These fees would be used to protect, restore, maintain, and monitor habitat.

The process for developing the SSHCP was initiated in 1992, predating the 2000 incorporation of the City of Elk Grove. A public review draft of the SSHCP and Implementing Agreement, accompanying joint draft Environmental Impact Statement/draft Environmental Impact Report, and draft Aquatic Resources Program, was released on June 2, 2017, opening a 90-day public comment period that runs until September 5, 2017. Public hearings will be held on proposed adoption of the final SSHCP, final EIS/EIR, final Aquatic Resources Program, and final Implementing Agreement in ~~The SSHCP is currently undergoing environmental review and, according to the SSHCP website, the plan is anticipated to be adopted in the summer of 2017. At this time, the SSHCP is still being developed and details of the proposed plan are not available.~~fall and winter of 2017–2018, and an Incidental Take Permit is expected to be issued in Spring 2018 (Sacramento County 2017b).

3.4.3 Environmental Impacts and Mitigation Measures

Methodology

The project does not include development proposals or any land use changes; therefore, the environmental analysis is based on a potential land use scenario that anticipates, conservatively, full development of the proposed SOIA Area. Potential impacts on biological resources resulting from implementation of the proposed project were determined by mapping and quantifying common and sensitive habitats (i.e., aquatic habitats), and evaluating potential effects to common and special-status species that could result from loss of these habitats and other potential direct and indirect effects. For purposes of the biological resources analysis, it is assumed that all existing habitat in the SOIA Area could eventually be converted to developed land uses as a result of approval of the SOIA. Potential impacts associated with possible future off-site improvement areas are characterized very generally since there is no annexation, land use change, development, or infrastructure associated with the project and since the location of nonexistent off-site improvement areas is unknown.

THRESHOLDS OF SIGNIFICANCE

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the State CEQA Guidelines. The project would result in a significant impact related to biological resources if it would do any of the following:

- Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW;
- Have a substantial adverse effect on Federally protected waters of the United States, including wetlands, as defined by Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan; or
- Substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species.

~~ISSUES NOT DISCUSSED FURTHER~~

~~**Wildlife nursery sites or migratory routes:** No native wildlife nursery sites or established migratory routes have been identified in the SOIA Area. According to the California Essential Habitat Connectivity Project, the SOIA Area is not located within a Natural Landscape Block or Essential Habitat Connectivity area (Spencer *et al.* 2010). Project development would not interfere substantially with the movement of any native resident or migratory wildlife species because the SOIA Area does not currently provide an important connection between any areas of natural habitat that would otherwise be isolated. Therefore, project implementation would not have an impact on wildlife movement or nursery sites.~~

IMPACT ANALYSIS

IMPACT 3.4-1 Special-status plants. *The pond, canal, and some of the ditches in the SOIA Area provide marginally suitable habitat for the special-status plant species Sanford's arrowhead. This species could potentially be present and if there is future development of the SOIA Area, this could be lost through habitat removal. This impact is considered* ***potentially significant****.*

As previously stated, the proposed SOIA does not include development or land use change. However, land use assumptions were developed for this analysis in order to illustrate the types of environmental effects that could result from possible future development in the SOIA Area. If the proposed SOIA Area is proposed for development in the future, such development could result in removal of approximately four acres of human-made ditches, canal, and pond that have low potential to support the special-status plant species Sanford's arrowhead. This potential is considered low because habitat in the on-site aquatic features is heavily disturbed due to managed hydrology, periodic channel dredging, and vegetation management. However, Sanford's arrowhead is known to occur in artificial and disturbed waterways and stock ponds in the region. Therefore, the possibility of this species being found on the site cannot be dismissed. Loss of aquatic habitat from the SOIA Area could result in direct mortality of this special-status plant if it is present.

In addition, off-site improvements such as roads, sewer lines, drainage facilities, and water lines could also be required if future development were to occur in the SOIA Area. While some of the off-site improvements may occur within existing rights-of-way that do not provide suitable habitat for special-status plants, other off-site improvements may occur in areas that contain habitat (e.g., freshwater marsh and vernal pools) for other special-status plant species known to occur in the region, as listed in Table 3.4-2. Therefore, possible future off-site improvements could result in mortality of Sanford's arrowhead and other special-status plant species if they are present in off-site improvement areas associated with possible future development in the SOIA Area. Loss of special-status plants is considered a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.4-1: Conduct Special-status Plant Surveys; Implement Compensatory Mitigation for Special-status Plants

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of special-status plant species:

- Retain a qualified botanist to conduct protocol-level preconstruction special-status plant surveys for potentially occurring species for each future proposed project following the CDFW rare plant survey protocols (CDFG 2009) or the most recent CDFW rare plant survey protocols. All plant species encountered on the project site shall be identified to the taxonomic level necessary to determine species status. The surveys shall be conducted no more than 5 years prior and no later than the blooming period immediately preceding the approval of a grading or improvement plan or any ground disturbing activities, including grubbing or clearing.

- Notify CDFW, as required by the California Native Plant Protection Act, if any special-status plants are found on the project site. Notify the USFWS if any plant species listed under the Endangered Species Act are found.

- Develop a mitigation and monitoring plan to compensate for the loss of special-status plant species found during preconstruction surveys, if any. The mitigation and monitoring plan shall be submitted to CDFW or USFWS, as appropriate depending on species status, for review and comment. The City shall ~~consult~~ coordinate with these entities, as appropriate depending on species status, before approval of the plan to determine the appropriate mitigation measures for impacts on any special-

status plant population. Mitigation measures may include preserving and enhancing existing on-site populations, creation of off-site populations on project mitigation sites through seed collection or transplantation, and/or preserving occupied habitat off-site in sufficient quantities to offset loss of occupied habitat or individuals

- If transplantation is part of the mitigation plan, the plan shall include a description and map of mitigation sites, details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements, and sources of funding to purchase, manage, and preserve the sites. The following performance standards shall be applied:

- The extent of occupied area and the flower density in compensatory reestablished populations shall be equal to or greater than the affected occupied habitat and shall be self-producing.

- Reestablished populations shall be considered self-producing when:

  – plants re-establish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and

  – re-established habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types.

- If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, and other details, as appropriate to target the preservation of long term viable populations.

Significance after Mitigation

If development occurs in the proposed SOIA under the City of Elk Grove's jurisdiction that requires discretionary action, the City will be required to make General Plan consistency findings, including consistency with Policy CAQ-11 and CAQ-11 Action 1, which suggest that the City will assess special-status plant species occurrences and seek to preserve or mitigate impacts to such species. In addition, implementation of Mitigation Measure 3.4-1 would reduce impacts on potentially-occurring special-status plant species because future project applicants would be required to identify special-status plant populations and provide compensation for the loss of special-status plants through establishment of new populations, conservation easements, or other appropriate measures. With enforcement of the above mitigation, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. The impact is **less than significant with mitigation**.

IMPACT 3.4-2 Special-status raptors and other nesting raptors. *If there is future development of the SOIA Area, this would result in eventual conversion from agricultural land uses in the SOIA Area to urban land uses. This would result in loss of suitable nesting and foraging habitat for special-status raptors (Swainson's hawk, white-tailed kite, northern harrier, and burrowing owl) and common raptors protected under California Fish and Game Code and the MBTA. Loss of nesting and foraging habitat would contribute to a regional*

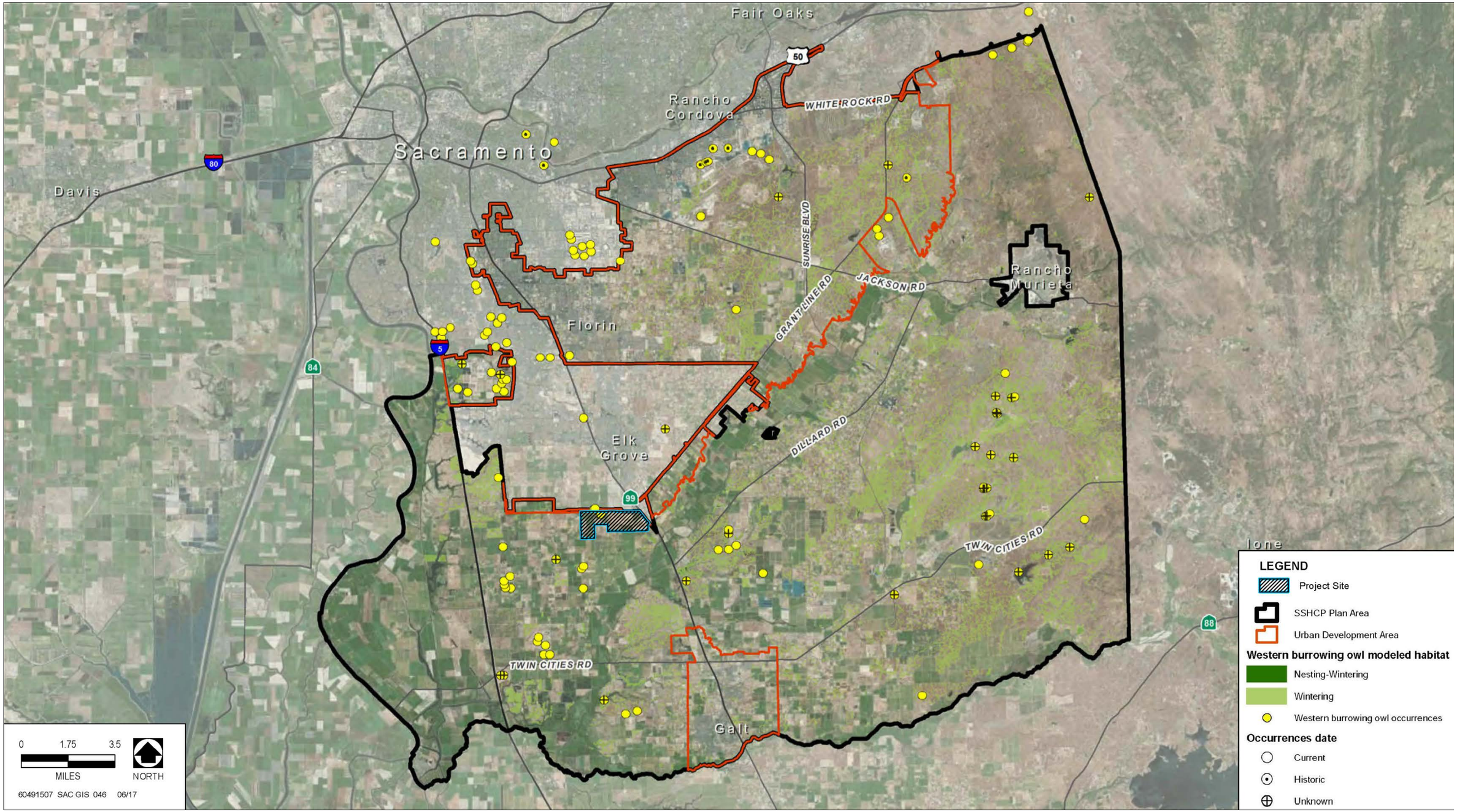
reduction in these essential habitats and may contribute to regional population declines of affected species. Construction of future projects resulting from the SOIA could also disturb active nests on or near the SOIA Area and off-site improvement areas, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This impact is considered ***significant****.*

Converting land in the SOIA Area from agricultural to urban land uses would result in removal of approximately 1,150 acres of cropland that provides suitable foraging habitat for Swainson's hawk, white-tailed kite, northern harrier, and burrowing owl. Swainson's hawk is listed as threatened under CESA, white-tailed kite is a fully protected species, and northern harrier and burrowing owl are California species of special concern. Exhibits 3.4-4, 3.4-4, 3.4-5, and 3.4-6 show the location of the SOIA Area in relation to Swainson's hawk, white-tailed kite, northern harrier, and burrowing owl occurrences, respectively. Numerous Swainson's hawk nests have been reported in the general vicinity of the SOIA Area (CNDDB 2016, Estep 2007, 2009a, 2012). White-tailed kite and northern harrier were observed foraging over the SOIA Area during the biological reconnaissance surveys conducted in March 2016 and burrowing owls were observed in the SOIA Area in 2010 (CNDDB 2016).

Although some of the SOIA Area is currently planted in vineyards that are not considered suitable foraging habitat for Swainson's hawk, the entire SOIA Area is currently zoned AG-80 and is therefore assumed to provide 100 percent foraging habitat value according to the Sacramento County Department of Environmental Review and Assessment. The draft SSHCP (Sacramento County et al. 2017a) modeled the SOIA Area as high-value foraging habitat for Swainson's hawk, and also as foraging habitat for white-tailed kite. Although burrowing owls are found within the agricultural landscape of Sacramento County (Exhibit 3.4-3) and the species is known to inhabit agricultural field borders and forage in cultivated fields, the SOIA Area is not modeled in the draft SSHCP as either wintering or nesting habitat for western burrowing owl. Following the ultimate conversion of the SOIA Area to urban uses, the SOIA Area would retain zero foraging habitat value for all of these special-status raptor species.

Swainson's hawks generally nest within two miles of suitable foraging habitat, which consists of alfalfa, disked fields, fallow fields, dry-land pasture, beets, tomatoes, irrigated pasture, grains, other row crops, and uncultivated grasslands (Estep 1989, Estep pers. comm. 2007, Estep 2009a, Estep 2009b). There are 78 nesting Swainson's hawk records within 5 miles of the SOIA Area and the loss of 750 acres of foraging habitat from the SOIA Area, and potentially more acreage at off-site improvement areas, could affect nesting success, survival rates, and availability of prey for the local population, or result in displacement of nesting pairs of Swainson's hawk, white-tailed kite, and northern harrier. Therefore, the loss of foraging habitat resulting from eventual development of the SOIA Area and off-site improvement areas is considered a **potentially significant** impact.

Trees that provide suitable nest sites for Swainson's hawk, white-tailed kite, and common raptors would also be removed. Northern harriers ~~could~~ nest on the ground along field borders or in cattail and bulrush patches in the canals and ditches. These nesting habitats would also be removed or otherwise impacted. Ground squirrel burrows that provide potentially suitable nesting and cover habitat for burrowing owl were also observed during the reconnaissance survey.



Source: SSHCP 2017

Exhibit 3.4-3 **SSHCP Western Burrowing Owl Occurrences**

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In addition, possible future off-site improvements to roads, sewer lines, drainage facilities, and water lines could result in additional losses of suitable nesting and foraging habitat for raptors in the vicinity of the SOIA Area.

All raptors and their active nests, including common species, are protected under Section 3503.5 of the California Fish and Game Code. Common raptors that could nest on or near the SOIA Area include red-tailed hawk and American kestrel and these species were observed foraging in the SOIA Area during reconnaissance surveys.

Vegetation removal, grading, and other construction activities associated with land use conversion could result in mortality of individuals and nest abandonment. If trees are to be removed during the raptor breeding season (March–August), mortality of eggs and chicks of tree nesting raptors could result if an active nest were present. In addition, future development activities could disturb active nests near construction areas, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. Ground disturbance or vegetation removal during the breeding season could result in loss of active northern harrier nests.

Burrowing owls need burrows at all times to survive, and displacing individuals from their burrows can result in indirect impacts such as predation, increased energetic costs, increased stress, and risks associated with having to find and compete for burrows, all of which can lead to take or reduced reproduction.

Construction activities in the SOIA Area could result in direct destruction of an active Swainson's hawk, white-tailed kite, northern harrier, burrowing owl, or common raptor nests or disturb nesting raptors located on or near the SOIA Area and off-site improvement areas, resulting in nest abandonment by adult birds and abandonment of chicks and eggs, causing mortality. Direct and indirect impacts on active raptor nests or burrows are considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-2a: Avoid Direct Loss of Swainson's Hawk and Other Raptors

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of nesting Swainson's hawks and other nesting raptors:

- Tree and vegetation removal shall be completed during the nonbreeding season for raptors (September 1–February ~~31~~15).

- To avoid, minimize, and mitigate potential impacts on Swainson's hawk and other raptors (not including burrowing owl) nesting on or adjacent to the SOIA Area or possible off-site improvement areas, retain a qualified biologist to conduct preconstruction surveys and identify active nests on and within 0.5 mile of the project site for construction activities conducted during the breeding season (March 1~~–August~~ September 15). The surveys shall be conducted before the approval of grading and/or improvement plans (as applicable) and no less than 14 days and no more than 30 days before the beginning of construction. Guidelines provided in *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley* (Swainson's Hawk Technical Advisory Committee 2000) shall be followed for surveys for Swainson's hawk. If no nests are found, no further mitigation will be required.

- Impacts on nesting Swainson's hawks and other raptors shall be avoided by establishing appropriate buffers around active nest sites identified during preconstruction raptor surveys. No project activity shall commence within the buffer areas until a qualified biologist has determined, in coordination with CDFW, the young have fledged, the nest is no longer active, or reducing the buffer would not result in nest abandonment. The buffer distance for Swainson's hawk nests shall be determined by ~~size of the buffer may be decreased if~~ a qualified biologist and the City, in ~~consultation~~ coordination with CDFW, , ~~determine that such an adjustment would not be likely to adversely affect the nest~~ based on the distance required to avoid adversely affecting the nest(s).

- The appropriate no-disturbance buffer for other raptor nests (i.e., species other than Swainson's hawk) shall be determined by a qualified biologist based on site-specific conditions, the species of nesting bird, nature of the project activity, visibility of the disturbance from the nest site, and other relevant circumstances.

- Monitoring of all active raptor nests by a qualified biologist during construction activities will be required if the activity has potential to adversely affect the nest. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. The qualified biologist will have the authority to shut down construction activities within a portion or all of a construction site if necessary to avoid nest abandonment or take of individuals. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined appropriate by a qualified biologist.

Mitigation Measure 3.4-2b: Avoid Loss of Burrowing Owl

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of burrowing owl:

- To avoid, minimize, and mitigate potential impacts on burrowing owl, applicants for each future project shall retain a qualified biologist to conduct focused breeding and nonbreeding season surveys for burrowing owls in areas of suitable habitat on and within 1,500 feet of the project site. Surveys will be conducted prior to the start of construction activities for each project and in accordance with Appendix D of CDFW's Staff Report on Burrowing Owl Mitigation (2012) or the most recent CDFW protocols.

- If no occupied burrows are found, a letter report documenting the survey methods and results will be submitted to the City and CDFW and no further mitigation will be required.

- If an active burrow is found during the nonbreeding season (September 1 through January 31), owls will be relocated to suitable habitat outside of the project area using passive or active methodologies developed in ~~consultation~~ coordination with CDFW and may include active relocation to preserve areas if approved by CDFW and the preserve managers. No burrowing owls will be excluded from occupied burrows until a burrowing owl exclusion and relocation plan is developed by the project applicant and approved by CDFW.

- If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows will not be disturbed and will be provided with a 150- to 1,500-foot protective buffer unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer will depend on the time of year and level of disturbance, as outlined in the CDFW Staff Report (2012, pg 9) or the most recent CDFW protocols. Once the fledglings are capable of independent survival, the owls will be relocated to suitable habitat outside the project area in accordance with a burrowing owl exclusion and relocation plan developed in ~~consultation~~coordination with CDFW and the burrow will be destroyed to prevent owls from reoccupying it. No burrowing owls will be excluded from occupied burrows until a burrowing owl exclusion and relocation plan is approved by CDFW. Following owl exclusion and burrow demolition, the site shall be monitored by a qualified biologist to ensure burrowing owls do not recolonize the site prior to construction.

- If active burrowing owl nests are found on the project site and these nest sites are lost as a result of implementing the project, the project applicant shall mitigate the loss through preservation of other known nest sites in Sacramento County, at a minimum ratio of 1:1. The applicant shall develop a mitigation and monitoring plan for the compensatory mitigation areas.

- The mitigation and monitoring plan will include detailed information on the habitats present within the preservation areas, the long-term management and monitoring of these habitats, legal protection for the preservation areas (e.g., conservation easement, declaration of restrictions), and funding mechanism information (e.g., endowment). All burrowing owl mitigation lands shall be preserved in perpetuity and incompatible land uses shall be prohibited in habitat conservation areas.

- The project applicants shall transfer said burrowing owl mitigation land, through either conservation easement or fee title, to a third-party, nonprofit conservation organization (Conservation Operator), with the City and CDFW named as third-party beneficiaries. The Conservation Operator shall be a qualified conservation easement land manager that manages land as its primary function. Additionally, the Conservation Operator shall be a tax-exempt nonprofit conservation organization that meets the criteria of Civil Code Section 815.3(a) and shall be selected or approved by the City, after ~~consultation~~ coordination with CDFW. The City, after ~~consultation~~ coordination with CDFW and the Conservation Operator, shall approve the content and form of the conservation easement. The City, CDFW, and the Conservation Operator shall each have the power to enforce the terms of the conservation easement. The Conservation Operator shall monitor the easement in perpetuity to ensure compliance with the terms of the easement.

Mitigation Measure 3.4-2c: Prepare and Implement a Swainson's Hawk Foraging Habitat Mitigation Plan

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of Swainson's hawk foraging habitat:

- Before the approval of grading and improvement plans or before any ground-disturbing activities, whichever occurs first, preserve suitable Swainson's hawk foraging habitat to ensure 1:1 mitigation

for Swainson's hawk foraging habitat value lost as a result of the project. ~~Because the SOIA Area is currently zoned Ag 80, it is deemed to provide 100 percent foraging habitat value and the entire acreage must therefore be compensated at a 1:1 ratio.~~ Loss of foraging habitat resulting from possible future off-site improvements shall be compensated by preserving suitable Swainson's hawk foraging habitat to ensure 1:1 replacement of habitat value, based on zoning of the affected land, lost as a result of the project. The suitability of preservation habitat shall be determined by the City after ~~consultation~~ coordination with CDFW and a qualified biologist and shall be located within the geographical foraging area of the local nesting population as determined acceptable to CDFW.

- Before approval of such proposed mitigation, the City shall ~~consult~~ coordinate with CDFW regarding the appropriateness of the mitigation. If mitigation is accomplished through conservation easement, then such an easement shall ensure the continued management of the land to maintain Swainson's hawk foraging values, including but not limited to ongoing agricultural uses and the maintenance of all existing water rights associated with the land. The conservation easement shall be recordable and shall prohibit any activity that substantially impairs or diminishes the land's capacity as suitable Swainson's hawk foraging habitat.

- The project applicants shall transfer said Swainson's hawk mitigation land, through either conservation easement or fee title, to a third-party, nonprofit conservation organization (Conservation Operator), with the City and CDFW named as third-party beneficiaries. The Conservation Operator shall be a qualified conservation easement land manager that manages land as its primary function. Additionally, the Conservation Operator shall be a tax-exempt nonprofit conservation organization that meets the criteria of Civil Code Section 815.3(a) and shall be selected or approved by the City, after ~~consultation~~ coordination with CDFW. The City, after ~~consultation~~ coordination with CDFW and the Conservation Operator, shall approve the content and form of the conservation easement. The City, CDFW, and the Conservation Operator shall each have the power to enforce the terms of the conservation easement. The Conservation Operator shall monitor the easement in perpetuity to assure compliance with the terms of the easement.

- The project applicants, after ~~consultation~~ coordination with the City, CDFW, and the Conservation Operator, shall establish an endowment or some other financial mechanism that is sufficient to fund in perpetuity the operation, maintenance, management, and enforcement of the conservation easement. If an endowment is used, either the endowment funds shall be submitted to the City to be distributed to an appropriate third-party nonprofit conservation agency, or they shall be submitted directly to the third-party nonprofit conservation agency in exchange for an agreement to manage and maintain the lands in perpetuity. The Conservation Operator shall not sell, lease, or transfer any interest of any conservation easement or mitigation land it acquires without prior written approval of the City and CDFW.

- If the Conservation Operator ceases to exist, the duty to hold, administer, manage, maintain, and enforce the interest shall be transferred to another entity acceptable to the City and CDFW. The City shall ensure that mitigation habitat is properly established and is functioning as habitat by conducting regular monitoring of the mitigation site(s) for the first 10 years after establishment of the easement.

- For development projects of less than 40 acres, project proponents may mitigate for the loss of Swainson's hawk foraging habitat through payment of an impact mitigation fee that will provide funds to acquire available land with suitable Swainson's hawk foraging habitat values as determined by the City in ~~consultation~~ coordination with CDFW.

Significance after Mitigation

If development occurs in the proposed SOIA under the City of Elk Grove's jurisdiction that requires discretionary action, the City will be required to make General Plan consistency findings, including consistency with Policy CAQ-11 and CAQ-11 Action 1, which suggest that the City will assess special-status wildlife species occurrences and seek to preserve or mitigate impacts to such species and their habitats.

In addition, implementing Mitigation Measures 3.4-2a, 3.4-2b, and 3.4-2c would reduce significant impacts on white-tailed kite, northern harrier, burrowing owl, and other raptors because it would ensure that these species are not disturbed during nesting so that project construction would not result in nest abandonment and loss of eggs or young. These measures would also ensure that Swainson's hawk foraging habitat and burrowing owl habitat would be preserved at a 1:1 ratio of habitat lost. Preservation of Swainson's hawk foraging habitat would also benefit white-tailed kite and northern harrier and reduce the potential indirect effect of foraging habitat loss on these species. The mitigation would ensure that future project applicants purchase and preserve replacement foraging habitat prior to the approval of grading and improvement plans or before any ground-disturbing activities. The City of Elk Grove would not accept payment of impact mitigation fees as an alternative to preserving habitat at a 1:1 mitigation ratio for any development projects in the SOIA Area that are larger than 40 acres, and would not allow payment of impact mitigation fees as an alternative to preserving habitat at a 1:1 mitigation ratio for any development projects in the SOIA Area if the City has a Swainson's hawk mitigation obligation deficit of more than 250 acres.

However, even with mitigation measures such as those outlined above, the impact on Swainson's hawk may not be reduced to ~~a~~ less-than-significant ~~level~~ because there has already been rapid and widespread loss of foraging habitat for this species in the region and the local area supports one of the highest breeding concentrations of this species. There is a finite amount of land available within the foraging range of the local nesting population and even with preservation of foraging habitat to compensate for losses that would occur in the SOIA Area~~;~~ there would still be an overall net loss of foraging habitat available to the local nesting population. This net loss would undoubtedly result in reduced reproductive success and displacement of nesting pairs thereby contributing to the decline of Swainson's hawk populations in the region. There is no additional feasible mitigation available that would avoid this impact. The impact on Swainson's hawk would remain **significant and unavoidable**.

With enforcement of the above mitigation measure, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. With regard to the other species addressed in the mitigation above, the impact is considered **less than significant with mitigation**.

IMPACT 3.4-3a **Loggerhead shrike, Modesto song sparrow, tricolored blackbird, and common nesting birds.** *Conversion from agricultural to urban land uses would result in loss and disturbance of potential nesting habitat for loggerhead shrike, Modesto song sparrow, and common birds protected under the MBTA. If there is future development within the SOIA Area and associated off-site improvement areas, construction could disturb active nests on or near the construction area, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This impact is considered* ***potentially significant****.*

Converting land in the SOIA Area from agricultural to urban land uses would result in removal and disturbance of stands of cattail and bulrush, blackberry brambles, and isolated trees and shrubs that provide potential nesting habitat for loggerhead shrike, Modesto song sparrow, and other nesting birds. Evidence of loggerhead shrike (frogs impaled on barbed wire fence) was observed on the site and song sparrow was observed foraging on-site, though it is unknown if it was Modesto song sparrow or another subspecies. In addition, possible future off-site improvements to roads, sewer lines, drainage facilities, and water lines could result in additional losses of suitable nesting habitat in the vicinity of the SOIA Area. Since it is unknown where nonexistent off-site improvements would occur, it is possible that such improvements could affect nesting habitat for other special-status bird species such as tricolored blackbird, grasshopper sparrow, and least bittern. Removal or disturbance of potentially suitable habitat during construction in the SOIA Area and off-site improvement areas could result in nest abandonment and loss of eggs or young if an active loggerhead shrike, Modesto song sparrow, or other special-status bird nest were to be present during ground-disturbing activities.

Vegetation removal and ground disturbances associated with project implementation could result in direct destruction of active nests of common birds protected under the MBTA or California Fish and Game Code. Project construction could also result in indirect disturbance of breeding birds causing nest abandonment by the adults and mortality of chicks and eggs. Loss of nests of common bird species (those not meeting the definition of special-status as provided above) would not be a significant impact under CEQA because it would not result in a substantial effect on their populations locally or regionally; however, destruction of bird nests is a violation of the MBTA and Section 3503 of the California Fish and Game Code and mitigation to avoid the loss of active nests of these species is required for compliance with these regulations.

Nesting habitat for loggerhead shrike is very limited in the SOIA Area because there are very few shrubs present. Exhibit 3.4-7 shows the location of the SOIA Area in relation to loggerhead shrike occurrences. Habitat is very marginal for Modesto song sparrow because this species typically nests in dense emergent marsh vegetation or riparian scrub habitats. Nonetheless, it is possible that a pair of Modesto song sparrows could nest in the sparse cattail or bulrush patches found in the canal and ditches on-site. Loss of an individual Modesto song sparrow nest would not significantly affect local population numbers of this species because the largest concentration of the population nests in large marsh or riparian habitats along larger streams, rivers, sloughs and other permanent water bodies. However, possible future off-site improvements could result in loss of larger numbers of nests of Modesto song sparrow and other special-status bird nests and this loss would be a **potentially significant** impact. Loss of an active loggerhead shrike nest would be a **potentially significant** impact because this species is a solitary nester that needs larger territories per pair (10 to 40 acres) and it is unknown how many pairs are nesting in the Elk Grove area (Zeiner and Laudenslayer 1990). There are no CNDDB records of this species in the nine quadrangles containing and surrounding the SOIA Area suggesting there may be a very limited number of them nesting in this area.

Mitigation Measures

Mitigation Measure 3.4-3a: Avoid Direct Loss of Loggerhead Shrike and Protected Bird Nests

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~future project~~ that applicants to implement the following measures to mitigate the potential loss of protected bird nests:

- To the extent feasible, vegetation removal, grading, and other ground disturbing activities will be carried out during the nonbreeding season for protected bird species in this region (generally September 1–January 31).

- For any project activity that would occur during the nesting season (February 1–August 31), the project applicant shall conduct a preconstruction survey. The preconstruction survey shall be conducted by a qualified biologist before any activity occurring within 500 feet of suitable nesting habitat for any protected bird species. The survey shall be conducted within 14 days before project activity begins.

- If an active nest of loggerhead shrike, song sparrow, other special-status bird species, or common bird species protected by the Migratory Bird Treaty Act or California Fish and Game Code is found, the qualified biologist shall establish a buffer around the nest. No construction activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active. The size of the buffer shall be determined in ~~consultation~~ coordination with CDFW. Buffer size is anticipated to range from 50 to 500 feet, depending on the species of bird, nature of the project activity, the extent of existing disturbance in the area, and other relevant circumstances, as determined by a qualified biologist in ~~consultation~~ coordination with CDFW.

- Monitoring of all protected nests by a qualified biologist during construction activities will be required if the activity has potential to adversely affect the nest. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist.

IMPACT 3.4-3b Tricolored blackbirds. *If there is future development within the SOIA Area, this would result in loss of foraging habitat and disturb nesting colonies that might occur near the SOIA Area and off-site improvement areas, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This impact is considered* ***potentially significant****.*

If there is future development within the SOIA Area, this could disturb active nesting tricolored blackbird colonies near the SOIA Area, and would result in loss of foraging habitat. In addition, possible future off-site improvements to roads, sewer lines, drainage facilities, and water lines could result in losses of suitable nesting and foraging habitat for tricolored blackbird in the vicinity of the SOIA Area.

Potential tricolor blackbird nest sites are often associated with freshwater marsh and seasonal wetlands, or in thickets of willow, blackberry, wild rose, thistle, and other thorny vegetation. Tricolored blackbirds are also

known to nest in crops associated with dairy farms. No suitable nesting habitat is present in the SOIA Area, but there is a 1981 record of 100 birds nesting in blackberry bushes near the intersection of Kammerer Road and Bruceville Road, approximately 1 mile west of the SOIA Area. This nesting colony may still be extant, as suitable habitat still exists at that location and the immediate area has not yet been developed. Several other nesting records from the city of Elk Grove exist, but are or may be extirpated (removed) because they occur in areas that have been developed and recent surveys have not detected any tricolored blackbirds at these locations. Exhibit 3.4-8 shows the location of the SOIA Area in relation to tricolored blackbird occurrences.

Vegetation removal and ground disturbances could result in disturbance to nearby nesting colonies of tricolored blackbirds, causing nest abandonment by the adults and mortality of chicks and eggs. Loss of even a small colony of tricolored blackbirds, which is currently a candidate for listing as endangered by CDFW, is considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-3b: Avoid Impacts on Tricolored Blackbird Colonies

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require that applicants implement the following measures to mitigate the potential impacts on nesting colonies of tricolored blackbirds:

- A qualified biologist shall conduct pre-construction surveys to determine if active tricolored blackbird nests are present within a project footprint or within 500 feet of a project footprint. The biologist shall conduct pre-construction surveys within 30 days and within 3 days of ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. Pre-construction surveys shall be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities.

- If active nests are found within the project footprint or within 500 feet of any project-related activity, a 500-foot temporary buffer around the active nest shall be maintained until the young have fledged. A qualified biologist experienced with tricolored blackbird behavior shall monitor the nest throughout the nesting season and to determine when the young have fledged. The biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction shall cease until the buffer size is increased to a distance necessary to result in no harm or harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with CDFW will be held to determine the best course of action to avoid nest abandonment or take of individuals. The biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone).

Significance after Mitigation

Loss of agricultural foraging habitat for tricolored blackbirds would be addressed simultaneously with implementation of Mitigation Measures 3.4-2c and 3.4-4, which require compensation for the loss of Swainson's hawk and sandhill crane foraging habitat.

Successful implementation of mitigation measures 3.4-11b would reduce impacts on tricolored blackbird because they would ensure that disturbance to active nesting colonies would be avoided. With enforcement of the above mitigation measures, future development in the SOIA Area and off-site improvements would be designed to avoid and minimize potential impacts. The impact is **less than significant with mitigation.**

Significance after Mitigation

If development occurs in the proposed SOIA under the City of Elk Grove's jurisdiction that requires discretionary action, the City will be required to make General Plan consistency findings, including consistency with Policy CAQ-11 and CAQ-11 Action 1, which suggest that the City will assess special-status wildlife species occurrences and seek to preserve or mitigate impacts to such species and their habitats.

In addition, Mitigation Measure 3.4-3 would reduce potentially significant impacts on loggerhead shrike and song sparrow because it would ensure these birds are not disturbed during nesting so that project construction would not result in nest abandonment and loss of eggs or young. The impact is **less than significant with mitigation**.

IMPACT 3.4-4 Sandhill crane winter foraging habitat. *Conversion from agricultural to urban land uses would result in loss and disturbance of potential winter foraging habitat for sandhill cranes. This impact is considered potentially significant.*

Converting land in the SOIA Area from agricultural to urban land uses would result in removal of approximately 750 acres of cropland (hayfields and fallow fields) that provides potential winter foraging habitat for federally listed greater sandhill crane, as well as California species of special concern, lesser sandhill crane. Sandhill cranes were observed flying over the SOIA Area and heard calling nearby during the reconnaissance survey conducted in March 2016. It is unknown if they were greater or lesser sandhill cranes since both subspecies winter in the Sacramento Valley. For greater sandhill crane, the two most important wintering sites in California are in the Sacramento-San Joaquin Delta (Delta) at Woodbridge Ecological Reserve, Staten Island, and the Cosumnes River Floodplain, and the Butte Sink area north of Sutter Buttes (Littlefield and Ivy 2000, Small 1994). The SSHCP models show that most of the SOIA Area is within high-value foraging habitat for greater sandhill cranes. Exhibit 3.4-9 shows the location of the SOIA Area in relation to greater sandhill crane occurrences. No greater sandhill crane roosting sites have been documented in the SOIA Area, but roosting occurrences have been recorded in the Cosumnes River Preserve approximately 0.5 miles to the southeast.

Greater sandhill cranes forage and roost in low-lying areas that are subject to cyclical flooding during wet winters. The undammed Cosumnes River floods the Cosumnes River basin on a regular basis, and low elevation areas in the Stone Lakes National Wildlife Refuge are also flooded in wet winters. While greater sandhill crane will forage and roost in shallow flooded fields, areas that are deeply inundated are not suitable for foraging, and sandhill cranes are dependent on unflooded or shallowly flooded upland areas for foraging. As shown in Exhibit 3.4-~~10the SOIA Area~~, even with inundation of the 100-year floodplain, extensive unflooded upland foraging habitat is still available; ~~in the SOIA AreaIn addition,~~ a~~A~~pproximately 103,085 acres of high value crane habitat occurs outside

of the 100-year floodplain within the SSHCP plan area. Therefore, plenty of high value upland crane foraging habitat is available even during wet winters~~, for birds to forage~~.

Because the SOIA Area is within the foraging zone of one of the greater sandhill crane's most important wintering sites, this loss of foraging habitat could affect food availability for the local wintering population, thereby reducing the number of birds that can be supported. Therefore, the loss of foraging habitat from the SOIA Area would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.4-4: Prepare and Implement a Sandhill Crane Foraging Habitat Mitigation Plan

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~future project~~ that applicants to implement the following measures to mitigate the potential loss of greater sandhill crane foraging habitat:

- Before the approval of grading and improvement plans or before any ground-disturbing activities, whichever occurs first, preserve suitable sandhill crane foraging habitat to ensure 1:1 mitigation for foraging habitat lost as a result of the project. The suitability of preservation habitat shall be determined by the City after ~~consultation~~ coordination with CDFW and a qualified biologist and shall be located within five miles of the Cosumnes River Floodplain wintering population site.

- Before approval of such proposed mitigation, the City shall ~~consult~~ coordinate with CDFW regarding the appropriateness of the mitigation. If mitigation is accomplished through conservation easement, then such an easement shall ensure the continued management of the land to maintain sandhill crane foraging values, including but not limited to ongoing agricultural uses and the maintenance of all existing water rights associated with the land. The conservation easement shall be recordable and shall prohibit any activity that substantially impairs or diminishes the land's capacity as suitable sandhill crane foraging habitat.

- The project applicants shall transfer said sandhill crane mitigation land, through either conservation easement or fee title, to a third-party, nonprofit conservation organization (Conservation Operator), with the City and CDFW named as third-party beneficiaries. The Conservation Operator shall be a qualified conservation easement land manager that manages land as its primary function. Additionally, the Conservation Operator shall be a tax-exempt nonprofit conservation organization that meets the criteria of Civil Code Section 815.3(a) and shall be selected or approved by the City, after ~~consultation~~ coordination with CDFW. The City, after ~~consultation~~ coordination with CDFW and the Conservation Operator, shall approve the content and form of the conservation easement. The City, CDFW, and the Conservation Operator shall each have the power to enforce the terms of the conservation easement. The Conservation Operator shall monitor the easement in perpetuity to assure compliance with the terms of the easement.

- The project applicants, after consultation with the City, CDFW, and the Conservation Operator, shall establish an endowment or some other financial mechanism that is sufficient to fund in perpetuity the operation, maintenance, management, and enforcement of the conservation easement. If an endowment is used, either the endowment funds shall be submitted to the City to be distributed to an

appropriate third-party nonprofit conservation agency, or they shall be submitted directly to the third-party nonprofit conservation agency in exchange for an agreement to manage and maintain the lands in perpetuity. The Conservation Operator shall not sell, lease, or transfer any interest of any conservation easement or mitigation land it acquires without prior written approval of the City and CDFW.

- If the Conservation Operator ceases to exist, the duty to hold, administer, manage, maintain, and enforce the interest shall be transferred to another entity acceptable to the City and CDFW. The City shall ensure that mitigation habitat is properly established and is functioning as habitat by conducting regular monitoring of the mitigation site(s) for the first 10 years after establishment of the easement.

Significance after Mitigation

If development occurs in the proposed SOIA under the City of Elk Grove's jurisdiction that requires discretionary action, the City will be required to make General Plan consistency findings, including consistency with Policy CAQ-11 and CAQ-11 Action 1, which suggest that the City will assess special-status wildlife species occurrences and seek to preserve or mitigate impacts to such species and their habitats.

In addition, implementing Mitigation Measures 3.4-4 would reduce significant indirect impact of foraging habitat loss on sandhill crane because it would ensure that foraging habitat would be preserved at a 1:1 ratio of habitat lost in the foraging range of the local wintering population. With enforcement of the above mitigation measure, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. The impact is **less than significant with mitigation**.

IMPACT 3.4-5 Western pond turtle. *Converting the SOIA Area from agricultural to urban land uses could result in loss of agricultural ditches and canal that provide marginally suitable aquatic habitat for western pond turtle, a California species of special concern. Construction activities in the canal and some ditches could result in death of individual pond turtles if they are present. This impact is considered* ***potentially significant****.*

Habitat on in the SOIA Area is poor quality for western pond turtle because the pond, canal, and ditches lack vegetation, rocks, woody debris, or other potential basking substrate and therefore, are not expected to support large numbers of turtles. The irrigation ditches convey water only intermittently. Exhibit 3.4-11 shows the location of the SOIA Area in relation to western pond turtle occurrences. The SSCHP does not show modeled western pond turtle habitat as occurring in or near the SOIA Area. Nonetheless, western pond turtles have been documented near the SOIA Area and aquatic habitats in the SOIA Area could attract individual turtles from time to time. It is unlikely that turtles would nest in the SOIA Area due to the high level of disturbance from agricultural activities and vegetation management, and unsuitable upland cover types (crops; developed surfaces; tall, dense weeds). Regardless, individual turtles could be present in the pond, canal, or larger ditches when water is present and construction activities in this habitat could result in death of turtles. In addition, possible future off-site improvement areas could contain suitable aquatic and nesting habitat for western pond turtle and construction activities in these areas could result in destruction of nests with eggs or hatchlings and death of juveniles and adult turtles. This impact is **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-5: Avoid Take of Western Pond Turtles

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~future project~~ that applicants to implement the following measures to avoid the potential loss of western pond turtles:

- Off-site improvements shall be planned and designed to avoid aquatic habitats that could support western pond turtle to the extent that is technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the habitat may be preserved on-site while still obtaining the project purpose and objectives and if the preserved habitat features (i.e., aquatic habitats) could reasonably be expected to continue to function as suitable habitat for western pond turtle following project implementation.

- A preconstruction survey for western pond turtle shall be conducted by a qualified biologist prior to work in suitable aquatic habitat. If no pond turtles are observed, no further mitigation is necessary.

- If pond turtles are observed, a qualified biologist, with approval from CDFW, shall relocate pond turtles from to the nearest area with suitable aquatic habitat that will not be disturbed by project-related construction activities.

- Construction within 500 feet of aquatic habitat known to support western pond turtles shall be conducted outside of the nesting season (March–August) unless a nesting survey conducted by a qualified biologist determines there are no active nests or hatchlings present in the proposed construction area.

Significance after Mitigation

If development occurs in the proposed SOIA under the City of Elk Grove's jurisdiction that requires discretionary action, the City will be required to make General Plan consistency findings, including consistency with Policy CAQ-11 and CAQ-11 Action 1, which suggest that the City will assess special-status wildlife species occurrences and seek to preserve or mitigate impacts to such species and their habitats.

In addition, implementing Mitigation Measure 3.4-5 would reduce potentially significant impacts on western pond turtle because it would ensure that western pond turtles are removed from the site so that project construction would not result in mortality of individuals. With enforcement of the above mitigation measure, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. The impact is **less than significant with mitigation**.

IMPACT 3.4-6 Giant garter snake. *Converting the SOIA Area from agricultural to urban land uses could result in loss of agricultural ditches and canal that provide potentially suitable dispersal habitat for giant garter snake. Construction activities in or within 200 feet of the canal and ditches could result in direct take of giant garter snake. This impact is considered* ***potentially significant****.*

Giant garter snake has been documented in the vicinity of the SOIA Area, and has been documented in drainages that are connected to the SOIA Area. Exhibit 3.4-12 shows the location of the SOIA Area in relation to giant garter snake occurrences. The SSCHP does not show modeled aquatic or upland giant garter snake habitat as occurring in or near the SOIA Area. The on-site canal and ditches provide potentially suitable dispersal habitat for giant garter snake. These waterways are only marginally suitable for giant garter snake because they do not provide a permanent water source during the snake's active season, they lack of suitable foraging habitat and escape cover, ongoing vegetation management activities, annual dredging of the irrigation ditches, and agricultural disturbance (i.e., disking, planting, harvesting). Many of the ditches on site are very narrow and shallow, contain no emergent vegetation, and convey water very sporadically for short duration. These types of ditches generally do not provide suitable habitat for giant garter snake and none of the ditches contain permanent water during the snake's active season, a requirement for breeding habitat. The canal is the largest, deepest waterway in the SOIA Area and contains water the longest; however, it is extremely incised within the SOIA Area with very steep banks, which lowers its value for giant garter snake because it does not provide opportunities for snakes to escape the channel and take refuge during its inactive season. Nonetheless, agricultural ditches and other waterways provide dispersal habitat for giant garter snake when water is present. Possible future off-site improvement areas could contain suitable aquatic breeding and dispersal habitat. Conversion of these habitats, as well as construction activities within 200 feet of suitable aquatic habitat, could result in mortality of individuals if they are present. This impact is **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-6: Implement Avoidance Measures, Secure Incidental Take Authorization for Federally Listed Giant Garter Snake and Implement all Conditions of the Take Authorization

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects~~ that applicants ~~to~~ implement the following measures to mitigate impacts on giant garter snake:

- Off-site improvements shall be planned and designed to avoid aquatic habitats that could support giant garter snake to the maximum extent it is if technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the habitat may be preserved on-site while still obtaining the project purpose and objectives and if the preserved habitat features (i.e., aquatic habitats) could reasonably be expected to continue to function as suitable habitat for giant garter snake following project implementation.

- All construction activities within ~~200~~ 300 feet of aquatic habitat suitable for giant garter snakes shall be conducted during the snake's active season of May 1 to ~~October 1~~September 15 so that snakes can move and avoid danger. For any construction outside of this period, USFWS will be consulted to determine whether additional measures are necessary to avoid or minimize potential impacts during the inactive season and avoid take.

- In areas where irrigation ditches, or other potential giant garter snake habitats are being retained on the site:

    - A qualified biologist shall install temporary exclusion fencing around suitable upland habitat within ~~200~~ 300 feet of aquatic habitat to prevent giant garter snakes from entering the work area

during construction. The fencing shall be maintained for the duration of the construction activities;

- Ground disturbance, spoils, and equipment storage and other project activities shall not be allowed within the fenced area; and

- The water quality shall be maintained and construction runoff into wetland areas shall be limited through the use of hay bales, filter fences, vegetative buffer strips, or other accepted equivalents. However, no plastic, monofilament, jute, or similar matting to control erosion that could entangle snakes shall be placed in the project area.

- If ~~wetlands, irrigation ditches, or other~~ potential giant garter snake aquatic habitat would be filled, the aquatic habitats shall be dewatered at least 15 days before fill. Dewatering of aquatic habitat for construction purposes shall not occur between October 1 and April 15, with the exception of any areas within a cofferdam, unless authorized by USFWS. Any dewatered habitat must remain dry for at least 15 consecutive days after April 15 and before excavation or filling of the dewatered habitat.

- If the project involves any ground-disturbing activities in or within 200 feet of waterways that may support giant garter snake, and take of giant garter snake may occur, the project proponent/s shall obtain incidental take authorization from the USFWS and CDFW pursuant to ESA and CESA, and shall abide by all conditions in the take authorization, including conservation and minimization measures, intended to be completed before on-site construction. Conservation and minimization measures are expected to include requirements for preparing supporting documentation describing methods to protect existing habitat during and after project construction, methods for determining impact ratios, a detailed monitoring plan, and reporting requirements. CDFW may issue a Consistency Determination under Section 2080.1 of CESA if the applicant(s) obtains take authorization from USFWS and submits the federal opinion take statement to the Director of Fish and Game. CDFW must determine that conditions specified in the Federal take authorization are consistent with CESA. If a Consistency Determination is not obtained, the applicants shall obtain a separate incidental take permit under Section 2081(b) of CESA.

Significance after Mitigation

If development occurs in the proposed SOIA under the City of Elk Grove's jurisdiction that requires discretionary action, the City will be required to make General Plan consistency findings, including consistency with Policy CAQ-11 and CAQ-11 Action 1, which suggest that the City will assess special-status wildlife species occurrences and seek to preserve or mitigate impacts to such species and their habitats.

In addition, successful implementation of Mitigation Measure 3.4-6 would reduce impacts on giant garter snake because it would ensure that take of giant garter snakes is avoided or minimized. With enforcement of the above mitigation measure, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. The impact is **less than significant with mitigation.**

IMPACT 3.4-7 Federally protected waters of the United States. *Converting the SOIA Area from agricultural to urban land uses could result in permanent fill of waters of the United States subject to USACE jurisdiction under the CWA. This impact is considered* ***potentially significant****.*

Converting land in the SOIA Area from agricultural to urban land uses could result in removal (fill) of approximately 6 acres of potentially jurisdictional waters of the United States consisting of 2 acres of canal, 2 acres of ditches, and 2 acres of created pond. These waters may subject to federal protection under Section 404 of the CWA due to ultimate connectivity to the Sacramento-San Joaquin River Delta via South Stone Lake thence Snodgrass Slough; however, a jurisdictional determination has not been completed for the SOIA Area. Possible future off-site improvements could result in fill of other waters of the United States, including wetlands, if they are present in off-site improvement areas. Waters that do not meet the criteria to qualify as waters of the United States and are disclaimed by the USACE would still be considered waters of the state subject to regulation by the Central Valley RWQCB under California's Porter-Cologne Act.

In addition to direct impacts described above, downstream waters could be indirectly affected by creation of impervious surfaces and increased runoff from the SOIA Area. Potential indirect effects to downstream waters include reduction in water quality caused by urban runoff, erosion, and siltation, and increased flow volumes/altered hydrology. This impact is considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-7: Avoid, Minimize, or Compensate for Loss of Waters of the United States and Waters of the State

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants implement the following measures to mitigate the potential loss of waters:

- Conduct a delineation of waters of the United States according to methods established in the USACE wetlands delineation manual (Environmental Laboratories 1987) and Arid West Supplement (Environmental Laboratories 2008). The delineation shall map and quantify the acreage of all aquatic habitats in the SOIA Area and associated off-site improvement areas, and shall be submitted to USACE for verification and jurisdictional determination.

- Off-site improvements shall be planned and designed to avoid waters of the United States, including wetlands, and waters of the state to the maximum extent technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the habitat may be preserved on-site while still obtaining the project purpose and objectives and if the preserved aquatic habitat could reasonably be expected to continue to provide the same habitat functions following project implementation.

- The project applicant for each project requiring fill of waters shall replace or restore on a "no-net-loss" basis the function of all wetlands and other waters that would be removed as a result of implementing the respective project. Wetland habitat will be restored or replaced at an acreage and location and by methods agreeable to USACE and the Central Valley RWQCB, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.

- Mitigation methods may consist of establishment of aquatic resources in upland habitats where they did not exist previously, reestablishment (restoration) of natural historic functions to a former aquatic resource, enhancement of an existing aquatic resource to heighten, intensify, or improve aquatic resource functions, or a combination thereof. The compensatory mitigation may be accomplished through purchase of credits from a USACE-approved mitigation bank, payment into a USACE-approved in-lieu fee fund, or through permittee-responsible on-site or off-site establishment, reestablishment, or enhancement, depending on availability of mitigation credits.

- If applicable, project applicants shall obtain a USACE Section 404 Individual Permit and Central Valley RWQCB Section 401 water quality certification before any groundbreaking activity within 50 feet of waters of the United States or discharge of fill or dredge material into any water of the United States, or meet waste discharge requirements for impacts to waters of the state.

- The project applicant shall have a qualified biologist prepare a wetland mitigation plan to describe how the loss of aquatic functions for each project will be replaced. The mitigation plan will describe compensation ratios for acres filled, and mitigation sites, a monitoring protocol, annual performance standards and final success criteria for created or restored habitats, and corrective measures to be applied if performance standards are not met.

- Permittee-responsible mitigation habitat shall be monitored for a minimum of 5 years from completion of mitigation, or human intervention (including recontouring and grading), or until the success criteria identified in the approved mitigation plan have been met, whichever is longer.

- Water quality certification pursuant to Section 401 of the CWA, or waste discharge requirements (for waters of the state), will be required before ~~issuance of the record of decision and before~~ issuance of a Section 404 permit. Before construction in any areas containing aquatic features that are waters of the United States, the project applicant(s) shall obtain water quality certification for the project. Any measures required as part of the issuance of water quality certification and/or waste discharge requirements (for waters of the state), shall be implemented. Project applicant(s) shall obtain a General Construction Stormwater Permit from the Central Valley RWQCB, prepare a stormwater pollution prevention plan (SWPPP), and implement best management practices (BMPs) to reduce water quality effects during construction.

Significance after Mitigation

If development occurs in the proposed SOIA under the City of Elk Grove's jurisdiction that requires discretionary action, the City will be required to make General Plan consistency findings, including consistency with Policy CAQ-9 and CAQ-9 Action 1, which requires avoidance of wetlands, where feasible, and no net loss where it is infeasible to avoid adverse effects. In addition, successful implementation of Mitigation Measure 3.4-7 would reduce potentially significant impacts on waters of the United States and waters of the state because it would ensure no net loss of function of aquatic habitat, and would require applicants to develop and implement a BMP and water quality maintenance plan that conforms to applicable state and local regulations restricting surface water runoff s to minimize adverse effects on water quality and wetland hydrology. With enforcement of the above mitigation measure, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. The impact is **less than significant with mitigation.**

IMPACT 3.4-8 Conflicts with local policies and ordinances protecting biological resources. *If there is development in the SOIA Area and associated off-site improvement areas in the future, it is possible that this could conflict with the City's tree ordinance and policies outlined in the Elk Grove General Plan that apply to special-status species, wildlife habitats, streamside habitats, and agricultural open space. This impact is considered potentially significant.*

The SOIA Area contains five valley oak trees that qualify as trees of local importance under Section 19.12.040 of the City code. Possible future off-site improvement areas may contain additional trees that qualify as trees of local importance. Elk Grove General Plan Policy CAQ-8, acknowledges that trees can function as important natural habitat features and thus should be retained to the extent possible. The large native oaks on-site, as well as other large, nonnative, ornamental species in the eastern portion of the SOIA Area provide potential nest sites for raptors, including Swainson's hawk. Converting land in the SOIA Area from agricultural to urban land uses, and construction of possible off-site improvements, could result in removal of trees protected under the City tree ordinance and/or General Plan policy. The City's tree ordinance and General Plan policies call for the preservation of large trees to the extent feasible; however, retaining trees on-site would still result in a loss of nesting habitat for Swainson's hawk and white-tailed kite because these trees would be surrounded by urban land uses following development and would no longer be suitable for nesting by these species.

While the SOIA Area does not contain any natural streams, the canal and some ditches function as streamside and wetland habitat for some native and endangered wildlife species (e.g., giant garter snake), and off-site improvement areas could contain natural streams and wetlands. Removal of the canal and ditches and removal of wetland or streamside habitat in off-site improvement areas could conflict with General Plan policies that call for the preservation of wetland and streamside habitats and habitat for special-status species (General Plan Policies CAQ-9, CAQ-11, and CAQ-17). In addition, General Plan Policy PTO-15 recognizes open space lands of all types as important resources, which should be preserved in the region for a variety of uses, including for wildlife habitat. Because the SOIA Area consists of agricultural open space that provides important habitat values for many species of wildlife, including the state-listed Swainson's hawk, loss of this agricultural land to urban uses, which could occur if there is development of the SOIA Area in the future, would conflict with this General Plan policy.

In sum, there is the potential for conflict with the City's tree ordinance and with General Plan policies through removal of large trees, aquatic habitat (canals and ditches, streamside habitat, and wetlands), and agricultural open space. This impact is considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-8a: Implement Mitigation Measures 3.4-2c, 3.4-4, 3.4-6, and 3.4-7

Mitigation Measure 3.4-8b: Avoid, Minimize, or Compensate for Loss of Protected Trees and Aquatic and Streamside Habitats

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects to~~ that applicants avoid tree removal and removal or fill of waterways that provide important habitat to special-status species, if technically feasible and appropriate, through incorporation of these features into project design and planning. Avoidance shall be deemed

technically feasible and appropriate if the features may be preserved on-site while still obtaining the project purpose and objectives and if the preserved habitat features (i.e., trees and aquatic habitats) could reasonably be expected to continue to function as suitable habitat following project implementation.

All trees retained on-site shall be protected from construction-related impacts by placing exclusion fencing around the drip line of retained trees and maintaining said fencing through the duration of construction.

If it is not technically feasible to retain trees on the project site, trees protected under City ordinance or General Plan policy shall be replaced at a 1:1 ratio (1 new inch dbh of tree for each inch dbh lost), unless alternative mitigation is approved by the City pursuant to Section 19.12.160 of the City code. Replacement trees may be planted on-site to areas that would not be developed or to nearby offsite open space areas. Alternatively, if approved by the City, trees to be removed may be transplanted to other open space areas in proximity to the SOIA Area. Payment of an in-lieu fee to a tree preservation fund may also be allowed to compensate for tree loss.

Significance after Mitigation

Successful implementation of mitigation measures 3.4-2c, 3.4-4, 3.4-6, 3.4-7, and 3.4-8 would reduce potentially significant impacts related to conflicts with City ordinances and policies protecting biological resources because it would require project applicants to avoid protected trees and aquatic habitats if technically feasible and would require compensation for loss of function of aquatic habitat and loss of agricultural habitat that provides habitat values for special-status species. With enforcement of the above mitigation measure, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. The impact is **less than significant with mitigation.**

IMPACT 3.4-9 Conflicts with the provisions of an adopted habitat conservation plan. *If there is development in the SOIA Area and associated off-site improvement areas in the future after the SSHCP is adopted, the City of Elk Grove will coordinate with CDFW regarding acquisition of mitigation lands, as described in Mitigation Measures 3.4-2c and 3.4-4. The City, in coordination with CDFW, would assess whether those projects would compete with, or impede, implementation of the SSHCP Conservation Strategy. In addition, Mitigation Measures 3.4-1 through 3.4-6 and 3.4-11b are consistent with the avoidance, minimization and mitigation measures for covered species described in the draft SSHCP. Therefore, development in the SOIA Area and associated off-site improvement areas in the future are not likely to conflict with the provisions of the SSHCP, if it is adopted prior to annexation and development of the SOIA Area.*

The ~~proposed~~ draft SSHCP, described previously in Section 3.4.2 "Regulatory Framework," includes the SOIA Area in its ~~currently proposed~~ plan area; however, the City of Elk Gove is no longer~~t~~ a participant in the proposed SSHCP. ~~It is possible that the~~ Adoption of the SSHCP is anticipated to occur sometime in 2018 (Sacramento County 2017b) and therefore the SSHCP could be ~~completed and~~ adopted before the SOIA Area is annexed into the City of Elk Grove. ~~The current draft plan area map for t~~

The draft SSHCP identifies 67,618 acres of Urban Development Area (UDA), which corresponds with the County's USB, and 33,499 acres of planned impact within that UDA. The SOIA Area is located outside of the UDA and outside of the USB and, as such, would not have been included in the planned impact calculation.

~~However, the plan identifies a need for 33,796 acres of preserve area t~~To offset the planned impacts that would occur within the UDA, the SSCHP Conservation Strategy calls for creation of an integrated preserve system that conserves the natural land covers, certain cropland, and irrigated pasture–grassland in the SSHCP plan area. The preserve system will preserve at least 34,495 acres of existing habitat and re-establish or establish at least 1,787 acres of habitat for a total preserve system of 36,282 acres. There are 250,038 acres of plan area outside of the UDA within which preservation land would be sought from willing sellers.

~~Therefore, p~~Possible future development of the 1,156-acre SOIA Area, with associated acquisition of mitigation lands in the SSHCP plan area, is unlikely to interfere with the ability to successfully implement the SSHCP Conservation Strategy given the extensive acreage (250,038 acres) of the SSHCP area outside of the UDA boundaries. ~~preservation goals.~~ The SSHCP ~~, as currently envisioned, would~~ does not categorize specific areas ~~for~~ to acquire for preservation lands and would rely on purchasing suitable land from willing sellers anywhere within the undeveloped portions of the plan area. While it is possible that a specific parcel in the south County may be targeted for acquisition by both the SSHCP and a proposed project within the SOIA Area, the overall availability of land is not likely to limit overall achievement of conservation goals (36,282 acres out of 250,038 acres or 14 percent of land in the area outside of the UDA). Furthermore, if a parcel was acquired for mitigation for Swainson's hawk (or other covered species) by a project in the SOIA Area, it would contribute to the overall preservation of land in the south County and the overall conservation of the species in the area. Even though the parcel would not be counted towards the SSHCP preserve area, it would not "preclude" the SSHCP from achieving its goals, which is the long-term conservation of covered species.

At the time of submittal of any application to annex territory within the SOIA Area following adoption of the SSHCP, the City of Elk Grove will coordinate with CDFW regarding acquisition of mitigation lands, as described in Mitigation Measures 3.4-2c and 3.4-4. CDFW, one of the SSHCP's Permitting Agencies and a member of the SSHCP's Technical Advisory Committee, would review any property acquisition proposal for mitigation, and would have an opportunity at that time to assess whether acquisition would meet targeted SSCHP objectives and preserve acquisition criteria, and to also reject proposed mitigation that would compete with, or impede, the SSHCP's mitigation acquisitions.

~~Because mitigation measures for particular species have not yet been established under the SSHCP, it is not possible to design mitigation for potentially affected species in consistency with the SSHCP. If the SSHCP has been finalized and approved before commencement of mitigation pursuant to the MMP developed for the project, USACE, the Central Valley RWQCB, and the City may consider (if applicable and feasible) modifications to the MMP to be consistent with the SSHCP. In addition, t~~The City would also be required to analyze consistency of future proposed projects in the SOIA Area with the provisions of the SSHCP once adopted to assess whether those projects would compete with, or impede, implementation of the SSHCP Conservation Strategy. In addition, Mitigation Measures 3.4-1 through 3.4-6 and 3.4-11b are consistent with the avoidance, minimization and mitigation measures for covered species described in the draft SSHCP. Therefore, development in the SOIA Area and associated off-site improvement areas in the future is not likely to conflict with the provisions of the SSHCP, if it is adopted prior to annexation and development of the SOIA Area. The impact is **less than significant**.

~~Project consistency with the SSHCP is not required under CEQA because the SSHCP has not been adopted and is not scheduled for adoption until summer 2017. The exact scope and content of the SSHCP is not known at this time. Therefore, further evaluation of project consistency with the SSHCP would be too speculative for meaningful analysis and an impact conclusion cannot be made at this time.~~

IMPACTS ASSOCIATED ONLY WITH POSSIBLE FUTURE OFF-SITE IMPROVEMENTS

IMPACT 3.4-10 Riparian habitat and sensitive natural communities. *Possible future off-site improvements could result in loss of riparian habitat or other sensitive natural communities if they are present in off-site improvement areas and would be removed by project development. This impact is considered* ***potentially significant****.*

No riparian communities or other sensitive natural communities are present in the SOIA Area; however, since the location of possible future off-site improvement areas is unknown, annexation and eventual development of the SOIA Area could result in direct removal of sensitive natural communities or riparian habitats if they are present in future off-site improvement areas required to support eventual development of the SOIA Area. Therefore, project implementation could have a substantial adverse effect on riparian habitat and other sensitive natural communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-10: Avoid, Minimize, or Compensate for Loss of Riparian Habitat and Sensitive Natural Communities

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall demonstrate that it will require ~~all discretionary projects that require~~ off-site improvements to retain a qualified botanist to identify, map, and quantify riparian habitat and other sensitive natural communities in proposed off-site improvement areas before final project design is completed. Off-site improvement projects shall be planned and designed to avoid loss or substantial degradation of riparian habitat and other sensitive natural communities, if technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the features may be preserved on-site while still obtaining the project purpose and objectives and if the preserved habitat/community could reasonably be expected to provide comparable habitat functions following project implementation. The avoidance measures shall include relocating off-site improvement components, as necessary and where practicable alternatives are available, to prevent direct loss of riparian habitats and other sensitive natural communities.

If riparian habitat or other sensitive natural communities are present in off-site improvement areas and cannot feasibly be avoided, the project applicant shall ~~consult~~ coordinate with the City of Elk Grove and CDFW to determine appropriate mitigation for removal of riparian habitat and sensitive natural communities resulting from project implementation. Mitigation measures may include restoration of affected habitat on-site, habitat restoration offsite, or preservation and enhancement of existing habitat/natural community offsite. The compensation habitat shall be similar in composition and structure to the habitat/natural community to be removed and shall be at ratios adequate to offset the loss of habitat functions in the affected off-site improvement area.

If required, the project applicants shall obtain a Section 1602 streambed alteration agreement from CDFW and comply with all conditions of the agreement.

Significance after Mitigation

Successful implementation of mitigation measures 3.4-10 would reduce potentially significant impacts related to riparian habitat and sensitive natural communities because it would require project applicants to avoid these habitats if technically feasible and would require compensation for loss of riparian habitat and sensitive natural communities. With enforcement of the above mitigation measure, future development in off-site improvement areas would be designed to minimize potential impacts. The impact is **less than significant with mitigation.**

IMPACT 3.4-11 Additional special-status wildlife. *Possible future off-site improvements could result in the loss and degradation of habitat for special-status wildlife species that do not have potential to occur in the SOIA Area. These species include the federally listed species vernal pool fairy shrimp, vernal pool tadpole shrimp, and valley elderberry longhorn beetle, as well as California species of special concern such as western red bat and American badger. This impact is considered* ***potentially significant****.*

Since the location of possible future off-site improvement areas is unknown, annexation and eventual development of the SOIA Area could result in direct removal or degradation of habitat types not found in the SOIA Area, including vernal pools, seasonal wetlands, elderberry shrubs, and riparian habitats. Loss and degradation of these habitat types could result in direct or indirect injury, mortality, displacement or, reduced reproductive success of special-status wildlife species associated with these habitats if they are present in future off-site improvement areas required to support eventual development of the SOIA Area. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-11a: Implement Mitigation Measures 3.4-5, 3.4-6, 3.4-7, 3.4-8b, and 3.4-9

Mitigation Measure 3.4-11b: Identify Potential Species Habitat, Implement Avoidance Measures, Secure Incidental Take Authorization for Federally Listed Species and Implement all Conditions of the Take Authorization, Compensate for Loss of Habitat

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall demonstrate that it will require ~~all discretionary projects to~~ that applicants conduct a biological review and analysis for off-site improvement projects to identify potential special-status species habitat. Off-site improvement projects shall be planned and designed to avoid adverse effects to special-status wildlife species, if technically feasible and appropriate. Avoidance shall be deemed technically feasible and appropriate if the species and its habitat may be preserved on-site while still obtaining the project purpose and objectives and if the preserved species habitat could reasonably be expected to continue to function as suitable habitat for the affected species following project implementation.

If, after examining all feasible means to avoid impacts to potential special-status species habitat through project site planning and design, adverse effects cannot be avoided, then impacts shall be mitigated in accordance with guidance from the appropriate state or federal agency charged with the protection of the subject species, including surveys conducted according to applicable standards and protocols, where necessary, implementation of impact minimization measures based on accepted standards and guidelines and best available science, and compensatory mitigation for unavoidable loss of special-status species habitats through preservation and enhancement of existing occupied habitat, relocating individuals or

populations to other suitable habitat, and/or restoring or creating suitable replacement habitat in sufficient quantities to offset the loss of occupied habitat and individuals. Purchase of mitigation credits at an agency-approved mitigation bank (i.e., approved by the agency with jurisdiction over the affected species or habitat) in Sacramento County, will also be acceptable for compensatory mitigation.

If the project would result in take of state or federally listed species, then the City will require project proponent/s to obtain take authorization from the U.S. Fish & Wildlife Service or the California Department of Fish and Wildlife, as appropriate, depending on species status, and comply with all conditions of the take authorization. The City will require project applicants to develop a mitigation and monitoring plan to compensate for the loss of special-status species and their habitats. The mitigation and monitoring plan will describe in detail how loss of special-status species and their habitats shall be avoided or offset, including details on restoration and creation of habitat, compensation for the temporal loss of habitat, success criteria ensuring habitat function goals and objectives are met, performance standards to ensure success, and remedial actions if performance standards are not met. The plan will include detailed information on the habitats present within the preservation and mitigation areas, the long-term management and monitoring of these habitats, legal protection for the preservation and mitigation areas (e.g., conservation easement, declaration of restrictions), and funding mechanism information (e.g., endowment).

Significance after Mitigation

If off-site improvements occur under the City of Elk Grove's jurisdiction that require discretionary action, the City will be required to make General Plan consistency findings, including consistency with Policy CAQ-11 and CAQ-11 Action 1, which suggest that the City will assess special-status wildlife species occurrences and seek to preserve or mitigate impacts to such species and their habitats.

In addition, successful implementation of Mitigation Measures 3.4-5, 3.4-6, 3.4-7, 3.4-8b, and 3.4-10b would reduce impacts on special-status wildlife species because it would ensure that loss and degradation of habitat and take of individuals is avoided or minimized, or that compensatory mitigation is provided. With enforcement of the above mitigation measure, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. The impact is **less than significant with mitigation.**

IMPACT 3.4-12 Wildlife nursery sites or migratory routes. *Construction of future projects resulting from the SOIA could result in impacts on wildlife nursery sites, movement corridors or migratory routes. This impact is considered less than significant.*

No native wildlife nursery sites have been identified in the SOIA Area. The project site consists almost entirely of agricultural land cover types that do not provide suitable breeding or nesting habitat for most species. Little natural vegetation and few trees or shrubs are available at the site to support nesting bird colonies, rookeries, or fawning areas, and there are no suitable trees or structures to support bat maternity roosts.

No established migratory routes have been identified in the SOIA Area, and converting land in the SOIA Area from agricultural to urban land uses would not cause any areas of natural habitat to become isolated. According to the California Essential Habitat Connectivity Project, the SOIA Area is not located within a Natural Landscape Block or Essential Habitat Connectivity area (Spencer *et al.* 2010). The California Essential Habitat Connectivity

Project provides a comprehensive, statewide assessment of large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for ecological connectivity between them (Essential Connectivity Areas).

The SSHCP (Sacramento County 2017a) does not identify the SOIA Area as part of any migratory routes or wildlife corridors. The SSCHP describes Laguna Creek and the Cosumnes River/Deer Creek corridor as two key wildlife movement corridors in the SSHCP plan area that should be preserved to maintain movement and resident habitat for wildlife, preserve riparian habitat, and maintain hydrologic connections between preserves. The SOIA Area is not located within either of these corridors.

The SOIA Area is within the Pacific flyway, which is a major north-south route for migratory birds along western North America. As such, large numbers of migrating birds may move through the area seasonally and may congregate and forage in wetlands, grasslands, and agricultural fields during winter or use them as resting grounds during longer migrations from the Arctic to Central or South America. While migrating birds may use agricultural fields in the SOIA Area as winter resting (stop-over) and foraging habitat, loss of agricultural habitat from the SOIA Area would not create a barrier to movement of migratory species. Loss of SOIA Area agricultural habitat would not alter the character of existing habitat available to migrating birds along the Pacific flyway such that it would no longer function as a migratory corridor because abundant agricultural habitat of equal or better value would be available to migrating birds surrounding the SOIA Area. This agricultural habitat, along with the Cosumnes River and Cosumnes River Preserve, Stone Lakes Wildlife Refuge, and the Woodbridge Ecological Reserve, would continue to support the needs of migratory birds and provide wildlife movement opportunities for other native resident or migratory wildlife species in the area.

Project development would not interfere substantially with the movement of any native resident or migratory wildlife species because the SOIA Area does not currently provide an important connection between any areas of natural habitat that would otherwise be isolated, and converting land in the SOIA Area from agricultural to urban land uses would not cause any areas of natural habitat to become isolated. Therefore, project implementation would not have an impact on wildlife movement or nursery sites, and this potential impact is considered **less than significant**.

3.6. ENERGY

This section addresses energy use related to transportation and to electrical and natural gas services. Below is a brief overview of State and local laws and regulations pertaining to energy. The analysis considers the primary uses of energy for the proposed project; the benefit of existing regulations that require energy-efficient construction and operation; the location, design, and mix of uses of the proposed project relative to energy use; the degree to which the proposed project would create physical environmental effects related to the construction or expansion of existing transmission facilities; and the potential for the proposed project to result in the wasteful, inefficient, and unnecessary consumption of energy.

3.6.1 ENVIRONMENTAL SETTING

ELECTRICAL SERVICE

In 2014, the total system power for California was 293,268 gigawatt hours (GWh) of electricity, of which approximately 198,973 GWh of electricity was generated in-state (California Energy Commission [CEC] 2015b).

The Sacramento Municipal Utility District (SMUD) generates, transmits, and distributes to approximately 1.5 million customers within its estimated 900-square-mile service area, which covers Sacramento County, (including the city of Elk Grove), and a small portion of Placer County (SMUD 2015). SMUD is one of 46 publicly owned utilities in the state and in 2014 it was the fifth largest utility in California (CEC 2016a). In 2014, SMUD generated approximately 10,573 million kilowatt-hours (kWh) of electricity within its service area (CEC 2016b). Table 3.6-1 shows SMUD's average historic electrical consumption and forecasts of future consumption. The average annual growth rate of electrical consumption is expected to decrease over time with energy conservation efforts, even though electric vehicle use is expected to increase electricity consumption within SMUD's service area by nearly 100 GWh in the mid demand case by 2022 (CEC 2012b).

Table 3.6-1. SMUD Service Area Average Electrical Consumption and Forecast[1]

Year	Consumption (GWh)2
1990	8,361
2000	9,502
2010	10,354
2011	10,486
2015	11,082
2020	11,812
2022	12,109

Notes: SMUD = Sacramento Municipal Utility District; GWh gigawatt hours; CEC = California Energy Commission

[1] Based on the 2011 Final–Mid Forecast

[2] Gigawatt equals 1 million kilowatts.

Source: CEC 2012b:96

Electricity Sources

Electricity is generated through a combination of nuclear power plants; natural gas-fired power plants; renewable energy sources, such as wind, solar, geothermal, and small hydroelectric facilities; and additional energy purchased from other energy suppliers. SMUD receives power through varied sources, including hydropower,

natural-gas-fired generators, renewable energy from solar and wind power, and power purchased on the wholesale market (which may include one or more of the other sources listed above). As shown in Table 3.6-2, in 2014, SMUD received 25 percent of its electricity from natural gas-fired power plants; 0 percent from nuclear generation; 27 percent from eligible renewable resources, such as biomass, solar, wind, geothermal, and small hydroelectric power plants that generate 30 megawatts (MW) or less of electricity; 10 percent from large hydroelectric power plants; and 23 percent from other unspecified power sources (i.e., electricity that is not traceable to specific generation sources by any auditable contract) (SMUD 2015b).[1]

Table 3.6-2. SMUD Electrical Power Mix, 2014

Electrical Sources	Percent
Natural Gas	25
Nuclear	0
Renewable[1]	27
Large Hydroelectric	10
Other Unspecified[2]	23

Notes:

[1] Renewable energy sources include biomass & waste, geothermal, solar, wind, and small hydroelectric power plants that generate 30 MW or less of electricity. These energy sources are considered eligible to meet California's renewable portfolio standard of 33 percent renewable energy generation by 2020.

[2] Other unspecified sources refer to electricity that is not traceable to specific generation sources by any auditable contract.

Source: SMUD 2015b

Energy Conservation and Renewable Energy Programs

SMUD has a number of energy-efficiency programs. The Home Performance Program allows customers a low cost appraisal of the overall energy efficiency of their homes and provides incentives for home energy improvements through a grant from the U.S. Department of Energy. Additionally, SUMD offers tools for home and business owners to track their energy use and identify ways to conserve energy through energy-efficient upgrades.

SMUD's voluntary "Greenergy" green pricing program began in 1997, which supports reducing electricity generated by fossil fuels. Greenergy is a voluntary program where customers may elect to obtain 100 or 50 percent, respectively of their electricity from a renewable source by paying a monthly fee (SMUD 2015c). Residential customers also have the option of selecting renewable energy supply for 50 percent of their electricity and offsetting the carbon footprint with special purchases in carbon offset projects.

SMUD's RPS program was approved by SMUD's elected board one year before the state RPS program was approved by the legislature and governor. The RPS program was implemented to support renewable energy generation and reduce the need to generate energy from fossil fuels. To meet its annual renewables goals, SMUD both contracts for renewable electricity from independent power producers and builds and owns renewable energy power plants. SMUD met its renewable energy supply goals of 24 percent for 2011 (20 percent RPS + 4 percent Greenergy in 2011). SMUD has chosen to meet or exceed the state requirements and anticipates meeting the 2020 goal of 37 percent (33 percent RPS plus 4 percent Greenergy) (SMUD 2015c).

[1] Renewable energy sources for the purposes of California's renewable portfolio standard of 33 percent renewable energy generation by 2020 include biomass, solar, wind, geothermal, and small hydroelectric power plants that generate 30 MW or less of electricity.

NATURAL GAS SERVICE

Natural gas service in Sacramento County is provided by Pacific Gas and Electric Company (PG&E) through portions of PG&E's approximately 46,000 miles of natural gas distribution pipelines. In 2014, PG&E delivered approximately 4,386 million therms (MM therms) of natural gas throughout its service area (CEC 2016c). Of this total, the County of Sacramento received 272 MM therms, which accounted for 6 percent of the total natural gas deliveries within the PG&E service area (CEC 2016d). Table 3.6-3 shows PG&E's average historic natural gas consumption and forecasts of future consumption. The average annual growth rate of electrical consumption is expected to decrease over time with energy conservation efforts. All construction and maintenance activities for natural gas facilities are the responsibility of PG&E.

Table 3.6-3. PG&E Service Area Average Natural Gas Consumption and Forecast[1]

Year	Consumption (MM Therms)
1990	5,275
2000	5,291
2010	4,643
2015	4,862
2020	5,035
2022	5,081

Notes: PG&E = Pacific Gas and Electric Company; MM therms = million therms; CEC = California Energy Commission

[1] Based on the 2011 Final –Mid Forecast

Sources: CEC 2012a:62

ENERGY USE FOR TRANSPORTATION

Transportation is, by far, the largest energy consuming sector in California, accounting for more than 38 percent of all energy use in the state (U.S. Energy Information Administration 2014). Since transportation accounts for more energy consumption than heating, cooling, and powering of buildings, powering industry, or any other use, travel demand is very important for consideration in an assessment of energy efficiency (Lawrence Berkeley National Laboratory 2013).

The regional per-capita VMT in 2020 is estimated to be 25.6 miles per day, with the 2036 VMT estimated to be 24.2 per day (Sacramento Area Council of Governments [SACOG] 2016, Chapter 5B, page 79). The decrease in per-capita VMT can be attributed to several factors, including alternate modes of transportation in proximity to land uses within the region. Because per-capita VMT would decline, the use of transportation fuels is projected to become more efficient.

The City of Elk Grove Transit Services has a Transportation Demand Management Program (TDM) which promotes and encourages the use of alternative commuter transportation with in the City of Elk Grove. The City is working closely with employers to address local transportation and air quality issues. Some of the services provided include:

- Promotion of alternative transportation (walking, biking, public transit or ridesharing) to all residents;
- Outreach to employers about alternative transportation;
- Ridematching (Carpool/Vanpools/Bicycling); and

- Travel Training where residents are taught how to ride public transit, use bicycle and pedestrian trails in the City, to telecommute or rideshare in a car or van.

Successful implementation of this program could help reduce the city-wide, per-capita VMT.

3.6.2 REGULATORY FRAMEWORK

FEDERAL LAWS, REGULATIONS, PLANS, AND POLICIES

Energy Policy and Conservation Act of 1975

The Energy Policy and Conservation Act of 1975 established the first fuel economy standards for on-road motor vehicles sold in the United States. The National Highway Traffic and Safety Administration (NHTSA) is responsible for establishing vehicle standards and revising existing standards. The Corporate Average Fuel Economy (CAFE) program was created to determine vehicle manufacturers' compliance with the fuel economy standards. The U.S. Environmental Protection Agency (U.S. EPA) administers the testing program that generates the fuel economy data.

National Energy Act of 1978

The National Energy Act of 1978, including the Public Utility Regulatory Policies Act (Public Law 95-617), Energy Tax Act (Public Law 95-318), National Energy Conservation Policy Act (Public Law 95-619), Power Plant and Industrial Fuel Use Act (Public Law 95-620), and the Natural Gas Policy Act (Public Law 95-621), is a broadscale, national energy conservation of renewable energy initiative.

The intent of the National Energy Act was to promote greater use of renewable energy, provide residential consumers with energy conservation audits to encourage slower growth of electricity demand, and promote fuel efficiency. The Public Utility Regulatory Policies Act created a market for nonutility electric power producers to permit independent power producers to connect to their lines and to pay for the electricity that was delivered.

The Energy Tax Act promoted fuel efficiency and renewable energy through taxes and tax credits. The National Energy Conservation Policy Act required utilities to provide residential consumers with energy conservation audits and other services to encourage slower growth of electricity demand.

Energy Policy Acts

The Energy Policy Act of 1992 (EPAct) was developed to reduce dependence on imported petroleum and improve air quality by addressing all aspects of energy supply and demand, including alternative fuels, renewable energy, and energy efficiency. EPAct requires certain federal, state, and local government and private fleets to purchase alternative fuel vehicles. The act also includes definitions for "alternative fuels," and includes fuels such as ethanol, natural gas, propane, hydrogen, electricity, and biodiesel.

The Energy Policy Act of 2005 was signed into law on August 8, 2005. The Energy Policy Act set federal energy management requirements for energy-efficient product procurement, energy savings performance contracts, building performance standards, renewable energy requirements, and alternative fuel use. The Energy Policy Act also amends existing regulations, including fuel economy testing procedures.

Energy Independence and Security Act of 2007

Signed into law in December 2007, the Energy Independence and Security Act was passed to increase the production of clean renewable fuels; increase the efficiency of products, buildings, and vehicles; improve the energy performance of the federal government; and increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy. The Energy Independence and Security Act included the first increase in fuel economy standards for passenger cars since 1975. The act also included a new energy grant program for use by local governments in implementing energy-efficiency initiatives, as well as a variety of green building incentives and programs.

Executive Order 13514

On October 5, 2009, the President signed Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance (3 CFR 13514). The Executive Order set sustainability goals for federal agencies and focuses on making improvements in their environmental, energy, and economic performance. The Executive Order requires agencies to meet a number of energy, water, and waste reduction targets, including:

- 30 percent reduction in vehicle fleet petroleum use by 2020;
- 26 percent improvement in water efficiency by 2020;
- 50 percent recycling and waste diversion by 2015;
- 95 percent of all applicable contracts will meet sustainability requirements;
- Implementation of the 2030 net-zero-energy building requirement;
- Implementation of the stormwater provisions of the Energy Independence and Security Act of 2007, section 438; and
- Development of guidance for sustainable federal building locations in alignment with the Livability Principles put forward by the Department of Housing and Urban Development, DOT, and USEPA.

Executive Order 13693

On March 19, 2015, the President signed Executive Order 13693, Planning for Federal Sustainability in the Next Decade. The Executive Order sets a goal of reducing federal agency greenhouse gas (GHG) emissions by 40 percent over the next decade. The Executive Order sets agency GHG reduction targets and sustainability goals, including:

- Percentage reduction targets must be proposed by each federal agency, including FHWA, FTA, and Federal Railroad Association (FRA), for agency-wide GHG emissions reductions by the end of fiscal year 2025 relative to a fiscal year 2008 baseline.
- Sustainability goals for each federal agency, including:
    - Promoting building energy conservation, efficiency, and management;

- Requiring the use of renewable and alternative energy for electric and thermal energy in federal buildings by up to 25 percent by fiscal year 2025;
- Requiring the use of renewable and alternative energy for total building energy consumption in federal buildings by up to 30 percent by fiscal year 2025;
- Improving federal agency water efficiency and management to reduce water consumption by 36 percent by fiscal year 2025;
- Improving federal agency vehicle fleet efficiency and management to reduce GHG emissions by 30 percent by fiscal year 2025;
- Promoting sustainable acquisition and procurement practices; and
- Advancing waste prevention and pollution prevention by diverting at least 50 percent of non-hazardous solid waste.

STATE LAWS, REGULATIONS, PLANS, AND POLICIES

California Energy Commission Plans and Programs

The California Energy Commission (CEC) is the state's primary energy policy, planning, and energy efficiency standards regulatory agency. The CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. The CEC has five major responsibilities: (1) forecasting future energy needs and keeping historical energy data, (2) licensing thermal power plants 50 MW or larger, (3) promoting energy efficiency through appliance and building standards, (4) developing energy technologies and supporting renewable energy, and (5) planning for and directing the state response to an energy emergency.

Last updated in 2008, the State of California Energy Action Plan establishes goals and specific actions to ensure adequate, reliable, and reasonably priced electrical power and natural gas supplies, initiatives for increasing supply and reducing demand, in the context of global climate change (CEC 2008).

The CEC conducts assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery, and distribution, The CEC adopts the Integrated Energy Policy Report (IEPR) every two years and an update every other year. The 2014 IEPR is the most recent report and provides a summary of energy issues, outlining strategies and recommendations to further California's goal of ensuring reliable, affordable, and environmentally responsible energy sources (CEC 2015a).

California Public Utilities Commission

The CPUC has authority to set electric rates, regulate natural gas utility service, protect consumers, promote energy efficiency, and ensure electric system reliability. The California electricity market, regulated by the CPUC, serves 11.5 million customers with 32,698 miles of transmission lines and 239,112 miles of distribution lines for a total economic value of $23.7 billion (CPUC 2015a).

The CPUC has established rules for the planning and construction of new transmission facilities, distribution facilities, and substations. Utility companies are required to obtain permits to construct certain power line facilities or substations. The CPUC also has jurisdiction over the siting of natural gas transmission lines.

The CPUC regulates distributed generation policies and programs for both customers and utilities. This includes incentive programs (e.g., California Solar Initiative) and net energy metering policies. Net energy metering allows customers to receive a financial credit for power generated by their on-site system and fed back to the utility. The CPUC is involved with utilities through a variety of energy procurement programs, including the Renewable Portfolio Standard program.

In 2008, the CPUC adopted the Long Term Energy Efficiency Strategic Plan, which is the roadmap to achieving maximum energy savings in California through 2020 (CPUC 2015b). Consistent with California's energy policy and electricity "loading order", the Energy Efficiency Strategic Plan indicates that energy efficiency is the highest priority resource in meeting California's energy needs. The CPUC also adopted energy goals for all new residential construction in California to be zero net energy (ZNE) by 2020. The ZNE goal means new buildings must use a combination of improved efficiency and distributed renewable energy generation to meet 100 percent of their annual energy need (CEC 2015b). In addition to the ZNE goals for residential buildings by 2020, the CPUC has adopted goals that all new commercial construction in California will be ZNE by 2030 and 50 percent of existing commercial buildings will be retrofit to ZNE by 2030.

Renewable Portfolio Standard

In 2002, state law established the basic policy framework to increase the use of renewable energy resources in California, also known as the Renewable Portfolio Standard (RPS). In 2011, SB X1-2, was signed to require all retail suppliers of electricity to procure at least 33 percent of annual retail sales from eligible renewable energy sources by 2020. This requirement applies to all electricity retailers in the state, including publicly-owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. On October 15, 2015, SB 350 was signed by Governor Brown expanding the RPS to 50 percent by the end of 2030.

Performance Standard for Baseload Power Generation

SB 1368 (Chapter 598, Statutes of 2006) required the California Public Utilities Commission (PUC) to establish a GHG emissions performance standard for "baseload" generation from investor-owned utilities of 1,100 lbs. CO_2/Megawatt hour. The CEC established a similar standard for local publicly owned utilities. All electricity provided to California, including imported electricity, must be generated from plants that meet or exceed this standard.

Senate Bill 1 (Chapter 132, Statutes of 2006)

The California Solar Initiative (Senate Bill 1, Chapter 132, Statutes of 2006), also known as the "Million Solar Roofs" legislation, set a goal of installing 3,000 megawatts of new solar capacity by 2017.

Title 24 Energy Standards

Energy Conservation Standards for new residential and nonresidential buildings were first adopted by the CEC in June 1977 and were most recently revised in 2013 (Title 24, Part 6 of the California Code of Regulations [Title 24]). Title 24 governs energy consumed by commercial and residential buildings in California. This includes the

heating, ventilation, and air conditioning (HVAC) system; water heating; and some fixed lighting. Non-building energy use, or "plug-in" energy use, is not covered by Title 24. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. California's Building Energy Efficiency Standards are updated on an approximate 3-year cycle. The most recent update was in 2013. The 2013 Title 24 standards went into effect July 1, 2014, and improve on the 2008 Title 24 standards. 2016 Title 24 standards have been drafted and will supersede the 2013 standards by going into effect January 1, 2017.

Appliance Efficiency Regulations

California's 2009 Appliance Efficiency Regulations (20 CCR 1601–1608) were adopted by the CEC on December 3, 2008, and approved by the California Office of Administrative Law on July 10, 2009. The regulations include standards for both federally regulated appliances and non-federally regulated appliances.

Green Building Standards

First adopted in 2010 (and taking effect in 2012), the California Green Building Standards Code (24 CCR Part 11 [CALGreen Code]) is the State's primary sustainability code. The CALGreen code was updated in 2013 (and took effect January 1, 2014), with a supplement effective July 1, 2015. These comprehensive regulations will achieve major reductions in GHG emissions, energy consumption, and water use. CALGreen will require that every new building constructed in California reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low-pollutant-emitting materials. The code also requires separate water meters for non-residential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects and mandatory inspections of energy systems (e.g., heat furnace, air conditioner, and mechanical equipment) for nonresidential buildings larger than 10,000 square feet to ensure that all are working at their maximum capacity and according to their design efficiencies. ARB estimates that the mandatory provisions will reduce GHG emissions from buildings by approximately 3 MMT CO_2e in 2020 in comparison with GHG emissions without implementation of the Green Building Standards (ARB 2014).

Another update to the energy efficiency standards for 2016 will become effective January 1, 2017. The 2016 update to the Building Energy Efficiency Standards will improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards include improvements for attics, walls, water heating, and lighting. The new standards address non-residential development, as well, and build on the energy efficiency progress made within previous iterations.

Executive Order B-18-12

Executive Order B-18-12 orders all new State buildings and major renovations beginning design after 2025 be constructed as Zero Net Energy facilities. The Executive Order sets an interim target for 50 percent of new facilities beginning design after 2020 to be Zero Net Energy. It directs State agencies to take measures toward achieving Zero Net Energy for 50 percent of the square footage of existing State-owned building area by 2025.

LOCAL LAWS, REGULATIONS, PLANS, AND POLICIES

City of Elk Grove Climate Action Plan

In 2013, the City of Elk Grove Climate Action Plan (CAP) was adopted by the City Council, along with the Sustainability Element of the City of Elk Grove General Plan. This planning document identifies sources of GHG emissions within the city boundary and identifies measures to reduce emissions, including measures that would also reduce energy use. The City estimates that implementation of the CAP will achieve a 15 percent reduction in emissions below 2005 levels by 2020. The CAP includes the following policy topics for emission reduction strategies: An innovative and Efficient Built Environment, Resource Conservation, Transportation Alternatives and Congestion Management, and Municipal Programs. Table 3.6-4 presents applicable energy-related measures.

Table 3.6-4. City of Elk Grove Climate Action Plan Applicable Energy Reduction Measures

Reduction Measures		Policy Topic
BE-6	Building Stock: New Construction. Adopt CALGreen Tier 1 standards to require all new construction to achieve a 15% improvement over minimum Title 24 CALGreen Energy requirements.	Built Environment
BE-7	Building Stock: Appliances and Equipment in New Development. Encourage the use of energy-efficient appliances and equipment in new buildings that maximize efficiency.	Built Environment
BE-10	On-Site Renewable Energy Installations. Promote voluntary installations of on-site solar photovoltaics in new and existing development, and revise standards to facilitate the transition to solar water heaters and solar photovoltaics in new development.	Built Environment
BE-11	Off-Site Renewable Energy. Encourage participation in SMUD's off-site renewable energy programs, which allow building renters and owners to choose locally produced cleaner electricity sources.	Built Environment
RC-2	Water Conservation. Reduce the amount of water used by residential and nonresidential uses.	Resource Conservation
TACM-1	Local Goods. Promote policies, programs, and services that support the local movement of goods in order to reduce the need for travel.	Transportation Alternatives & Congestion Management
TACM-2	Transit-Oriented Development. Support higher-density, compact development along transit by placing high-density, mixed-use sites near transit opportunities.	Transportation Alternatives & Congestion Management
TACM-3	Intracity Transportation Demand Management. The City shall continue to implement strategies and policies that reduce the demand for personal motor vehicle travel for intracity (local) trips.	Transportation Alternatives & Congestion Management
TACM-4	Intracity Transportation Demand Management. The City shall support and contribute to regional efforts to reduce demand for intercity (regional) personal vehicle travel.	Transportation Alternatives & Congestion Management
TACM-5	Pedestrian and Bicycle Travel. Provide for safe and convenient pedestrian and bicycle travel through implementation of the Bicycle and Pedestrian Master Plan and increased bicycle parking standards.	Transportation Alternatives & Congestion Management
TACM-6	Public Transit. Continue to improve and expand transit services for commuters and non-commuters traveling within Elk Grove and regionally, providing the opportunity for workers living in other areas of Sacramento County to use all forms of public transit - including bus rapid transit and light rail - to travel to jobs in Elk Grove, as well as for Elk Grove residents to use public transit to commute to jobs outside the City.	Transportation Alternatives & Congestion Management
TACM-7	Jobs/Housing Balance. Continue to improve Elk Grove's jobs/housing ratio and seek to achieve sufficient employment opportunities in Elk Grove for all persons living in the City.	Transportation Alternatives & Congestion Management
TACM-9	Efficient and Alternative Vehicles. Promote alternative fuels and efficient vehicles throughout the community.	Transportation Alternatives & Congestion Management

Table 3.6-4. City of Elk Grove Climate Action Plan Applicable Energy Reduction Measures		
Reduction Measures		Policy Topic
TACM-10	Car Sharing. Promote the use of vehicles and transportation options other than single-occupant vehicles.	Transportation Alternatives & Congestion Management
TACM-11	Safe Routes to School. Implement SACOG's Safe Routes to School Policy.	Transportation Alternatives & Congestion Management
TACM-12	Traffic Calming and Anti-Idling. Improve traffic flow and reduce unnecessary idling through use of traffic calming devices and enforcement of idling restrictions.	Transportation Alternatives & Congestion Management
MP-2	Municipal Facilities. New. All City facilities shall incorporate energy-conserving design and construction techniques.	Municipal Programs
MP-7	Municipal Water Use. Improve the efficiency of municipal water use through retrofits and employee education.	Municipal Programs

City of Elk Grove General Plan

The City of Elk Grove 2030 General Plan includes policies that promote energy conservation and reduction strategies.

- **CI-1:** Circulation planning for all modes of travel (vehicle, transit, bicycle, pedestrian, etc.) shall be coordinated with efforts to reduce air pollution.

- **CI-3:** The City's efforts to encourage alternative modes of transportation will therefore focus on incentives to reduce vehicle use, rather than disincentives (which are generally intended to make driving and parking less convenient, more costly, or both). Incentives may include:

  - Preferential carpool and vanpool parking,
  - Bus turnouts, and
  - Pedestrian-friendly project designs

- **CI-4:** Specific Plans, Special Planning Areas, and development projects shall be designed to promote pedestrian movement through direct, safe, and pleasant routes that connect destinations inside and outside the plan or project area.

- **CI-5:** The City shall encourage the use of transportation alternatives that reduce the use of personal motor vehicles.

  - **CI-5-Action 1:** Funding for development, operations, and maintenance of facilities for mass transit, bicycle, pedestrian modes of transportation shall be given appropriate priority in the City's budgeting process.

  - **CI-5-Action 2:** Implement policies and actions in the Conservation/Air Quality Element which seek to encourage non-vehicle transportation alternatives in Elk Grove.

  - **CI-5-Action 3:** The City will support positive incentives such as carpool and vanpool parking, bus turnouts, and pedestrian-friendly project designs to promote the use of transportation alternatives.

- **CI-5-Action 4:** The City shall participate in the preparation and implementation of a Congestion Management Plan (CMP) consistent with legal requirements which gives priority to air quality goals, alternatives to automobile travel, and the development of demand reduction measures over additional road capacity.

- **CI-5-Action 5:** The City shall develop and implement Pedestrian and Bikeway Master Plans to provide safe and convenient pedestrian and on- and off-street bicycle facilities throughout the City.

► **CI-6:** The City shall require that transit service is provided in all areas of Elk Grove, including rural areas, so that transit dependent residents of those areas are not cut off from community services, events, and activities.

- **CI-6-Action 1:** The City shall require that RT or any other local or regional transit agency serving Elk Grove include bus service to the rural areas of Elk Grove.

► **CI-7:** The City shall encourage an approach to public transit service in Elk Grove which will provide the opportunity for workers living in other areas of Sacramento County to use all forms of public transit—including bus rapid transit and light rail—to travel to jobs in Elk Grove, as well as for Elk Grove workers to use pub Policy CI-8. The City shall encourage the extension of bus rapid transit and/or light rail service to the planned office and retail areas north of Kammerer Road and west of Hwy 99.

► **CI-9:** Light rail service in Elk Grove should be designed to serve major employment centers and the regional mall at Kammerer Road/Hwy 99. The City of Elk Grove encourages the development of light rail which will bring workers and shoppers to Elk Grove, while also serving as part of a coordinated, regional transportation network.

- **CI-9-Action 1:** Using the City's preferred alignment, work with Regional Transit to select a final alignment for the extension of bus rapid transit and/or light rail into Elk Grove, and to develop final station and/or park-and-ride locations along the entire transit corridor in Elk Grove. As necessary, update this Circulation Element to reflect the final alignment.

- **CI-9-Action 2:** The City shall require irrevocable offers of dedication of rights- of-way and station sites along the City's preferred light rail alignment. Offers of dedication shall be required as part of the approval of any tentative map or other discretionary approvals as appropriate.

► **CI-17:** The City shall regulate truck travel as appropriate for the transport of goods, consistent with circulation, air quality, congestion management, and land use goals.

- **CI-17-Action 1:** The City shall on an as-needed basis review existing truck routes within Elk Grove and designate routes consistent with the need to reduce traffic, noise and other impacts, and negative effects on residential areas.

► **CI-18:** To the extent possible, major traffic routes for residential areas should be separate from those used by the city's industrial areas, with the purpose of avoiding traffic conflicts and potential safety problems.

► **CI-19:** The circulation system serving the city's industrial areas should be designed to safely accommodate heavy truck traffic.

- **CI-21:** The City shall require the installation of traffic pre-emption devices for emergency vehicles (police and fire) at all newly constructed intersections, and shall seek to retrofit all existing intersections to incorporate these features.

- **CAQ-26:** It is the policy of the City of Elk Grove to minimize air pollutant emissions for all City facilities and operations to the extent feasible and consistent with the City's need to provide a high level of public service.

    - **CAQ-26-Action 1:** The City shall encourage all its employees to use transportation alternatives such as public transit, bicycling, walking, and carpooling for commute and other work-related trips. The City shall provide information on these and other applicable programs to all employees.

    - **CAQ-26-Action 2:** All City facilities shall incorporate energy-conserving design and construction techniques.

    - **CAQ-26-Action 3:** The City shall encourage City contractors and vendors to reduce emissions from their operations (such as by using low emission vehicles), and shall consider including a preference for low emission contractors and vendors in City requests for proposals where appropriate.

- **CAQ-27:** The City shall promote energy conservation measures in new development to reduce on-site emissions and power plant emissions. The City shall seek to reduce the energy impacts form new residential and commercial projects through investigation and implementation of energy efficiency measures during all phases of design and development.

    - **CAQ-27-Action 1:** Provide information to the public and builders on available energy conservation techniques and products.

    - **CAQ-27-Action 2:** Encourage the use of trees planted in locations that will maximize energy conservation and air quality benefits. Encourage the use of landscaping materials which produce lower levels of hydrocarbon emissions.

    - **CAQ-27-Action 3:** During project review, City staff shall consider energy conservation and, where appropriate, suggest additional energy conservation techniques.

    - **CAQ-27-Action 4:** During project review, ensure that "Best Available Control Technology" is properly used and implemented.

    - **CAQ-27-Action 5:** Encourage new commercial uses to limit delivery hours to non-peak hours.

3.6.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

Evaluation of potential energy impacts was based on a review of the following documents and regulations pertaining to the SOIA Area and surrounding area:

- California Energy Demand 2010–2020, Adopted Forecast (CEC 2012a; CEC 2012b);

- City of Elk Grove 2030 General Plan (City of Elk Grove 2015);
- City of Elk Grove Climate Action Plan (City of Elk Grove 2013); and
- Title 24 of the California Code of Regulations, including the 2013 California Green Building Code (Part 11, Title 24)

Future energy demand was calculated based on the conceptual land use scenario as described in Section 3.3, "Air Quality," and modeling conducted by AECOM for the greenhouse gas inventory using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2 (see Section 3.3, "Air Quality," for further discussion of CalEEMod). Impacts related to energy that would result from implementation of the proposed project were identified by comparing existing capacity against future demand.

THRESHOLDS OF SIGNIFICANCE

Appendix F of the State CEQA Guidelines provides guidance for assessing impacts related to energy supplies, focusing on the goal of conserving energy by ensuring that projects use energy wisely and efficiently including a list of six environmental impacts related to use of energy in Section II (c). For the purposes of this EIR, Energy impacts are considered significant if the proposed project would result in any of the following:

- Develop land use patterns that cause wasteful, inefficient, and unnecessary consumption of energy; or
- Require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

IMPACT ANALYSIS

IMPACT 3.6-1 Energy efficiency. *The project does not propose development or land use change. However, if there is future annexation of the SOIA Area to the City and if there is development of the SOIA Area in the future, this would increase demand for energy, including fuel, electricity, and natural gas. Any future development will be required to comply with existing regulations that are designed to improve energy efficiency. It is possible that future development could cause the inefficient, wasteful, or unnecessary consumption of energy. The impact is considered* ***significant****.*

The project does not include direct changes to land use or the City of Elk Grove General Plan goals and policies. In addition, no specific land use entitlements, development proposals, or land development activities are proposed in conjunction with the proposed SOIA. However, land use assumptions were developed for this analysis to allow LAFCo to understand possible environmental effects that could result from future development within the SOIA Area.

Construction-Related Energy Consumption

Should the SOIA Area be developed, there would be an increase in energy consumption for the duration of the construction. The primary energy demand during construction would be associated with construction vehicle fueling and short-term in nature. Energy in the form of fuel and electricity would be consumed during this period by construction vehicles and equipment operating on-site, trucks delivering equipment and supplies to the site, and construction workers driving to and from the site. There are no known project characteristics that would

necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the city of Elk Grove or unincorporated Sacramento County. If there is development in the future within the SOIA Area, such development will be required to demonstrate consistency with policies and actions in the City of Elk Grove's General Plan that are intended to promote more efficient use of energy. This would include actions CAQ-26-Action 2, which requires City facilities to use energy-conserving construction techniques.

Energy efficiency is a possible indicator of environmental impacts. The actual adverse physical environmental effects associated with energy use and the efficiency of energy use detailed throughout this EIR in the environmental topic-specific sections. For example, use of energy for transportation leads to air pollutant emissions, the impact of which is addressed in Sections 3.3 and 3.8 of this EIR. There is no significant impact associated with energy efficiency that is not addressed in the environmental topic-specific sections of this EIR. Thus, this impact is **less than significant**.

Development-Related Energy Consumption

Should the SOIA Area be developed, there would be an increase in energy consumption related to vehicle use, building energy demand, and other elements of potential future development. Energy consumption was modeled using a conceptual land use scenario. Table 3.6-5 provides a summary of the potential electrical and natural gas demands if the SOIA is developed. Electrical and natural gas demand for potential development could be approximately 186,609,640 kWh/year and 309,201,008 thousand British thermal units (kBtu)/year, respectively.

Table 3.6-5. Estimated Annual Electrical and Natural Gas Demand, Conceptual Land Use Scenario

Location	Electrical Demand (kWh/year)	Natural Gas Demand (kBtu/year)
Multi-Family Residential	6,769,440	24,229,000
Single Family Residential	23,903,500	103,336,000
General Office Building	97,699,600	83,751,300
School	1,855,000	3,613,308
Parks/Open Space	0	0
Industrial	38,717,300	86,576,100
Commercial	17,665,100	7,695,300
Total	**186,609,940**	**309,201,008**

Notes: kWh = kilowatt-hours; kBtu = thousand British thermal unit

Source: AECOM 2016

SMUD would provide electricity to future development. SMUD has continued to prioritize renewable energy and aims to provide dependable renewable resources for 33 percent of its load by 2020, excluding additional renewable energy acquired for certain customer programs, in compliance with SB X1-2 (SMUD 2015d). Per SB 350, SMUD must achieve 50 percent of its load by 2050. In 2014, SMUD received 25 percent of its electricity from natural gas-fired power plants; 0 percent from nuclear generation; 27 percent from eligible renewable resources, such as biomass, solar, wind, geothermal, and small hydroelectric power plants that generate 30 MW or less of electricity; 10 percent from large hydroelectric power plants; and 23 percent from other unspecified power

sources (i.e., electricity that is not traceable to specific generation sources by any auditable contract) (SMUD 2015b).

If there are buildings constructed within the SOIA Area, they would require heating and cooling capabilities. All development will be required to comply with applicable building code requirements, which would include State energy efficiency provisions that are in effect at the time of construction. For example, all new development is required to comply with the Building Energy Efficiency Standards (Title 24 of the California Code of Regulations), including the 2016 Building Energy Efficiency Standards (effective January 1, 2017) or the version of building energy efficiency standards that are in effect when proposals are submitted to the City of Elk Grove. Some cities have additional, more stringent energy efficiency requirements, so if that is the case in the future for Elk Grove, such provisions would apply. Reduction Measure BE-6 from the City's Climate Action Plan suggests that the City will adopt more stringent energy efficiency requirements than the State code. Compliance with these code requirements reduces potential energy demand. The 2016 CalGreen Code (Part 11, Title 24), was developed to enhance the design and construction of buildings and sustainable construction practices through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental air quality. The 2016 Building Energy Efficiency Standards are anticipated to reduce statewide annual electricity consumption by approximately 281 GWh per year, electrical peak demand by 195 MW, and natural gas consumption by 16 million therms per year (CEC 2015c).

If there is development in the future within the SOIA Area, such development will be required to demonstrate consistency with policies and actions in the City of Elk Grove's General Plan and reduction measures in the City's Climate Action Plan that are intended to promote more efficient use of energy. This would include reduction measures BE-6, BE-7, and BE-10, policy CAQ-27, and CAQ-27 Action 1, CAQ-27 Action 2, and CAQ-27 Action 3, which are intended to increase building energy efficiency and promote generation of renewable energy. If the City implements these provisions in the future within the SOIA Area, this could help to increase energy efficiency.

All new development will be required to comply with code requirements that would reduce total energy consumption, improve energy efficiency, and reduce peak and base demand for electricity and other forms of energy. Therefore, this impact is considered **less than significant**.

Transportation-Related Energy Consumption

As noted, transportation is, by far, the largest energy consuming sector in California, and since transportation accounts for more energy consumption than heating, cooling, and powering of buildings, powering industry, or any other use, travel demand is a critical consideration in assessing energy efficiency (U.S. Energy Information Administration 2015, Lawrence Berkeley National Laboratory 2013).

Using the land use scenario developed for the purpose of analysis in this EIR, possible future development in the SOIA Area could generate 188,019 daily trips on weekdays, 130,938 daily trips on Saturdays, and 81,135 daily trips on Sundays.[2] This equates to an approximate total daily VMT of 910,037, which would generate an

[2] This estimate of VMT is derived using default assumptions for the land use scenario from the CalEEMod air pollutant emissions model.

estimated annual energy demand of 1,399,106 MMBtu.[3,4] The annual VMT for potential residential development included in the land use scenario for the SOIA Area is 108,821,820. Daily VMT for the residential uses is estimated to be approximately 298,142, which is approximately 22.3 VMT per day per capita.[5]

The Sacramento Area Council of Governments (SACOG) prepared a regional analysis of VMT and found average daily VMT for Sacramento County to be approximately 32,937,000. This travel demand is forecast to increase to 37,092,000 in 2020 and to 43,669,000 in 2036 under the Metropolitan Transportation Plan (MTP)/Sustainable Communities Strategy (SCS) (SACOG 2016). The regional VMT per capita in 2008 was estimated to be 26.2, decreasing by 2012 to 25.1 miles per day (SACOG 2016, Chapter 5B, page 79). Although regional VMT is anticipated to increase throughout the region, the VMT per capita is forecast to decline slightly during the planning horizon for the MTP/SCS (through 2036). Per-capita VMT in 2036 is estimated to be 24.2 per day, which is an 8-percent decrease from 2008 per-capita levels (SACOG 2016, Chapter 5B, page 79).

SACOG's VMT estimates include three primary categories: household-generated, commercial vehicle, and external. External VMT includes VMT generated by passenger vehicles traveling through the region. The total household-generated weekday VMT in the region was estimated to be 40,709,600 in 2012, increasing to 52,258,900 by 2036 (SACOG 2016, Chapter 5B, page 81). On a per-capita basis, weekday household VMT was estimated by SACOG to be 17.9 in 2012, decreasing by 5 percent to 17 in 2036. If the SOIA Area were to be developed in accordance with land use scenario, household-generated daily VMT could be approximately 22.3 per capita, which is 31 percent higher than the regional estimate for 2036. However, this estimate is based on default assumptions from an air pollutant emissions model based on a land use scenario for the overall SOIA Area.

If there is annexation and development in the future, the actual travel demand will depend on the density and development intensity of development, mixing of land uses, the relationship between land uses in the SOIA Area and adjacent areas, the level of pedestrian, bicycle, and transit infrastructure, parking standards, the relative affordability of housing, and other factors that are not currently known. In 2036, SACOG estimates that in 2036, 45 percent of all household-generated VMT will be associated with commuting. If development of the SOIA Area were to generate job opportunities for Elk Grove residents that are currently commuting, this could potentially shorten potential commute trips. Whether future SOIA Area residents would commute to jobs outside the city or county is unknown, but residents would likely be influenced by commute times, the price of fuel, and other social and economic factors.

The actual VMT associated with possible development of the SOIA Area in the future will depend on density, design, mixing of land uses, the connectivity of the transportation network, the quality of pedestrian and bicycle infrastructure, transit accessibility and service, and other factors that are currently unknown. The relationships between density, mix of land uses, urban design, and the quality of the non-automobile transportation network, on one hand, and VMT, on the other, is complex. Although there is extensive literature showing that VMT can be reduced with density, land use mix, a connected transportation network, access to employment and regional

[3] This analysis assumes diesel (heat content) is 5.825 MMBtu/barrel, that for vehicular gasoline there are 5.218 MMBtu/barrel, that there are 42 gallons/barrel, that there are 10 therms/MMBtu, and an annualization factor of 347 days/year. These assumptions are consistent with guidance provided in the California Climate Action Registry (CCAR), 2009 General Reporting Protocol Version 3.1: Table C.3.

[4] Trip summary information modeled in CalEEMod can be reviewed in Appendix B of this EIR.

[5] CalEEMod generated a residential population based on the apartments low rise and the single family housing land uses, which had 4,769 and 8,581 assumed residents, respectively.

destinations, and transit-supportive development patterns, among other factors (see work by Reid Ewing, Robert Cervero, Susan Handy, Lawrence Frank, and Gary Pivo, among others[6]), these factors have varying levels of influence on travel demand.

If there is development in the future within the SOIA Area, such development will be required to demonstrate consistency with policies and actions in the City of Elk Grove's General Plan and reduction measures in the City's Climate Action Plan that are intended to promote more efficient use of energy. This would include reduction measures TACM-1, TACM-2, TACM-3, TACM-4, TACM-5, TACM-6, TACM-7, TACM-9, TACM-10, TACM-11, and TACM-12; policies CI-1, CI-3, CI-4, CI-5, CI-6, CI-7, CI-9, and CI-17; and actions CI-5-Action 2, CI-5-Action 3, CI-5-Action 4, CI-5-Action 5, CI-6-Action 1, CI-9-Action 1, and CI-9-Action 2, which are intended to reduce VMT attributable to development in Elk Grove. If the City implements these provisions in the future within the SOIA Area, this could help to increase transportation-related energy efficiency. However, possible future development within the proposed SOIA Area could substantially increase transportation-related energy consumption. The impact is considered **significant**.

Please refer also to Section 3.3 of this EIR, "Air Quality," which comprehensively analyzes and provides feasible mitigation for air pollutant emissions; Section 3.8, "Greenhouse Gas Emissions," comprehensively analyzes and provides feasible mitigation for GHG emissions; and Section 3.12, "Noise and Vibration," which comprehensively analyzes and provides feasible mitigation for noise and vibration impacts.

Mitigation Measures

Mitigation Measure 3.6-1: Implement Mitigation Measures 3.3-2a and 3.3-2b

Significance after Mitigation

Future urbanization of the SOIA Area would increase energy demand. Should the SOIA Area ever be developed, the City of Elk Grove will require all discretionary projects (both concurrent and subsequent projects) with the potential to generate energy consumption during construction and operation will be required to comply with the City's General Plan and Climate Action Plan. Additionally, projects will also need to incorporate energy efficient design elements and energy conservation measures included in the City's General Plan, including those related to reducing VMT, as well as ongoing cooperation with SUMD and local agencies to support renewable energy production, in addition to the implementation of State building and energy efficiency standards. Development within the SOIA Area would be subject to policies and standards designed to improve energy efficiency and avoid inefficient, excessive, and unnecessary consumption of energy due in construction and operations. Mitigation Measure 3.3-2b would require the preparation of a bicycle, pedestrian, and transit master plan, which would implement City General Plan policies CAQ-29, CI-1, CI-3, CI-4, CI-5, and CI-7 and actions CAQ-29-Action 1 and CAQ-29-Action 2, as well as the City's Climate Action Plan reduction measures TACM-4, TACM-5, TACM-6, and TACM-11. However, the location and intensity of future development is not known at this time.

[6] Reid Ewing and Robert Cervero. 2001. "Travel and the Built Environment" Transportation Research Record, 1780, Paper No. 01-3515. Robert Schneider, Kevan Shafizadeh, and Susan Handy. 2012 (December). "Methodology for Adjusting ITE Trip Generation Estimates for Smart-Growth Projects. California Smart-Growth Trip Generation Rates Study. University of California, Davis. U.S. Environmental Protection Agency. 2013 (June). Our Built and Natural Environments: A Technical Review of the Interactions among Land Use, Transportation, and Environmental Quality. Second Edition. UC Davis Institute of Transportation Studies. Richard Lee, Joshua Miller, Rachel Maiss, Mary Campbell, Kevan Shafizadeh, Deb Niemeier, and Susan Handy. 2011 (September). Evaluation of the Operation and Accuracy of Five Available Smart Growth Trip Generation Methodologies. Research Report – UCD-ITS-RR-11-12.

The actual adverse physical environmental effects associated with energy use and the efficiency of energy use detailed throughout this EIR in the environmental topic-specific sections. Given the scale of possible development that could be proposed in the future, the impact would continue to be considered significant. There is no additional feasible mitigation. The impact is **significant and unavoidable**.

IMPACT 3.6-2 New or expanded electrical and natural gas utilities. *The proposed project does not propose development or land use change within the SOIA Area. However, if there is future annexation of the SOIA Area to the City and if there is development of the SOIA Area, new development would require construction of new on-site electrical and natural gas infrastructure. PG&E would need to provide natural gas infrastructure and SMUD would need to provide electrical infrastructure to the area, as necessary, to extend service into the SOIA Area. Existing infrastructure will likely be extended from developed areas in the vicinity that would exist in the future to serve any future development of the SOIA Area. Therefore, the impact is considered* ***significant****.*

As previously stated, the project does not include direct changes to land use or the City of Elk Grove General Plan goals and policies. In addition, no specific land use entitlements, development proposals, and land development activities are proposed at this time in conjunction with the proposed SOIA. However, land use assumptions were developed for this analysis to allow LAFCo to understand possible environmental effects that could result from future development within the SOIA Area.

The city of Elk Grove is served by SMUD's aboveground and underground electric transmission and distribution lines. ~~SMUD would use existing facilities and electric transmission and distribution lines to supply the necessary service to the SOIA Area should it be annexed and developed by the City.~~ SMUD has 230kV overhead transmission lines and structures located inside and along the eastern boundary and southwest boundary of the SOIA Area. SMUD has indicated the increase in electrical demand in the SOIA Area would likely require a new substation in the area and additional 69kV overhead transmission lines (SMUD 2017).

PG&E currently provides natural gas service within the city of Elk Grove; however the natural gas lines do not currently serve the SOIA Area according to the Gas Transmission Pipeline Systems Map (PG&E 2016). The existing grid network of gas lines would have to be extended to serve the increased demand for natural gas generated by development on the SOIA Area.

Electrical demand for the proposed project would be approximately 186,609,940 kWh/year, and natural gas demand for the proposed project would be approximately 309,201,008 kBtu/year (Table 3.6-5). Based on SMUD's and PG&E's total service area and total supply of energy, the energy demands created by the proposed project are not considered substantial in relation to the total amount of existing and future energy supplied by SMUD (12,109 million kWh of electricity in 2022) and PG&E (5,081 MM therms of natural gas in 2022).

The increase in energy demand would not be substantial in relation to existing or future demands in SMUD's and PG&E's service area. However, existing infrastructure will likely be extended from developed areas in the vicinity that would exist in the future to serve any future development of the SOIA Area. Therefore, the proposed project may require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. This impact would be **significant**.

Mitigation Measures

Mitigation Measure 3.6-2: Prepare Utility Service Plans that Demonstrate Adequate Electrical and Natural Gas Supplies and Infrastructure are Available before the Annexation of Territory within the SOIA

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall prepare utility service plans that identify the projected electrical and natural gas demands and that appropriate infrastructure sizing and locations to serve future development will be provided within the annexation territory. The utility service plans shall demonstrate that SMUD will have adequate electrical supplies and infrastructure. Project applicants shall provide utility service plans to SMUD for any improvements that are proposed within the SMUD transmission line easement. ~~and~~ In addition, the utility service plans shall demonstrate that PG&E will have adequate natural gas supplies and infrastructure available for the amount of future development proposed within the annexation territory. If SMUD or PG&E must construct or expand facilities, environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of mitigation measures. Such measures should include those necessary to avoid or reduce environmental impacts associated with, but not limited to, air quality, noise, traffic, biological resources, cultural resources, GHG emissions, hydrology and water quality, and others that apply to specific construction or expansion of natural gas and electric facilities projects.

Significance after Mitigation

The proposed project would not directly require the need for additional natural gas or electric infrastructure. Existing infrastructure will likely be extended from developed areas in the vicinity that would exist in the future to serve any future development of the SOIA Area any future development of the SOIA Area. If it is determined that SMUD or PG&E need to construct or expand facilities, this could result in potentially significant impacts from the construction of new natural gas, electricity, and diesel fuel facilities or the expansion of existing facilities that would be required to adequately meet projected capacity. Implementation of Mitigation Measure 3.6-2 would reduce impacts associated with the construction and expansion of natural gas and electricity infrastructure. However, it cannot be guaranteed at this time that all future project-level impacts can be mitigated to a less-than-significant level. Therefore, this impact is **significant and unavoidable**.

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3.9 HAZARDS AND HAZARDOUS MATERIALS

This section addresses hazards to human health and the environment from the use of hazardous materials and the potential for such materials to accidentally spill during construction or subsequent operations; the potential for construction (excavation) to occur in areas affected by hazardous materials; the potential for accidents or incidents in adjacent industrial areas to affect people at the SOIA Area or at off-site improvement areas; and potential exposure to wildfires.

This section uses the term "hazardous materials" to discuss hazardous materials and wastes. Under federal and State laws, any material, including waste, may be considered hazardous if it is specifically listed by statute as such, or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). Hazardous materials are defined in Title 49, Section 171.8 of the Code of Federal Regulations (49 CFR 171.8) as "a substance or material that…is capable of posing an unreasonable risk to health, safety, and property when transported in commerce." Section 25501 of the California Health and Safety Code defines hazardous materials as any material (hazardous substances, wastes, or materials) that poses a significant present or potential hazard to human health and the environment. Health and Safety Code Section 25141(b) defines hazardous wastes as wastes that may cause or significantly contribute to an increase in mortality or serious illness or hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Potential hazards and associated impacts related to toxic air contaminant emissions are discussed in Section 3.3, "Air Quality." Seismic and other geologic hazards are addressed in Section 3.7, "Geology, Soils, Minerals, and Paleontological Resources." Flooding hazards are addressed in Section 3.10, "Hydrology and Water Quality." Traffic hazards not related to the ability of emergency responders to respond to an emergency are addressed in Section 3.14,"Transportation." Service levels by fire personnel and other emergency responders are addressed in Section 3.13, "Public Services and Recreation."

3.9.1 ENVIRONMENTAL SETTING

LAND USES AND CONDITIONS IN THE SOIA AREA

The SOIA Area is within unincorporated Sacramento County and is primarily used for extensive dry farmed and irrigated croplands and vineyard operations. Review of historical imagery and documents shows that the SOIA Area has been used for agriculture (farming and ranching) since the mid-1800s. Similarly, other adjacent parcels have historically been used for row crops, vineyards, and pasture (See Section 3.5 of this EIR, "Cultural Resources" for more information on the history of the SOIA Area).

USE OF AGRICULTURAL CHEMICALS ON THE SOIA AREA

Pasture, dry-farmed crops, and natural grasses, such as those historically and currently grown on the SOIA Area, typically require little to no applications of environmentally persistent pesticides. Orchards and orchard-cultivated soils in the may have been contaminated through the repeated application of agricultural chemicals to fruit or nut trees. These may have included organochlorine pesticides, such as dichlorodiphenyltrichloroethane (DDT), which may be broken down into dichlorodiphenyldichloroethane (DDD) and dichlorodiphenyldichloroethylene (DDE).

ASBESTOS AND LEAD-BASED PAINT

Currently, the Wackman Ranch consists of a main house, a modular home, a construction worker's house, a modern mobile home, three barns, two shop buildings, a small shed, and a carriage house with attached garage. Older building in the SOIA Area could contain asbestos-containing materials (ACMs) and lead-based paints.

Asbestos is designated as a hazardous substance when the fibers have potential to come in contact with air because the fibers are small enough to lodge in the lung tissue and cause health problems. The presence of ACMs in existing buildings poses an inhalation threat only if the ACMs are found to be in a friable state. If the ACMs are not friable, there is no inhalation hazard because asbestos fibers remain bound in the material matrix. Emissions of asbestos fiber to the ambient air, which can occur during activities such as renovation or demolition of structures made with ACMs (e.g., insulation), are regulated in accordance with Section 112 of the federal Clean Air Act.

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. Human exposure to lead has been determined by U.S. Environmental Protection Agency (EPA) and the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) to be an adverse health risk, particularly to young children. Primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil.

KNOWN INACTIVE AND ACTIVE HAZARDOUS SITES

According to the *City of Elk Grove General Plan Background Report*, an "active" status does not mean that the site poses an environmental or human safety risk, only that there is a hazardous material occurrence associated with the facility and that the site is presently undergoing remediation or is under further regulatory review. DTSC maintains a hazardous waste and substances site list (Cortese list) pursuant to Government Code Section 65962. None of the sites identified by the City of Elk Grove *General Plan Background Report* were listed on the Cortese List (City of Elk Grove 2003a). In addition, as of May 2016, the SOIA Area is not on the Cortese list (DTSC 2016).

The *City of Elk Grove General Plan Background Report* contains a list of known "inactive" hazardous sites within the City's Planning Area, which includes the SOIA Area. "Inactive" sites are defined as having been investigated and remediated to the satisfaction of the lead oversight agency. Three sites were identified in the commercial/industrial area northeast of the Kammerer Road/Highway 99 interchange, approximately 2,400 feet from the edge of the SOIA Area: the Transcon Lines, the Flying "V" SS groundwater contamination site (former), and the Georgia-Pacific soil contamination site. Of these, only the Georgia-Pacific site was considered active at the time, although the facility is now closed. Another inactive site was identified at 8320 Eschinger Road, just over a half mile south of the SOIA Area. The *City of Elk Grove General Plan Background Report* did not identify any other inactive hazardous sites in the vicinity of the SOIA Area (City of Elk Grove 2003a).

The Sacramento County General Plan does not identify any hazardous materials near the SOIA Area. The closest listed site in the Sacramento County General Plan is the closed Elk Grove Landfill, an estimated 3 miles north of the SOIA Area (Sacramento County 2011b).

AECOM searched the EPA's Envirofacts web site and the State Water Resources Control Board's (SWRCB's) GeoTracker web site to identify toxic releases, hazardous waste, or other violations that could affect the SOIA

Area. The Envirofacts web site presents information from several regulatory agencies and databases, including those for the EPA, California Department of Toxic Substances Control (DTSC), and Office of Emergency Services, and contains a variety of environmental information maintained by EPA, such as the locations of releases of more than 650 toxic chemicals. The GeoTracker database provides data relating to leaking underground storage tanks and other types of soil and groundwater contamination, along with associated cleanup activities. No records of any toxic releases, hazardous waste, or other violations were found that would affect the SOIA Area (EPA 2016, SWRCB 2016).

The SOIA Area was not listed on any county, State, or federal government lists as a contaminated site. There were no known contaminated municipal groundwater wells, active or inactive landfills, producing California Division of Oil and Gas petroleum wells, or registered USTs located on, adjacent to, or within one-half mile of the SOIA Area. There are four buried, plugged, and abandoned wells within the SOIA Area. No confirmed, State or federal "Superfund" sites were identified within one mile of the property.

TRANSPORT OF HAZARDOUS MATERIALS

Hazardous materials are transported on area roadways, including State Route (SR) 99, continually. The transportation of hazardous materials within the City is subject to various federal, State, and local regulations (see Section 3.9.2, "Regulatory Framework," below) The only roadway and transportation route approved for the transportation of explosives, poisonous inhalation hazards, and radioactive materials in the City is Interstate 5, located more than 3 miles west of the SOIA Area. Smaller quantities of hazardous materials, such as medical supplies, pool chemicals, cleansing agents, paint, and household chemicals, may be transported on all roadways throughout the City. An industrial area where larger concentrations of hazardous materials may occur is located near the northeastern corner of the SOIA Area, east of SR 99. It is likely that the majority of deliveries of hazardous materials to this area would occur via Grant Line Road and SR 99.

SUBURBAN PROPANE

Suburban Propane facility is located at 10450 Grant Line Road, approximately 3,000 feet from the northeastern corner of the SOIA Area. The Suburban Propane facility receives and stores pressurized and refrigerated propane from trucks and railcars and loads trucks for off-site transport. The facility operates four 60,000-gallon, pressurized, ambient-temperature propane storage tanks and two 12-million-gallon refrigerated, low-pressure storage tanks. The tanks are 146 feet in diameter and 122 feet tall. According to the comment from Suburban Propane on the Notice of Preparation, the property for the facility was selected in 1969 and propane was first stored on site in 1971. The facility has operated on an around-the-clock, 365 days per year basis since that time Suburban Propane utilizes state of the art security at its facility and there has never been an accident on site. Fire Chief Mark Meaker, who retired in 2003, reduced the radius for residential or dense development around the facility from one mile to 1/2 mile (Suburban Propane 2016).

The Elk Grove Patch in 2011 interviewed several land owners for details on the safety at the Suburban Propane Facility. Cosumnes Fire Marshal George Apple said that the Suburban plant "goes above and beyond" the safety measures required by California fire code. Fire Marshal Apple said he had overseen eight years of annual inspections there and failed to identify a single safety problem. A high-tech sprinkler system is designed to detect and immediately cool any tank where a flame erupts, preventing a fire like the one in Lincoln, California from occurring. Large berms have been built around the plant's perimeter to contain liquid in case of a leak. A disaster preparedness expert, Denise Beach, a senior engineer with the National Fire Protection Association, interviewed

for the article said "The only way an explosion would occur is if a fire impinges directly on a [propane] tank and there is no effort taken to keep the tank cool." In addition, the article summarized some of the safety measures Elk Grove has in place. "A Reverse 911 system can convey instructions to all residents near the propane plant in the event of an emergency" and a mandatory evacuation order, has been pre-reviewed by the city attorney and can be quickly signed by officials, if it is ever needed. (Mello 2011).

For the City General Plan, the City of Elk Grove reviewed several technical reports that evaluated a range of hypothetical accident scenarios and the potential effects from an explosion, radiant heat, fire, shrapnel, and chemical exposure, including potential injuries and fatalities. The study prepared by Quest in 2000, used in the General Plan EIR, evaluated a hypothetical release of flammable (propane) and toxic chemicals (formalin), the probability of an incident, and estimated hazard zones around the Suburban Propane facility. The Quest study presented individual risk contours and a numerical estimate of the annual risk of fatality with distance from the facility. As shown in Exhibit 3.9-1, the northeast corner of the SOIA Area falls within the 10^{-8} contour indicating a 1-in-one hundred million risk of fatality.

SCHOOLS

There are no schools within 0.25 mile of the SOIA Area. Elk Grove High School is approximately 1.9 miles north of the SOIA Area, Elizabeth Pinkerton Middle School is approximately 1.5 miles north of the SOIA Area, and Carroll Elementary School is approximately 1.8 miles northwest of the SOIA Area.

AIRPORTS AND AIRSTRIPS

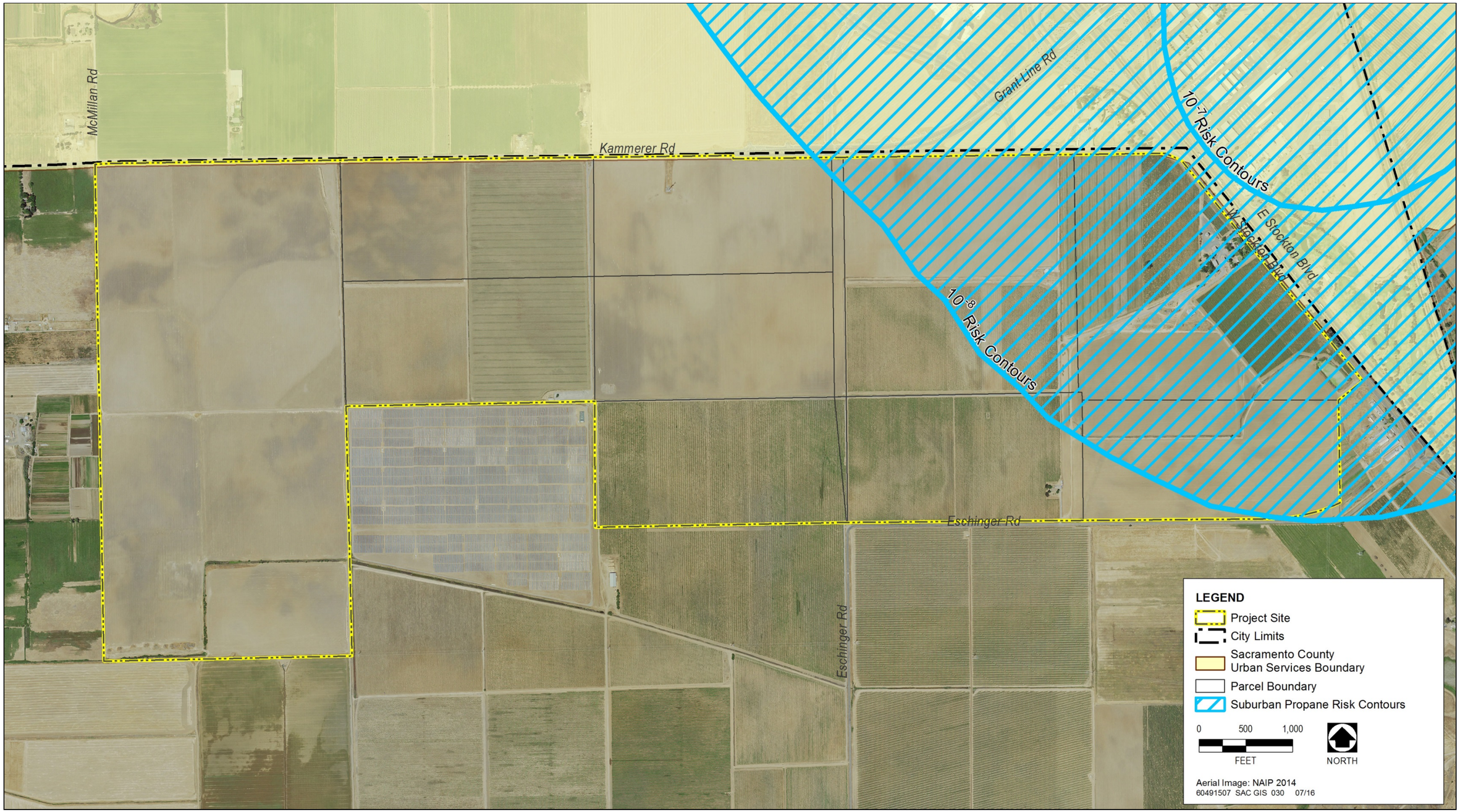
No public airports or private airstrips exist within two miles of the SOIA Area. The closest public-use airport is Sacramento Executive Airport, approximately 11 miles northwest of the SOIA Area. The nearest active, privately operated airstrip~~s Mosier Airport (on Sheldon Road in Elk Grove) and~~ Mustang Airport (on Arno Road in Galt)~~ are~~ located approximately ~~6 miles northeast and~~ 3.5 miles south of the SOIA Area~~, respectively~~. The former Sunset Skyranch Airport, formerly located approximately two miles to the northeast, was closed after the Sacramento County Board of Supervisors denied a use permit.

WILDLAND FIRE HAZARDS

CEQA requires that environmental analyses consider the potential exposure of people and structures to wildland fire hazards. The California Department of Forestry and Fire Protection (CAL FIRE) has developed fire hazard severity zones to predict the potential damage from wildland fires. The zones depicted on CAL FIRE maps account for potential fire intensity and speed, production and spread of embers, fuel loading, topography, and climate (e.g., temperature and the potential for strong winds).

Fire prevention areas considered to be under State jurisdiction are referred to as "state responsibility areas." In state responsibility areas, the CAL FIRE is required to delineate three hazard ranges: moderate, high, and very high. "Local responsibility areas," which are under the jurisdiction of local entities (e.g., cities, counties), are required to only identify very high fire hazard severity zones.

The SOIA Area is within a local responsibility area (LRA) and CAL FIRE identifies the SOIA Area as a non–very high fire hazard severity zone (CAL FIRE 2016). The Cosumnes Community Service District (CCSD) Fire Department is responsible for providing fire protection services to the SOIA Area.



Source: Quest 2000, adapted by AECOM 2016

Exhibit 3.9-1 **Risk Contours at Suburban Propane**

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3.9.2 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Hazardous Materials Management

The U.S. Environmental Protection Agency (EPA) has primary responsibility for enforcing and implementing federal laws and regulations pertaining to hazardous materials. Applicable regulations are contained mainly in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the laws summarized below.

- **Resource Conservation and Recovery Act of 1976 (RCRA):** The RCRA (42 U.S. Code [USC] 6901 et seq.) established a federal regulatory program for the generation, transport, and disposal of hazardous substances. Under the RCRA, EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. The RCRA was amended by the Hazardous and Solid Waste Amendments of 1984, which banned the disposal of hazardous waste on land and strengthened EPA's reporting requirements. EPA has delegated authority for many RCRA requirements to the California Department of Toxic Substances Control (DTSC).

- **Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA):** CERCLA, also called the Superfund Act (42 USC 9601 et seq.), provided broad federal authority and created a trust fund for addressing releases and threatened releases of hazardous substances that could endanger public health or the environment.

- **Superfund Amendments and Reauthorization Act of 1986 (SARA):** The Superfund Hazardous Substance Cleanup Program (Public Law 96-510) was established on December 11, 1980. The program was expanded and reauthorized by the Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499), also known as SARA Title III. SARA created the Emergency Planning and Community Right-to-Know Act of 1986, also known as SARA Title III, a statute designed to improve community access to information about chemical hazards and to facilitate the development of chemical emergency response plans by state, tribal, and local governments.

- **Toxic Substances Control Act:** The Toxic Substances Control Act (15 USC 2601 et seq.) provides EPA with authority to require reporting, recordkeeping and testing, and restrictions related to chemical substances and/or mixtures. The Toxic Substances Control Act addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

- **Clean Air Act:** Regulations under the Clean Air Act (42 USC 7401 et seq., as amended) are designed to prevent accidental releases of hazardous materials. The regulations require facilities that store a threshold quantity or greater of listed regulated substances to develop a risk management plan that includes hazard assessments and response programs to prevent accidental releases of listed chemicals.

- **Federal Clean Water Act Section 311 and 40 CFR 110.10:** Federal Clean Water Act Section 311 and 40 CFR 110.10, also referred to as the "Spill Prevention, Control, and Countermeasure (SPCC) Regulation," is intended to prevent oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil. The regulation requires reporting to the National Response Center of any discharge of oil to navigable

waters that causes a sheen upon the water, deposits a sludge upon the shoreline or violates a water quality standard. Essentially, any amount of petroleum could cause a sheen, and in California, the State Water Resources Control Board (SWRCB) has determined that, due to the drain discharge locations, storm drains generally are considered navigable waters.

- **40 CFR 112.4 (federal SPCC rule):** This rule requires facility owners/operators to report specified information to the U.S. EPA Regional Administrator within 60 days if the facility has discharged more than 1,000 gallons of oil to navigable waters or adjoining shorelines in a single discharge or discharged more than 42 gallons of oil to navigable waters or adjoining shorelines in each of two discharges occurring within any twelve-month period.

- **Emergency Planning and Community Right-to-Know Act (EPCRA):** EPCRA establishes requirements for federal, State, and local governments, Indian tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. Regulations implementing EPCRA are codified in Title 40 of the Code of Federal Regulations, parts 350 to 372. EPCRA requires businesses have available Material Safety Data Sheets (MSDS) and must submit hazardous chemical inventory forms to the State Emergency Response Commission, Local Emergency Preparedness Committee, and local fire department annually on March 1st. Meeting this federal requirement is achieved through compliance with the California Hazardous Materials Business Plan program (CA Health and Safety Code sec 25504 [a-c]). Such plans must include an inventory of hazardous materials handled, as well as facility floor plans showing where hazardous materials are stored, an emergency response plan, and emergency response procedures that provide for employee training (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). In addition, facilities must immediately notify the Local Emergency Planning Committees and the State Emergency Response Commission or the Tribal Emergency Response Commissions if there is a release into the environment of a hazardous substance that is equal to or exceeds the minimum reportable quantity set in the regulations. This requirement covers the 355 extremely hazardous substances, as well as the more than 700 hazardous substances subject to the emergency notification requirements under CERCLA Section 103(a)(40 CFR 302.4).

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. EPA is responsible for compiling the National Priorities List (NPL) for known or threatened release sites of hazardous substances, pollutants, or contaminants (commonly referred to as "Superfund sites"). EPA provides oversight of and supervision for Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

Occupational Safety and Health Administration Worker Safety Requirements

The Occupational Safety and Health Administration (OSHA) is responsible for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for handling hazardous substances and addressing other potential industrial hazards. OSHA also establishes criteria by which each state can implement its own health and safety program. The Hazard Communication Standard (CFR Title 29, Part 1910) requires that workers be informed of the hazards associated with the materials they handle. Workers must be trained in safe handling of hazardous materials, use of emergency response equipment,

and building emergency response plans and procedures. Containers must be labeled appropriately, and material safety data sheets must be available in the workplace.

Hazardous Materials Transportation

The U.S. Department of Transportation (DOT), in conjunction with EPA, is responsible for enforcing and implementing federal laws and regulations that govern transportation of hazardous materials. The Hazardous Materials Transportation Act of 1974 (49 USC 5101) directed DOT to establish regulations for the safe storage and transportation of hazardous materials (CFR Title 49, Parts 171–180), which define the types of hazardous materials, their transport, packaging, and methods of marking vehicles (i.e., via placards). The Federal Motor Carrier Safety Administration was established as a separate administration within the DOT on January 1, 2000, pursuant to the Motor Carrier Safety Improvement Act of 1999. The Federal Motor Carrier Safety Administration covers all non-exempt commercial motor vehicles that cross state lines. EPA, the California Highway Patrol (CHP), the California Department of Transportation (Caltrans), and DTSC also enforce State and federal laws regarding hazardous materials transport. EPA regulations for transporting hazardous wastes require tracking shipments with manifests. EPA standards for transporters of hazardous materials are found at 40 CFR 263 and include labeling, placarding, proper containers, and reporting discharges. DOT regulations are documented in 49 CFR 171–180.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Hazardous Materials Management

Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety. The California Environmental Protection Agency (Cal/EPA) and the Governor's Office of Emergency Services establish rules governing the use of hazardous substances in California. Within Cal/EPA, under Title 22, Division 4.5 of the California Code of Regulations (CCR 22), DTSC is primarily responsible for regulating the generation, transport, and disposal of hazardous substances under the authority of the Hazardous Waste Control Law; enforcement is delegated to local jurisdictions. Regulations implementing the Hazardous Waste Control Law list hazardous chemicals and common substances that may be hazardous; establish criteria for identifying, packaging, and labeling hazardous substances; prescribe hazardous-substances management; establish permit requirements for treatment, storage, disposal, and transportation of hazardous substances; and identify hazardous substances prohibited from landfills. These regulations apply to the protection of human health and the environment during construction.

State regulations applicable to hazardous materials are contained primarily in Title 22 of the California Code of Regulations (CCR). CCR Title 26 is a compilation of those CCR chapters or titles that are applicable to hazardous materials management. California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) standards are presented in CCR Title 8; these standards are more stringent than federal OSHA regulations and address workplace regulations involving the use, storage, and disposal of hazardous materials.

State and federal laws require detailed planning to ensure that hazardous materials are handled, used, stored, and disposed of properly, and, in case such materials are accidentally released, to prevent or to mitigate injury to health or the environment.

Underground Storage Tank Program and the Spills, Leaks, Investigations, and Cleanups Program

Several state regulatory structures govern cleanup of contaminated sites in California. DTSC regulates many of these programs: RCRA corrective actions, state Superfund sites, brownfields programs, and voluntary cleanups. The State Water Resources Control Board (through nine regional water quality control boards and some local agencies) regulates releases with the potential to affect water resources under programs such as the Underground Storage Tank Program and the Spills, Leaks, Investigations, and Cleanups Program. Regulatory authority for these programs may be delegated by the federal government (as with RCRA corrective actions directed by DTSC) or may be found in the California Health and Safety Code. These regulations require reporting, investigation, and remediation of sites where hazardous materials have been released, and appropriate disposal of any hazardous materials. These programs govern a range of pollutants in surface water, groundwater, soil, sediment, and air, such as solvents, petroleum fuels, heavy metals, and pesticides.

California Hazardous Materials Release Response Plans and Inventory Law of 1985

Chapter 6.95 of the California Health and Safety Code requires any business handling or storing in excess of 55 gallons or 500 pounds of a solid or liquid hazardous material or 200 cubic feet of gas to submit Hazardous Materials Management Business Plans (HMBPs). Such plans must include an inventory of hazardous materials handled, as well as facility floor plans showing where hazardous materials are stored, an emergency response plan, and emergency response procedures that provide for employee training (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Facilities storing materials that are "acutely" hazardous and in excess of the quantities in CCR, Title 19, must submit a more comprehensive Risk Management Plan, which includes off-site consequences analysis, maintenance, training programs, and an executive summary. ~~This law requires preparation of hazardous materials business plans and disclosure of hazardous materials inventories. Such plans must include an inventory of hazardous materials handled, as well as facility floor plans showing where hazardous materials are stored, an emergency response plan, and emergency response procedures that provide for employee training (California Health and Safety Code, Division 20, Chapter 6.95, Article 1).~~ The business plan program is administered by the California Emergency Management Agency.

Health and Safety Code 25507(a) and 19 California Code of Regulations (CCR) 2703

A handler of hazardous materials must, upon discovery, immediately report to the Certified Unified Program Agency (CUPA) and California Emergency Management Agency (Cal EMA) any release or threatened release of a hazardous material if there is a reasonable belief that the release or threatened release poses a significant present or potential hazard to human health and safety, property, or the environment. There is no quantitative reportable quantity stated, and this threat/hazard-based reporting requirement applies regardless of whether the release enters a waterway or escapes the facility.

California Water Code (CWC) 13272 and California Government Code 8670

The regulations require reporting to California Emergency Management Agency or the Regional Water Quality Control Board (RWQCB) of discharges into or onto waters of the state and marine waters of 'any amount' of oil (a 42-gallon threshold is stated in the statutes, but the statute-referenced California Oil Spill Contingency Plan requires any amount be reported).

Cal/OSHA Worker Safety Requirements

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations for the use of hazardous materials in the workplace (CCR Title 8) require safety training, available safety equipment, accident and illness prevention programs, hazardous-substance exposure warnings, and preparation of emergency action and fire prevention plans. Cal/OSHA enforces regulations on hazard communication programs and mandates specific training and information requirements. These requirements include procedures for identifying and labeling hazardous substances, providing hazard information about hazardous substances and their handling, and preparing health and safety plans to protect workers and employees at hazardous-waste sites. Employers must make material safety data sheets available to employees and document employee information and training programs.

Hazardous Materials Transportation

DOT regulates transportation of hazardous materials between states. The CHP and Caltrans are the state agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies. Together, these agencies determine container types used and license haulers to transport hazardous waste on public roads.

California Accidental Release Prevention Program

US EPA Risk Management Plan (RMP) Rule, the CalARP Program; and the California Occupational Safety and Health (Cal/OSHA) Process Safety Management (PSM) standard require that facilities assess the potential for accidental releases of toxic, reactive, flammable, or explosive chemicals, and programs must be established to minimize the frequency and extent of accidental releases. The goal of the ~~California Accidental Release Prevention Program~~ CalARP (CCR Title 19, Division 2, Chapter 4.5) is to reduce the likelihood and severity of consequences of any releases of extremely hazardous materials. Any business that handles regulated substances (chemicals that pose a major threat to public health and safety or the environment because they are highly toxic, flammable, or explosive, including ammonia, chlorine gas, hydrogen, nitric acid, and propane) must prepare a risk management plan. The risk management plan is a detailed engineering analysis of the potential accident factors present at a business and the measures that can be implemented to reduce this accident potential. The plan must provide safety information, hazard data, operating procedures, and training and maintenance requirements. The list of regulated substances is found in Article 8, Section 2770.5 of the program regulations.

The RMP and CalARP regulations are focused on off-site consequences, to protect the general public. PSM is geared toward workplace and employee safety. Propane and butane manufactured and stored in quantities over 10,000 pounds are regulated flammable substances under the RMP and CalARP Rules.

Fire Protection

California Fire Code and National Fire Protection Association (NFPA) code addresses requirements for flammable and combustible liquid and compressed gas storage including pressure vessel installation, water mains, foam fire protection systems, and water supply reliability requirements.

California Department of Pesticide Regulation

The purpose of the California Department of Pesticide Regulation (DPR) is to protect the health of humans and the environment. DPR sets standards for the sale and use of pesticides and encourage "reduced-risk pest management" to decrease the use of hazardous pesticides. The DPR has a staff of about 350 employees and is funded by regulatory fees. A portion of its budget supports local pesticide enforcement by County Agricultural Commissioners. DPR released "A Community Guide to Recognizing and Reporting Pesticide Problems" to inform Californians about the use, potential hazards, and response to hazards from pesticide use (DPR 2008).

State Water Resources Control Board

The Central Valley RWQCB is authorized by the SWRCB to enforce provisions of the Porter-Cologne Water Quality Control Act of 1969. This act gives the Central Valley RWQCB authority to require groundwater investigations when the quality of groundwater or surface waters of the state is threatened and to require remediation of the site, if necessary.

State Hazard Mitigation Plan

The State Hazard Mitigation Plan (SHMP) is the official statement of the State's hazard identification, vulnerability analysis, and hazard mitigation strategy. The SHMP is also a federal requirement under the Disaster Mitigation Act of 2000 for the State of California to receive federal funds for disaster assistance grant programs. The goal of the SHMP, prepared by the California Office of Emergency Services (OES), is to guide implementation activities to achieve the greatest reduction of vulnerability, which results in saved lives, reduced injuries, reduced property damage, and protection for the environment. OES worked with the California Office of Planning and Research to incorporate hazard mitigation into the 2016 General Plan Guidelines, a public draft of which was released in October 2015.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Emergency Management Agency, which coordinates the responses of other agencies, including Cal/EPA, the California Highway Patrol, the California Department of Fish and Wildlife, and RWQCBs.

Unified Program

Cal/EPA has adopted regulations implementing the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The six program elements of the Unified Program are hazardous-waste generation and on-site treatment, underground storage tanks, aboveground storage tanks, hazardous-material release response plans and inventories, risk management and prevention programs, and Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency, referred to as the Certified Unified Program Agency (CUPA), which is responsible for consolidating the administration of the six program elements within its jurisdiction. The Sacramento County Environmental Management Department (EMD) is the CUPA for Sacramento County and its incorporated cities, including Elk Grove.

The Unified Program Agencies are required to implement and enforce the California Aboveground Petroleum Storage Act (CAPSA), adopted in chapter 6.67 of the California Health and Safety Code. The CAL FIRE-Office of the State Fire Marshal (OSFM) is responsible for ensuring the implementation of the Aboveground Petroleum Storage Act (APSA) program element of the Unified Program. APSA regulates facilities with aggregate aboveground petroleum storage capacities of 1,320 gallons or more, which include aboveground storage containers or tanks with petroleum storage capacities of 55 gallons or greater. Facilities with total petroleum storage quantities at or above 10,000 gallons are inspected at least once every three years by a Unified Program Agency and have reporting and fee requirements, while facilities with petroleum storage quantities equal to or greater than 1,320 gallons but less than 10,000 gallons have reporting and fee requirements only. All regulated facilities must meet the federal Spill Prevention, Control and Countermeasure Rule requirements.

California Government Code Section 65962.5 (Cortese List)

The provisions of California Government Code Section 65962.5 are commonly referred to as the "Cortese List" (after the legislator who authored the law). The Cortese List is a planning document used by State and local agencies to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Section 65962.5 requires Cal/EPA to develop an updated Cortese List at least annually. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies in California, such as the State Water Resources Control Board, also must provide additional release information. As of May 2016, the SOIA Area is not on the Cortese list (DTSC 2016).

Asbestos Abatement

Asbestos abatement efforts must be completed in compliance with 7 CCR Section 5208, 8 CCR Section 1529, and 8 CCR Sections 341.6 through 341.14. The regulations in 7 CCR Section 5208 implement worker exposure limits, require exposure monitoring, implement compliance programs, require employee protection and hazard communication, and require employee medical surveillance and reporting. Asbestos exposure for construction work is regulated by 8 CCR Section 1529, which includes exposure limits and procedures for handling and removal. Requirements for transport and disposal are included in 8 CCR Sections 341.6 through 341.14.

Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, prohibits local agencies from issuing demolition or alteration permits until the applicant has demonstrated compliance with applicable regulations. If there is 100 square feet or more of asbestos-containing material, renovation or demolition of buildings containing asbestos must be conducted by a licensed contractor and the work must comply with requirements included in 8 CCR Sections 1529 and 341.6 through 341.14. Cal/OSHA must be notified 10 days before the start of construction and demolition activities. Asbestos encountered during demolition of an existing building must be transported and disposed of at an appropriate facility. The contractor and hauler of the material must file a hazardous-waste manifest that provides disposal details.

Lead and Lead-Based Paint Abatement

Regulation of lead and lead-based paint is described in 29 CFR 1926.62 and 8 CCR Section 1532.1. These regulations cover the demolition, removal, cleanup, transportation, storage, and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, and monitoring. Cal/OSHA's Lead in Construction Standard requires notification and a lead compliance plan with safe work practices and a detailed plan to protect workers from lead exposure.

California Department of Education School Siting Requirements

The California Department of Education (CDE) School Facilities Planning Division (SFPD) has prepared the Guide to School Site Analysis and Development (CDE 2000) that provides criteria (described below) for locating appropriate school sites in California. CDE's authority for approving proposed sites is contained in California Education Code Section 17251 and in Title 5, Section 14010 of the CCR. CDE's approval is a condition for school districts to receive State funds for the acquisition of sites under the State's School Facilities Program administered by the State Allocation Board. Districts using only local funds are still encouraged to seek CDE approval for the benefits that such outside review can provide.

School Siting Criteria

The California Education Code contains various provisions governing the siting of new public schools (e.g., California Education Code Sections 17211, 17212, and 17212.5). In addition, to help focus and manage the site selection process, CDE's School Facilities and Planning Division has developed screening and ranking procedures based on criteria commonly affecting school selection (California Education Code Section 17251[b], 5 CCR Section 14001[c]). The highest priority on the criteria list is safety. Other site selection criteria require an analysis of the specific environmental constraints and land use concerns.

Before a school district can obtain State funding to acquire a site for a proposed school facility, CDE must approve the site to ensure that certain minimum criteria are met (CDE 2000). The criteria relevant to the project include the requirement of an analysis of environmental constraints and land use concerns.

The foremost consideration in the selection of school sites is safety. Certain health and safety requirements are governed by State statute and CDE regulations. In selecting a school site, a school district should consider the following factors:

- Proximity to airports.
- Proximity to high-voltage power transmission lines.
- Proximity to toxic and hazardous substances.
- Proximity to high-pressure pipelines, reservoirs, or water storage tanks.
- Hazardous air emissions and facilities within one-quarter mile.
- Whether the site consists of a current or former hazardous waste disposal site or solid-waste disposal site, unless, if the site was a former solid-waste disposal site, the board of education concludes that the wastes have been removed.
- Whether the site is a hazardous-substance release site identified by DTSC.
- Whether the site has one or more pipelines, situated underground or aboveground, that carry hazardous substances, materials, or wastes, unless the pipeline is used only to supply natural gas to that school or neighborhood.

- If the proposed land has been designated a border-zone property by DTSC, then a school may not be located on the site without a specific variance in writing by DTSC.
- Whether a site is located near or downwind from a stockyard, fertilizer plant, soil-processing operation, auto-dismantling facility, sewage treatment plant, or other potentially hazardous facility.
- Proximity to railroad tracks.
- Location within a 100-year floodplain, as designated by FEMA.
- Air quality adjacent to busy traffic corridors.
- Accessibility for residential neighborhoods.
- Consideration of the cost and complications associated with selecting sites adjacent to wetlands.
- Consideration of compatibility with land use plans.
- Consideration of compatibility with nearby agricultural operations.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Sacramento Metropolitan Air Quality Management District Asbestos Program

The Sacramento Metropolitan Air Quality Management District (SMAQMD) regulates asbestos in building materials. The program applies to renovations or demolitions of jurisdictional structures in Sacramento County that include asbestos. This program requires and asbestos survey to identify all of the asbestos in building materials and abatement by a licensed asbestos contractor.

Sacramento County Environmental Management Department, Hazardous Materials Division

The Hazardous Materials Division of the Sacramento County EMD is the designated CUPA for Sacramento County, including Elk Grove. The Sacramento County EMD has a 24-hour hazardous materials incident response team and responds to incidents involving chemical releases, as well as any other hazardous materials situations. As the CUPA, the Hazardous Materials Division is responsible for implementing six statewide environmental programs for Sacramento County:

- Underground storage of hazardous substances (underground storage tanks)
- Hazardous materials business plan requirements
- Hazardous waste generator requirements
- California Accidental Release Prevention Program
- Uniform Fire Code hazardous materials management plan
- Aboveground storage tanks (spill prevention control and countermeasures plan)

Aboveground Petroleum Storage Tanks is one element within the Sacramento County EMD. EMD provides regulatory oversight for the operation of Aboveground Petroleum Storage Tanks including:

- Review of Aboveground Petroleum Storage Tank Facility Statements (TFS)
- Routine inspections of AST site operations and equipment
- Review and verification of Spill Prevention Control and Countermeasure (SPCC) Plans

Permits for all CUPA regulatory programs are obtained by registering with EMD and paying an annual permit fee. According to the EMD, all tank facilities meeting the storage capacity threshold of 1,320 gallons, must take the following 6 actions:

- Complete and submit to EMD an initial Aboveground Petroleum Storage Tank Facility Statement Form.
- Prepare and implement an SPCC Plan in accordance with U.S. Code of Federal Regulations, Title 40, Part 112 (40 CFR 112)
    - Facilities with ≤10,000 aggregate storage capacity and with no tank >5,000 gallons (e.g., Tier I Facilities) may use the Environmental Protection Agency (EPA) SPCC Plan template.
    - Facilities with ≤10,000 aggregate storage capacity and with any individual tank >5,000 gallons (e.g., Tier II Facilities) may self-certify an SPCC Plan, but may not use the EPA SPCC Plan template.
    - Facilities with >10,000 gallons must have a registered Professional Engineer (P.E.) review and certify the SPCC Plan.
- Conduct periodic inspections of your ASTs to ensure compliance with the 40 CFR 112.
- Submit an annual fee to EMD beginning in January 2010. This fee is established by the CUPA to recover the cost it will take to administer this program.
- Allow EMD to conduct periodic inspections.
- Immediately notify the California Emergency Management Agency (EMA) and EMD upon discovery of a spill or release of 42 gallons or more of petroleum.

Sacramento County Local Hazard Mitigation Plan

The *Sacramento County Local Hazard Mitigation Plan* (Sacramento County 2011a), as amended, to which the City of Elk Grove is a signatory, includes a risk assessment of existing hazards such as severe weather, dam failure, flooding, earthquakes, wildfire, drought, health hazards, landslides, and volcanoes, and a mitigation strategy. The plan includes countywide recommended action items to reduce the economic effects and the loss of life and property. Specific action items recommended for Elk Grove included fully integrating the local hazard mitigation plan into the General Plan Safety Element.

Elk Grove General Plan

The following policies and actions from the *Elk Grove General Plan* Safety Element (City of Elk Grove 2015) related to hazards and hazardous materials would apply to future development tin the proposed SOIA Area.

- **Policy SA-1:** The City will seek to maintain acceptable levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in Elk Grove.

- **Policy SA-2:** In considering the potential impact of hazardous facilities on the public and/or adjacent or nearby properties, the City shall consider the hazards posed by reasonably foreseeable events. Evaluation of such hazards shall address the potential for events at facilities to create hazardous physical effects at off-site locations that could result in death, significant injury, or significant property damage. The potential hazardous physical effects of an event need not be considered if the occurrence of an event is not reasonably foreseeable as defined in Policy SA-3. Absent substantial evidence to the contrary, a "hazardous physical effect" from an event shall be a level of exposure to a hazardous physical effect in excess of the levels identified in Policy SA-4.

For the purpose of implementing Policy SA-2, the City considers an event to be "reasonably foreseeable" when the probability of the event occurring is as indicated in the table below (labeled as Table 3.9-1 for this EIR).

Table 3.9-1. Reasonably Foreseeable Probability of Occurrence

Land Use	Probability of Occurrence Per Year
"Agriculture, Light Industrial, and Industrial" Uses involving continuous access and the presence of limited number of people but easy evacuation, e.g., open house, warehouses, manufacturing plants, etc.	Between 100 in one million and 10 in one million (10^{-4} to 10^{-5})
"Commercial" Uses involving continuous access but of easy evacuation, e.g., commercial uses, offices.	Between 10 in one million and 1 in one million (10^{-5} to 10^{-6})
"Residential" All other land uses without restriction including institutional uses, residential areas, etc.	1 in one million and less (10^{-6})

- **Policy SA-3:** For the purpose of implementing Policy SA-2, the City considers an event to be "reasonably foreseeable" when the probability of the event occurring is as indicated in the [table contained on page SA-5 of the City General Plan].

    - **SA-3-Action 1:** As part of the environmental review process for proposed projects, the City shall analyze potential safety-related impacts resulting from or affecting new development which could cause or be affected by reasonably foreseeable events. This analysis shall include the potential for events to occur at the facility, and the potential for hazardous physical effects to result from such events with respect to the hazards listed in Table SA-A [page SA-6 of the City General Plan, reproduced below as Table 3.9-2].

Table 3.9-2. Maximum Acceptable Exposure Criteria for Agricultural, Residential, and Non-Residential Land Uses (Elk Grove General Plan Table SA-A)

Land Use	Maximum Acceptable Exposure			
	Overpressur	Airborne Toxic Substances	Radiant Heat	Shrapnel
Agriculture	3.4 psig[1]	Dose = ERPG-2[2] ppm for 60 min Exposure time = 60 min For example: chlorine ERPG-2 = 3 ppm Dose = 3 ppm x 60 min = 180 ppm-min Target concentration = Dose/Exposure time Target concentration = (180 ppm-min)/60 min Target concentration = 3 ppm chlorine	Radiant dose = 200 kJ/ m^2 [3] Exposure time = 30 sec Target radiant energy = Radiant dose/Exposure time Target radiant energy = (200 kJ/m^2)/30 sec Target radiant energy = 6.67 kW/m^2	All uses shall be located such that the possibility of injury for an unprotected person due to shrapnel released by a reasonably foreseeable event[4] is less than $1/10^{-6}$ (1/ 1,000,000)
Residential (all density ranges)[5]	1.0 psig			
Office/ Commercial	1.0 psig			
Light industrial	1.25 psig	Dose = ERPG-2 ppm for 60 min Exposure time = 30 min For example: chlorine ERPG-2 = 3 ppm Dose = 3 ppm x 60 min = 180 ppm-min Target concentration = Dose/Exposure time Target concentration = (180 ppm-min)/30 min Target concentration = 6 ppm chlorine	Radiant dose = 200 kJ/m^2 Exposure time = 15 sec Target radiant energy = Radiant dose/ Exposure time Target radiant energy = (200 kJ/m^2)/15 sec Target radiant energy = 13.34 kW/m^2	
Industrial	3.4 psig	Dose = ERPG-2 ppm for 60 min Exposure time = 15 min For example: chlorine ERPG-2 = 3 ppm Dose = 3 ppm x 60 min = 180 ppm-min Target concentration = Dose/Exposure time Target concentration = (180 ppm-min)/15 min Target concentration = 12 ppm chlorine		

[1] psig: pounds per square inch gauge.

[2] ERPG-2: Emergency Response Planning Guidelines. The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action; ppm: parts per million.

[3] kJ/m^2: kiloJoules per square meter (a measure of radiant heat received); kW/m^2: kilowatts per square meter; 1.0 kJ/m^2 = 1.0 kW/m^2 for 1 sec = 1 kW/ (m^2-sec).

[4] As defined in Policy SA-3.

[5] Includes schools, parks, libraries, and other similar public gathering places regardless of their location.

Source: City of Elk Grove 2015:SA-6

- **Policy SA-4:** The Maximum Acceptable Exposure standards shown in Table SA-A [page SA-6 of the City General Plan, reproduced below as Table 3.9-2] shall be used in determining the appropriateness of either:

  1. placing a use near an existing hazardous facility which could expose the new use to hazardous physical effects, or

  2. siting a hazardous facility that could expose other nearby uses to hazardous physical effects.

  Absent substantial evidence to the contrary, the placement of land uses that do not meet the Maximum Acceptable Exposure standards shall be considered to result in a significant, adverse impact for the purposes of CEQA analysis.

- **Policy SA-8:** Storage of hazardous materials and waste shall be strictly regulated, consistent with state and federal law.

    - **SA-8-Action 2:** Secondary containment and periodic examination shall be required for all storage of hazardous and toxic materials, consistent with the requirements of state or federal law.

    - **SA-8-Action 3:** As part of the review and approval of development plans and building permits, ensure that secondary containment is provided for hazardous and toxic materials.

    - **SA-8 Action 4:** Prior to site improvements for properties that are suspected or known to contain hazardous materials and sites that are listed on or identified on any hazardous material/waste database search shall require that the site and surrounding area be reviewed, tested, and remediated for potential hazardous materials in accordance with all local, state, and federal regulations.

- **Policy SA-9:** The City shall seek to ensure that all industrial facilities are constructed and operated in accordance with up-to-date safety and environmental protection standards.

- **Policy SA-10:** Industries which store and process hazardous or toxic materials shall provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the City of Elk Grove.

    - **SA-10-Action 1:** Consider the impact of proposed industrial development projects with respect to transport of hazardous materials within the city. To the extent feasible, uses requiring substantial transport of hazardous materials should be located to direct such traffic away from the city's residential and commercial areas.

Elk Grove Municipal Code—Section 23.60.030, "Hazardous Materials"

The City has developed the following standards to ensure that the use, handling, storage, and transportation of hazardous materials comply with all applicable State laws (Section 65850.2 of the Government Code and Section 25505 et seq. of the Health and Safety Code) and that appropriate information is reported to the Fire Department as the regulatory authority.

A. Reporting Requirements. All businesses required by State law (Section 6.95 of the Health and Safety Code) to prepare hazardous materials release response plans and hazardous materials inventory statements shall, upon request, submit copies of these plans, including any revisions, to the Fire Department.

B. Underground Storage. Underground storage of hazardous materials shall comply with all applicable requirements of state law (Section 6.7 of the Health and Safety Code and Articles 679 and 680 of the California Fire Code, or as subsequently amended). Businesses that use underground storage tanks shall comply with the following procedures:

    1. Notify the Fire Department of any unauthorized release of hazardous materials prescribed by City, county, state and federal regulations;

    2. Notify the Fire Department and the Sacramento County Health Department of any proposed abandoning, closing or ceasing operation of an underground storage tank and actions to be taken to dispose of any hazardous materials; and

3. Submit copies of the closure plan to the Fire Department.

C. Above-Ground Storage. Above-ground storage tanks for hazardous materials and flammable and combustible materials may be allowed subject to the approval of the Fire Department.

D. New Development. Structures adjacent to a commercial supply bulk transfer delivery system with at least six (6) inch pipes shall be designed to accommodate a setback of at least one hundred (100) feet from that delivery system. The setback may be reduced if the Planning Director, with recommendation from the Fire Department, can make one or more of the following findings:

1. The structure would be protected from the radiant heat of an explosion by berming or other physical barriers;

2. A one hundred (100) foot setback would be impractical or unnecessary because of existing topography, streets, parcel lines or easements; or

3. A secondary containment system for petroleum pipelines and transition points shall be constructed. The design of the system shall be subject to the approval of the Fire Department.

E. Notification Required. A subdivider of a development within five hundred (500) feet of a pipeline shall notify a new/potential owner before the time of purchase and the close of escrow of the location, size and type of pipeline.

3.9.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

The evaluation of environmental impacts from hazards and hazardous materials is based on a review of documents, such as the Elk Grove General Plan, Background Report, and EIR; the Sacramento County General Plan; and the Sacramento County Local Hazard Mitigation Plan and databases such as the Cortese List; EPA's Envirofacts, and CAL FIRE's maps, as well as:

- applicable laws and regulations pertaining to public health and safety and hazardous materials,
- potential future construction activities and uses,
- the potential to discover hazardous soils and other materials,
- the locations of known hazardous-waste sites, and
- the locations of schools, airports, and areas prone to fire (potential receptors and sources of safety hazards).

These hazards were reviewed in light of existing hazardous materials management plans and policies, emergency response plans, and fire management plans.

The information obtained from these sources was summarized to establish existing conditions and to evaluate the significance of potential environmental effects, based on the thresholds of significance presented below. In determining the level of significance, this analysis assumes that future development in the SOIA Area would comply with relevant federal, state, regional, and local ordinances and regulations.

There are no changes to land uses proposed as part of this SOIA application. However, in order to facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario. Since

the current project does not propose any development or land use change, it is possible that, if future development is proposed, it could involve land uses that are potentially capable of exposing the public or the environment to hazards and/or hazardous materials. However, future land use within the SOIA Area is not known. As a result, this analysis assumes and evaluates a broad range of potential uses, in order to fully address potential impacts and provide mitigation needed to reduce or avoid potentially significant impacts.

THRESHOLDS OF SIGNIFICANCE

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the State CEQA Guidelines, as amended. The proposed project would have a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment or through the routine transport, use, or disposal of hazardous materials;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to government code section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- Result in a safety hazard for people residing or working in a project area that is located within 2 miles of a public airport or public use airport;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or residences are intermixed with wildlands.

ISSUES NOT DISCUSSED FURTHER

- **Safety Hazard for People in a Project Area Located within 2 Miles of a Public Airport**—The SOIA Area is not located within 2 miles of any airport. The closest public-use airport is Sacramento Executive Airport, approximately 11 miles from the SOIA Area. The nearest active, privately operated airstrip~~s—Mosier Airport (on Sheldon Road in Elk Grove) and~~ Mustang Airport (on Arno Road in Galt) ~~—are~~ is located approximately ~~6 miles northeast and~~ 3.5 miles south of the SOIA Area~~, respectively~~. Therefore, this issue is not addressed further in this EIR.

IMPACT ANALYSIS

IMPACT 3.9-1 Routine transport, use, or disposal of hazardous materials. *Future development could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during demolition, construction, or operation activities. However, compliance with applicable rules and regulation specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated quicker response to emergencies, the impact related to the creation of significant hazards to the public through routine, transport, use, and disposal is* less than significant.

Although the project does not include any land use plan or development, future development could occur within the SOIA Area. Future construction could require the storage, use, and transport of small quantities of hazardous materials as fuels, oils and lubricants, paints and paint thinners, glues, and cleaning fluids (e.g., solvents). Development could occur in the SOIA Area or off-site, for improvements to roads, sewer lines, drainage facilities, and water lines. Although it cannot be determined where these improvements would be located or how extensive the disturbance would be, it is possible that these improvements could require the storage, use, or transport of hazardous materials.

The SOIA Area could be developed with home improvement, hardware, or auto parts stores. Medical uses may use or store pressurized oxygen tanks, medical waste, biohazardous materials, and/or radioactive materials. The project area could also be developed with light manufacturing uses that could potentially use, store, or dispose of hazardous materials.

The SOIA Area could potentially require development of new schools to serve new students generated by future development. Future school sites would likely be more than one-quarter mile from areas proposed for commercial, office, and light industrial uses that could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste.

Hazardous materials are transported on virtually all public roads, particularly since all motor vehicles contain hazardous materials (e.g., fuel) in addition to any hazardous cargo that may be on board. Future development and associated future population growth would increase the amount of hazardous materials transported on main local and regional routes. With additional development, more people would be potentially exposed to toxic spills or releases under buildout conditions, as compared to existing conditions.

If improperly handled, hazardous materials and wastes can cause public health hazards when released to the soil, groundwater, or air. The primary exposure pathways are inhalation, ingestion, and contact with the skin. Events leading to exposure may include accidental releases during transportation, storage, or handling. Soil disturbance during construction (e.g., excavation, grading) can also lead to exposure of workers or the public if soils contaminated by spills or leaks are stockpiled, handled, or transported.

The CHP and Caltrans enforce regulations for transport of hazardous materials on local roadways and DTSC regulates the use of these materials, as outlined in CCR Title 22. If future development occurs within the SOIA Area, it is assumed that such development would occur under the jurisdiction of the City of Elk Grove. The City of Elk Grove and any construction contractors would be required to comply with Cal/EPA's Unified Program (e.g., hazardous materials release response plans and inventories, California Uniform Fire Code hazardous

materials management plans and inventories). DOT (through the Hazardous Materials Transportation Act), and other regulatory agencies (including the California Public Utilities Commission for natural gas transmission lines) provide standards designed to avoid releases including provisions regarding securing materials and container design.

Facilities that would use hazardous materials on-site would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases and protect the public health. Regulated activities would be managed by the Sacramento County EMD, the designated CUPA, and would be required to comply with CCR Title 8, "Industrial Relations," for workplace regulations addressing hazardous materials, as well as Title 26, "Toxics." Title 26, Division 6 contains requirements for CHP enforcement of hazardous materials storage and rapid-response cleanup in the event of a leak or spill. Compliance with these regulations would reduce the potential for accidental release of hazardous materials during future construction and operation and to minimize both the frequency and the magnitude if such a release occurs.

In addition, if new schools are proposed, certain health and safety requirements for school site selection are governed by State regulations and the California Department of Education's School Facilities Planning Division policies. These requirements are outlined in the *School Site Selection and Approval Guide* and relate to siting school facilities in the proximity to airports, railroads, and major roadways; near or on suspected hazardous materials sites; or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste and identifies requirements for conducting an environmental site investigation to determine the health and safety risks (if any) associated with a new school An analysis of conformity of the proposed school sites with the California Department of Education School Siting Criteria would be the subject of further, separate environmental review.

In addition, the City of Elk Grove would enforce its General Plan and Municipal Code through project conditions of approval. The City would be required to comply with State regulations and the City would assess future discretionary entitlement requests for consistency with City General Plan policies for safety, including hazardous materials (described in Policy SA-8 and associated action measures, Policy SA-9, Policy SA-10 and associated actions).

With enforcement of existing hazardous materials regulations and the application of relevant City of Elk Grove policies and code requirements as conditions of approval, future development in the of the SOIA Area and, potentially, off-site improvement areas would be designed to minimize potential impacts from the release of hazardous materials and to minimize both the frequency and the magnitude if such a release occurs. The impact is **less than significant**.

Mitigation Measures

No mitigation measures are required.

IMPACT 3.9-2 Potential human health hazards from exposure to existing on-site hazardous material. *Future development could expose construction workers to hazardous materials present on-site during construction activities and hazardous materials on-site could create an environmental or health hazard for later residents or occupants, if left in place. This impact is considered* ***potentially significant****.*

A preliminary review of environmental risk databases was conducted. The SOIA Area was not listed on any county, State, or federal government lists as a contaminated site. There were no known contaminated municipal groundwater wells, active or inactive landfills, producing California Division of Oil and Gas petroleum wells, or registered USTs located on the proposed site. As of May 2016, the SOIA Area is not on the Cortese list (DTSC 2016). The timing and extent of any potential off-site infrastructure improvements that would be required to serve future development is unknown, but they would likely be in areas near the SOIA Area. The areas where off-site improvements would occur could have on-site hazardous materials.

This analysis did not include any sampling, site specific review, laboratory analysis, or inspection of buildings or site surfaces. Site specific investigation for future development or off-site improvements will be required to address hazardous materials conditions. Existing environmental and regulatory requirements would protect against effects from hazardous materials.

Hazardous Building Materials

Demolition of existing structures, either within the SOIA Area or for off-site improvements, could encounter hazardous building materials requiring proper handling and disposal. Older buildings could have asbestos, electrical equipment containing PCBs or di(2-ethylhexyl)phthalate (DEHP), fluorescent lights containing mercury vapors, and/or lead-based paints, as described above. These materials have been prohibited from new construction for decades but are still encountered during demolition of older buildings. If discovered and removed during building demolition, these materials would require special disposal procedures.

Section 19827.5 of the California Health and Safety Code requires local agencies to comply with hazardous air pollutant regulations for asbestos. The City of Elk Grove would regulate asbestos through conditions of approval and the SMAQMD would be notified 10 days in advance of any proposed demolition or abatement work. Future projects will be required to comply with the California Health and Safety code for abatement of lead-based paint. Requirements for disposal and recycling of fluorescent light tubes containing mercury are specified in 22 CCR Section 66261.50; requirements for disposal of PCB-containing equipment are specified in 22 CCR Section 66261.24 and Part 761 of CFR Title 40. The waste generator must determine whether ballasts containing DEHP are hazardous and dispose of them properly. DTSC recommends that these wastes be shipped to a light ballast recycling facility (DTSC 2003).

Agricultural Contaminants

If evidence of soil contamination exceeding ambient or background concentrations is discovered during construction, either within the SOIA Area or for off-site improvements, any future developer would implement and comply with existing hazardous materials regulations. The hazardous materials regulations are specifically designed to protect worker and public health by providing for improved handling and transport of hazardous materials, and coordinated and rapid emergency response. All demolition and soil handling would be subject to applicable federal, State, and local regulations, including the California Health and Safety Code, as described above. In addition, the City of Elk Grove would enforce its General Plan and Municipal Code through project

conditions of approval, specifically General Plan Policy SA-8 Action 4 states that if sites and surrounding area are suspected or known to contain hazardous materials, these areas will be reviewed, tested, and remediated for potential hazardous materials in accordance with all local, State, and federal regulations prior to site improvements.

Other Existing On-Site Hazardous Materials

If contaminated soils and/or groundwater (i.e., identifiable by soil staining or odors) are encountered during construction activities, either within the SOIA Area or for off-site improvements, work would cease until appropriate worker health and safety precautions, as specified by Title 8 of the California Code of Regulations (Section 5194) promulgated by the California Occupational Safety and Health Agency (Cal OSHA), are implemented.

A qualified hazardous materials specialist would be notified for an evaluation and the appropriate regulatory agency would be contacted. If deemed necessary by the appropriate agency, remediation would be undertaken in accordance with existing federal, State, and local regulations/requirements and guideline established for the treatment of hazardous substances. Work would cease in the contaminated area until the nature and extent of contamination have been established, and proper disposal or remediation has occurred. Any contaminated soils and/or groundwater encountered during construction would require proper disposal. This would likely require removal from the site and transportation to an EPA approved disposal facility by a Department of Transportation (DOT) certified hazardous waste transporter.

The designation of encountered contamination would be based on the chemicals present and chemical concentrations detected through laboratory analysis. Based on the analytical results, appropriate disposal of the material in accordance with EPA, Department of Toxic Substances Control, and Regional Water Quality Control Board guidelines would be implemented.

However, hazardous materials on-site in the SOIA Area or in the area of off-site improvements could still create an environmental or health hazard for later residents or occupants, if left in place. Thus, impacts would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.9-2: Hazardous Materials Identification and Remediation.

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require an environmental analysis, including an updated review of environmental risk databases, for the presence of potential hazardous materials. This evaluation should consider the SOIA Area and any off-site improvement areas, and if this assessment indicates the presence or likely presence of contamination, Phase I environmental site assessments and/or Phase II soil/groundwater testing and remediation shall be required before development. The sampling program developed as a part of the Phase II EA shall be conducted to determine the degree and location of contamination, if any, exists. If contamination is determined to exist in the SOIA Area or any off-site improvements, it will be fully remediated, by qualified personnel, in accordance with federal, State, and local regulations and guideline established for the treatment of hazardous substances. The designation of encountered contamination will be based on the chemicals present and chemical concentrations detected through laboratory analysis.

Based on the analytical results, appropriate disposal of the material in accordance with EPA, Department of Toxic Substances Control, and Regional Water Quality Control Board guidelines shall be implemented. Any land disturbance near potential hazardous sites should occur only after the remediation and clean-up of the existing site is complete.

Significance after Mitigation

With enforcement of the above mitigation measure and adherence to existing hazardous materials regulations, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts from any existing hazardous materials. The impact is considered **less than significant with mitigation incorporated.** Future projects proposed to the City of Elk Grove would require General Plan consistency findings and compliance with City policies and General Plan actions would further reduce potential impacts.

IMPACT 3.9-3 Upset and accident conditions. *Future development could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions at involving the release of hazardous materials into the environment. This impact would be* ***less than significant.***

Compliance with State, federal, and regional or local regulations would reduce the risk or severity of an accident. Specifically, federal regulations include RCRA, CERCLA, the Clean Air Act, EPRCA, OSHA, The Hazardous Materials Transportation Act of 1974, the Motor Carrier Safety Improvement Act of 1999, 40 CFR 263, and 49 CFR 171–180. State regulations include CCR Title 26, Chapter 6.95 of the California Health and Safety Code, Health and Safety Code 25507(a) and 19 CCR 2703, Cal/OSHA, CCR Title 19, Division 2, Chapter 4.5, California Fire Code and NFPA code, and the California Aboveground Petroleum Storage Act (CAPSA), adopted in chapter 6.67 of the California Health and Safety Code. Regional and local regulations include Hazardous Materials Division of the Sacramento County EMD, the Elk Grove General Plan, and Elk Grove Municipal Code—Section 23.60.030, "Hazardous Materials." To further reduce the effects of an industrial accident, the City of Elk Grove would implement its policies as outlined in the City General Plan Safety Element. These policies include coordination with the Governor's Office of Emergency Services, DTSC, the CHP, the Sacramento County Department of Environmental Health Services, the Cosumnes Community Services District (CCSD) fire department (referred to in the Safety Element as the "Elk Grove CSD"), and local law enforcement to prepare for hazardous-materials route planning and incident response. The City is also part of the CUPA for Sacramento County, which responds to incidents involving chemical releases. The City participated in preparation of the *County of Sacramento Emergency Operations Plan*; however, while this plan focuses on preparedness to respond to an event and potentially reduce the number of casualties and other secondary effects, it does not reduce the probability of the initial event. The probability of an event can be reduced only by internal safety procedures, structural measures, and effective intelligence and law enforcement.

Accidents at nearby industrial areas, including the Suburban Propane facility could result in an explosion, radiant heat, fire, shrapnel, and chemical exposure, including potential injuries and fatalities. To evaluate potential risks associated with Suburban Propane to future site users and uses within the SOIA Area, LAFCo used the City General Plan's Safety Element (City of Elk Grove 2015), which contains definitions of reasonably foreseeable events, permitted land uses, and maximum acceptable exposure criteria for uses adjacent to hazardous facilities. General Plan Policy SA-2 states that the City shall consider the hazards posed by reasonably foreseeable events and that potential hazardous physical effects of an event need not be considered if the occurrence of an event is not reasonably foreseeable. General Plan Policy SA-3 defines the probability of reasonably foreseeable for

different land uses (see Table 3.9-1, which reproduces City General Plan Table SA-A) and General Plan Policy SA-4 states that placing a land use not consistent with the criteria defining reasonably foreseeable events would be a significant adverse impact. The policy defines agriculture, light industrial, and industrial as allowed land uses in areas where the probability of an accident is between 10^{-4} and 10^{-5} (between 10 and 100 in one million), and commercial uses as allowed uses when the probability of accident is between 10^{-5} and 10^{-6} (between 1 and 10 in one million). Residential and institutional uses are allowed in areas where the probability of an incident is less than 10^{-6} (1 in one million).

Information about Suburban Propane is provided in detail in this EIR to promote public disclosure. Per CEQA, this is not considered an adverse physical environmental effect because it is an existing condition (i.e., predating initial consideration of the proposed project) unrelated to any of the CEQA significance thresholds for hazards and hazardous materials. In addition, ~~A~~as identified in the Quest 2000 study, the northeastern corner of the SOIA Area in falls within the 10^{-8} contour indicating a 1-in-one hundred million risk of fatality. This is below the City's threshold of "reasonably foreseeable" of 10^{-6} (General Plan Policy SA-3). ~~Although LAFCo will not necessarily use this very low chance of risk as a universal threshold when considering possible risks to the environment or public from accidents, for this project, t~~ The impact is considered **less than significant**.

Mitigation Measures

No mitigation measures are required.

IMPACT 3.9-4 **Interfere with emergency response or evacuation plan.** *Future development could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This impact is considered* ***potentially significant.***

In the event of an emergency that would require citizens to evacuate, including those citizens who live in the City of Elk Grove, Sacramento County would implement its emergency operations plan, evacuation plan, and mass care and shelter plan. Sacramento County and other area agencies, including the City of Elk Grove, have also prepared the *Sacramento County Local Hazard Mitigation Plan* (Sacramento County 2011a).

There are no hospitals or fire stations in the vicinity of the SOIA Area. Future streets included within SOIA Area will comply with the City's and CCSD Fire Department's design standards pertaining to emergency access.

Nearby roadways in the vicinity of the SOIA Area and off-site improvements, such as Kammerer Road, Bruceville Road, and SR 99, could be affected intermittently during construction of future development and off-site improvements, resulting in decreased emergency response times. Construction activities could result in temporary lane closures, increased truck traffic, and other roadway effects that could slow or stop emergency vehicles, temporarily increasing response times and impeding existing services. Potential reduction of emergency response services during construction of future development and the off-site improvements would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.9-4 Traffic Control Plans.

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall ~~impose a condition on all discretionary projects~~ require applicants to prepare and implement traffic control plans for construction activities that may affect road rights-of-way during construction of future development and off-site improvements. The traffic control plans shall be designed to avoid traffic-related hazards and maintain emergency access during construction phases. The traffic control plan will illustrate the location of the proposed work area; provide a diagram showing the location of areas where the public right-of-way would be closed or obstructed and the placement of traffic control devices necessary to perform the work; show the proposed phases of traffic control; and identify the time periods when traffic control would be in effect and the time periods when work would prohibit access to private property from a public right-of-way. The plan may be modified in order to eliminate or avoid traffic conditions that are hazardous to the safety of the public. Traffic control plans should be submitted to the City of Elk Grove, Sacramento County, and/or the California Department of Transportation, as appropriate, for review and approval before approval of improvement plans, where future construction may cause impacts on traffic.

Significance after Mitigation

Implementation of this mitigation measure would reduce the impact. With enforcement of the above mitigation measure, existing hazardous materials regulations, and City of Elk Grove policies and code requirements as conditions of approval, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. LAFCo would condition approval of future annexation on compliance with Mitigation Measure 3.9-4. The impact is **less than significant with mitigation**.

IMPACT 3.9-5 Risks from wildfires. *Future development would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact would be* ***less than significant****.*

The project does not propose development or land use change. However, for the purposes of analysis only in this EIR, it is assumed that development could occur in the future within the SOIA Area. It is possible that such future development could require removal of existing vegetation and could introduce roads, buildings, parking areas or structures, landscaping, and other features that would not be conducive to intense wildfires.

The SOIA Area is within an LRA where fire protection is provided by the nearby CCSD. In the event of a nearby grass fire or a fire within pastureland that adjacent to the SOIA Area, CCSD would respond (see Section 3.13, "Public Services and Recreation," for further discussion of the CCSD Fire Department facilities and response times). CAL FIRE has designated the areas as a non–very high fire hazard severity zone (CAL FIRE 2016), which is defined as an area not prone to intense, damaging wildfires. Therefore, future development within the SOIA Area would not be exposed to significant risks of wildfire. This impact would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

IMPACT 3.9-6 Hazardous emissions or handling of hazardous materials, substances, or waste within one-quarter mile of a school. *Future development could include the construction of schools. However, compliance with CDE school siting criteria ensures schools will not be located near hazardous material handlers and emitters. This impact would be* ***less than significant****.*

The closest schools are Elk Grove High School and Elizabeth Pinkerton Middle School are located approximately 1.9 and 1.5 miles away, respectively. However, it is possible that, if development is proposed within the SOIA Ara in the future, such development could include the construction of schools or could generate population growth so that new schools are required.

However, future schools would be required to comply with CDE school siting criteria as defined in California Education Code Section 17251[b], 5 CCR Section 14001[c]. These requirements are outlined in the *School Site Selection and Approval Guide* and relate to siting school facilities in the proximity to airports, railroads, and major roadways; near or on suspected hazardous materials sites; or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste and identifies requirements for conducting an environmental site investigation to determine the health and safety risks (if any) associated with a new school site (see "California Department of Education School Site Selection and Approval Guide" under "Regulatory Framework"). There are no on-site high-voltage power transmission lines, and the project is not located in proximity to any airports or railroads or near or on any known or suspected hazardous materials sites. The SOIA Area is more than one-quarter mile from any handlers of hazardous or acutely hazardous materials, substances, or wastes. An analysis of conformity of future proposed school sites with the CDE School Siting Criteria would be the subject of further, separate environmental review that would be conducted by the Elk Grove Unified School District.

In addition, future development, within the SOIA Area or for off-site improvements, would be required to implement and comply with existing hazardous material regulations associated with the routine use, transport, and disposal of hazardous materials and each of these regulations is specifically designed to protect the public health (see Impact 4.9-1, above). Thus, future development, which could include or require the construction of a school, would not locate a school within one-quarter mile of hazardous emissions, or handling of hazardous materials, substances, or wastes. This impact would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

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3.10 HYDROLOGY AND WATER QUALITY

3.10.1 ENVIRONMENTAL SETTING

REGIONAL HYDROLOGY

The SOIA Area is located on the boundary of the Sacramento River Basin and San Joaquin River Basin.

The Sacramento River Basin has an area of approximately 27,200 square miles in land area. The region includes all or large portions of Modoc, Siskiyou, Lassen, Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra, Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa counties, along with small areas of Alpine and Amador counties. Geographically, the region extends south from the Modoc Plateau and Cascade Range at the Oregon border, to the Sacramento-San Joaquin Delta. The Sacramento River converges with the San Joaquin and Mokelumne Rivers at the delta in the southwest portion of the Sacramento County (DWR 2003). Seven large dams are operated in the Sacramento River Basin for purposes of water supply, irrigation, recreation, flood control, and/or hydroelectricity.

The San Joaquin River Basin is south of the Sacramento River Basin and has the Coast Ranges, Sierra Nevada, and the Tulare Basin as its western, eastern, and southern borders, respectively. The basin is approximately 31,500 square miles in land area. The Cosumnes River and its tributary Deer Creek are the closest streams to the SOIA Area. Unlike most rivers the Cosumnes River is not dammed. Currently, the river channel is confined to a single channel isolated from the historical floodplain by levees. The levees were fortified to protect development from flooding (Booth et. al 2006).

LOCALIZED DRAINAGES

The SOIA Area is located in Drainage Shed C, as identified by the City of Elk Grove's Storm Drainage Master Plan. The drainage shed is nearly 7,900 acres with an average slope of 0.10 percent from east to west (City of Elk Grove 2011). Drainage Shed C and All watersheds within the city except for Deer Creek and Grant Line Channel ultimately drain into the Stone Lakes National Wildlife Refuge. Deer Creek and Grant Line channel ultimately drain to the Cosumnes and Mokelumne Rivers, respectively (City of Elk Grove 2012).

Within the SOIA Area, runoff is directed into a series of highly maintained agricultural ditches that generally follow field boundaries. Irrigation to the vineyards is from an old SR 99 borrow pit modified as a storm/irrigation runoff holding facility that is fully maintained on the most easterly parcel of the proposed SOIA Area.

WATER CONSUMPTION

The SOIA Area is in active agricultural and has been leveled to facilitate commercial farming. The SOIA Area is currently used for dry farming and irrigated croplands, as well as vineyard operations. Though water consumption rates specifically in the SOIA Area are unavailable, an estimate can be made based on the crops grown at the site. Based on California crop information and estimated amount of water applied to each crop type, the SOIA Area is estimated to use over 597 million gallons of water a year (Table 3.10-1).

Table 3.10-1. Estimate of Crop Water Usage within the SOIA Area				
	Average Annual Water Use per Acre		Estimated Acres within SOIA Area	Total Annual Water Usage
Crop Type	Acre-Feet	Gallons		
Alfalfa	5.0	1,629,257	46.9	76,412,153
Hay Grass	1.4	456,192	626.0	285,576,192
Vineyard	1.9	619,118	380.3	235,450,575
Non-Crop uses (canal, developed, ditch, fallow, pond)	N/A	N/A	99.97	N/A
Total	**8.3**	**2,704,567**	**1,153.17**	**597,438,921**

Source: Average Annual Water Use per Acre from Johnson and Cody 2015. Crop acreages and Total Annual Water Usage estimated by AECOM 2016.

Notes: Average acre-feet applied per acre values used from Johnson and Cody 2015. For Hay Grass, the value for Grains was used. For Vineyard, the value for Vines was used.

SURFACE WATER RESOURCES AND QUALITY

The SOIA Area does not contain any undisturbed natural stream corridors. The surface water resources nearest to the SOIA Area are Deer Creek and the Cosumnes River, which are both approximately 0.5 miles from the SOIA Area. The sources of the water for these streams are precipitation and snowmelt from the Sierra Nevada mountain range. Both streams are listed as impaired water bodies on the California Clean Water Act Section 303(d). The Cosumnes River is listed for Escherichia coli (E. coli) and invasive species from unknown sources, and sediment toxicology from agricultural uses. Deer Creek is listed for iron from an unknown source (Central Valley Regional Water Quality Control Board 2010). As described in the *City of Elk Grove General Plan Background Report*, agricultural regions around Elk Grove typically have residual levels of agricultural chemicals, primarily pesticides and herbicides applied to irrigated row crops in the early to mid-20th century before they were banned (City of Elk Grove 2003). Thus, there is a likelihood of the presence of pesticides and herbicides in the soil, including within the SOIA Area, and therefore could be contained within the runoff from the SOIA Area.

NON-POINT SOURCE POLLUTION SOURCES

Non-point source pollution is pollution that cannot be tied to a discernable, confined, and discrete conveyance such as a pipe (EPA 2016a). Agricultural activities that can cause non-point source pollution include grazing, plowing, irrigation, and the application of pesticides and fertilizers. Agricultural non-point source pollution is the leading source of water quality impacts on surveyed rivers and streams, according to the National Water Quality Assessment (EPA 2016b). The primary agricultural pollutants are nutrients, sediment, animal wastes, salts, and pesticides.

GROUNDWATER RESOURCES AND QUALITY

The Sacramento Valley Groundwater Basin is the major groundwater basin in the Sacramento River hydrologic region. There are 18 groundwater subbasins. The SOIA Area is located within Groundwater Basin 5-21.65 Sacramento Valley, South American subbasin (identified locally as the Central Basin). This subbasin encompasses the area bounded on the north by the American River, on the south by the Cosumnes and Mokelumne rivers, on the west by the Sacramento River, and on the east by the Sierra Nevada mountain range. The Central Basin contains a shallow aquifer zone and a deeper aquifer zone separated by a semi-confining discontinuous clay layer. The shallow aquifer extends 200 to 300 feet below the ground surface, while the base of

the deep aquifer is approximately 1,400 feet below ground surface. Both the shallow and deeper aquifer zones provide the groundwater used in the Central Basin. The active river and stream channels where extensive sand and gravel deposits exist, particularly along the American, Cosumnes, and Sacramento River channels, recharge the aquifer system (Sacramento Central Groundwater Authority 2012). The SOIA Area is approximately ½ mile from Deer Creek and the Cosumnes River, the areas adjacent to which are considered to have medium groundwater recharge capability. The SOIA Area itself is considered to have poor groundwater recharge capability (County of Sacramento Not Dated).

Sacramento Central Groundwater Authority monitoring data shows that groundwater elevations generally declined by approximately 20 to 30 feet consistently until about 1980. Water levels recovered by about 10 feet from 1980 through 1983, and remained stable until the beginning of the 1987–1992 drought, where until 1995, water levels declined by about 15 feet. Most water levels recovered between 1995 and 2003 generally to levels higher than prior to the 1987–1992 drought. According to the Sacramento Central Groundwater Authority, "much of this recovery can be attributed to the increased use of surface water in the Central Basin, and the fallowing of previously irrigated agricultural lands transitioning into new urban development areas in accordance with the Sacramento County and City of Elk Grove General Plans" (Sacramento Central Groundwater Authority 2012).

The Sacramento Central Groundwater Authority's *South American Subbasin Alternative Submittal* (Sacramento Central Groundwater Authority 2016) (Alternative Submittal) analyzed the change in groundwater storage in the Central Basin from 2005 to 2015. The difference in total annual average change in storage over the 2005 to 2015 timeframe is calculated to be approximately 4,000 acre-feet per year (afy). In terms of order of magnitude, this equates to four to five large municipal wells in the subbasin, and is representative of a basin in equilibrium where natural recharge from deep percolation, hydraulically connected rivers, and boundary subsurface inflows are keeping up with active pumping and changes in hydrology. Over the 10-year period, the basin continues to recover at its deepest points and management is now focused on working with outside agencies to keep water from leaving the basin, and improving basin conditions where and when possible, in accordance with the Central Sacramento County Groundwater Management Plan (Central Sacramento County GMP) (Sacramento Central Groundwater Authority 2016).

Groundwater storage in the recharge area underlying Elk Grove and surrounding areas is continuing to increase as a result of recharge from the construction of large conjunctive use and surface water infrastructure facilities, increased use of recycled water, and water conservation. The increase in storage in this portion of the subbasin has filled the long-term cone of depression and has eroded the ridge of higher groundwater separating it from the Cosumnes Subbasin (Sacramento Central Groundwater Authority 2016). Land subsidence, which can occur from over-pumping groundwater, has not been documented in the SOIA Area (DWR 2016a).

Groundwater quality is dependent on the geologic material of the aquifer and anthropogenic activities. The land within the SOIA Area is used for agricultural purposes and, therefore, contributes to the groundwater quality and recharge potential in the area. Non-point source pollution from agricultural is common. According to GeoTracker, the State Water Resources Control Board's (SWRCB) data management system for sites that impact groundwater or have the potential to impact groundwater, a well in the SOIA Area has previously tested positive for barium, iron, and manganese (State Water Resources Control Board 2016).

GROUNDWATER EXTRACTION AND SUSTAINABLE YIELD

The Water Forum Agreement set the long-term average annual extraction of groundwater (i.e., sustainable yield) from the Central Basin at 273,000 afy. As shown in Table 3.10-2, groundwater extraction has been within the Water Forum Agreement's sustainable yield from 2005 to 2015. The least amount of groundwater extraction over this period occurred in 2011 (202,324 afy) and the most occurred in 2008 (260,200 afy). The average groundwater extraction during the drought years (2011–2015) was approximately 219,000 afy (Sacramento Central Groundwater Authority 2016) (Table 3.10-2).

Table 3.10-2 Central Basin Groundwater Extraction, 2005-2015

Water User	Groundwater Extraction (afy)										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015[2]
Urban	78,070	80,277	79,780	84,498	81,287	73,680	68,679	66,478	64,547	54,610	54,111
Agriculture[1]	167,062	166,148	165,234	164,320	163,406	162,494	116,500	134,600	152,400	133,900	140,000
Rural	7,852	7,946	8,041	8,136	8,231	8,326	17,200	23,400	22,900	23,100	23,000
Total	**252,984**	**254,321**	**253,055**	**256,954**	**252,924**	**244,498**	**202,379**	**224,478**	**239,847**	**211,610**	**217,111**

Notes: afy = acre-feet per year.

[1] Improved agricultural water supply requirement estimates using State DWR's IWFM Demand Calculator occurred in 2011.

[2] Agriculture and Rural extractions for calendar year 2015 were not available and is based on the nominal average of previous 3 years.

Source: Sacramento Central Groundwater Authority 2016

FLOODING AND FLOOD CONTROL

Sacramento Valley has had a history of flooding until the development of flood control systems in the area. The Cosumnes River and its tributary, Deer Creek, are the closest streams to the SOIA Area. Unlike other rivers in the Sacramento Valley, the Consumes River does not have a major dam for flood control (Booth et. al 2006). The SOIA Area is outside of regional (Cosumnes River) and local 100-year floodplains (Exhibit 3.10-1). The City of Elk Grove has amended its General Plan and zoning regulations to address flooding within a 1-in-200 chance of occurring in any given year. As noted in the City's 200-year floodplain map, the SOIA Area is outside the limit of the 200-year floodplain model and therefore the 200-year floodplain area is undetermined within the SOIA Area (City of Elk Grove 2016a).



Source: FEMA 2012, Sacramento County 2014 adapted by AECOM in 2016

Exhibit 3.10-1 **100-Year Flood Zone**

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3.10.2 REGULATORY FRAMEWORK

FEDERAL

Clean Water Act

Section 303 of the 1972 Clean Water Act (CWA) requires states to adopt water quality Standards for all surface waters of the United States. Standards are based on the designated beneficial use(s) of the surface water body. In situations where multiple beneficial uses exist, the water quality standards that protect the most sensitive use are applied. The water quality standards are commonly numeric. When numerical standards cannot be applied, narrative criteria based on biomonitoring methods is used.

Section 402 of the CWA requires that certain types of construction activity comply with the regulations of the National Pollutant Discharge Elimination System (NPDES) stormwater program. The Phase II rule, issued in 1999, requires that construction activities that disturb land equal to or greater than one acre require permitting under the NPDES. In California, permitting occurs under the General Permit for Stormwater Discharges Associated with Construction Activity, issued to the SWRCB, implemented, and enforced by the nine Regional Water Quality Control Boards (RWQCBs). Effective February 14, 2011, all dischargers whose project includes clearing, grading, or stockpiling activities expected to disturb 1 or more acres of soil are required to obtain compliance under the NPDES Construction General Permit Order 2009-0009-DWQ and 2010-0014-DWQ, which amends Order Number 2009-0009-DWQ.

This General Permit requires all dischargers, where construction activity disturbs one or more acres, to take the following measures:

- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to include a site map(s) of existing and proposed building and roadway footprints, drainage patterns, stormwater collection and discharge points, and pre- and post-project topography.
- Describe types and placement of Best Management Practices (BMPs) in the SWPPP that will be used to protect stormwater quality.
- Provide a visual and chemical (if non-visible pollutants are expected) monitoring program for implementation upon BMP failure; and
- Provide a sediment monitoring plan if the area discharges directly to a water body listed on the 303(d) list for sediment.

To obtain coverage, the landowner must file a Notice of Intent (NOI) with the SWRCB. The notice is required to include the information listed above. When project construction is completed, the landowner must file a notice of termination.

The law requires that a permit (Section 404) be obtained from the United States Army Corps of Engineers (USACE) for any dredge or fill materials into wetlands or waters of the United States.

Floodplain Regulations

Executive Order 11988 for Floodplain Management (May 24, 1977) directs all federal agencies to evaluate potential effects of any actions it may take in the floodplain and to avoid all adverse impacts associated with modifications to floodplains. It also directs federal agencies to avoid floodplain development whenever there is a practicable alternative and to restore and preserve the natural and beneficial values served by the floodplains.

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) oversees floodplains and administers the National Flood Insurance Program adopted under the National Flood Insurance Act of 1968. The program makes federally subsidized flood insurance available to property owners within communities that participate in the program. Areas of special flood hazard (those subject to inundation by a 100-year flood) are identified by FEMA through regulatory flood maps titled Flood Insurance Rate Maps. The National Flood Insurance Program mandates that development cannot occur within the regulatory floodplain (typically the 100-year floodplain) if that development results in an increase of more than 1 foot in flood elevation. In addition, development is not allowed in delineated floodways within the regulatory floodplain.

US Army Corps of Engineers

The USACE constructs and operates regional scale flood protection systems in cooperation with state and local agencies. The USACE is responsible for the Lower San Joaquin River Flood Control Project, built in the 1960s.

Reclamation and Levee Districts

Reclamation and levee districts are special districts responsible for reclaiming and/or maintaining land subject to frequent flooding via levee and dike systems within urban and rural areas. The USACE was responsible for constructing much of the levee system in the early- to mid-1900s, but then turned it over to the local reclamation and levee districts for maintenance. Reclamation and levee districts are responsible for preventing flooding within their jurisdiction by maintaining levees and related facilities such as pump stations. Reclamation and levee districts are authorized to operate through the California Department of Water Resources (DWR) and USACE.

STATE

The Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 authorized the SWRCB to provide comprehensive protection for California's waters through water allocation and water quality protection. The SWRCB implements the requirement of the Clean Water Act Section 303, indicating that water quality standards have to be set for certain waters by adopting water quality control plans under the Porter-Cologne Act.

The Porter-Cologne Act established the responsibilities and authorities of the nine RWQCBs, which include preparing water quality plans for areas in the region, identifying water quality objectives, and issuing NPDES permits and Waste Discharge Requirements (WDRs). Water quality objectives are defined as limits or levels of water quality constituents and characteristics established for reasonable\protection of beneficial uses or prevention of nuisance. The Porter-Cologne Act was later amended to provide the authority delegated from the U.S. Environmental Protection Agency (U.S. EPA) to issue NPDES permits.

Water Quality Control Plan for the Sacramento-San Joaquin River Basins

Sacramento County is within the jurisdiction of the Central Valley RWQCB, which is responsible for the preparation and implementation of the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan), adopted in 1998. The last adopted revision occurred in April 2016 (Central Valley RWQCB 2016). The Basin Plan identifies the beneficial uses of water bodies and provides water quality objectives and standards for waters of the Sacramento River and San Joaquin River hydrologic regions, which includes waters within the County.

The Basin Plan contains specific narrative and numeric water quality objectives for a number of physical properties (e.g., temperature, dissolved oxygen, turbidity and suspended solids), biological constituents (e.g., coliform bacteria), and chemical constituents of concern, including inorganic parameters and trace metals and organic compounds. Water quality objectives for toxic priority pollutants (i.e., select trace metals and synthetic organic compounds) are included in the Basin Plan and the California Toxics Rule, described below.

Title 22 Standards

California's drinking water quality standards are contained in Title 22 of the California Code of Regulations (CCR). Water quality standards are enforceable limits composed of two parts:

- the designated beneficial uses of water, and
- criteria (i.e., numeric or narrative limits) to protect those beneficial uses.

Municipal and domestic supply (MUN) is among the "beneficial uses" defined in CCR Section 13050(f) of the Porter-Cologne Act as uses of surface water and groundwater that must be protected against water quality degradation. MCLs drinking water standards have been adopted by the California Department of Health Services (now California Department of Public Health) pursuant to the California Safe Drinking Water Act (Title 22 of the CCR, Division 4, Chapter 15, Domestic Water Quality and Monitoring). Primary water quality objectives were established for protection of health. Secondary water quality objectives were established for aesthetic concerns (e.g., taste and odor, staining of laundry and porcelain fixtures), and at elevated levels do not pose a health hazard.

Drinking water MCLs directly apply to water supply systems "at the tap" (i.e., at the point of use by consumers in, for example, their home and office), and are enforceable by the State. California MCLs, both primary and secondary, directly apply to groundwater and surface water resources when they are specifically referenced as water quality objectives in the pertinent basin plan. In such cases, MCLs become enforceable limits by the SWRCB and RWQCBs. When fully health protective, MCLs may also be used to interpret narrative water quality objectives prohibiting toxicity to humans in water designated as a source of drinking water (MUN) in the Basin Plan.

California State Anti-degradation Policy

The SWRCB adopted a non-degradation policy aimed at maintaining high quality for waters in California. The non-degradation policy states that the disposal of wastes into state waters shall be regulated to achieve the highest water quality consistent with maximum benefit to the people of the state and to promote the peace, health, safety, and welfare of the people of the state. The policy provides, as follows:

- Where the existing quality of water is better than required under existing water quality control plans, such quality would be maintained until it has been demonstrated that any change would be consistent with maximum benefit to the people of the state and would not unreasonably affect present and anticipated beneficial uses of such water.

- Any activity which produces waste or increases the volume or concentration of waste and which discharges to existing high-quality waters would be required to meet waste discharge requirements, which would ensure (1) pollution or nuisance would not occur and (2) the highest water quality consistent with the maximum benefit to the people of the state would be maintained.

Section 303(d) of the CWA requires that the SWRCB identify surface water bodies within California that do not meet established water quality standards. Once identified, the affected water body is included in the SWRCB's "303(d) Listing of Impaired Water Bodies," and a comprehensive program must then be developed to limit the amount of pollutant discharges into that water body. This program includes the establishment of "total maximum daily loads" (TMDL) for pollutant discharges into the designated water body. The most recent 303(d) listing for California was approved by the EPA in 2006.

California Toxics Rule and State Implementation Plan

The California Toxics Rule (CTR) was presented in 2000 in response to requirements of the EPA National Toxics Rule and establishes numeric water quality criteria for approximately 130 priority pollutant trace metals and organic compounds. The CTR criteria are regulatory criteria adopted for inland surface waters, enclosed bays, and estuaries in California that are on the CWA Section 303(c) listing for contaminants. The CTR includes criteria for the protection of aquatic life and human health.

Human health criteria (water and organism based) apply to all waters with a Municipal and Domestic Water Supply Beneficial Use designation as indicated in the basin plans. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, also known as the State Implementation Plan (SIP), was adopted by SWRCB in 2000. It establishes provisions for translating CTR criteria, National Toxics Rule criteria, and basin plan water quality objectives for toxic pollutants into:

- NPDES permit effluent limits;
- effluent compliance determinations;
- monitoring for 2,3,7,8-TCDD (dioxin) and its toxic equivalents;
- chronic (long-term) toxicity control provisions;
- site-specific water quality objectives; and
- granting of effluent compliance exceptions.

The goal of the SIP is to establish a standardized approach for permitting discharges of toxic effluents to inland surface waters, enclosed bays, and estuaries throughout the state.

National Pollutant Discharge Elimination System Permit System and Waste Discharge Requirements

Under CWA section 402, the SWRCB and Central Valley RWQCB have adopted specific NPDES permits for a variety of activities that have potential to discharge wastes to waters of the state. The NPDES permits all involve similar processes including submittal of Notices of Intent (NOI) to discharge to the Central Valley RWQCB and

implementation of best management practices (BMPs) to minimize those discharges. The Central Valley RWQCB may also issue site-specific WDRs, or waivers to WDRs, for certain waste discharges to land or waters of the state.

National Pollutant Discharge Elimination System Permit System and Waste Discharge Requirements for Construction

The latest SWRCB General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-Division of Water Quality [DWQ]) – the Construction General Permit is applicable to all land-disturbing construction activities that would affect 1 acre of land area or more.

Construction activities subject to the Construction General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters. The permit also requires dischargers to consider the use of post-construction permanent BMPs that will remain in service to protect water quality throughout the life of the project. Types of BMPs include source controls, treatment controls, and site planning measures.

Activities subject to the NPDES General Permit for construction activity must develop and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP includes a site map and description of construction activities and identifies the BMPs that will be employed to prevent soil erosion and discharge of other construction-related pollutants, such as petroleum products, solvents, paints, and cement that could contaminate nearby water resources. A monitoring program is generally required to ensure that BMPs are implemented according to the SWPPP and are effective at controlling discharges of stormwater related pollutants.

The Construction General Permit became effective on July 1, 2010 and includes the following requirements:

- Risk-Based Permitting Approach: the amended General Permit establishes three levels of risk possible for a construction site. Risk is calculated in two parts: (1) Project Sediment Risk, and (2) Receiving Water Risk.

- Rainfall Erosivity Waiver: the amended General Permit includes the option allowing a small construction site (>1 and <5 acres) to self-certify if the rainfall erosivity value (R value) for their project's given location and time frame calculates to be less than or equal to 5 (the variable "R" in the EPA's Revised Universal Soil Loss Equation). Dischargers can access an online rainfall erosivity calculator from EPA's website.

- Technology-Based Numeric Action Levels (NAL): the amended General Permit includes NALs for pH and turbidity.

- Technology-Based Numeric Effluent Limitations (NEL): the amended General Permit contains daily average NELs for pH during any construction phase where there is a high risk of pH discharge and daily average NELs turbidity for all discharges in Risk Level 3. The daily average NEL for turbidity is set at 500 NTU (Nephelometric Turbidity Units) to represent the minimum technology that sites need to employ (to meet the traditional Best Available Technology Economically Achievable (BAT)/Best Conventional Pollutant Control Technology (BCT) standard) and the traditional, numeric receiving water limitations for turbidity.

- Minimum Requirements Specified: the amended General Permit imposes more minimum BMPs and requirements that were previously only required as elements of the SWPPP or were suggested by guidance.

- Project Site Soil Characteristics Monitoring and Reporting: the amended General Permit provides the option for dischargers to monitor and report the soil characteristics at their project location. The primary purpose of this requirement is to provide better risk determination and eventually better program evaluation.

- Effluent Monitoring and Reporting: the amended General Permit requires effluent monitoring and reporting for pH and turbidity in stormwater discharges. The purpose of this monitoring is to determine compliance with the NELs and evaluate whether NALs included in this General Permit are exceeded.

- Receiving Water Monitoring and Reporting: the amended General Permit requires Risk Level 3 dischargers to monitor receiving waters and conduct bioassements, under certain conditions.

- Post-Construction Storm Water Performance Standards: the amended General Permit specifies runoff reduction requirements for all sites not covered by a Phase I or Phase II MS4 NPDES permit (Sacramento County and Elk Grove are covered under Phase I), to avoid, minimize and/or mitigate post-construction stormwater runoff impacts.

- Rain Event Action Plan: the amended General Permit requires certain sites to develop and implement a Rain Event Action Plan (REAP) that must be designed to protect all exposed portions of the site within 48 hours prior to any likely precipitation event.

- Annual Reporting: the amended General Permit requires all projects that are enrolled for more than one continuous three-month period to submit information and annually certify that their site is in compliance Draft Fact Sheet Construction General Permit -6- April 22, 2009 with these requirements. The primary purpose of this requirement is to provide information needed for overall program evaluation and pubic information.

- Certification/Training Requirements for Key Project Personnel: the amended General Permit requires that key personnel (e.g., SWPPP preparers, inspectors) have specific training or certifications to ensure their level of knowledge and skills are adequate to ensure their ability to design and evaluate project specifications that will comply with General Permit requirements.

- Linear Underground/Overhead Projects: the amended General Permit includes requirements for all Linear Underground/Overhead Projects (LUPs).

National Pollutant Discharge Elimination System Municipal Stormwater Permit Program

The SWRCB Municipal Storm Water Permitting Program regulates stormwater discharges from municipal separate storm sewer systems or MS4s. MS4 permits are issued in two phases. Under Phase I, which started in 1990, the RWQCBs have adopted NPDES stormwater permits for medium (serving between 100,000 and 250,000 people) and large (serving 250,000 people) municipalities. Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area.

Sacramento County submitted and received an MS4 permit under Phase I of the MS4 implementation (Order No. R5-2002-0206) for all unincorporated areas of the County. The MS4 Permit requires the County to develop programs to control pollutants in urban stormwater runoff and evaluate the impacts of such discharges on local receiving waters.

The City of Elk Grove became a joint participant with Sacramento County's NPDES. The permit allows the City to discharge urban runoff from MS4s in its municipal jurisdictions (Permit No. CAS082597). The permit requires that the City impose water quality and watershed protection measures for all development projects. The NPDES also requires a permit for every new construction project that implements the following measures:

- Eliminate or reduce non-stormwater discharges to stormwater systems and other waters of the nation;
- Develop and implement a stormwater pollution prevention plan (SWPPP); and
- Perform inspections of stormwater control structures and pollution prevention measures.

Senate Bill 318 – Urban Water Management Planning Act

Each urban water supplier in California is required to prepare an urban water management plan (UWMP) and update the plan on or before December 31 in years ending in 5 and 0, pursuant to California Water Code Sections 10610–10657, as last amended by Senate Bill (SB) 318 (Chapter 688, Statutes of 2004), the Urban Water Management Planning Act. SB 318 is the 18th amendment to the original bill requiring an UWMP, which was initially enacted in 1983. Water supply and demand is discussed in in Section 3.15 of this EIR, "Utilities and Service Systems."

Senate Bill 610

SB 610 (Chapter 643, Statues of 2001) became effective January 1, 2002. The purpose of SB 610 is to strengthen the process by which local agencies determine whether current and future water supplies are adequate and sufficient to meet current and future demand. SB 610 amended the California Public Resources Code to incorporate California Water Code requirements within the CEQA process. SB 610 also amended the California Water Code to broaden the types of information required to be included in an UWMP (California Water Code Section 10610 et seq.). Water supply and demand is discussed in Section 3.15 of this EIR, "Utilities and Service Systems."

Senate Bill 221

SB 221 (Chapter 642, Statues of 2001) requires a county or city to include as a condition of approval of any tentative map, parcel map, or development agreement for residential subdivisions of more than 500 units or a 10 percent increase for public systems with fewer than 5,000 connections that a "sufficient water supply" be available. Proof of a sufficient water supply must be based on a written verification from the public water system that would serve the development. To determine "sufficient water supply", the water supplier must consider:

- the availability of water supplies over a historical record of at least 20 years;
- the applicability of an urban water shortage contingency analysis;
- any reductions in water supply allocated to a specific water use sector pursuant to an adopted resolution or ordinance or contractual obligation on the part of the public water system; and
- the amount of water that the water supplier can reasonably rely on receiving from other water supply projects.

The written verification of a water supplier's ability or inability to provide sufficient water to a subdivision needs to be supported by substantial evidence, which may include the public water system's most recently adopted urban water management plan or other information relating to the sufficiency of the water supply. Water supply and demand is discussed in Section 3.15 of this EIR, "Utilities and Service Systems." Potential groundwater impacts associated with water supply is described below.

Recycled Wastewater Requirements

Wastewater recycling in California is regulated under Title 22, Division 4 of the CCR under the jurisdiction of the California Department of Public Health. The intent of these regulations is to ensure protection of public health associated with the use of recycled water. Title 22 regulations establish acceptable levels of constituents in recycled water for a range of uses and stipulate means for ensuring reliability in the production of recycled water.

Recycled water is commonly given non-potable uses and is an effective means of conserving water. The California Department of Public Health has jurisdiction over the distribution of recycled wastewater and the enforcement of Title 22 regulations. The RWQCB is responsible for issuing WDRs (including discharge prohibitions, monitoring, and reporting programs). The RWQCB is also responsible for reuse requirements associated with implementing wastewater reclamation projects. Title 17, Division 1 of the CCR establishes requirements for protection of potable water systems where potable water and recycled water could cross contaminate.

California Department of Water Resources

The California Department of Water Resources (DWR) is responsible for preparation of the California Water Plan, management of the State Water Project (SWP), regulation of dams, provision of flood protection, and other functions related to surface water and groundwater resources.

FloodSAFE California

FloodSAFE California is a program launched in 2006 by DWR to guide the development of regional flood management plans to better identify and address flood hazards and to improve integrated flood management systems statewide with an emphasis on the Central Valley.

Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova

In its seminal decision dealing with water supplies for long-term land use planning under CEQA, Vineyard Area *Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal. 4th 412, the California Supreme Court articulated the following requirements for an adequate water supply analysis under CEQA:

1. The EIR must contain information on planned long-term development in the area, and identify the competing water demands associated with such development. (Id. at p. 445.)

2. The EIR must demonstrate a reasonable likelihood of adequate long-term supply by showing "a rough balance between water supply and demand." Where, "[d]espite a full discussion, it is impossible to confidently determine that anticipated future water sources will be available, CEQA requires some discussion of possible replacement sources or alternatives to use of the anticipated water, and of the environmental consequences of

those contingencies." The estimate of demand must include not only the proposed project, but also other planned development in the area. (Id. at pp. 445-446.)

3. The EIR must address the environmental impacts of the water sources needed to serve the proposed development and must identify any mitigation measures needed to lessen or avoid any significant effects. To the extent the EIR relies upon water supply analyses prepared for other projects, the EIR must adhere to the rules governing tiering and incorporation by reference. Among other things, the EIR for the development project must incorporate and adopt the mitigation measures identified in the EIR that is being relied upon. (Id. at p. 446.)

4. Although an agency may rely on a provision calling for curtailing the later stages of development if water supplies do not materialize, the EIR must disclose or propose mitigation for "the environmental effects of such truncation." (Id. at p. 447.)

Sustainable Groundwater Management Act

In 2014, the California Legislature enacted a three-bill law (Assembly Bill-1739, Senate Bill [SB]-1168, and SB-1319), known as the Sustainable Groundwater Management Act (SGMA). The SGMA was created to provide a framework for the sustainable management of groundwater supplies. The SGMA is intended to empower local agencies to adopt groundwater management plans that are tailored to the resources and needs of their communities, such that sustainable management would provide a buffer against drought and climate change, and ensure reliable water supplies regardless of weather patterns. The SGMA is considered part of the statewide, comprehensive California Water Action Plan that includes water conservation, water recycling, expanded water storage, safe drinking water, and wetlands and watershed restoration. The SMGA protects existing surface water and groundwater rights and does not affect current drought response measures (Association of California Water Agencies [ACWA] 2014).

The SGMA requires that local agencies form a local groundwater sustainability agency within two years (i.e., by 2017). This process is not subject to LAFCo purview. Agencies located within high- or medium-priority basins must adopt groundwater sustainability plans within 5–7 years. The time frame for basins determined by DWR to be in a condition of "critical overdraft" is 5 years (i.e., by 2020). Local agencies will have 20 years to fully implement groundwater sustainability plans after the plans have been adopted. Intervention by the SWRCB would occur if a groundwater sustainability agency is not formed by the local agencies, and/or if a groundwater sustainability plan is not adopted or implemented.

The SGMA requires local agencies to develop and implement groundwater sustainability plans in high and medium priority groundwater basins throughout California. In 2014, DWR designated the South American groundwater subbasin as high priority (DWR 2014). However, the South American Subbasin is not included on DWR's list of critically overdrafted basins (DWR 2016~~c~~b). Local agencies must form groundwater sustainability agencies by 2017, then agencies in critically overdrafted basins must develop plans by 2020, while agencies in all other high and medium priority basins must prepare plans by 2022. Designation of a groundwater sustainability agency is not required until 2017, and groundwater sustainability plans are not required until 2020 at the earliest.

~~As of May 4, 2016, two Resource Conservation Districts have submitted notice to be the groundwater sustainability agency for the South American Subbasin (DWR 2016d).~~ The Sacramento Central Groundwater Authority is moving forward with SGMA compliance and submitted a notice of intent on July 21, 2016, to

become a Groundwater Sustainability Agency for its area within the South American Subbasin and exclusive status was granted for the majority of that area by DWR (Sacramento Central Groundwater Authority 2016).

The northern portions of the Omochumne-Hartnell Water District and the Sloughhouse Resource Conservation District overlap areas along the southern boundary of the South American Subbasin (DWR 2016c). Both water districts have submitted notices to be groundwater sustainability agencies. Resolution of overlap areas will occur in parallel with review of the South American Subbasin Alternative Submittal that is discussed further below.

Levee Flood Protection Zones

Water Code Section 9130 was passed in 2007 and required DWR to prepare Levee Flood Protection Zone maps that identified the areas where flood levels would be more than three feet deep if a levee were to fail. Several sources of information were used by DWR for these maps, including FEMA floodplain maps, FEMA Q3 data, USACE's 2002 Sacramento and San Joaquin River Basins Comprehensive Study, and local project-levee studies. DWR is updating the Levee Flood Protection Zone maps as needed based on new topography, hydrology, hydraulic models, and floodplain maps (DWR 2011).

The SOIA Area is not located within the Sacramento River Basin Levee Flood Protection Zone map (DWR 2011).

LOCAL

Sacramento LAFCo Policies, Standards, and Procedures

Sacramento LAFCo has developed standards and guidelines in its Plans, Policies, and Procedures Manual that aide in the implementation of the CKH Act. The following Sacramento LAFCo policies, standards, and procedures relate to hydrology and water quality.

Chapter IV, General Standard

- **Section F.** Application of the California Environmental Quality Act to Changes of Organization or Reorganization and Spheres of Influence.

  - **Standard F.4.** In preparing an Initial Study for the project subject to LAFCo review, the LAFCo will generally consider the project to have the potential to significantly affect the environment if one or more of the following situations exists:

    - If buildout of the project may result in the capacity of any public service or facility being exceeded or substantially affected. For the purposes of this provision, public facilities or services include, but are not limited to: sewage disposal, water service, flood control facilities, drainage facilities, law enforcement, fire protection, school, parks, libraries, gas and electric service, and solid waste disposal. A public service or facility shall be considered "substantially affected" if the additional demand generated by the project would result in the facility or service exceeding 110 percent of its design capacity, or 120 percent of the available capacity.

    - If the project has substantial growth-inducing potential because it would result in:

- providing or requiring flood control or other public facility which will protect the public safety so as to permit new development in an area substantially larger than the proposed project;
- providing any other public service or facility to a substantial area which could not grow without such service; and
- encouraging or fostering growth in a substantial area.

City of Elk Grove

The City of Elk Grove General Plan establishes goals and policies to guide both present and future development within the City's jurisdiction. The General Plan contains the following policies related directly or indirectly to hydrology and water quality.

- **Policy CAQ-1:** Reduce the amount of water used by residential and non-residential uses by encouraging water conservation.
  - **CAQ-1-Action 1:** Implement the City's Water Conservation Ordinance.
  - **CAQ-1-Action 2:** Actively encourage water conservation by both agricultural and urban water users.
  - **CAQ-1-Action 3:** Work with urban and agricultural water purveyors to establish long range conservation plans which set specific conservation objectives and utilize, to the extent possible, a common planning horizon, plan framework and estimating/ forecasting procedures.
  - **CAQ-1-Action 4:** Promote the use of drought-tolerant vegetation to minimize water consumption by providing information to developers and designers.
- **Policy CAQ-5:** Roads and structures shall be designed, built, and landscaped so as to minimize erosion during and after construction.
- **Policy CAQ-12:** The City shall seek to ensure that the quality of groundwater and surface water is protected to the extent possible.
  - **CAQ-12-Action 2:** Implement the City's NPDES permit on all public and private development projects and activities.
- **Policy CAQ-13:** Implement the City's NPDES permit through the review and approval of development projects and other activities regulated by the permit.
- **Policy CAQ-14:** The city shall seek to minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and use onsite infiltration of runoff in areas with appropriate soils where the infiltration of storm water would not pose a potential threat to groundwater quality.
- **Policy CAQ-16:** Future land uses that are anticipated to utilize hazardous materials or waste shall be required to provide adequate containment facilities to ensure that surface water and groundwater resources are

protected from accidental releases. This shall include double containment, levees to contain spills, and monitoring wells for underground storage tanks, as required by local, state and federal standards.

- **Policy CAQ-17:** The City recognizes the value of naturally vegetated stream corridors, commensurate with flood control and public acceptance, to assist in removal of pollutants, provide native and endangered species habitat and provide community amenities.

- **Policy CAQ-18:** Post-development peak storm water runoff discharge rates and velocities shall be designed to prevent or reduce downstream erosion, and to protect stream habitat.

- **Policy CAQ-19:** Encourage the retention of natural stream corridors, and the creation of natural stream channels where improvements to drainage capacity are required.

  - **CAQ-19-Action 1:** Re-vegetation using native plant species shall be encouraged; use of nonnative species shall be discouraged. Use of invasive species shall be prohibited.

  - **CAQ-19-Action 2:** The City shall permit stream channel realignment only:

    - When necessary to eliminate flood hazards, after alternatives to provide flood capacity while protecting the natural alignment have been shown to be infeasible; or

    - To protect and preserve natural features and vegetation which would otherwise be removed; or

    - If the existing channel has been significantly disrupted by agricultural improvements or other man-made changes.

  - **CAQ-19-Action 3:** The City shall require, to the maximum extent practical, retention of topographic diversity and variation when channels are realigned or modified, including:

    - "Self-sustaining" meander characteristics,

    - Berms,

    - Naturalized side slope, and

    - Varied channel bottom elevation, consistent with the characteristics of the watershed, public safety, and other site-specific considerations.

  - **CAQ-19-Action 4:** Where existing streams support riparian vegetation, evaluate options for constructing secondary flood control channels or other facilities for flood control and water quality purposes.

  - **CAQ-19-Action 5:** Channel lowering of existing natural streams shall occur only after consideration of alternatives (including surface drainage systems which do not require channel lowering) and only when it is necessary to accommodate the gravity drainage of storm runoff and/or accommodate floodflows under existing bridge structures.

- **CAQ-19-Action 6:** All storm drainage improvements on natural streams shall be designed where feasible to maintain water flows necessary to protect and enhance existing fish habitat, native riparian vegetation, water quality, and/or ground water recharge.

- **CAQ-19-Action 7:** Improvements in watercourses shall be designed for low maintenance, and to accommodate peak flows with vegetation (including mitigation plantings) in the channel. Channel modifications shall retain marsh and riparian vegetation whenever possible.

- **CO-19-Action 8:** Development design shall maximize the total floodplain frontage that is open to public view. Development adjacent to stream corridors shall be encouraged to provide a public street paralleling at least one side of the corridor with vertical curbs, gutters, foot path, street lighting, and post and cable barriers to prevent vehicular entry.

- **CAQ-19-Action 9:** Trails along stream corridors shall be located to minimize wildlife impacts and shall be restricted to non-motorized traffic.

- **CAQ-19-Action 10:** Except where approved by the City as part of the development of a public or private development project, no grading, clearing, tree cutting, debris disposal or any other similar action shall be allowed in stream corridors except for normal channel maintenance.

► **Policy SA-12:** The City opposes the construction of flood control facilities that would alter or reduce flows in the Cosumnes River and supports retention of the Cosumnes River floodplain in non-urban uses consistent with location in an area subject to flooding.

► **Policy SA-13:** The City shall require that all new projects not result in new or increased flooding impacts on adjoining parcels on upstream and downstream areas.

► **Policy SA-14:** The City shall give priority to the designation of appropriate land uses in areas subject to flooding to reduce risks to life and property. Construction of new flood control projects shall have a lower priority, unless land use controls (such as limiting new development in flood-prone areas) is not sufficient to acceptable levels.

► **Policy SA-15:** Development shall not be permitted on land subject to flooding during a 100-year event, based on the most recent floodplain mapping prepared by the Federal Emergency Management Agency (FEMA) or updated mapping acceptable to the City of Elk Grove. Potential development in areas subject to flooding may be clustered onto portions of a site which are not subject to flooding, consistent with other policies of this General Plan.

► **Policy SA-16:** A buildable area outside the 100-year floodplain must be present on every residential lot sufficient to accommodate a residence and associated structures. Fill may be placed to create a buildable area only if approved by the City and in accordance with all other applicable policies and regulations. The use of fill in the 100-year floodplain to create buildable area is strongly discouraged, and shall be subject to review to determine potential impacts on wildlife, habitat, and flooding on other parcels.

► **Policy SA-17:** Vehicular access to the buildable area of all parcels must be at or above the 10-year flood elevation.

- **Policy SA-18:** Creation of lots whose access will be inundated by flows resulting from a 10-year or greater storm shall not be allowed. Bridges or similar structures may be used to provide access over creeks or inundated areas, subject to applicable local, state, and federal regulations.

- **Policy SA-19:** Discourage the number of crossings of natural creeks in order to reduce potential flooding and access problems.

    - **SA-19-Action 1:** Lots or parcels which will contain two or more buildable areas on both sides of a creek or floodplain shall be discouraged.

- **Policy SA-20:** Parcels should not be created on which the presence of easements, floodplain, marsh or riparian habitat, or other features would leave insufficient land to build and operate structures. This policy shall not apply to open space lots specifically created for dedication to the City or another appropriate party for habitat protection, flood control, drainage, or wetland maintenance.

- **Policy SA-22:** New and modified bridge structures shall not cause an increase in water surface elevations of the 100-year floodplain exceeding one foot, unless analysis clearly indicates that the physical and/or economic use of upstream property will not be adversely affected.

- **Policy SA-23:** The City shall require all new urban development projects to incorporate runoff control measures to minimize peak flows of runoff and/or assist in financing or otherwise implementing Comprehensive Drainage Plans.

    - **SA-23-Action 1:** As part of the review of development projects, ensure that runoff control measures are planned and provided.

- **Policy SA-24:** Drainage facilities should be properly maintained to ensure their proper operation during storms.

- **Policy PF-6:** The City shall seek to protect the quality and quantity of groundwater resources, including those which serve households and businesses which rely on private wells.

Central Sacramento County Groundwater Management Plan

The Sacramento Central Groundwater Authority implements the *Central Sacramento County Groundwater Management Plan* (February 2006). The Central Sacramento County ~~Groundwater Management Plan (CSCGMP)~~ Central Sacramento County GMP represents an established framework for maintaining sustainable groundwater resources for the various users overlying the basin in Sacramento County between the American and Cosumnes Rivers (SCGA 2006). It includes specific goals, objectives, and an action plan to provide a "road map" for the governance body as the steps necessary to manage the basin are taken in coordination with various stakeholders. The ~~CSCGMP~~ Central Sacramento County GMP is intended to be adaptive to changing conditions within the groundwater basin and is updated and refined as needed to reflect progress made in achieving the ~~CSCGMP's~~ Central Sacramento County GMP's objectives. A goal of the ~~CSCGMP~~ Central Sacramento County GMP is to ensure a viable groundwater resource for beneficial uses, including water for purveyors, agricultural, agricultural residential, industrial, and municipal supplies while maintaining and enhancing flows in the Cosumnes River. It is used as a tool to help ensure a long-term reliable water supply for rural domestic, agricultural, urban,

business/industrial, environmental, and development uses in the region. The California Water Code requires that a groundwater management plan contain numerous technical provisions, which are briefly summarized as follows:

- An inventory of water supplies and a description of water uses within a given region. This information is summarized in a water balance showing overall water demands and available water supplies.
- Monitoring and management programs that ensure the Basin Management Objectives are being met.
- Description of stakeholder involvement and public information plan and programs for the groundwater basin.

The Central Sacramento County GMP includes the following Basin Management Objectives to help achieve groundwater basin goals:

- maintain the regional long-term average groundwater extraction rate at or below the sustainable yield of 273,000 afy established by the Water Forum,
- adhere to specific minimum groundwater elevations with a focus on the deepest point of the cone of depression,
- protect against any potential inelastic land surface subsidence,
- protect against any adverse impacts to surface water flows, and
- develop specific water quality objectives for several constituents of concern.

Sacramento Central Groundwater Authority Alternative Submittal

This process is not subject to LAFCo purview. SGMA established a process for local agencies to develop an Alternative in lieu of a groundwater sustainability plan, as long as the Alternative satisfies the objectives of SGMA via a similar level of groundwater management through the agencies' existing groundwater management plan, and/or by providing sufficient factual evidence demonstrating the subbasin has operated within its locally established sustainable yield for at least 10 years. According to the groundwater sustainability plan regulations, Alternatives will be evaluated by the same criteria that will be used to assess groundwater sustainability plans.

The Sacramento Central Groundwater Authority prepared and submitted a final draft of the Alternative Submittal to DWR on December 14, 2016. The Alternative Submittal provides the same level of detail as required in a groundwater sustainability plan and shows groundwater management would continue to occur consistent with the existing Central Sacramento County GMP. The Alternative Submittal demonstrates subbasin operations from 2005 to 2015 did not exceed the sustainable yield conditions set forth by the Water Forum Agreement of 273,000 afy (Table 3.10-2). If approved, the 273,000 afy sustainable yield set forth by the Water Forum Agreement will be incorporated into the Alternative Submittal, and this total will be the base year for measuring the long-term sustainability of groundwater in the subbasin. The Sacramento Central Groundwater Authority proposed that its Alternative Submittal be adopted in-lieu of a groundwater sustainability plan. DWR's timetable for approval and adoption of the Alternative Submittal is not known at this time.

City of Elk Grove Storm Drainage Master Plan

On December 14, 2011, the City Council certified an EIR and adopted a Mitigation Monitoring and Reporting Program for the City's Storm Drainage Master Plan. The plan provides a variety of drainage concepts for upgrading the existing storm drainage and flood control collection system. Volume II of the plan evaluates the performance level of the existing facilities, identifies performance deficiencies, identifies potential impacts of future development on existing facilities, and identifies existing and new facilities upgrades to serve buildout conditions (City of Elk Grove 2012).

3.10.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

The proposed project consists of altering the City of Elk Grove Sphere of Influence (SOI), the Sacramento Area Sewer District (SASD) SOI, and the Sacramento Regional County Sanitation District (SRCSD) SOI to include the project area. The proposed project itself does not include any development or construction, only alteration to the SOI boundaries. Therefore, the proposed project itself would not degrade water quality, alter drainage or groundwater, create runoff, or expose people or structures to flooding. Thus, the proposed project would not result in any significant impacts based on the thresholds of significance. However, alteration of the SOI boundaries would allow consideration of future development under the purview of the City of Elk Grove. Therefore, impacts are evaluated assuming that the entire SOIA Area could potentially be subject to development, using the land use scenario developed for the purposes of analysis (see Chapter 2 of this EIR for more detail).

THRESHOLDS OF SIGNIFICANCE

The proposed SOIA could have a significant impact related to hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;

- Place housing within a 100-year or 200-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year or 200-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Inundation by seiche, tsunami, or mudflow.

ISSUES NOT DISCUSSED FURTHER

- **Seiche, Tsunami, and Mudflow** – The SOIA Area is located in an area not subject to seiche or tsunami, and the area topography is relatively level and not subject to mudflow. Therefore these issues are not discussed further in this EIR.

IMPACT ANALYSIS

IMPACT 3.10-1 Degradation/violation of water quality standards. *Future development within the SOIA Area and installation of possible off-site infrastructure improvements could result in degraded water quality and an increase in stormwater or wastewater discharge. This impact is considered* ***potentially significant.***

Storm drainage within this SOIA Area has historically been achieved as part of the various agricultural operations, flowing into agricultural ditches, which generally follow field boundaries. Though the project itself would not include any development or construction that would affect water quality or waste discharge requirements, approval of the SOIA would potentially allow for the SOIA Area to be developed, along with any off-site infrastructure improvements needed to support the development. As part of a future development, a stormwater drainage system would be required to collect and convey stormwater runoff from developed areas. Future stormwater drainage systems could include open channels and multi-use stormwater quality/detention facilities. The potential growth and urbanization of the SOIA Area and potential off-site infrastructure improvement areas could alter storm drainage pathways and add potential contaminant sources (i.e., oils, grease, etc.), which could have an impact on water quality. As noted previously, there is a likelihood of the presence of pesticides and herbicides in the soil, and therefore could be transported by the runoff from the SOIA Area and potential off-site infrastructure improvement areas.

If the SOIA Area and potential off-site infrastructure improvement areas are developed in the future, pollutants within the stormwater runoff would likely include hydrocarbons, grease, oil, and heavy metals from automobiles, detergents, coliform bacteria, and trash. Infiltration of stormwater runoff into the soil would also likely decrease due to an increase in impermeable surfaces. Stormwater volume would likely increase.

If the SOIA Area is developed in the future, it is likely the existing agricultural ditches would be replaced by other stormwater infrastructure. According to the City of Elk Grove's Storm Drainage Master Plan (2011), low impact development (LID) must be incorporated into future development projects in the City, based on the requirements of the City's NPDES stormwater permit. LID emphasizes the use of on-site natural features integrated with engineered hydrologic controls distributed throughout a watershed that promote infiltration, filtration, storage, and evaporation of runoff close to the source in order to manage stormwater (City of Elk Grove 2011).

The City of Elk Grove's Storm Drainage Master Plan recommends that all runoff from developed areas within Drainage Shed C should be directed into detention basins: "The detention basins, in conjunction with LID, will provide all the necessary stormwater quality treatment and flood flow mitigation for the developing areas within the watershed" (City of Elk Grove 2011, page 15-11).

The Storm Drainage Master Plan also states that the proposed mitigation measures for Shed C will effectively mitigate for the potential hydromodification impacts in the watershed and that modeling results indicate that the proposed drainage system including LID, detention, and channel improvements will adequately mitigate for potential flood flow increases downstream of the City. The modeling also shows that peak flood flows for the 10-year and 100-year storms are predicted to be reduced slightly (Table 15-14) (City of Elk Grove 2011).

Any future development would be required to submit stormwater drainage designs, including a comprehensive drainage study, consistent with the Storm Drainage Master Plan to the City of Elk Grove for approval (City of Elk Grove 2007a).

In addition, any future development within SOIA Area would have to adhere to City of Elk Grove NDPES permit requirements and City of Elk Grove Municipal Code requirements related to Stormwater Management and Discharge Control (Chapter 15.12). According to the City of Elk Grove's Improvement Standards Section 11 Stormwater Quality Protection, "developers meeting the project area disturbance threshold of one (1) acre or more of disturbed area shall obtain coverage under the SWRCB General Permit for Storm Water Discharges Associated with Construction Activity (Construction General Permit), prior to commencing construction activities…Projects smaller than one (1) acre of disturbed soil area shall prepare a Water Pollution Control Plan (WPCP)" (City of Elk Grove 2007b). Permit requirements include development and implementation of a SWPPP prior to disturbing a site. The SWPPP has to include a site-specific listing of the potential sources of stormwater pollution, anticipated stormwater discharge locations, BMPs for construction waste handling and disposal, and non-stormwater management, among other items (City of Elk Grove 2007b – Section 11).

Despite city requirements regarding stormwater, due to the potential for pesticides and herbicides to be present in the soil, the impact to water quality from these chemicals being transported in stormwater is considered **potentially significant.**

Mitigation Measures

Mitigation Measure 3.10-1: Implement Mitigation Measure 3.9-2

Significance after Mitigation

Implementation of Mitigation Measure 3.10-1 would reduce impacts associated with the potential presence of pesticides and herbicides at the site, by requiring review, testing, and remediation of potential hazardous materials in accordance with all local, State, and federal regulations. In addition, compliance with the City's requirements related to water quality and wastewater discharge, would ensure stormwater would be captured and treated as necessary according to the City's Storm Drainage Master Plan, NDPES permit, and Municipal Code requirements. The impact is **less than significant with mitigation**.

IMPACT 3.10-2 **Depletion of groundwater supplies.** *Future development within the SOIA Area could require additional drinking water that may be supplied via groundwater, resulting in a depletion of groundwater supplies. This impact is considered* ***significant.***

The SOIA Area is considered a poor groundwater recharge area. With detention basin and LID requirements described in Impact 3.10-1, above, and within the City's Storm Drainage Master Plan, development (and related increase in impervious surfaces) would not interfere substantially with groundwater recharge (County of Sacramento Not Dated).

Future development within the SOIA Area would increase demands for water supply. The SOIA Area is adjacent to the southwestern boundary of Sacramento County Water Agency's (SCWA's) Zone 40. Therefore, it is most likely that water service would be provided by SCWA (Exhibit 3.10-1). SCWA would need to annex the SOIA Area into its service area. The SOIA Area is not within SCWA's Zone 40 2030 Study Area and water supply demands to the SOIA Area were not accounted for in the Zone 41 Urban Water Management Plan (UWMP) or Zone 40 Water Supply Master Plan. The SCWA Zone 40 Water Supply Master Plan has developed water supply demand factors for the 2030 Study Area based on acreages of land uses. Based on California crop information and estimated amount of water applied to each crop type, the SOIA Area is estimate to use over 597 million gallons of water a year under current conditions (Table 3.10-1).

SCWA's Zone 40 water-demand factors were applied to the acreage for each land use designation that generates water use within the SOIA. As shown on Table 3.10-~~2~~ 3, the estimated water supply demand based on build-out of the conceptual land use scenario has been conservatively estimated as 3,233 afy.[1] If a recycled water program becomes available in the future, recycled water could be used for parks, landscape corridors, schools and open space areas.

Table 3.10-~~2~~ 3. Projected Water Demands for Build-Out of Future Development

Land Use Category	Unit Water Demand Factors (af/ac/yr)	Land Use (acres)	Water Demand (afy)
Single-Family	2.89	430	1,243
Multifamily—High Density	4.12	~~87~~90	~~358~~371
Commercial[1]	2.75	~~373~~380	~~1,026~~1,045
Industrial	2.71	~~125~~130	~~339~~352
Public Recreation[2]	3.46	~~141~~140	~~488~~484
Subtotal	**--**	**1,156**	**3,454~~3~~3,495**
Water System Losses (7.5%)	--	--	~~259~~262
Total Demand	**--**	**--**	**~~3,195~~3,233**

Notes: af/ac/yr = acre-feet per acre per year; afy = acre-feet per year.

[1] Future commercial and office development is included in the Commercial land use category.

[2] Future schools and parks/open space are included in the Public Recreation land use category.

Source: SCWA 2005:2-5

The majority of SCWA's water supply comes from groundwater wells (75 percent), with remaining supply met by surface water supplies from the American and Sacramento Rivers. SCWA pumps groundwater from the South

[1] This water supply demand does not reflect 2016 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requirements to reduce indoor demand for potable water by 20 percent and to reduce landscape water usage by 50 percent or water conservation measures that may be implemented by future development.

American Sub-basin of the Sacramento Valley Groundwater Basin. ~~Therefore, it is likely that if SCWA becomes the water supplier for the project area, a portion to all of the water supplied to the development could come from groundwater.~~ SCWA anticipates that, at buildout of its service area, and assuming that appropriative water and CVP contract water continue to be available, surface water will account for approximately 70 percent of water supplies during average and wet years and account for approximately 30 percent of water supplies in the driest years, thereby resulting in a long-term average of approximately 60 percent of water demands being met by surface water supplies (SCWA 2017).

The Zone 41 UWMP indicates that water supplies and demands within SCWA Zone 40 would be the same during normal, single-dry, and multiple-dry years; however, the year-to-year mix of surface and groundwater would be adjusted, as necessary, to meet the demands as part of its conjunctive use water supply program. As shown in Table 3.15-2, SCWA would have surface water and groundwater supplies that exceed demands within Zone 40 from 2010 to 2035 in all water years.

~~Extensive groundwater pumping in the region has resulted in groundwater depressions on either side of the Cosumnes River, which has hydraulically separated the river from the groundwater basin. In addition, groundwater pumping has dewatered important wetlands and habitat. Long-term groundwater pumping has resulted in groundwater levels up to 60 feet lower than surrounding areas.~~ The Sacramento Central Groundwater Authority has found that over the 10-year period (2005–2015), the Central Basin continues to recover at its deepest points and management is now focused on working with outside agencies to keep water from leaving the basin, and improving basin conditions where and when possible, in accordance with the Central Sacramento County GMP (Sacramento Central Groundwater Authority 2016).

Further, groundwater storage in the recharge area underlying Elk Grove and surrounding areas is continuing to increase as a result of increased use of surface water in the Central Basin, the fallowing of previously irrigated agricultural lands transitioning into new urban development, recharge from the construction of large conjunctive use and surface water infrastructure facilities, increased use of recycled water, and water conservation. The increase in storage in this portion of the subbasin has filled the long-term cone of depression and has eroded the ridge of higher groundwater separating it from the Cosumnes Subbasin (Sacramento Central Groundwater Authority 2016).

As a signatory to the Water Forum Agreement, SCWA is committed to adhering to the long-term average sustainable yield of the Central Basin (273,000 acre-feet) (SCWA 2011). As shown in Table 3.10-2, groundwater extraction has been within the Water Forum Agreement's sustainable yield from 2005 to 2015. It is currently not known if SCWA's existing water supplies would be adequate to meet the water demands of future development but SCWA has indicated that it is likely additional surface water and groundwater supplies will be procured to meet the water supply demands of the SOIA Area (SCWA 2017) (see Impact 3.15-1 in Section 3.15, "Utilities and Services Systems," for further discussion). It is unknown what effect additional groundwater pumping, if required, would have on the Central Basin. ~~When the Water Forum stakeholders negotiated this extraction volume for the basin, it was anticipated that this volume would result in a further decline in groundwater levels (approximately 50 feet in the deepest part of the cone of depression as measured in 1990). It was expected that such a decline would affect some existing domestic and agricultural wells. An update of the impact analysis from the Water Forum Agreement was recently completed. This update is based on groundwater model improvements and the Zone 40 Water Supply Master Plan. Results of this analysis show that the decline is not as severe as originally expected (Sacramento Regional County Sanitation District 2014). However, given the likelihood that at~~

~~least a portion of the water supply that may be provided to future development at the site could come from already greatly depleted groundwater,~~ Therefore, the impact is considered **significant**.

Mitigation Measures

Mitigation Measure 3.10-2~~a~~: Implement Mitigation Measure 3.15-1 ~~Mitigation Measure 3.10-2b: Assure Consistency with the Central Basin Groundwater Management Plan~~

~~At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require discretionary project to demonstrate consistency with the Central Basin Groundwater Management Plan.~~

Significance after Mitigation

As described in Mitigation Measure 3.10-2, prior to approval of any application to annex territory within the SOIA Area, the City of Elk Grove shall prepare a Plan for Services which shall demonstrate that SCWA water supplies are adequate to serve existing and planned development under normal, single dry, and multiple dry years as required by law. The Plan for Services required by Mitigation Measure 3.10-2 (also known as Mitigation Measure 3.15-1) shall demonstrate that the SCWA is a signatory to the Water Forum Agreement, that groundwater management would occur consistent with the Central Sacramento County Groundwater Management Plan, and that groundwater will be provided in a manner that ensures no overdraft will occur. The Plan for Services shall depict the locations and appropriate sizes of all on-site water system facilities to accommodate the amount of development identified for the annexation territory, demonstrate SCWA has annexed the territory into its service area, and demonstrate adequate SCWA off-site water facilities are available to accommodate the amount of development identified in the annexation territory or that fair share funding will be provided for the construction of new or expansion and/or improvement of existing off-site water system facilities.

~~As described in Mitigation Measure 3.10-2b, Elk Grove is required to include an assessment of existing and proposed groundwater uses and the City of Elk Grove is required to incorporate this data as necessary into monitoring and management programs that ensure the Central Basin Groundwater Management Plan Basin Management Objectives designed to protect and enhance the groundwater basin continue to be met. To ensure a sustainable resource, the plan may need to consider limitations on development or pursuit of additional surface water supplies, increased use of recycled water, and implementation of water conservation elements to ensure consistency with the Central Basin Groundwater Management Plan.~~

Implementation of Mitigation Measure 3.10-2~~a and Mitigation Measure 3.10-2b~~ would reduce significant impacts associated with groundwater use because the City of Elk Grove would demonstrate adequate SCWA water supplies to support the amount of development identified in the annexation territory. However, given the uncertainty of future potential land uses, LAFCo finds that it is not now possible to determine the effectiveness of mitigation with certainty. LAFCo would condition future annexation on compliance with Mitigation Measure 3.10-2~~a and Mitigation Measure 3.10-2b~~. However, neither LAFCo nor the City of Elk Grove would have control over SCWA's future water supply planning. There is no additional feasible mitigation. The impact is **significant and unavoidable**.

IMPACT 3.10-3 **Erosion, siltation, downstream flooding, or increased stormwater runoff volumes.** *Future development within the SOIA Area and potential installation of off-site infrastructure improvements could alter drainage patterns, increase stormwater runoff, and increase susceptibility to downstream flooding and/or erosion that is due to increased volumes or peak flows. This impact is considered* ***potentially significant.***

Future development within the SOIA Area and potential installation of off-site infrastructure improvements could alter drainage patterns, increase stormwater runoff, and increase susceptibility to downstream flooding and/or erosion that is due to increased volumes or peak flows.

Within the SOIA Area, runoff is currently directed into a series of highly maintained agricultural ditches that generally follow field boundaries. As mentioned above, the SOIA Area is located in Drainage Shed C as identified by the Storm Drainage Master Plan of the City of Elk Grove (Elk Grove 2012). Future development would likely result in existing agricultural ditches being replaced by other stormwater infrastructure thereby altering the drainage patterns at the site. These modifications would be required to be consistent with City of Elk Grove's Strom Drainage Master Plan requirements, as described under Impact 3.10-1, above.

As stated in Impact 3.10-1, future development and potential off-site infrastructure installation would likely decrease infiltration of stormwater runoff into the soil due to an increase in impervious surfaces. In addition, increased volumes of peak flows could result in new or increased flooding upstream and downstream on adjoining parcels. Therefore, this impact is considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.10-3: Prepare a Drainage Master Plan

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require ~~all discretionary projects~~ applicants to plan for drainage through preparation of a ~~to prepare a~~ Drainage Master Plan or update to an areawide or city drainage master plan. The Drainage Master Plan shall disclose where stormwater is designed to be released into waterway crossings at State Route 99 facilities. The Drainage Master Plan shall include a review, analysis, and disclosure of locations where channel capacity inadequacies lie; identify the capacities of bridges crossing State Route 99; and identify the need for additional bridge capacity, if necessary. City shall develop measures to minimize, avoid, reduce, or compensate for potential impacts to roadway facilities in consultation with the California Department of Transportation. The City shall provide proof of consultation with the California Department of Transportation to LAFCo. In addition, the Master Drainage Plan shall identify areas of potential impacts due to encroachments on channels, measures to provide improvements or maintenance where development in the SOIA Area would affect channels.

The Drainage Master Plan that demonstrates attainment of pre-project stormwater runoff rates and describe the volume reduction measures and treatment controls used to reach attainment. The Master Drainage Plan shall identify all expected flows from the project area and the location, size, and type of facilities used to retain and treat the runoff volumes and peak flows to meet pre-project conditions. The Master Drainage Plan shall also include the geotechnical report verifying groundwater elevation for the regional basins.

Significance after Mitigation

Implementation of Mitigation Measure 3.10-3 would require future project applicant to prepare and submit a drainage plan to the City of Elk Grove that demonstrates that off-site upstream runoff would be appropriately conveyed, that project-related on- and off-site runoff would be appropriately contained in detention basins or other drainage features to reduce flooding, and that proposed improvements meet requirements of City and County policies described above. Therefore, this impact is considered **less than significant.**

IMPACT 3.10-4 Structures or housing within flood hazard area. *Future development could place housing or structures within a flood hazard zone and could impede or redirect flood flows. This impact is considered less than significant.*

Although the SOIA Area is located outside of regional (Cosumnes River) and local 100-year floodplains (Exhibit 3.10-1), the SOIA Area may be partially within the 200-year floodplain for the Cosumnes River. As noted in the City's 200-year floodplain map, the SOIA Area is outside the limit of the 200-year floodplain model and therefore the 200-year floodplain area is undetermined within the project area (City of Elk Grove 2016a). However, based on the City's map, it is likely the eastern portion of the SOIA Area is within the 200-year floodplain.

Based on SB 5, which required the City of Elk Grove to amend its General Plan and Zoning regulations to address the 200-year floodplain, the City of Elk Grove amended Chapter 23.42.040 of the City's Municipal Code, Flood Combining District. Development in the 200-year floodplain is not allowed unless certain findings are made. Development in areas with flood depths less than three feet is exempt from the finding requirement, as allowed under SB 5 (City of Elk Grove 2016b). Therefore, any future development in the SOIA Area that is determined to be within the 200-year floodplain would have to meet City requirements to protect residents and development against flood damage. Thus, this impact is considered **less than significant.**

Mitigation Measures

No mitigation measures are required.

IMPACT 3.10-5 Loss, injury, or death from flooding. *Future development could expose people or structures to a risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. This impact is considered less than significant.*

Although the project does not propose development or any land use change, future development could occur as a result of the SOIA. The nearest dams are Folsom Dam and Sly Park Dam. The SOIA Area is located outside of the Folsom Dam inundation zone and just west of the inundation zone for the Sly Park Dam. There are no levees within or adjacent to the SOIA Area. Therefore, any future development within the SOIA Area would not expose people or structures to a risk of loss, injury or death from flooding as a result of the failure of a levee or dam.

As described in Impact 3.10-4, the SOIA Area is located outside the 100-year floodplain but may be partially within the 200-year floodplain, thereby potentially exposing people or structures to flooding. However, as described above, any future development in the SOIA Area that is within the 200-year floodplain would have to meet City requirements to protect residents and development against flood damage. Thus, this impact is considered **less than significant**.

Mitigation Measures

No mitigation measures are required.

3.11 LAND USE, POPULATION, HOUSING, EMPLOYMENT, ENVIRONMENTAL JUSTICE, AND UNINCORPORATED DISADVANTAGED COMMUNITIES

This section describes the existing land uses and potential effects associated with project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on review of the Sacramento LAFCo Policies, Standards, and Procedures Guidelines; Sacramento County General Plan; the Sacramento County Zoning Ordinance Code; the City of Elk Grove General Plan; and the SACOG Blueprint and the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (2016).

The relationship between the proposed SOIA and any habitat conservation plans or natural community conservation plans is discussed in Section 3.4, "Biological Resources."

This section documents the existing population, housing, and employment conditions in the city of Elk Grove and Sacramento County. The information and analysis contained in this section focuses on potential population growth, changes in the housing stock, and changes in employment resulting from the implementation of the proposed SOIA.

Finally, this section discusses the existing low-income and minority populations and disadvantaged unincorporated communities within and in the vicinity of the SOIA Area and potential disproportionate effects on these populations.

3.11.1 ENVIRONMENTAL SETTING

LAND USE

SOIA Area

The SOIA Area is located adjacent to the southern boundary of the Elk Grove City limits within an unincorporated area of Sacramento County, California. The SOIA Area currently consists of approximately 1,156 acres of agricultural land west of State Route 99, south of Kammerer Road and east of McMillan Road. The City of Elk Grove's Sphere of Influence (SOI) boundaries are currently coterminous with the City limits. ~~The SOIA Area is outside the area governed by the City's existing General Plan and zoning ordinance. The 2003 General Plan land use diagram designates the area for "future study."~~

The SOIA Area is part of the larger 3,675-acre area identified in the Elk Grove General Plan update as the South Study Area. The South Study Area is located to the south of the existing City limits and is bound by Kammerer Road on the north, State Route 99 on the east, Eschinger Road on the south, and Bruceville Road on the west. The planning objective for the South Study Area is to create a new major employment center that builds off of the proposed Southeast Policy Area's (SEPA's) business parks, comprising high-intensity office, industrial flex space, and light industrial uses (City of Elk Grove 2017a).

The General Plan update EIR NOP presents two land plan program scenarios for the South Study Area. Table 3.11-1 shows the General Plan Update's proposed land use designations for the South Study Area and a percent range of total acreage for each land use. In addition, Table 3.11-1 compares the applicant's proposed conceptual land use scenario for the SOIA Area and the percent of proposed acreage for each land use. As shown in Table

3.11-1, the conceptual land use plan's multi-family residential land uses (8 percent), commercial land uses (4 percent), schools (3 percent), and parks (10 percent) are generally in the range of both scenarios, while the percent of single-family residential land uses (37 percent) and industrial land uses (11 percent) exceed Scenario 1 but are within the range of Scenario 2. However, the percent of the SOIA Area potentially designated for office land uses (29 percent) exceeds the range of both scenarios.

Table 3.11-1. City of Elk Grove South Study Area Proposed General Plan Update Land Uses

Land Use Designation	Scenario 1 (Percent)	Scenario 2 (Percent)	SOIA Area (Percent)
Commercial and Employment			
Community Commercial Regional Commercial	1–5	2–10	4
Employment Center	5–10	15–25	29
Light Industrial	3–5	8–15	11
Mixed Use			
Village Center Mixed Use Residential Mixed Use	1–5	1–5	0
Public/Quasi-Public and Open Space			
Public Services	As need to support planned uses	As need to support planned uses	3
Parks, Open Space, and Resource Management	2–10 of total acreage, or as necessary to meet general siting criteria	2–10 of total acreage, or as necessary to meet general siting criteria	10
Residential			
Rural Residential Estate Residential Low Density Residential	25–30	25–40	37
Medium Density Residential High Density Residential	8-15 or higher if needed to comply with RHNA obligations	8-15 or higher if needed to comply with RHNA obligations	8
Other			
Agriculture	20–30	N/A	N/A

Notes: RHNA = Regional Housing Needs Allocation; N/A = not applicable.
Sources: City of Elk Grove 2017a

Surrounding Land Uses

Land uses surrounding the SOIA Area consist of residential, industrial, and commercial, open space, renewable energy generation, and agriculture.

At the northeastern corner of the SOIA Area and within the City limits, the proposed Lent Ranch Marketplace, or Lent Ranch, provides approximately 295 acres for regional retail, office, and entertainment uses (City of Elk Grove 2016a). Even further to the northeast are several commercial/industrial uses, including the Cosumnes CSD Fire Department. ~~Along the north edge of the SOIA Area, north of Kammerer Road, there are mainly agricultural lands with a few rural residences.~~ The recently approved 1,200-acre ~~Southeast Policy Area (~~SEPA~~)~~ lies directly to the north in the city of Elk Grove and currently consists of agricultural lands and rural residences. A small trucking company is also located north of the SOIA Area. ~~To the west of the SOIA Area are agricultural uses with~~

~~several rural residences.~~ South of the SOIA Area is Eschinger Road and an area developed with agricultural operations and solar energy generation facilities.

Future Land Uses in the Vicinity of the SOIA Area

As stated above, the SEPA is within the City limits. Approximately 4,800 dwelling units; 7.8 million square feet of commercial and light industrial development; and public services, including three elementary schools, are proposed in the SEPA (City of Elk Grove 2014).

The City's General Plan update EIR NOP identifies two areas outside of the existing City limits that are in vicinity of the SOIA Area: the East Study Area and the West Study Area (City of Elk Grove 2017a).

The East Study Area is located southeast of the existing City limits and northeast of the SOIA Area. It encompasses approximately 1,773 acres of land southeast of Grant Line Road and east of the Union Pacific Railroad. The Elk Grove Multi-Sports Complex is proposed for the western portion of the East Study Area and the proposal includes a multi-sports complex with associated sports fields and amphitheater.[1] Although no future development beyond the sports complex is proposed, future development could consist of commercial and industrial uses. In the central and northeastern portions of the East Study Area, uses transition to more residential in nature (City of Elk Grove 2017a). The General Plan update EIR NOP presents two land plan program scenarios for the East Study Area, and both scenarios focus on designating 40 to 60 percent of the study area's acreage to residential land uses and designating 15 to 25 percent of the acreage to parks and open space, with commercial and industrial land uses comprising 1 to 10 percent and 7 to 12 percent, respectively, of the study area's acreage (City of Elk Grove 2017a).

The West Study Area comprises 1,982 acres outside the existing City limits and is bound by Bilby Road on the north, the Union Pacific railroad line on the west, Bruceville Road on the east, and Core and Eschinger roads on the south. An application has been submitted to LAFCo for the Bilby Ridge SOIA (Sacramento LAFCo Application #04-16). The Bilby Ridge SOIA Area is proposed to include a range of residential densities, including medium-density residential apartments and townhomes, low-density residential housing, and Estate Residential homes; commercial uses; and light industrial uses. Other lower-density residential neighborhoods will provide a buffer between agricultural land south of the Bilby Ridge neighborhoods and employment centers (City of Elk Grove 2017a). The General Plan update EIR NOP presents two land plan program scenarios for the East Study Area. Scenario 1 focuses on designating up to 15 percent of the study area's acreage to residential land uses and up to 8 percent as commercial and employment center land uses, while conserving up to 70 percent of agricultural land (City of Elk Grove 2017a). Scenario 2 focuses on a greater acreage designated for residential land uses (up to 80 percent) and a greater acreage ~~of~~ designated for commercial and employment land uses (up to 18 percent) (City of Elk Grove 2017a).

The City has capacity for approximately 12,000 to 14,000 additional dwelling units. Assuming a 1.75 percent growth rate for the City, the City has approximately 10 to 15 years of growth potential within the City limits. With the General Plan update, the City intends to provide annexation strategies that ensure annexation proposals provide for planned, orderly, efficient development of the City within near-term time frames, recognizing opportunities or limitations to achieving substantially the same project within the existing City limits consistent

[1] A Draft EIR is currently being prepared for the Elk Grove Multi-Sports project; however, there is currently no timeline for public review.

with the General Plan update (City of Elk Grove 2017a). Furthermore, the General Plan update is intended to emphasize infill development that fills in unfinished, undeveloped gaps found throughout the city with new development that meets market demands and provides a variety of housing types (City of Elk Grove 2017a).

POPULATION

The City of Elk Grove's total population increased from 72,665 at its incorporation in 2000 to ~~167,965~~ 171,059 in ~~2016~~ 2017, an increase of ~~131~~ 135 percent, or about 8 percent annually during this 17-year period (City of Elk Grove 2014; California Department of Finance [DOF] ~~2016~~ 2017). According to the City, the rapid development occurred as a result of an increase in available jobs in the Sacramento region and the land that was made available in Elk Grove for residential development, as well as the annexation of the Laguna West-Lakeside Census Designated Place (CDP), which added 25,000 residents (City of Elk Grove 2014).

Over the last decade, the City of Elk Grove has experienced substantial residential growth, most of which occurred west of State Route 99. As of 2016, it is estimated that the city is almost 76 percent built out in terms of residential uses (Sacramento Area Council of Governments [SACOG] 2016).

Population growth in the city increased from 168,118 in 2016 to 171,059 in 2017, or an increase of 1.75 percent (DOF 2017). The City's population is expected to increase to 207,663 by 2035, an increase of 27 percent (City of Elk Grove 2015).

HOUSING

According to the DOF, the total number of housing units in the City of Elk Grove was ~~53,269~~ 53,829 in ~~2016~~ 2017, with an average household size of ~~3.27~~ 3.29 persons per unit, compared to 2.80 in unincorporated Sacramento County (DOF ~~2015~~ 2017). Approximately 90 percent of these housing units were attached and detached single-family homes, compared to 71 percent countywide (DOF ~~2016~~ 2017). The larger percentage of single-family homes in Elk Grove versus countywide could be a factor in Elk Grove's larger average household size.

SACOG estimates that total number of housing units in the City of Elk Grove will be 65,282 by 2036 (SACOG 2016). This includes the estimated number of housing units that could be constructed as part of the Laguna Ridge Specific Plan, Lent Ranch Market Place, the Southeast Policy Area, Sterling Meadows, and the Triangle Special Planning Area (SACOG 2016). SACOG projects that total number of housing units would be 67,820 at buildout of the City (SACOG 2016).

The 2016 MTP/SCS designates the SOIA Area as "Blueprint Vacant Urban Designated Lands Not Identified for Development in the MTP/SCS Planning Period (SACOG 2016)." Therefore, the SOIA Area is not included in SACOG's future housing projections.

EMPLOYMENT

The largest industry sector in terms of local employment is education, health care, and social assistance, making up approximately 25 percent of the jobs in the City of Elk Grove, followed by public administration (15 percent), and the retail trade (11 percent) (U.S. Census Bureau 2014).

About 5 percent of the regional employment growth is forecast~~ed~~ to be in the City of Elk Grove. This is supported by the city's effort to attract more jobs and by the fact that it has begun to see some of this employment growth in the recent arrivals and expansions of a number of medical facilities and state jobs (SACOG 2016). Many Elk Grove residents commute to employment centers outside of the city for work. According to the Elk Grove Market Study Progress Evaluation report, more than 44,000 City workers commuted outside the City limits in 2014 (Center for Strategic Economic Research 2014). The average commute time for these workers was approximately 29.7 minutes. SACOG estimates that the City of Elk Grove had 31,001 jobs in 2012 (SACOG 2015). Based on the current employment totals and projections, SACOG estimates the City of Elk Grove would have approximately ~~47,619~~ 50,865 jobs by 2036 (SACOG 2016). This includes the estimated number of jobs that could be generated as part of the Laguna Ridge Specific Plan, Lent Ranch Market Place, the Southeast Policy Area, and the Triangle Special Planning Area (SACOG 2016). SACOG projects that total number of jobs would be ~~52,176~~ 72,225 at buildout of the City (SACOG 2016). The SOIA Area is not included in SACOG's employment projections.

Unemployment

The estimated labor force in the City of Elk Grove in 2015 was 78,400 residents, of which 74,800 were employed (EDD [Employment Development Department] 2016a). The City's unemployment rate was 4.6 percent in 2015 (EDD 2016b). This unemployment rate is substantially lower than Sacramento County and California as a whole. Sacramento County's unemployment rate in 2015 was 6.0 percent, while California's unemployment rate was 6.2 percent (EDD 2016a, 2016b). The unemployment rate does not include individuals 16 years or over who have stopped looking for work or who are underemployed.

Jobs/Housing Balance

The relationship between the location and types of jobs and housing can have important environmental ramifications. A better match between the number and types of jobs and the number of households and interests/skills of the local labor force can help to alleviate traffic congestion, shorten commute times, and reduce vehicle miles traveled (VMT) and the associated air pollutant emissions and noise associated with vehicular travel. Job growth in technology, service, and other business sectors that allow for flexibility in time and place of work (e.g., potential to work at home) can also have benefits in reducing traffic-related impacts. Balancing jobs and housing in a smaller area can provide increased opportunities to use transit, bike, or walk to work in lieu of driving.

The balance of jobs and housing can be driven by the adequacy of supply of housing of the types and costs to house workers employed in a defined geographic area, such as a community, a city, or other subregion. Alternatively, a jobs/housing balance could focus more on the adequate provision of employment in a defined area that generates enough local workers to fill the housing supply. An area that has too many jobs relative to its housing supply is likely (in the absence of offsetting factors) to experience substantial in-commuting, escalations in housing prices, and intensified pressure for additional residential development. Conversely, if an area has relatively few jobs in comparison to the number of employed residents, many of the workers are required to commute to jobs outside of their area of residence. In order to maximize the environmental benefits of a jobs/housing balance, there needs to be a nexus between the types and cost of housing proposed to be located near jobs to be provided, the education/skills required by those jobs relative to the local labor force, and the income levels associated with those jobs.

Beyond the locational relationship between jobs and housing, there is also an important relationship between jobs and workers. Housing has long been used as a proxy for workers and worker residences. In reality, the number of workers per household varies widely across the regions based on a variety of demographic factors (such as age and education/skills) and different housing types have the capacity for accommodating different numbers of workers. Additionally, areas with "good" jobs-housing balance may still result in longer commutes for workers, if available housing in the area is unaffordable to workers filling local jobs (SACOG 2016).

One measure of jobs/housing balance is an index based on the ratio of employed residents (which is influenced by the number of homes) to jobs in the area. Other measurements compare jobs to housing units or jobs to households. An index of 1.0 indicates that the supply of jobs and housing are balanced. An index above 1.0 indicates that there are more jobs than employed residents, and may suggest that many employees are commuting in from outside the community. An index below 1.0 indicates that there are more employed residents than jobs and may suggest that many residents are commuting to jobs outside the community.

The real relationship between jobs and housing is far more complex than the ratio portrays. Even with a relative numeric balance, there can still be substantial commuting activity if the types of jobs are not matched with the skills and experience of the local labor force. The number of workers per household varies, and different types of housing accommodate different numbers of workers. In addition, the ratio depends on the geographic region used for the computation. A city with all residences on one side and all employment on the other side would have an acceptable numeric jobs-housing balance but a substantial amount of commuting. In a different scenario, workers with a substantially longer commute that is still within the city are counted, whereas workers that travel short distances outside of the city are not. Finally, employment necessarily concentrates in specific areas. Warehouses or industrial areas are usually not intermixed with housing, since they can be unattractive areas to live (SACOG 2015). However, the jobs-housing ratio can provide some useful information for planning purposes.

Finally, no simplistic numeric formula can capture the complex human decision-making process of where to live and where to work. For those households who have choices regarding employment and housing, lifestyle factors (good schools, community amenities and culture, available housing types, etc.) can outweigh the convenience of living closer to work.

The Center for Strategic Economic Research calculated a ratio between jobs and housing units in the City of Elk Grove at 0.43 in 2013. 2013 (Center for Strategic Economic Research 2014:A-3). The SACOG MTP/SCS forecast projects a ratio between jobs and households at 0.8 in 2036 (SACOG 2016). Full buildout of the Laguna Ridge Specific Plan, Lent Ranch Market Place, the Southeast Policy Area, and the Triangle Special Plan as well as other currently planned development is anticipated to increase the City's ratio between jobs and households to approximately 1.4 (SACOG 2016).

SACOG's goal is to move communities closer to the regional ratio of 1.2 jobs per household for growth between 2012 and 2036 (SACOG 2016).As stated previously, the 2016 MTP/SCS designates the SOIA Area as "Blueprint Vacant Urban Designated Lands Not Identified for Development in the MTP/SCS Planning Period" (SACOG 2016). Therefore, the jobs generated by potential future development with the SOIA Area are not included in SACOG's projected jobs/housing ratio for the city.

ENVIRONMENTAL JUSTICE

Environmental justice is defined in California law (Government Code Section 65040.12) as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws and policies." The Cortese-Knox-Hertzberg Act states in Government Code Section 56668(o) that "environmental justice" means the fair treatment of people of all races, cultures, and incomes with respect to the location of public facilities and the provision of public services.

Environmental justice addresses issues concerning whether a proposed project would expose minority or disadvantaged populations to proportionately greater risks or impacts compared with those borne by other individuals. Both statutory and common-law protections are legal authorities, which support environmental justice efforts. The State of California and the federal government are in pursuit of efforts to address this issue.

SACOG conducted an environmental justice analysis as part of the 2016 MTP/SCS to determine whether the MTP/SCS benefits low-income and minority communities equitably and whether the MTP/SCS would have any disproportionate negative effects on low-income and minority populations in the SACOG region (SACOG 2016). SACOG's 2016 MTP/SCS includes a regional environmental justice assessment based on 2009–2013 American Community Survey (ACS) data (see Section 3.11.2, "Regulatory Framework," for further discussion of criteria used to define environmental justice data). As shown in Exhibit 3.11-1, there are no environmental justice areas within or contiguous with the SOIA Area.

DISADVANTAGED UNINCORPORATED COMMUNITIES

Senate Bill 244 (SB 244) defines "disadvantaged unincorporated community" as any area with 10 or more dwelling units that is either within a city SOI, is an island within a city boundary, or is geographically isolated and has existed for more than 50 years and where the median household income is less than 80 percent of the statewide annual median (see Section 3.11.2, "Regulatory Framework," for further discussion). As shown in Exhibit 3.11-2, there are no disadvantaged unincorporated communities within or contiguous with the SOIA Area.

3.11.2 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

Executive Order 12898

In 1994, President Clinton issued Executive Order 12898 regarding environmental justice. This order requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States. Order 12898 is designed to focus attention on environmental and human health conditions in areas of high minority and low-income communities and to prevent discrimination in programs and projects substantially affecting human health and the environment. The order requires that the U.S. EPA and all other federal agencies (as well as state agencies receiving federal funds) develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

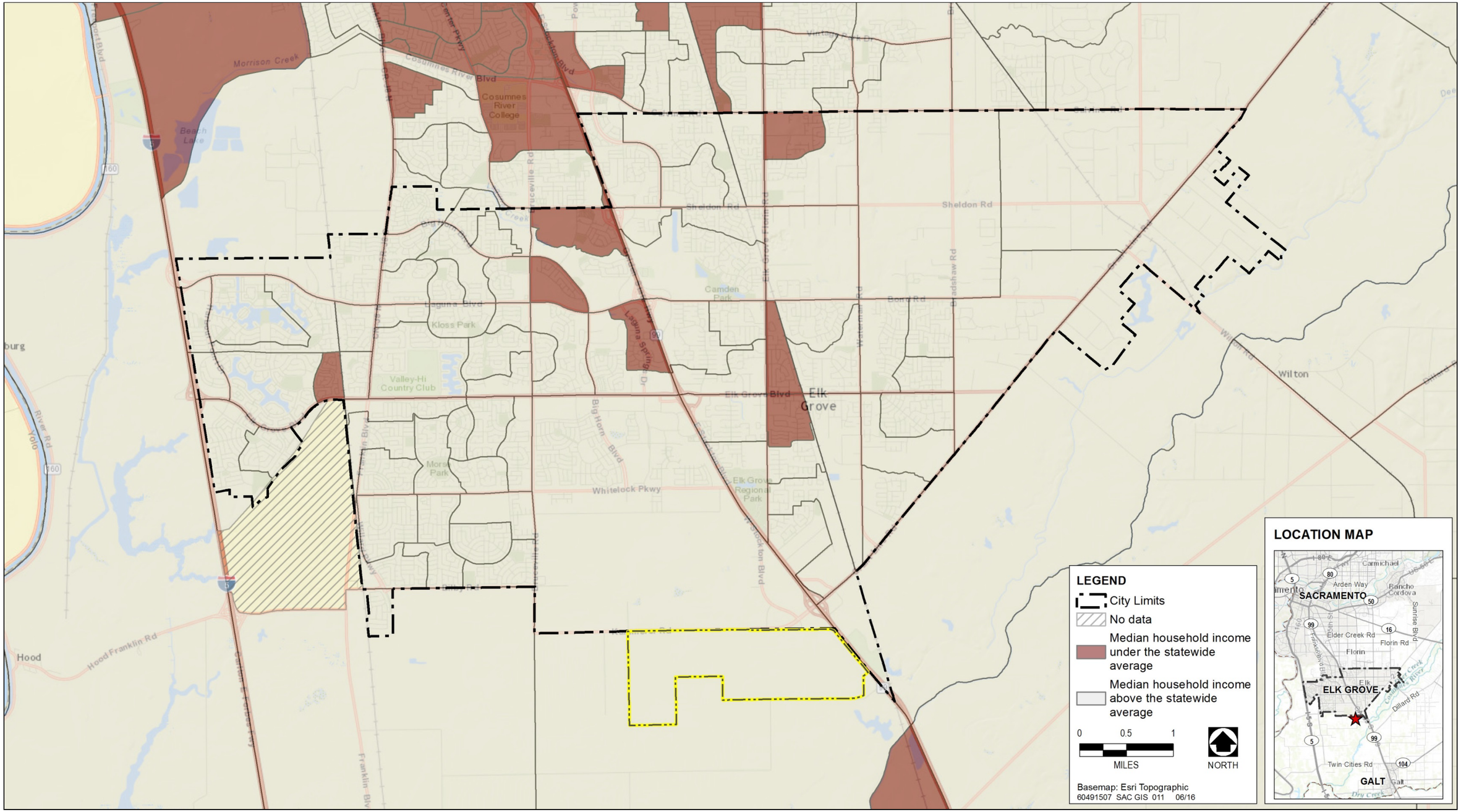
Cortese-Knox-Hertzberg Local Government Reorganization Act

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH Act) establishes procedures for the establishment, updating, or amendment of an SOI. See Chapter 1 of this EIR, "Introduction" for more information on the CKH Act.

The Sacramento Local Agency Formation Commission (LAFCo) is the agency responsible for the approval of the proposed Elk Grove SOIA and is responsible for implementing the Act. Sacramento LAFCo is responsible for reviewing, approving, modifying and approving or disapproving changes in organization to cities and special districts, including annexations, detachments, new formations, and incorporations. LAFCos must, by law, create municipal-service reviews and update spheres of influence for each independent local governmental jurisdiction within their countywide jurisdiction. Listed below are the adopted Sacramento LAFCo applicable policies and guidelines for approval of boundary adjustments (SACOG 2007).

- Demonstrate that adequate services will be provided within the time frame needed by the inhabitants of the area included within the proposed boundary.
- Identify existing land uses and a reasonable projection of land uses which would occur if services were provided consistent with an updated Master Services Element.
- Present a map that clearly indicated the location of existing and proposed facilities, including timing and location of those facilities.
- Describe the nature of each service provided.
- Demonstrate consistency with the applicable General Plan designations and text.
- Approve conversion of prime agricultural land in open space and other uses only if:
    - the proposal will lead to the planned, orderly, and efficient development in the area;
    - the subject land is consistent with the Spheres of Influence plan;
    - the development of the subject land is likely to occur within the next five years; and
    - the proposal will have no significant adverse effect on the physical and economic integrity of other agricultural lands.

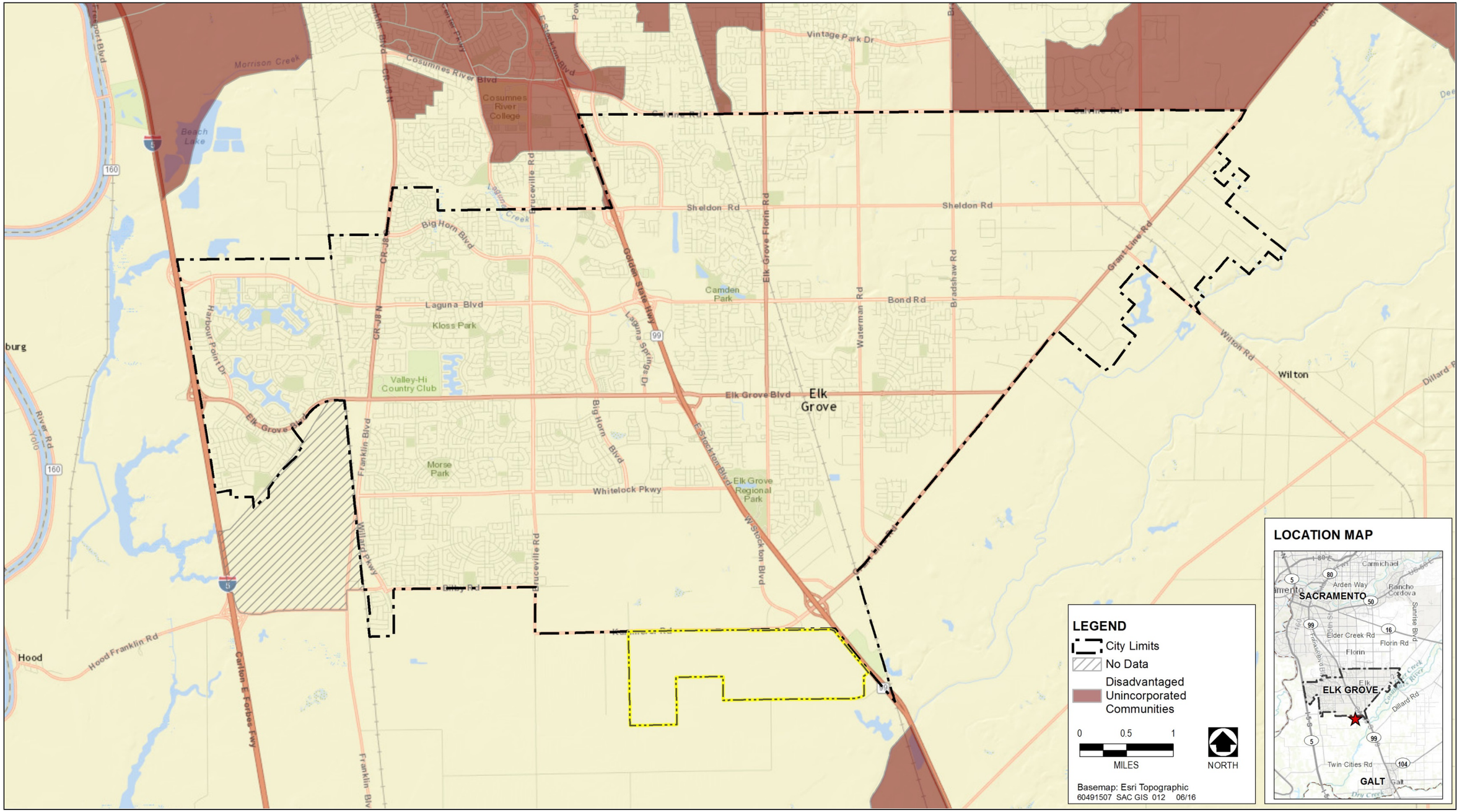
Assess the environmental consequences of its [LAFCo's] actions and decisions (required by CEQA), and take actions to avoid or minimize a project's adverse environmental impacts if feasible, or approve a project despite significant effects because it [LAFCo] finds overriding considerations exist.



Source: SACOG 2016 adapted by AECOM in 2016

Exhibit 3.11-1 **Environmental Justice Areas**

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Source: 2010 Census, adapted by AECOM in 2016

Exhibit 3.11-2

Disadvantaged Unincorporated Communities

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Senate Bill 244, Disadvantaged Communities

SB 244 requires cities and counties to address the infrastructure needs of unincorporated disadvantaged communities in LAFCo municipal service reviews (MSRs) and annexation decisions. SB 244 defines an unincorporated disadvantaged community as a place that meets the following criteria:

- contains 10 or more dwelling units in close proximity to one another;
- is either within a city SOI, is an island within a city boundary, or is geographically isolated and has existed for more than 50 years; and
- has a median household income that is 80 percent or less than the statewide median household income.

SB 244 prohibits approval of city annexations greater than 10 acres that are contiguous to a disadvantaged unincorporated community unless the city applies to annex the disadvantaged unincorporated community, as well. This requirement is not applicable if an application to annex the disadvantaged unincorporated community had been made during the prior five years or if a majority of residents in that community are opposed to the annexation.

As of July 1, 2012, LAFCos must consider the present and future need for public facilities and services by disadvantaged unincorporated communities for any city or district updating their SOI and which provides public sewer, municipal and industrial water, or structural fire protection facilities or services. LAFCos must also include considerations of disadvantaged unincorporated communities within a city or district SOI in statements of written determinations of MSRs.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Sacramento Area Council of Governments' Blueprint

The Sacramento Area Council of Governments (SACOG) coordinated with local governments in the region, including the City of Elk Grove, to develop the Blueprint Project and Preferred Blueprint Scenario, an extensive study of the long-term linkages between transportation, land use, and air quality. The Blueprint provides policy advisories for governments in the Sacramento region for long-term regional land use and transportation planning that encourage protection of additional natural resources (because less land would be required for urban uses), discourage conversion of agricultural land, and provide measures to reduce traffic and improve regional air quality. In December of 2004, the SACOG Board of Directors unanimously adopted a Preferred Scenario for the Blueprint. The Preferred Blueprint Scenario does not regulate land use in the SACOG jurisdictions, but includes a conceptual land use diagram that illustrates Blueprint principles. This Preferred Scenario designated the SOIA Area as "Vacant Urban Designated Lands (2050)."

Metropolitan Transportation Plan/Sustainable Communities Strategy

In 2016, SACOG approved the 2036 MTP/SCS, which is a regional transportation plan and land use strategy designed to support good growth patterns, including:

- Increased housing and transportation options;
- Inwardly-focused growth and improved economic viability of rural areas;

- Minimized direct and indirect transportation impacts on the environment;
- A transportation system that delivers cost- effective results and is feasible to construct and maintain;
- Effective connections between people and jobs;
- Improved opportunities for businesses and citizens to easily access goods, jobs, services, and housing; and
- Real, viable choices for methods of travel.

The MTP/SCS built on the foundation provided by the Blueprint project and includes a land use strategy to improve mobility and reduce travel demand from passenger vehicles by prioritizing compact and transit-oriented development, reducing the growth in vehicle miles traveled (VMT) and associated GHG emissions. The MTP/SCS also includes projections for the location of growth within the region, between jurisdictions and among housing place types (i.e., infill and greenfield development). The 2016 MTP/SCS designates the SOIA Area as "Blueprint Vacant Urban Designated Lands Not Identified for Development in the MTP/SCS Planning Period (SACOG 2016)."

Environmental Justice Areas

SACOG's 2016 MTP/SCS includes a regional environmental justice assessment of the six-county SACOG region. The 2016 MTP/SCS identifies certain Census Block Groups as environmental justice areas based on 2009–2013 ACS data to ensure that all populations are equally served by existing and proposed transportation infrastructure.

SACOG developed the following criteria to define environmental justice areas:

- Low-Income Communities: Census Tracts where 45 percent or more of the population earns 200 percent or less of the federal poverty level. Tracts meeting this threshold include about 29 percent of the region's population.

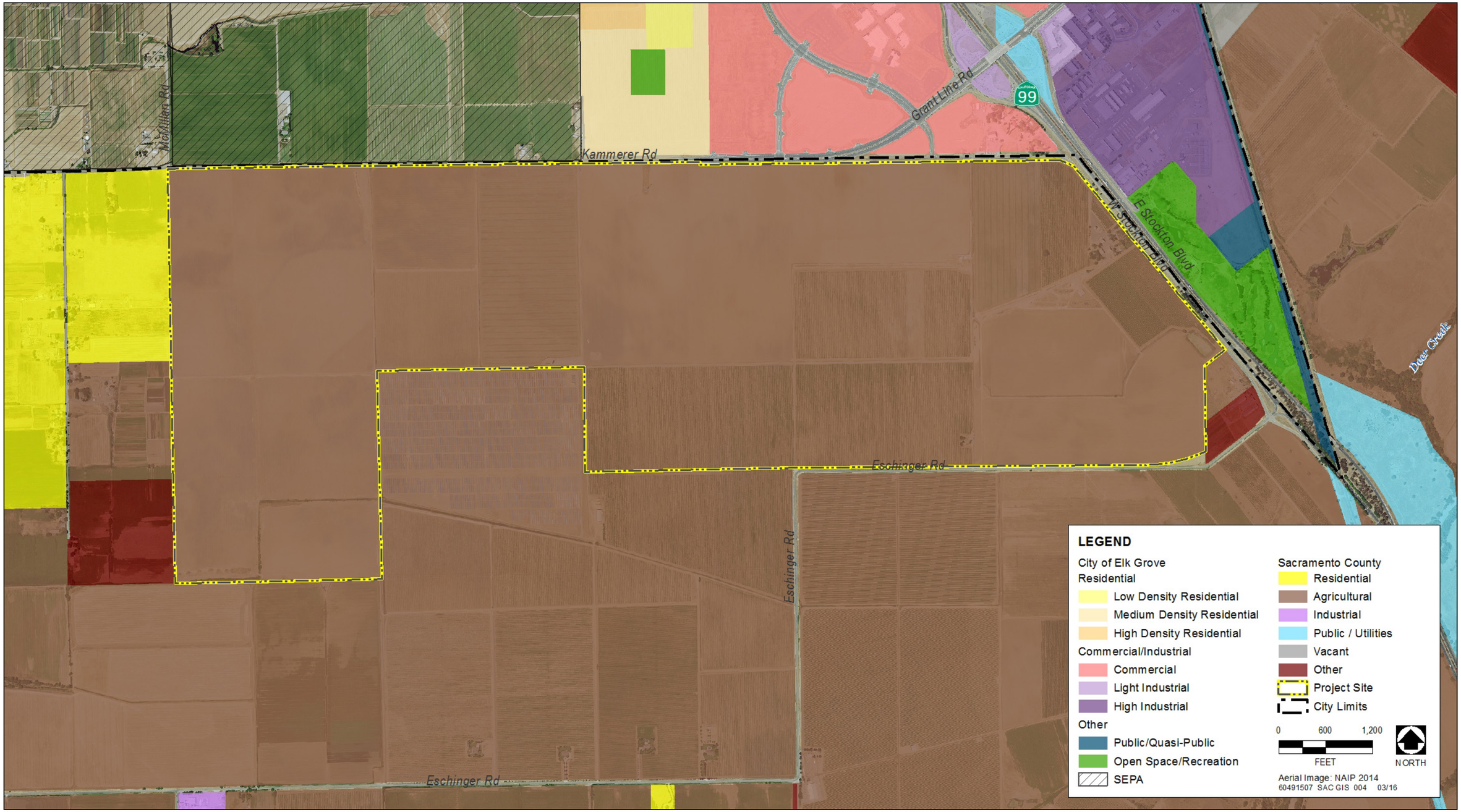
- Minority Communities: Census Block Groups where 70 percent or more of the population is Asian Pacific Islander, African American, Hispanic, Native American, or other Non-White ethnic group. Block groups meeting this threshold include about 8 percent of the region's population.

Sacramento County General Plan and Zoning

The current County of Sacramento General Plan, titled Sacramento County General Plan of 2005–2030 (2030 General Plan), was adopted on November 9, 2011. The Sacramento County General Plan provides an inventory of land supply within the County, and projects the amount and location of land and density, and intensity of development that will be required to accommodate future populations and economic growth through 2030.

The Sacramento County General Plan establishes land use designations within the SOIA Area (Exhibit 3.11-3). The General Plan land use designation for the SOIA Area is Agricultural Cropland. The entire SOIA Area is zoned AG-~~20~~ 80 (Agricultural, ~~20~~80-acre minimum). The AG-~~20~~ 80 zoning code is used to promote long-term agricultural use, to discourage the premature and unnecessary conversion of agricultural land to urban uses, and to encourage the retention of sufficiently large agricultural lots to assure maintenance of viable agricultural units.

The Sacramento County General Plan designates two boundaries that guide development: The Urban Service Boundary and the Urban Policy Area. The SOIA Area is outside of and adjacent to both of these boundaries.



Source: City of Elk Grove 2015, County of Sacramento 2011

Exhibit 3.11-3 **Land Use Designations within the SOIA Area**

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Urban Service Boundary

The Sacramento County General Plan designates a Urban Service Boundary (USB) to indicate the ultimate boundary of the urban area in the unincorporated area of Sacramento County. The General Plan states the following:

> The Urban Service Boundary indicates the ultimate boundary of the urban area in the unincorporated County. This boundary, which is based upon jurisdictional natural and environmental constraints to urban growth, is intended to be a permanent boundary not subject to modification except under extraordinary circumstances. The USB should be used by urban infrastructure providers for developing very long-range master plans which can be implemented over time as the urbanized area expands (Sacramento County 2011).

The following Sacramento County General Plan policy addresses revisions to the USB:

- **Policy LU-127:** The County shall not expand the Urban Service Boundary unless:

  - There is inadequate vacant land within the USB to accommodate the projected 25 year demand for urban uses; and
  - The proposal calling for such expansion can satisfy the requirements of a master water plan as contained in the Conservation Element; and
  - The proposal calling for such expansion can satisfy the requirements of the Sacramento County Air Quality Attainment Plan; and
  - The area of expansion does not incorporate open space areas for which previously secured open space easements would need to be relinquished; and
  - The area of expansion does not include the development of important natural resource areas, aquifer recharge lands or prime agricultural lands;
  - The area of expansion does not preclude implementation of a Sacramento County-adopted Habitat Conservation Plan;

  OR

  - The Board approves such expansion by a 4/5ths vote based upon on finding that the expansion would provide extraordinary environmental, social or economic benefits and opportunities to the County.

Urban Policy Area

The County of Sacramento also designates an Urban Policy Area (UPA), which is intended to indicate geographic areas where urban development is expected to occur during the projected buildout of the General Plan (year 2030). The UPA is intended to provide a 25-year supply of developable land sufficient to accommodate projected growth. The UPA also includes additional land to ensure an appropriate supply. The General Plan states:

The Urban Policy Area defines the area expected to receive urban levels of public infrastructure and services within the 25-year planning period. Defining the Urban Policy Area is of key importance in the provision of urban services and infrastructure to the unincorporated County, as it provides the geographic basis for infrastructure master plans, particularly for public water and sewerage, which require large capital investment and relatively long lead time for the installation of capital improvements (Sacramento County ~~1993~~ 2011).

The following Sacramento County General Plan policies address the UPA:

- **Policy LU-1:** The County shall not provide urban services beyond the Urban Policy Area (UPA), except when the County determines the need for health and safety purposes and the extension provisions as provided in Policy LU-1.1.

- **Policy LU-2:** The County will prohibit land use projects which are not contiguous to the existing Urban Policy Area, city boundaries, or existing planned communities or master plan areas (i.e., leapfrog development).

Sacramento County Municipal Code

The Sacramento County Ordinances and Codes provide regulation of land and structures in order to promote health, safety, and welfare of the public, and to insure the orderly development of the County. The Sacramento Zoning Code describes where specific allowed uses, such as residential development, may be located.

The SOIA Area is zoned by the County as AG-~~20~~ 80 (Agricultural, 80~~20~~-acre minimum). The AG-~~20~~ 80 zoning code is used to eliminate the encroachment of land uses incompatible with the long term agricultural use of land, to preserve the maximum amount of the limited supply of agricultural land in order to conserve the County's economic resources that are vital for a healthy agricultural economy ~~promote long-term agricultural use~~, to discourage the premature and unnecessary conversion of agricultural land to urban uses, and to encourage the retention of sufficiently large agricultural lots to assure maintenance of viable agricultural units (Sacramento County 2017).

City of Elk Grove General Plan

As discussed further below, the City of Elk Grove is preparing a comprehensive update to its General Plan. Adoption of the General Plan update is anticipated in early 2018. If the SOIA Area, or a portion of it, is annexed, that area would be under City of Elk Grove jurisdiction and would be required to comply with Elk Grove General Plan policies. A draft of the City's updated General Plan is not yet available, so the existing (2003, amended 2015) General Plan policies and actions are described below. Any future development would be required to comply with the most recent General Plan.

The City of Elk Grove General Plan is a broad framework for planning the future of Elk Grove. It is the official policy statement of the City Council 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 SOIA Area is outside the area governed by the City's existing General Plan. Areas to the north and adjacent to the project site are designated for development under the City's Southeast Policy Area, and for medium-density residential development and commercial development under the City's General Plan. The Emerald Lakes Golf

Course to the east of the SOIA Area is designated as open space. No areas within the SOIA Area are designated as open space by Elk Grove.

City of Elk Grove General Plan Policies

The following policies and actions from the Land Use and Economic Development Elements of the City of Elk Grove General Plan (2015) could apply to possible future development within the SOIA Area.

- **Policy LU-3:** The Zoning Map and all other land use approvals, including Specific Plans and Special Planning Areas, shall be consistent with the Land Use Policy Map of this General Plan.

- **Policy LU-4:** All land use approvals, including, but not limited to:

  - Zoning,
  - Planning documents (such as Specific Plans and Special Planning Areas),
  - Tentative Maps,
  - Conditional Use Permits,
  - Etc.

  shall be required to conform with the General Plan.

- **Policy LU-10:** The City should seek to designate sufficient land in all employment-generating categories to provide a minimum 1:1 correspondence between Elk Grove's working population and jobs in categories matching their employment level.

- **Policy LU-13:** The City will work with the Sacramento Local Agency Formation Commission to establish and update a Sphere of Influence, which reflects the City's near-term goals for potential additions to the corporate boundaries.

- **Policy LU-14:** The City shall apply the following policies to potential annexations:

  - Annexations should conform to an orderly expansion of city boundaries within planned urban growth areas and provide for a contiguous development pattern.

  - Annexations should include a comprehensive land use plan for the affected territory, including Pre-zoning and a plan for infrastructure financing and phasing;

  - Annexations should:

  - Constitute fiscally sound additions to the existing City.

  - Be consistent with State law and Local Agency Formation Commission policies, standards and criteria.

  - Preserve neighborhood identities.

  - Ensure the provision of adequate municipal services.

  - Be consistent with General Plan and Community Plan land use policies.

- Incorporate Smart Growth criteria for sustainable economic growth while maintaining environmental integrity, and providing for social equity.

- Promote fiscally sound, efficient service boundaries.

- **Policy LU-15:** The City shall encourage annexations initiated by landowner/ residents, which are consistent with the City's policies.

- **Policy LU-16:** The areas designated in the Planning Area as "Urban Study Areas" are envisioned as areas in which urbanization to some extent could occur, generally in compliance with the following criteria:

  - Development should be limited to areas outside of the 100-year floodplain.

  - Development should take place in compliance with the goals and policies of this General Plan.

  - Any study of potential land uses in these areas should be accomplished in cooperation with the County of Sacramento, the Sacramento Local Agency Formation Commission, and other agencies and parties with ownership or jurisdiction of lands in and near the study area.

  - Any study of land uses in these areas should be accompanied by an environmental evaluation of the potential impacts of development.

  - Prior to the completion of land use studies, the City's policy is that County of Sacramento land use designations in effect as of December 31, 2002, are retained.

- **Policy LU-17:** Implement a comprehensive and city-wide strategy for the preservation of open space, habitat and agriculture, both inside and outside the City's existing city limits.

- **Policy ED-7:** Maximize the use of non-residential land for employment-generating and revenue-generating uses.

  - **ED-7-Action 1:** Continue to improve Elk Grove's jobs/housing ratio and seek to achieve sufficient employment opportunities in Elk Grove for all of the employed persons living in the city, while continuing to promote the City's role as a regional center.

- **Policy ED-9:** Provide sufficient land for business expansion and attraction of new employers that utilize the City's existing labor pool.

City of Elk Grove Zoning

The Zoning Code (Title 23 of the City's Municipal Code) is the primary implementation tool of the General Plan. It divides the City into zoning districts and applies specific development standards to each district. Other development standards established by the Zoning Code include allowed land uses, height limits, setbacks, and the performance requirements (e.g., landscaping, parking) for each district.

The SOIA Area is outside the area governed by the City's zoning ordinance. Areas to the northwest of the SOIA Area are zoned for agricultural uses with a small section of residential zoning directly north and commercial/ industrial uses to the north and east.

City of Elk Grove General Plan Update

The City of Elk began preparing a comprehensive update to its General Plan in July 2015. On June 23, 2017, the City released a notice of preparation for the *Environmental Impact Report for the City of Elk Grove General Plan Update* (State Clearinghouse No. 2017062058) circulated for a 30-day public review period (City of Elk Grove 2017).[2] A public draft General Plan update and Draft EIR are anticipated to be available in late 2017. Adoption of the General Plan update and certification of the Final EIR is anticipated in early 2018. The update is intended to ensure that "the guiding policy document remains a useful tool, keeps pace with change, and provides workable solutions to current and future issues" (City of Elk Grove 2017b). The SOIA Area is identified in the City's preferred alternative land use diagram as the "South Study Area." The City's intent is that the Study Areas may be developed in accordance with annexation policies that will be identified in the General Plan and an additional layer of more detailed planning (e.g., specific plan).

3.11.3 Environmental Impacts and Mitigation Measures

Methodology

There are no changes to land uses proposed as part of this SOIA application. However, in order to facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario. The applicant-proposed array of land uses has been derived from the recently approved 1,200-acre mixed-use ~~Southeast Policy Area (~~SEPA~~)~~ land use distribution adjacent to the north, in order to facilitate project analysis. The applicant estimates that the SOIA Area could accommodate development that could provide 18,000 to 20,000 jobs in office, industrial, and commercial settings. The SOIA application identifies a potential jobs-to-housing ratio ranging from 3.6:1 to 5.0:1. Development could include a significant employment component near the Grant Line Road/SR 99 interchange and along the Kammerer Road (future Capital Southeast Connector) corridor. Additionally, for the purposes of analysis, the applicant has identified that the SOIA Area could accommodate the development of a broad array of housing types, with a total of 4,000 to 5,000 dwelling units. For the purposes of analysis, the applicant notes that future proposed development would involve supportive infrastructure, public lands, and retail development that is oriented to future employment areas.

Evaluation of the potential impacts of future development was based on a review of the following planning documents pertaining to the proposed project and surrounding area:

- *Sacramento County General Plan* (County of Sacramento 2011),
- *Elk Grove General Plan* (City of Elk Grove 2015),
- *Elk Grove Market Study Progress Evaluation* (Center for Strategic Economic Research 2014), and
- 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (SACOG 2016).

[2] The notice of preparation for the *Environmental Impact Report for the City of Elk Grove General Plan Update* is available at: http://www.elkgrovecity.org/city_hall/departments_divisions/planning/a_brighter_future/

Additional background information on population, housing, and environmental justice was obtained from the DOF, the EDD, and the U.S. Census Bureau.

Population, housing, and employment growth accommodated under future development is not, in and of itself, an environmental impact. However, there are indirect impacts associated with increased population, employment, and housing, such as increased travel demand that requires additional roadways and other transportation infrastructure and the associated air pollutant emissions and traffic noise, impacts related to public facilities and utilities expansions needed to serve new growth, and other impacts, each of which is addressed in each technical section of this EIR. These technical sections provide analysis of relevant environmental effects of implementing future development.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, land use impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
- Conflict with any applicable habitat conservation plan or natural communities conservation plan;
- Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure); or
- Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere.

In addition, the proposed project will have a significant impact related to environmental justice if the project would:

- Result in adverse effects or impacts that are appreciably more severe in magnitude or are predominately borne by low-income and minority populations or unincorporated disadvantage communities.

ISSUES NOT DISCUSSED FURTHER

- **Physically Divide an Established Community**—The SOIA Area is not located in between any established community. The surrounding areas consist of private agricultural land with a few rural residences, except for the commercial/industrial area to the northeast. There are no established communities that would be divided by future development. Therefore this issue is not evaluated further in this document.
- **Conflict with any Applicable Habitat Conservation Plan**—Potential conflicts with the South Sacramento Habitat Conservation Plan is discussed in Section 3.4, "Biological Resources."

- **Displace Substantial Numbers of People or Existing Housing**—There are no existing residences within the SOIA Area. Therefore, implementing the proposed project would not displace substantial numbers of people or existing housing that necessitates the construction of replacement housing elsewhere. Thus, this impact is not evaluated further in this EIR.

- **Adversely Affect a Low-Income or Minority Population**—As discussed above, there are no low-income or minority populations or disadvantaged unincorporated communities within or in the vicinity of the SOIA Area. Therefore, this impact is not evaluated further in this EIR.

IMPACT ANALYSIS

IMPACT 3.11-1 Consistency with Sacramento County zoning ordinance and City of Elk Grove zoning ordinance. *Future development would not conflict with Sacramento County or City of Elk Grove zoning ordinances. This impact is considered* ***less than significant.***

The project site is zoned by the County as AG-~~20~~80. In general the AG-~~20~~ 80 zoning designation is intended to promote long-term agricultural use. The proposed project would not change the zoning designations. The project would not allow land use change that would be inconsistent with this zoning designation. The project, in fact, would not directly allow any land use change. Thus, the proposed project would not conflict with zoning for agricultural use. Thus, the impact is considered **less than significant**.

Mitigation Measures

No mitigation measures are required.

IMPACT 3.11-2 Consistency with adopted Sacramento County General Plan or Elk Grove General Plan policies and land use designations. *Future development may be inconsistent with Sacramento County General Plan policies or Elk Grove General Plan policies adopted for the purpose of avoiding or mitigating an environmental effect. This impact is considered* ***less than significant.***

Because the SOIA Area is located within the unincorporated area of Sacramento County and outside the legal boundaries of Elk Grove, Sacramento County maintains the authority to designate allowable land uses. Since the project is a SOIA only, it does not include any land use plan or related pre-zoning. Similarly, the project does not include any indication of any timeline of development or phasing for future development. If the SOIA is approved and annexation to the City of Elk Grove is subsequently proposed, land use planning would occur under the City's jurisdiction. Pre-zoning of the affected territory by the City would be required prior to any application for annexation. Any future development would be required to comply with the City's General Plan policies. In addition, future development would be subject to CEQA review and analysis.

Sacramento General Plan

The SOIA Area is currently designated by the Sacramento County General Plan as Agricultural Cropland. The SOIA Area is located south of Kammerer Road and west of SR 99 is outside of Sacramento County's Urban Services Boundary and Urban Policy Area. The proposed project does not include the construction or development of any structures or infrastructure. The proposed SOIA would not change the zoning or land use

designation of the area and will thus remain consistent with the Sacramento County General Plan and land use designation.

However, future collaborative land use planning may commence between the City of Elk Grove and Sacramento County at some undetermined time if the proposed SOIA is established. Although there would be no direct physical impacts from the proposed project, it could result in annexation and potential future development.

The land use assumptions discussed above indicate that future development of the SOIA Area would result in urban land uses that do not conform to agricultural land use designation and does not comply with Sacramento County General Plan policies. However, if LAFCo were to consider and then approve annexation in the future, Sacramento County would relinquish land use planning authority to the City, and the Sacramento County General Plan would no longer apply to the annexed areas. Table 3.11-2 provides a consistency analysis with the County of Sacramento General Plan policies.

Table 3.11-2. Sacramento County General Plan Consistency Analysis

Element	Policy No	Text	Consistency Determination
Land Use	LU-1	The County shall not provide urban services beyond the Urban Policy Area (UPA), except when the County determines the need for health and safety purposes and the extension provisions as provided in Policy LU-1.1.	**Consistent:** The SOIA Area is currently within the jurisdiction of the County of Sacramento and is entirely outside of the County's General Plan UPA. However, no land uses changes are proposed that would require urban services.
	LU-12	The County will prohibit land use projects which are not contiguous to the existing Urban Policy Area, city boundaries, or existing planned communities or master plan areas (i.e., leapfrog development).	**Consistent:** The SOIA Area is currently within the jurisdiction of the County of Sacramento and is entirely outside of the County's General Plan UPA. However, it is contiguous to the Elk Grove city limits and would not cause leapfrog development, if the SOIA Area were to develop in the future.
	LU-127	The County shall not expand the Urban Service Boundary unless: • There is inadequate vacant land within the USB to accommodate the projected 25 year demand for urban uses; and • The proposal calling for such expansion can satisfy the requirements of a master water plan as contained in the Conservation Element; and • The proposal calling for such expansion can satisfy the requirements of the Sacramento County Air Quality Attainment Plan; and • The area of expansion does not incorporate open space areas for which previously secured open space easements would need to be relinquished; and • The area of expansion does not include the development of important natural resource areas, aquifer recharge lands or prime agricultural lands; • The area of expansion does not preclude implementation of a Sacramento County-adopted Habitat Conservation Plan; OR The Board approves such expansion by a 4/5ths vote based upon on finding that the expansion would provide extraordinary environmental, social or economic benefits and opportunities to the County.	**Consistent:** The SOIA Area is currently within the jurisdiction of the County of Sacramento and is entirely outside of the County's General Plan USB. However, no land uses changes are proposed that would require expanding the USB.

Elk Grove General Plan

The SOIA Area does not currently have Elk Grove General Plan land use designations. However, if future annexation were to occur, the SOIA Area would be under the jurisdiction of Elk Grove and would be required to be consistent with City General Plan policies and regulations.

The City of Elk Grove is preparing a comprehensive update to its General Plan. If the SOIA Area, or a portion of it, is annexed, that area would be under City of Elk Grove jurisdiction and would be required to comply with Elk Grove General Plan policies. Table 3.11-3 provides a consistency analysis with the adopted City of Elk Grove General Plan policies. ~~Elk Grove is currently (March 2016) updating their General Plan. However, since a draft is not yet available, this analysis is based on the existing General Plan, adopted in 2003.~~

Table 3.11-3. Elk Grove General Plan Consistency Analysis

Element	Policy No	Text	Consistency Determination
Land Use	LU-3	The Zoning Map and all other land use approvals, including Specific Plans and Special Planning Areas, shall be consistent with the Land Use Policy Map of this General Plan.	**Consistent:** After a future annexation, the Land Use Policy Map would reflect the land use designations that allow for development of future land and associated zoning changes would be consistent with those land use designations. The project does not propose any development or change to land use designations.
	LU-4	All land use approvals, including, but not limited to: • Zoning, • Planning documents (such as Specific Plans and Special Planning Areas), • Tentative Maps, • Conditional Use Permits, • Etc. shall be required to conform with the General Plan.	**Consistent:** City of Elk Grove in collaboration with County of Sacramento may begin comprehensive planning at an undetermined time pursuant to approval of the SOIA. Any proposed development would be required to demonstrate consistency with the General Plan.
	LU-10	The City should seek to designate sufficient land in all employment-generating categories to provide a minimum 1:1 correspondence between Elk Grove's working population and jobs in categories matching their employment level	**Consistent:** No physical development is being proposed by the project at this time and no project applications have been submitted. However, potential future development is envisioned to accommodate future growth and assist the City in achieving a citywide jobs-housing balance by providing a potential jobs-to-housing ratio ranging from 3.6:1 to 5.0:1.
	LU-13	The City will work with the Sacramento Local Agency Formation Commission to establish and update a Sphere of Influence, which reflects the City's near-term goals for potential additions to the corporate boundaries.	**Consistent:** The proposed SOIA is consistent, because the City of Elk Grove will be required to consult with LAFCo consistent with Policy LU-13.

Table 3.11-3. Elk Grove General Plan Consistency Analysis

Element	Policy No	Text	Consistency Determination
	LU-14	The City shall apply the following policies to potential annexations: • Annexations should conform to an orderly expansion of city boundaries within planned urban growth areas and provide for a contiguous development pattern. • Annexations should include a comprehensive land use plan for the affected territory, including Pre-zoning and a plan for infrastructure financing and phasing; • Annexations should: • Constitute fiscally sound additions to the existing City. • Be consistent with State law and Local Agency Formation Commission policies, standards and criteria. • Preserve neighborhood identities. • Ensure the provision of adequate municipal services. • Be consistent with General Plan and Community Plan land use policies. • Incorporate Smart Growth criteria for sustainable economic growth while maintaining environmental integrity, and providing for social equity. • Promote fiscally sound, efficient service boundaries	**Consistent:** Future development of the SOIA Area would require annexation by the City of Elk Grove and include comprehensive land use planning and consistency with the Elk Grove General Plan.
	LU-15	The City shall encourage annexations initiated by landowner/ residents, which are consistent with the City's policies.	**Consistent.** Multiple landowners are in support of the proposed SOIA and have requested to be included within the City's SOI.
	LU-16	The areas designated in the Planning Area as "Urban Study Areas" are envisioned as areas in which urbanization to some extent could occur, generally in compliance with the following criteria: • Development should be limited to areas outside of the 100-year floodplain. • Development should take place in compliance with the goals and policies of this General Plan. • Any study of potential land uses in these areas should be accomplished in cooperation with the County of Sacramento, the Sacramento Local Agency Formation Commission, and other agencies and parties with ownership or jurisdiction of lands in and near the study area. • Any study of land uses in these areas should be accompanied by an environmental evaluation of the potential impacts of development. • Prior to the completion of land use studies, the City's policy is that County of Sacramento land use designations in effect as of December 31, 2002, are retained.	**Consistent:** No city land use designations are proposed in conjunction with the SOIA application. The SOIA Area conforms to Sacramento County General Plan land use designations. Future city development of the SOIA Area would require annexation by the City of Elk Grove and includes comprehensive land use planning. Please note that all these activities will be subject to CEQA to ensure that growth occurs in a logical manner and does not result in significant impacts. In addition, the annexation, planning, and development approval process would follow the criteria listed under LU-16.
	LU-17	Implement a comprehensive and city-wide strategy for the preservation of open space, habitat and agriculture, both inside and outside the City's existing city limits.	**Consistent:** Future city development of the SOIA Area would require annexation by the City of Elk Grove and include comprehensive land use planning.

As shown in Table 3.11-2 and Table 3.11-3, implementation of the proposed project would be consistent with the City and County General Plan policies.

Consistency issues between implementation of the proposed project and the County and City General Plans are related to land use regulations, which are, in part, based on avoiding or otherwise restricting uses that would adversely impact resources of the development site or adjacent land uses. Specific impacts and project consistency issues associated with other resource and issue areas are addressed in each technical section of this EIR, as appropriate. These technical sections provide a detailed analysis of other relevant physical environmental effects that could result from implementation of the proposed project and identify mitigation measures, as necessary, to reduce impacts. Implementation of the proposed project would not conflict with adopted County or City General Plan policies, land use designations, or zoning that would generate any adverse physical impacts beyond those addressed in detail in the environmental sections of this EIR (air quality, biological resources, cultural resources, etc.). Thus, this impact is considered **less than significant**.

Mitigation Measures

No mitigation measures are required.

IMPACT 3.11-3 Consistency with LAFCo Policies, Standards, and Procedures Guidelines. *Future development would be consistent with Sacramento LAFCo Policies, Standards, and Procedures Guidelines. No impact would occur.*

California Government Code Section 56668 sets forth criteria for evaluation of annexation projects. This statute establishes factors that LAFCo agencies must use in reviewing annexation proposals. Any future urban development would require annexation by the City of Elk Grove and would be subject to this statute and evaluated for consistency at that time. Table 3.11-4 provides a consistency determination with the LAFCo policies that were adopted to avoid or mitigate for an environmental effect. As shown in Table 3.11-4, the project would be consistent with LAFCo policies. Thus, **no impact** would occur.

Mitigation Measures

No mitigation measures are required.

IMPACT 3.11-4 Consistency with the SACOG 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy. *Future development may be inconsistent with the SACOG 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy. This impact is considered significant.*

The SACOG MTP/SCS does not identify the SOIA Area for growth. Therefore, the SOIA could lead to development that would be inconsistent with the MTP/SCS. Although any future development would be subject to CEQA review, impacts could be **significant**.

Mitigation Measures

There is no feasible mitigation to reduce this impact to a less-than-significant level without changing the purposes of the proposed SOIA. The impact is **significant and unavoidable**.

Table 3.11-4. Sacramento LAFCo Policy Consistency Analysis

Element	Policy No	Text	Consistency Determination
III. LAFCo General Policies	1	The LAFCo will encourage participation in its decision-making process. LAFCo will contact community members through community councils, give published notice, and, where LAFCo determines appropriate, give mailed notice to the owners of property within 500 feet of a project site.	**Consistent:** The proposed project is consistent with this policy, as the Draft EIR will be circulated for public review to interested public and private agencies pursuant to CEQA.
	4	The LAFCo will favorably consider proposals that will provide urban services in areas with high growth potential rather than in areas with limited potential for future growth.	**Consistent:** The proposed project is consistent with this policy. There is a high growth potential in the SOIA Area.
	5	The CEQA requires that LAFCo assess the environmental consequences of its actions and decisions, and take actions to avoid or minimize a project's adverse environmental impacts, if feasible, or approve a project despite significant effects because it finds overriding considerations exist. To comply with CEQA, the LAFCo will take one or more of the following actions: • At its discretion, approve a project without changes if environmental impacts are insignificant; • Require an applicant to modify a project; • Establish mitigating measures as a condition of its approval of the proposal; • Deny the proposal because of unacceptable adverse environmental impacts; • Approve the project despite its significant effects by making findings of overriding concern.	**Consistent:** This EIR is prepared pursuant to CEQA to analyze environmental impacts associated with the proposed project. Any future city development would require annexation by the City of Elk Grove and would be subject to LAFCo policies for annexation. All these regulatory procedures would ensure consistency with this policy.
	7	LAFCo will favorably consider those applications which improve the balance between jobs and housing.	**Consistent:** The SOIA Area is envisioned to accommodate future growth and assist City in achieving a job housing balance.
IV. General Standards	A-2	Spheres of Influence are the primary planning tool for LAFCo. The LAFCo has developed standards related to the Master Service Element of any agency's Spheres of Influence. Agencies must have an updated Master Services Element which meets the following standards: • Is consistent with the Master Services Element of the Spheres of Influence of any overlapping jurisdiction; • Demonstrates that adequate services will be provided within the time frame needed by the inhabitants of the area included within the proposed boundary; • Identifies existing land use and a reasonable projection of land uses which would occur if services were provided consistent with the updated Element; • Presents a map that clearly indicates the location of existing and proposed facilities, including plan for timing and location of facilities; • Describes the nature of each service to be provided;	**Consistent:** The proposed project will be consistent with this policy. The Master Services Element/Municipal Services Review (MSR) has not yet been completed but will comply with this policy. The MSR completed for a previous SOI expansion application that was withdrawn that included the SOIA Area concluded there is adequate government structure available to provide necessary services, including those for which the City is a provider: land use planning, solid waste and recycling, roadway, law enforcement, animal control, code enforcement, parks and recreation, and storm drainage. The MSR also identified other agencies that will need to change boundaries to serve the SOIA Area: Sacramento County Water Agency, Sacramento Area Sewer District (collection) and the Sacramento Regional County Sanitation District (treatment). Conclusions for the MSR

Table 3.11-4. Sacramento LAFCo Policy Consistency Analysis

Element	Policy No	Text	Consistency Determination
		• Describes the service level capacity of the service provider's facilities; • Identifies the anticipated service level to be provided; • Describes any actions, improvements, or construction necessary to reach required service levels, including costs and financing methods; • Provides copies of district enabling legislation pertinent to the provision of service levels, including costs and financing methods; • Identifies projected revenue and identifies savings occurring as a result of the action; and • Provides existing and five year population projections within agency boundaries.	prepared for this project are expected to be similar.
	C-3	The LAFCo will not approve applications with boundaries which: • Split neighborhoods or divide an existing identifiable community, commercial district, or other areas having a social or economic identity; • Result in islands, corridors or peninsulas of incorporated or unincorporated territory or otherwise cause or further the distortion of existing boundaries; • Are drawn for the exclusive purpose of encompassing revenue-producing territories; • Create areas for which it is difficult to provide services; or • Split parcels.	**Consistent:** The SOIA boundary would not split neighborhoods or communities; result in islands or peninsulas; create areas where it is difficult to provide services; or split parcels. In addition, the SOIA boundary is not drawn for the exclusive purpose of encompassing revenue-producing territories.
V. Specific Standards by Type of Action	A-1	LAFCo will utilize Spheres of Influence through application of the following standards: • The LAFCo will approve an application for annexation only if the proposal conforms to and lies wholly within the approved Spheres of Influence boundary for the affected agency; • The LAFCo generally will not allow Spheres of Influence to be amended concurrently with annexation proposals; • The LAFCo will favorably consider proposals that are a part of an orderly, phased annexation program by an agency for territory within its Sphere of Influence; • An annexation must be consistent with a city's Master Services Plan Element of its Sphere of Influence Plan; and • The LAFCo encourages the annexation to each city of all islands of unincorporated territory and all substantially surrounded unincorporated areas located within the city's Sphere of Influence.	**Consistent:** The proposed project will be consistent with this policy. The Master Services Element/Municipal Services Review (MSR) has not yet been completed but will comply with this policy. The MSR completed for a previous SOI expansion application that was withdrawn that included the SOIA Area concluded there is adequate government structure available to provide necessary services, including those for which the City is a provider: land use planning, solid waste and recycling, roadway, law enforcement, animal control, code enforcement, parks and recreation, and storm drainage. The MSR also identified other agencies that will need to change boundaries to serve the SOIA Area: Sacramento County Water Agency, Sacramento Area Sewer District (collection,) and the Sacramento Regional County Sanitation District (treatment). Conclusions for the MSR prepared for this project are expected to be similar.

Table 3.11-4. Sacramento LAFCo Policy Consistency Analysis

Element	Policy No	Text	Consistency Determination
	A-2	The LAFCo will not approve proposals in which boundaries are not contiguous with the existing boundaries of the city to which the territory will be annexed, unless the area meets all of the following requirements: • Does not exceed 300 acres; • Is owned by the city; • Is used for municipal purposes; and • Is located within the same county as the city.	**Consistent:** The SOIA Area is contiguous to the existing boundaries of Elk Grove.
	B-2	Updated service plans as defined in the Master Services Element of these policies, standards and procedures must be available before LAFCo will approve a proposal initiated by the district.	**Consistent:** As previously stated, the proposed project will prepare an MSR.
	I-5	An applicant for an amendment to a Sphere of Influence must demonstrate a projected need or lack of need for service.	**Consistent:** In July 2014 the City of Elk Grove (City) completed environmental analysis and land use approvals for the last large unentitled area within the existing city limits. Consequently, the City now has no additional large, unplanned blocks of land available for long term planning and future growth within its boundaries. The purpose of this SOIA is to provide holding capacity for the City to be able to plan solutions for their continuing needs for employment opportunities and expanding population.
	I-6	Amendment proposals involving Sphere expansion which contain prime agricultural land will not be approved by the LAFCo if there is sufficient alternative land available for annexation within the existing Sphere of Influence.	**Consistent:** The SOIA Area contains prime farmland. However, the existing SOI is contiguous with city limits, so there is no available alternative location. Refer to Chapter 4.0 of this EIR, "Alternatives" for more information on the consideration of other locations for this development.
	I-9	The LAFCo will deny proposals that would result in significant unmitigable adverse effects upon other service recipients or other agencies serving the affected area unless the approval is conditioned to avoid such impacts.	**Consistent:** The SOIA would not result in any such impacts to service providers.
	I-10	The LAFCo will approve a proposed amendment to a Sphere of Influence only if the subject agency will be the most logical and prospectively most efficient provider of services to the subject territory.	**To Be Determined:** This question is examined in a MSR, under separate cover.

IMPACT 3.11-5 Conversion of open space. *Future development may lead to the conversion of open space resources, as defined by Sacramento LAFCo, to urban uses. This impact is considered* ***significant****.*

LAFCo includes unimproved lands devoted to agricultural lands within its definition of open space. Although the project does not involve any development proposals or changes to land use, it is assumed that the project would indirectly result in urbanization of the SOIA Area. Therefore, the project may indirectly create pressure to prepare a Land Use Plan and submit applications for annexation of the SOIA Area. This would result in the conversion of open space to urban uses. This impact is considered **significant**.

Mitigation Measures

Mitigation Measure 3.11-5: Implement Mitigation Measure 3.2-1

Significance after Mitigation

While conservation easements placed elsewhere in the region could partially offset the direct conversion of open space attributable to future development that could occur within the SOIA Area, this approach would not create new farmland to replace farmland that could be lost. This impact is **significant and unavoidable**.

IMPACT 3.11-6 Induce population growth. *There are no land uses changes proposed as part of this SOIA application; therefore, the proposed project would not directly induce population growth through development of new housing and employment opportunities or extension of infrastructure. Future development could indirectly facilitate population growth through development of 4,000 to 5,000 dwelling units and creation of 18,000 to 20,000 jobs. Because the population, housing, and employment growth that could be generated by the proposed project was not accounted for in the City's General Plan or SACOG's 2016 MTP/SCS, the proposed project could indirectly facilitate unplanned growth. Therefore, this impact is considered* ***significant****.*

There are no land uses changes proposed as part of this SOIA application. Therefore, the proposed project would not directly induce population growth through development of new housing and employment opportunities or extension of infrastructure.

Future development could indirectly facilitate population growth by generating a population of approximately 13,000 to 16,250 people in the City of Elk Grove. The SOIA Area is located outside of the City of Elk Grove's ~~Planning Area~~ City limits; therefore, the population that could be accommodated within the SOIA Area was not considered as part of the adopted Elk Grove General Plan. ~~However, the City is currently updating its General Plan and although no draft has been released, preliminary maps show the SOIA Area within the future planning area (City of Elk Grove 2016b).~~ It is anticipated that the population, housing, and employment that could be accommodated under the future land use scenario would be addressed in the City's General Plan Update.

The proposed project could develop approximately 4,000 to 5,000 dwelling units. SACOG estimates that the total number of dwelling units will be 65,282 by 2036 and 67,820 at buildout of the City. ~~The increase in dwelling units attributed to the proposed project would account for 6 to 8 percent of the dwelling units in 2036 and 6 to 7 percent at buildout of the City.~~ The SOIA Area is not included in SACOG's future housing projections; therefore, the number of dwelling units potentially generated by future development was not accounted for in SACOG's housing projections for the city.

In addition to residential development, future development could generate a substantial amount of employment-generating land uses. The conceptual land plan assumes a broad range of commercial, office, and industrial uses that generate 18,000 to 20,000 jobs. SACOG estimates the City of Elk Grove would have approximately ~~47,619~~50,865 jobs by 2036 and ~~52,176~~72,225 at buildout of the City. ~~This increase in jobs attributed to the proposed project would account for approximately 38 to 42 percent of the number of jobs in 2036 and 34 to 38 percent of jobs at buildout of the City.~~ The SOIA Area is not included in SACOG's future employment projection; therefore, the number of jobs potentially generated by future development would represent a substantial number of jobs not accounted for in SACOG's employment projections for the City. If this level of job growth is realized, it is possible that population growth near future job centers could be induced, beyond that which is included under the applicant's land use scenario used for analysis under this EIR.

It is the City's intent to include annexation strategies in the updated General Plan to ensure annexation proposals provide for planned, orderly, efficient development of the City (City of Elk Grove 2017a).

Because the population, housing, and employment growth that could be generated by the proposed project was not accounted for in the City's General Plan or the 2016 MTP/SCS, the proposed project could indirectly facilitate unplanned growth. Therefore, this impact is considered **significant**.

Mitigation Measures

Mitigation presented throughout this EIR addresses directly the environmental issues associated with future development. The purpose of the proposed project itself is to provide for future annexation of the SOIA Area and subsequent development of housing and employment opportunities. There is no feasible mitigation to reduce this impact to a less-than-significant level without changing the purposes of the proposed project. The impact is **significant and unavoidable**.

IMPACT 3.11-7 Jobs-housing balance. *Future development could result in the development of employment-generating uses, resulting in approximately 18,000 to 20,000 new jobs within the city. These jobs would contribute toward the City's goal of a 1:1 correspondence between Elk Grove's working population and jobs in categories matching their employment level as well as to SACOG's goal of 1.2 jobs per household. This impact is considered less than significant.*

As mentioned previously, the city of Elk Grove currently provides fewer jobs locally than the number of working residents. More than 44,000 City workers commuted to jobs outside of the Elk Grove City limits in 2014. SACOG estimated a ratio of 0.59 jobs to housing units or 0.64 jobs per household in 2008. The Center for Strategic Economic Research calculated a ratio between jobs and housing units at 0.43 in 2013 SACOG estimated a jobs-to-housing unit ratio of 0.6 in 2012.

SACOG's goal is 1.2 jobs per household. SACOG estimates that full buildout of the City would increase the City's ratio of jobs to households to approximately 1.4. Elk Grove has a goal of a minimum 1:1 correspondence between Elk Grove's working population and jobs in categories matching their employment level (Policy LU-10). Note that the policy does not provide a definition for working population (residents in the labor force or employed residents). The Sacramento County General Plan does not include a specific goal.

The conceptual land plan assumes a broad range of commercial, office, and industrial uses that generate 18,000 to 20,000 jobs. The proposed project could develop approximately 4,000 to 5,000 dwelling units for a jobs to housing unit ratio of 3.6 to 5.0.

Although the type, timing, and intensity of development are unknown, the following attempts to analyze how the project could affect conditions in Elk Grove, both currently and in 2036. Note that the following provides an analysis of the jobs-to-housing unit ratio, as well as the jobs-to-households ratio. The 2012 estimates and projections for 2036 are based on SACOG's MTP/SCS. 2010 Census data is used where SACOG estimates are not available.

Future annexations may require a market study demonstrating demand for the proposed jobs-generating land uses and the market study should consider the local and regional market, as well as the availability and feasibility of infill sites located within the City limits that may support similar development (City of Elk Grove 2017a).

Existing (2012) Conditions

SACOG estimated that the city of Elk Grove had 31,001 jobs in 2012 (SACOG 2015). SACOG also estimated that Elk Grove had 51,372 housing units, for a jobs-to-housing unit ratio of 0.60 in 2012. If the SOIA Area were to be fully built out, the City's jobs-to-housing units ratio could be increased to anywhere from 0.87 to 0.96.

The 2010 Census indicates that there were 47,927 households in the city in 2010, for an estimated jobs-to-households ratio of 0.65. According to the 2010 Census, 94.7 percent of housing units in Elk Grove are occupied. Assuming that this does not substantially change, the addition of 4,000 to 5,000 dwelling units in the SOIA Area could generate 3,788 to 4,735 households. This could increase the jobs-to-household ratio to anywhere from 0.93 to 0.99.

Future ~~(2036)~~ Conditions

SACOG estimated that, by 2036, continued development of the Laguna Ridge Specific Plan, Lent Ranch Market Place, the Southeast Policy Area, and the Triangle Special Plan, as well as other planned development (not including the SOIA Area, which was not anticipated in the MTP/SCS) could increase the City's jobs to 50,865 and housing units to 65,282, for a jobs to housing unit ratio of 0.78. SACOG estimates that the number of jobs at buildout of the City could increase to 72,225 and housing units to 67,820, for a jobs-to-housing ratio of 0.94. If the SOIA Area were to be fully built out, the City's jobs could be increased to anywhere from 68,865 to 70,865 and housing units to anywhere from 69,282 to 70,282, for a jobs-to-housing units ratio of anywhere from 0.98 to 1.01 by 2036. At buildout of the City, with full buildout of the SOIA Area, the City's jobs could be increased to anywhere from 76,225 to 78,225 and housing units to anywhere from 85,820 to 87,820, for a jobs-to-housing ratio of 0.89 to 0.91.

SACOG estimated a ratio of jobs to households to 0.77 by 2036 and 1.4 at buildout of the City. According to the 2010 Census, 94.7 percent of housing units in Elk Grove are occupied. Assuming that this does not substantially change, the addition of 4,000 to 5,000 dwelling units in the SOIA Area could generate 3,788 to 4,735 households. This could increase the jobs to household ratio to anywhere from 1.03 to 1.08 by 2036 and from 1.31 to 1.36 at buildout of the city.

The jobs-housing balance is summarized in Table 3.11-5. As shown in the table, future development in the SOIA Area could bring the ratio of jobs per housing unit to 0.98 to 1.01 by 2036 and bring the ratio of jobs per housing unit to 0.89 to 0.91 at buildout of the city. The ratio of jobs per household could increase from 1.03 to1.08 by 2036 and increase to 1.31 to 1.36 at buildout of the City.

The City's intent is not to view jobs-housing balance relative to a specific jobs-to-housing numeric ratio, but instead to consider jobs-housing balance relative to narrative strategies consistent with the MTP/SCS and the general land use siting criteria provided in the General Plan update (City of Elk Grove 2017a).

Table 3.11-5. Jobs Housing Balance

Ratio	Existing (2012) conditions	Future (2036) conditions	Future (Buildout) conditions	Existing (2012) conditions with future development in the SOIA Area	Future (2036) conditions with future development in the SOIA Area	Future (Buildout) conditions with future development in the SOIA Area
Jobs per housing units	0.60	0.78	0.94	0.87–0.96	0.98–1.01	0.89–0.91
Jobs per household	0.65	0.77	1.4	0.93–0.99	1.03–1.08	1.31–1.36

Source: Census 2010; SACOG MTP/SCS 2016; adapted by AECOM 2016.

Future development could develop a significant employment component near the Grant Line Road/SR 99 interchange and along the Kammerer Road (future Capital Southeast Connector) corridor, providing job opportunities in commercial, office, industrial settings. These jobs could offer a range of job types that require a range of education and specialized training – with some jobs requiring little by way of advanced degrees and training and other jobs with greater requirements. The City's goal is to increase the number and diversity of locally available jobs, including those that could be filled by residents of the City of Elk Grove (Policy ED-7, ED-7-Action 1, and Policy ED-9 of the City's General Plan).

Although it is not possible at this time to predict the number of jobs that would be filled by residents of the City compared to future residents of other cities and communities in Sacramento County, based on the land use scenario used for analysis in this EIR, future development of the SOIA Area could bring the jobs-housing balance closer to the City of Elk Grove and SACOG's goals. Therefore, this impact is considered **less than significant.**

Mitigation Measures

No mitigation measures are required.

3.13 PUBLIC SERVICES AND RECREATION

This section describes the existing public services and facilities, including fire protection, law enforcement, public schools, and parks and recreation and potential effects attributable to the project. Impacts are evaluated in relation to the actions needed to provide the services that could potentially lead to adverse physical environmental effects.

3.13.1 ENVIRONMENTAL SETTING

Descriptions and analysis in this section are based on information provided by Sacramento County, the City of Elk Grove, the Cosumnes Community Service District (CCSD), the Sacramento County Sheriff's Department (SCSD), the City of Elk Grove's Police Department (EGPD), the California Highway Patrol (CHP), the Elk Grove Unified School District (EGUSD), and applicable regulations.

FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

The CCSD Fire Department provides fire protection, prevention, life safety and emergency medical services to a 157-square-mile area encompassing the city of Elk Grove, the city of Galt, and areas of unincorporated southern Sacramento County.

The CCSD Fire Department currently provides fire protection, fire prevention, and emergency medical services to the SOIA Area. The Fire Department is headquartered at 10573 East Stockton Boulevard, Elk Grove. The CCSD operates eight fire stations: ~~serving the cities of~~ six in Elk Grove and two in Galt, as well as areas of unincorporated Sacramento County and a fire training facility. The closest existing fire stations to the SOIA Area are Station 71 or Station 72, at 8760 Elk Grove Blvd. and 10035 Atkins Drive respectively (CCSD 2016~~e~~). Both are approximately 5 miles (or 7 minutes per Google maps) from the SOIA Area. In addition, two new fire stations are planned in the vicinity of the SOIA Area, one within the Sterling Meadows project immediately north of the SOIA Area (along Lotz Parkway near Kammerer Road), and one in the Laguna Ridge Specific Plan Area, northwest of the SOIA Area (on Poppy Ridge Road just east of Big Horn Road) that will be built as these projects develop and as the need arises (City of Elk Grove 2014a). These new fire stations ~~w~~could directly serve the SOI Area (Ramos pers. comm., 2016).

Service Response

The CCSD Fire Department responds to various emergencies, including fires, vehicle collisions, hazardous materials spills, and medical and public assistance calls. The department has over 165 sworn personnel in the Operations Division, which has units devoted to fire suppression, training, and emergency medical services. The department currently staffs eight Type 1 engine companies (designed to fight structure fires), one ladder truck company, ~~six~~ seven ambulances, and a command officer each day on a 24-hour basis. ~~Also in the Elk Grove area,~~ The Department also operates six ~~eight grass~~ Type III engines (for fighting wildland and grass fires) and other specialty apparatus are staffed using these personnel as seasons and emergency circumstances dictate their use. Specialty apparatus includes one heavy foam unit, a heavy rescue vehicle, a mass decontamination trailer, a mass casualty incident trailer, two flood boat response trailers (containing eight boats total) and a swift water rescue boat. The department provides ambulance transportation and pre-hospital care throughout its service area, including ~~for~~ the cities of Elk Grove and Galt. The department employs over ~~80~~ 100 paramedics and over ~~60~~ 47 emergency medical technicians (EMTs). The Department's ~~operates six~~ seven full-time ambulance companies are staffed and operate 24 hours a day.

Communications and Mutual Aid

Fire and emergency services in Sacramento County have developed a Joint Powers Authority (JPA) for a unified dispatch system. The Sacramento Fire EMS Communications Center dispatches all fire agencies in Sacramento County.

CCSD is the primary fire protection and emergency medical response service within the SOIA Area. Sacramento Metro Fire District (SMFD), the City of Sacramento Fire Department (SFD), and the CCSD share common jurisdictional boundaries and participate in a regional automatic/mutual aid agreement. The CCSD also has a mutual aid agreement with the surrounding volunteer fire districts in southern Sacramento County, including Wilton, Courtland, Walnut Grove, and Herald Fire districts. As a result of the existing automatic and mutual aid agreements, the closest unit available is dispatched to an incident and fire district boundaries are not an issue when an incident occurs (Ramos, pers comm., 2017). ~~to provide mutual aid in the form of supplemental fire prevention, fire investigation, emergency medical services, hazardous materials control, water rescue, technical rescue and/or other emergency support during a major fire, disaster or other emergency. The JPA is comprised of the Sacramento Fire Department, the Sacramento Metropolitan Fire District, CCSD, and the Folsom Fire Department. Parties endeavor to cooperatively provide an appropriate, consistent, and efficient full service emergency response without regard to jurisdictional boundaries (City of Sacramento 2013).~~

POLICE PROTECTION

Sacramento County Sheriff's Department

The SOIA Area is currently served by the SCSD, which provides specialized law enforcement services to the County and local police protection to both the incorporated and unincorporated areas. Specialized law enforcement includes providing court security services, operating a system of jails for pretrial and sentenced inmates, and operating a training complex. Local police protection includes response to calls, investigations, surveillance, and routine patrolling. As of 2015, the SCSD employed 1,293 sworn officers, including 289 patrol officers (City of Elk Grove 2015b). The closest station to the SOIA Area is located at 7000 65th Street in Sacramento, approximately 11 miles (or 12 minutes) away.

City of Elk Grove Police Department

The EGPD also provides certain law enforcement services to the SOIA Area through a mutual aid agreement and would be the ~~main~~primary provider if future annexation requests were approved. The EGPD provides comprehensive police services throughout the City, including emergency and routine call response, follow-up investigations of crime, traffic enforcement, specialized anti-gang initiatives, and other crime prevention activities. EGPD has a force of ~~132~~ 139 sworn officers and ~~80~~ 86 civilian employees. This is equivalent to a staffing ratio of 0.82 sworn officers per 1,000 residents (City of Elk Grove 2015). The Police Department operates out of one police station, located at 8400 Laguna Palms Way, part of the City Hall complex, approximately 5 miles away from the SOIA Area.

As part of this facility, the EGPD operates a Community Service Center to report non-urgent or ongoing crimes, to have crime reports taken, and to take fingerprints and process other, routine requests for information. The EGPD handles approximately 100,000 service calls per year with a goal of ~~handling~~ responding to Priority One

calls (those involving a violent crime in-progress or other life-threatening emergency) within five minutes. During 2015, EGPD's actual average Priority One response time was ~~5.5~~ 5.3 minutes.

California Highway Patrol

The CHP provides traffic regulation enforcement, emergency management, and vice assistance on State highways, all federal interstate highways, and other major roadways in unincorporated Sacramento County. The SOIA Area is located within the CHP Valley Division, which is comprised of 20 area offices, one commercial vehicle enforcement facility, and four communications centers (CHP 2016).

SCHOOLS

The EGUSD provides K–12 education to the City of Elk Grove and the SOIA Area. Located in southern Sacramento County, the district covers 320 square miles. EGUSD had a 2015–2016 school year enrollment of 62,000 students. EGUSD has 66 schools: 40 elementary schools, 9 middle schools, 9 comprehensive high schools, 3 continuation high schools, an independent study school, an adult school, a special education school, a virtual academy, and 1 charter school (EGUSD 2016a).

Based upon current EGUSD school attendance boundaries, the SOIA Area falls within the attendance areas of Franklin Elementary School, Elizabeth Pinkerton Middle School, and Cosumnes Oak High School (EGUSD 2016). Franklin Elementary School is currently over capacity and has been offloading students to nearby schools for several years. Additionally, any excess capacity currently existing at Elizabeth Pinkerton Middle School and Cosumnes Oaks High School will be used to house future students from the already approved Laguna Ridge Specific Plan, Sterling Meadows, and the Southeast Policy Area. Therefore, those schools will not be able to accommodate the students who would reside in the proposed Kammerer/Highway 99 SOI Area, should it be developed, as described in this EIR. ~~As shown on the EGUSD school attendance boundaries maps, students within the SOIA Area would attend Franklin Elementary School, Elizabeth Pinkerton Middle School, and Cosumnes Oak High School (EGUSD 2016). However, EGUSD periodically changes its school boundaries if a new school is built or the population in a particular area changes significantly. Thus, these schools or others may serve residents at the SOIA Area. Table 3.13-1 identifies the 2015–2016 school year enrollments for these schools. All three schools are currently operating below design capacity.~~

~~**Table 3.13-1. Elk Grove Unified School District Enrollment, 2015–2016**~~

~~School Name~~	~~Grade~~	~~Enrollment~~	~~Design Capacity~~	~~Estimated Remaining Capacity~~
~~Franklin Elementary School~~	~~Pre-K–6~~	~~789~~	~~Traditional Calendar Capacity: 802~~	~~13~~
			~~Multi-track Year Round Calendar Capacity: 1,062~~	~~260~~
~~Elizabeth Pinkerton Middle School~~	~~7–8~~	~~1,084~~	~~1,424~~	~~340~~
~~Cosumnes Oak High School~~	~~9–12~~	~~2,237~~	~~2,568~~	~~331~~

~~Note: Student enrollment in the district changes daily as more students enroll and others leave; therefore, Table 3.13-1 does not necessarily reflect exact current enrollment.~~

~~Source: EGUSD 2016~~

Franklin Elementary School is located at ~~9373~~ 4011 Hood-Franklin Road and serves pre-kindergarten through sixth grade students. ~~Elk Grove Elementary School was completed in 1995 and has 29 classrooms, a library, multipurpose room, cafeteria, playfields, and hard courts.~~ Franklin Elementary school was constructed in 1955 and has 29 classrooms, multipurpose room, cafeteria, playfields and hard courts.

Elizabeth Pinkerton Middle School is located at 8365 Whitelock Parkway and serves middle school students in grades 7–8. Elizabeth Pinkerton Middle School was opened in 2008. School facilities include 48 classrooms, a library, multipurpose rooms, a gymnasium with locker rooms, playfields and hard courts.

~~Elk Grove~~Cosumnes Oaks High School is located at 8350 Lotz Parkway and serves high school students in grades 9–12. The ~~Elk Grove~~Cosumnes Oaks High School was opened in 2008. School facilities include 90 classrooms, multipurpose rooms, a library, a gymnasium with locker rooms, playfields, and hard courts.

EGUSD prepared the *Facilities Master Plan 2015–2025 Update* (Master Plan) to provide updated enrollment, school capacity, student generation rates, and to determine the approximate number of new students generated by new residential development between 2015 and 2025. The Master Plan anticipates that due to significant development (which did not include any future development within the SOIA Area) within its boundaries, enrollment at Franklin Elementary School, Elizabeth Pinkerton Middle School, and Cosumnes Oaks High School is projected to increase and exceed the schools' traditional calendar capacity by 2025, which could be addressed by constructing new schools and/or adjusting attendance boundaries. Changing to a multi-track year-round calendar or other measures may also be necessary as shown above (EGUSD 2016b).

EGUSD Funding

Under California's current funding model for new school construction, theoretically, 50 percent of the funding comes from the State and 50 percent from local sources. According to the EGUSD, the State participation is less than 50 percent for new schools (Williams, pers. comm., 2017). In order to construct new schools to mitigate growth from new residential development, EGUSD's local share comes from developer school impact fees. Based on its facilities needs assessment, EGUSD demonstrated the need to levy Level II developer fees (described below in Section 3.13.2, "Regulatory Framework") that are higher than the statutory fee. As of September 2016, Level II fees for residential development are $5.01 per square foot and $0.56 per square foot for commercial/industrial construction.

The State has not allocated funding for any new school construction projects since 2012 (Williams, pers. comm., 2017). Applications for over $1.5 billion worth of projects have been submitted to the Office of Public School Construction that have not been funded, or in some cases, have not been processed (Williams, pers. comm., 2017).

~~The EGUSD is funded by 50 percent State and 50 percent local sources. EGUSD can receive local funding through developer impact fees, tax revenue from Mello-Roos districts, and General Obligation bonds. Developer impact fees are the major source of funding for the district. Based on its facility needs assessment, EGUSD demonstrated the need to levy Level II developer fees (described below in Section 3.13.2, "Regulatory Framework") that are higher than the statutory fee. As of September 2016, Level II fees for residential development are $5.01 per square foot and $0.56 per square foot for commercial/industrial construction. Developer fees may be used to finance new schools and equipment, and to reconstruct existing facilities to maintain adequate housing for all the EGUSD's students.~~ Additional school funding is also provided through the

EGUSD Mello-Roos Community Facilities District (CFD) No.1. CFD No. 1 authorized the issuance of bonds not to exceed $275 million. The proceeds of the bonds are intended to be used for improvements to existing elementary, middle and high schools and to construct future elementary, middle and high schools and additions to existing schools. However, this funding source is not intended to address needs resulting from new development.

PARKS

Cosumnes Community Services District

The CCSD provides parks and recreation facilities for residents of the city of Elk Grove, as well as unincorporated portions of Sacramento County. CCSD serves an area of roughly 157 square miles, including the city limits of the City of Elk Grove, plus unincorporated areas of Sacramento County. CCSD serves an estimated population of 183,000, of which 163,000 is served by the Parks and Recreation Department. The CCSD Parks and Recreation Department manages ~~90~~ 94 parks totaling an estimated ~~684~~ 705 acres, 256 acres of landscape corridors and medians, and 18 miles of trails, and provides for several community programs, including youth sports, adults sports, aquatic programs, and manages a 9-hole golf course (CCSD Parks and Recreation 2016a). The closest existing CCSD facility is the Emerald Lakes Golf Course, directly to the east of the SOIA Area. Elk Grove Regional Park is approximately one mile north of the SOIA Area. This and other parks with other amenities could be used by future residents of the SOIA Area.

CCSD updated their Parks and Recreation Master Plan in ~~2009~~ 2016 to plan for future parks and recreational facilities over the next 10- to 15-year period and determined that a need currently exists for more park acreage. No parks and recreation services are provided for or planned within the SOIA Area, since there is no development and no planned development (~~CCSD 2009~~City of Elk Grove 2016a).The CCSD is working on a new Parks and Recreation Master Plan, which is scheduled to be completed in early 2018.

Cosumnes Community Services District & City of Elk Grove Memorandum of Understanding (MOU)

Parks and recreation facilities in new development areas specifically, Laguna Ridge Specific Plan (LRSP), South East Policy Area (SEPA), Silverado Village, and Sterling Meadows are developed and operated in accordance with the MOU between the CCSD and the City. The City is responsible for funding the development and operations of the park and recreation facilities. The CCSD will own these facilities and exclusively provide their programming. Seven new parks have been already completed within the LRSP. These parks, as well as future parks and recreation facilities within LRSP, Sterling Meadows, Silverado Village, and SEPA, which are all developments immediately north of the SOIA Area, could be used by future residents of the SOIA Area.

City of Elk Grove

The City of Elk Grove and CCSD have an agreement for joint development and operation of all future parks in the Laguna Ridge Specific Plan (LRSP) located about one mile northwest of the SOIA Area, as described above. In addition, the City will solely own and maintain the future Civic Center Community Park located in the LRSP planned for a grand opening in 2018 (City of Elk Grove 2004; City of Elk Grove 2016~~b~~b). These park facilities could be used by future residents of the SOIA Area.

3.13.2 REGULATORY FRAMEWORK

FEDERAL AND STATE PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulation, or laws pertaining to public services and recreation are applicable to the proposed project.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration (Cal OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include but are not limited to guidelines on the handling of highly combustible materials; fire hose sizing requirements; restrictions on the use of compressed air; access roads; and the testing, maintenance, and use of all firefighting and emergency medical equipment.

California Fire Code

The California Fire Code, which is contained in Title 24, Part 9 of the California Code of Regulations, (CFC) contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The CFC contains specialized technical regulations related to fire and life safety and those have been incorporated in to the City Building Code.

California Health and Safety Code

State fire regulations are set forth in Sections 13000, et seq. of the California Health and Safety Code, which includes regulations for building standards (as set forth in the California Building Code); fire protection and notification systems; fire protection devices such as extinguishers and smoke alarms; high-rise building and childcare facility standards; and fire suppression training.

Per the California Health and Safety Code, the Fire Code Official is both authorized to perform life safety inspections, and responsible for the enforcement of and life safety regulations adopted by the California State Fire Marshal in the California Buildings Standards. The Fire Prevention Bureau performs plan reviews and provides comments and field inspection on all construction projects within the jurisdiction. The Fire Inspectors also inspect occupancies and hazardous operations as required by the California Health and Safety Code.

State of California Emergency Medical Services regulations are set forth in Division 2.5 of the Health and Safety Code (Sections 1797-1799), which is known as the Emergency Medical Service System and the Prehospital Emergency Medical are Personnel Act. The regulations include system administration, certification, medical control, facilities, and other facets of emergency medical care.

Quimby Act

The Quimby Act (California Government Code Section 66477) was established by the California legislature in 1965 to preserve open space and parkland in the rapidly urbanizing areas of the state. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate land for parks, pay an in-lieu fee, or perform a combination of the two. The Quimby Act requires a city or county to adopt standards for recreational facilities in its general plan recreation element if it is to adopt a parkland dedication/fee ordinance. The City's standards for parkland dedication under the Quimby Act are provided in the discussion of local regulations below. Both the County and the City collect Quimby Act in-lieu fees. These fees contribute to a fund that would be used to acquire properties for parkland.

State School Funding

California Education Code Section 17620 authorizes school districts to levy a fee, charge, dedication, or other requirement against any development project for the construction or reconstruction of school facilities, provided that the district can show justification for levying of fees. California Government Code Section 65995 limits the fee to be collected to the statutory fee unless a school district conducts a School Facility Needs Assessment (California Government Code Section 65995.6) and meets certain conditions.

Senate Bill 50 (Chapter 407, Statutes of 1998) instituted a school facility program by which school districts can apply for state construction and modernization funds. This legislation imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development. It also provided the authority for school districts to levy fees at three different levels:

- **Level I fees** are the current statutory fees allowed under Education Code Section 17620. As mentioned above, this code section authorizes school districts to levy a fee against residential and commercial construction to fund school construction or reconstruction. These fees are adjusted every two years in accordance with the statewide cost index for Class B construction as determined by the State Allocation Board.

- **Level II developer fees** are outlined in Government Code Section 65995.5. This code section allows a school district to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multitrack year-round scheduling, having an assumed debt equal to 15–30 percent of the district's bonding capacity (the percentage is based on revenue sources for repayment), having at least 20 percent of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past 4 years that received at least 50 percent plus one of the votes cast. A facility needs assessment must demonstrate that the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years. As of September 2016, EGUSD's Level II fees are $5.01 per square foot for residential development and $0.56 per square foot for commercial/industrial construction.

- **Level III developer fees** are outlined in Government Code Section 65995.7. This code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction if State funding becomes unavailable. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of State funding.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Elk Grove General Plan

Approval by LAFCo of this SOIA does not authorize any change in land use or governance. However, the proposed project would adjust the City of Elk Grove's SOI and allow the City or affected landowners the opportunity to file an annexation request with LAFCo to annex lands within the SOIA Area.

The City of Elk Grove General Plan establishes goals and policies to guide both present and future development within the City's jurisdiction. Note that Elk Grove is currently updating their General Plan and that future development would need to comply with the most current version of the General Plan. The City of Elk Grove's current General Plan policies and actions relevant to public services are provided below.

Parks

- **Policy PTO-1:** The City of Elk Grove supports the development, maintenance, and enhancement of parks and trails serving a variety of needs at the neighborhood, area, and citywide level. The City may seek to accomplish the provision of parks and trails in cooperation with the Cosumnes Community Services District (CCSD).

    - **PTO-1-Action 1** As part of the review of development projects, ensure that public parks and trails are provided which meet the City's and CCSD's criteria and which implement the CCSD/City Parks Master Plan and City Bicycle, Pedestrian, and Trail Master Plan.

- **Policy PTO-3:** Funding for maintenance of parks and/or trails shall be assured to the City's satisfaction prior to the approval of any Final Subdivision Map which contains or contributes to the need for a public parks and facilities.

- **Policy PTO-4:** New residential developments may be required to, at a minimum, provide parks consistent with the Quimby Act (CA Govt. Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of five (5) acres of land for parks per 1,000 residents. Land dedication and/or payment of in-lieu fees shall be required consistent with state law. Land dedication and/or fees may be required pursuant to other policies in this Element with or without the use of the authority provided in the Quimby Act, or in combination with the Quimby Act and other legal authority.

Public Facilities and Finance

- **Policy PF-1:** Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

- **Policy PF-7:** The City shall require that water flow and pressure be provided at sufficient levels to meet domestic, commercial, and firefighting needs.

- **Policy PF-16:** Specific Plans shall identify all existing and planned school sites and should include guidelines and conceptual examples for incorporating new schools into overall neighborhood design.

- **Policy PF-17:** While recognizing that school siting and development are not within the jurisdiction of the City to control, the City strongly encourages the School District to consider the following criteria:

    - Traffic impacts on nearby roadways are addressed and mitigated to meet City standards for level of service.

    - Schools should serve as a focal point of neighborhood activity and be interrelated with churches, parks, greenways and off-street paths whenever possible.

    - Almost all residences will be within walking distance of a school (one mile or less) and all residences are within two miles of a school whenever possible.

    - New schools are adjacent to neighborhood and community parks whenever possible and designed to promote joint use of appropriate facilities.

    - New schools should link with trails, bikeways, and pedestrian paths wherever possible.

- **Policy PF-18:** The City supports state legislative efforts to secure additional state funding for school construction and ensure maintenance of local district priorities for funds in the state school bond program.

- **Policy PF-19:** Public facilities should be phased in a logical manner which avoids "leapfrog" development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall not provide public financing or assistance for projects that do not comply with the planned phasing of public facilities. Interim facilities may be used only if specifically approved by the City Council.

- **Policy PF-21:** New development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.

Safety

- **Policy SA-1:** The City will seek to maintain acceptable levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in Elk Grove.

- **Policy SA-29:** The City shall regularly monitor and review the level of police staffing provided in Elk Grove, and ensure that sufficient staffing and resources are available to serve local needs.

- **Policy SA-32:** Cooperate with the ~~Elk Grove~~Cosumnes Community Services District (~~EGCSD~~CCSD) Fire Department ~~[Cosumnes Community Services District]~~ to reduce fire hazards, assist in fire suppression, and emergency medical services and promote fire safety in Elk Grove.

    - **SA-32-Action 1** Review new development for adequate water supply and pressure, fire hydrants, and access to structures by firefighting equipment and personnel.

    - **SA-32-Action 2** Review projects for compliance with the Fire Code as part of the building permit process.

- **SA-32-Action 4** Require, where appropriate, on-site fire suppression systems for all new commercial and industrial development to reduce the dependence on fire department equipment and personnel.

City of Elk Grove Municipal Code Chapter 22.40 "Park and Recreation Dedication and Fees"

Elk Grove Municipal Code Chapter 22.40 "Park and Recreation Dedication and Fees" provides standards and formulas for the dedication of parkland and in-lieu fees. These policies help the City acquire new parkland. As previously stated, the General Plan sets forth the standard that 5 acres of property for each 1,000 persons residing within the city is to be devoted to local recreation and park purposes, or other ratio as provided through an adopted community plan, specific plan, or similar master or strategic plan. ~~Where a recreational or park facility has been designated in the 2030 General Plan or a specific plan, and is to be located wholly or in part within a proposed subdivision to serve the immediate and future needs of the subdivision's residents, the sub-divider must dedicate land for a local recreation or park facility sufficient in size and topography to serve the residents.~~ The amount of land to be provided is determined based on the appropriate standards and formula contained in Chapter 22.40. Under the appropriate circumstances, the sub-divider must, in lieu of dedicating land, pay a fee determined based on the appropriate standards and formula contained in Chapter 22.~~40equal to the value of the land prescribed for dedication to be used for recreational and park facilities that will serve the residents of the area being subdivided.~~

City of Elk Grove Municipal Code Chapter 16.95 "Development Impact Fees"

The Elk Grove City Code imposes six citywide development impact fees. Fees are assessed on landowners who develop property to provide funds for facilities required to meet the needs of, and address impacts caused by, the additional persons residing in or employed on the property as a result of the development. The fees are:

1. Capital Facilities Fee, which funds the following facilities: Civic Center; Police Facilities; Corporation Yard; Library Facilities; and Transit

2. Affordable Housing Fee, which funds the construction, acquisition or financing of new or existing multi or single family affordable housing projects within the City for low or very low income residents.

3. Roadway Fee, which is a multi-zonal fee program that funds the center lanes and medians of major roadways, and funds major intersections, freeway interchanges, and bridges

4. Fire Fee, which is a multi-zonal fee program that funds fire capital facilities and equipment.

5. Measure A Transportation Mitigation Fee, which funds regional transportation facilities. The City collects this fee on behalf of the Sacramento Transportation Authority (STA).

Elk Grove Bicycle, Pedestrian, and Trails Master Plan

The Elk Grove Bicycle, Pedestrian, and Trails Master Plan (Master Plan) is intended to offer recreational opportunities and an alternative method for transportation for Elk Grove residents (City of Elk Grove 2014b). The City Council adopted the Master Plan in January 2007, but the plan is continually updated as goals are achieved, as new funding sources become available, and in order to ensure consistency with the Elk Grove General Plan. The Master Plan shows a planned multi-use trail running east-west along Kammerer Road and several planned parks north of Kammerer Road (City of Elk Grove 2014b)

Cosumnes Community Services District Parks Master Plan

The Cosumnes Community Services District Parks Master Plan was initially approved by the CCSD in 2008, and the City gave its approval in 2010. The subsequent Master Plan 2016 Update was approved by both the City and CCSD in 2016. The Park Master Plan takes a system-wide approach to address recreation needs in Elk Grove and provides infrastructure direction for all areas in the CCSD/City service area, which includes the SOIA Area. CCSD had coordinated efforts with the City to update the Master Plan and ensure the document's vision, standards, and strategies meet the needs of both agencies. The CCSD Parks and Recreation Department is undertaking a new Parks and Recreation Master Plan which is scheduled to be completed early 2018.

CCSD Service Standards

CCSD Fire Department has established a response time goal of arriving on scene within seven-minutes of the 911 call, 90 percent of the time. CCSD has been given an Insurance Services Office (ISO) rating of 2 in "watered" areas and 2Y in "unwatered'' areas, such as the proposed SOIA Area. The ISO rating is the recognized classification for a fire department or district's ability to defend against major fires. A rating of 10 generally indicates no protection; whereas an ISO rating of l indicates high firefighting capability. The proposed SOIA Area is considered "unwatered." According to the ISO, newly developing urban areas should have a fire station opened within 1½ mile of all commercial development and 2½ miles from all residential development when "buildout" exceeds 20 percent of the planned area.

~~CCSD has established a response time goal of arriving on scene in six minutes or less 90 percent of the time in the urbanized portions of the City. The CCSD Fire Department has established a standard response time of 12 minutes or less 90 percent of the time in the rural areas (this includes the SOIA Area).~~

~~The Insurance Services Office (ISO) rating is the recognized classification for a fire department's or district's ability to defend against major fires. According to the ISO, newly developing urban areas should have a fire station opened within 1.5 miles of all commercial development and 2.5 miles of all residential development when "buildout" exceeds 20 percent of the planned area. A rating of 10 generally indicates no protection, whereas an ISO PPC rating of 1 indicates high firefighting capability. CCSD has been given an ISO rating of 3 in "watered" areas and 9 in "unwatered" areas. The proposed SOIA Area is currently considered "unwatered."~~

EGPD Service Standards

The EGPD handles approximately 100,000 service calls per year with a goal of ~~handling~~responding to Priority One calls (those involving a violent crime in-progress or other life-threatening emergency) within five minutes. EGPD's actual average Priority One response time was 5.5 minutes for the fiscal year 2014–2015 (City of Elk Grove 2015).

3.13.3 Environmental Impacts and Mitigation Measures

Methodology

There are no changes to land uses proposed as part of this SOIA application. However, in order to facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario. The applicant-proposed array of land uses has been derived from the recently approved 1,200-acre mixed-use Southeast Policy Area (SEPA) land use distribution adjacent to the north, in order to facilitate project analysis.

The applicant estimates that the SOIA Area could accommodate development that could provide 18,000 to 20,000 jobs in office, industrial, and commercial settings. The SOIA application identifies a jobs-to-housing ratio ranging from 3.6:1 to 5.0:1. Development could include a significant employment component near the Grant Line Road/SR 99 interchange and along the Kammerer Road (future Capital Southeast Connector) corridor. Additionally, for the purposes of analysis, the applicant has identified that the SOIA Area could accommodate the development of a broad array of housing types, with a total of 4,000 to 5,000 dwelling units. For the purposes of analysis, the applicant notes that future proposed development would involve supportive infrastructure, public lands, and retail development that is oriented to future employment areas.

Evaluation of potential public services and recreation impacts was based on a review of regional and local planning documents pertaining to the SOIA Area and surrounding area, including the Elk Grove General Plan (City of Elk Grove 2015a). Additional background information on current services, staffing, and equipment was obtained through consultation with appropriate agencies.

Impacts related to public services and facilities attributable to the proposed SOIA were identified by comparing existing service capacity and facilities against future demand associated with implementation of the EIR land use scenario and identifying reasonably foreseeable service and facilities expansion required to serve the SOIA Area if it is developed in the future. Where possible, a quantitative comparison was used to determine impacts of the project on future demands. Population projections used in this analysis were calculated based on the construction of 4,000 to 5,000 dwelling units multiplied by the California Department of Finance's (DOF's) 2015 estimate of 3.25 persons per dwelling unit (DOF 2015). Based on this estimate, the proposed project would generate a total of 13,000 to 16,250 persons, along with non-residential development, as outlined above.

THRESHOLDS OF SIGNIFICANCE

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the CEQA Guidelines, as amended. The proposed project would have a significant impact related to public services and recreation if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools, or parks;
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

IMPACT ANALYSIS

IMPACT 3.13-1 **Increased demand for fire protection and emergency medical services.** *Future development could increase demand for CCSD fire protection and emergency medical services. This could trigger the need for additional fire stations and facilities, the construction and operation of which could result in impacts on the physical environment. This impact is considered* ***significant****.*

CCSD will provide fire protection, fire prevention, life safety, and emergency medical services to the SOIA. The closest fire stations to the SOIA Area are Station 71 or Station 72, at 8760 Elk Grove Blvd. and 10035 Atkins Drive respectively (CCSD 2016~~c~~). Both are approximately 5 miles (or 7 minutes per Google maps) from the SOIA Area. In addition, ~~two~~ three new fire stations are planned in the vicinity of the SOIA Area, one within the Sterling Meadows project immediately north of the SOIA Area (near Lotz Parkway and Kammerer Road), and one in the Laguna Ridge Specific Plan Area, northwest of the SOIA Area (off Poppy Ridge Road near Big Horn Boulevard), and one near the intersection of Bradshaw Road and Grant Line Road. These stations will be built as these projects develop and as the need arises (Elk Grove 2014a).

Although the project does not propose any development or land use change, future City approved development could occur as a result of the SOIA. If the SOIA is approved, there may be annexation proposed in the future. If annexation is approved and then development is proposed that requires discretionary review by the City of Elk Grove, this would require General Plan consistency findings. In addition to consistency with the City's General Plan, future project proponents would be required to incorporate California Fire Code, California Health and Safety Code, and OSHA requirements into the project design to address access and finished surfaces for firefighting equipment; fire hydrant placement and sufficiency of fire hydrants; and fire flow availability. These topics are addressed by the City's General Plan Policy PF-7, Action SA-32-Action 1, SA-32-Action 2, and SA-32-Action 4. Physical impacts associated with construction and operations of on-site public facilities are evaluated throughout this EIR. The placement of any new on-site fire protection facilities has been considered in the other sections of this Recirculated Draft EIR, such as Biological Resources, and resource sections in the Draft EIR, such as Air Quality, which specifically analyze the potential for project construction and implementation.

The CCSD Fire Department receives its funding through property taxes, fees for service, and grant funding. New development projects are required to pay fire protection development fees to fund additional facilities and equipment. These funds would help to pay for all costs associated with the development of a new fire station, if needed. A CFD has also been established to assist in the long-term mitigation of growth impacts. Annexation into the CFD or lump sum payment to offset growth impacts is required of property owners of new development through a balloting process. Fee programs are regularly evaluated and updated, consistent with Elk Grove General Plan Policy PF-21, to ensure that adequate service levels are maintained.

If the proposed SOIA is approved, the area may develop over time. ~~It is currently not known if~~ The ~~CCSD's~~ existing CCSD fire protection facilities and personnel would not be adequate to meet the demands of future development. Due to the substantial number of residents (an estimated 13,000 to 16,250 persons) that could ~~theoretically~~ be accommodated within the SOIA Area in the future, the CCSD Fire Department ~~could~~ will need to build one or more of the predesignated new fire stations and need to hire additional firefighters, prevention, and emergency medical personnel to accommodate the increased demand for services. ~~It is possible that the~~ The construction and operation of new off-site facilities and expansion of existing off-site facilities by CCSD could also be required in order to maintain service ratios. As the recognized primary service provider for fire protection,

prevention, and emergency medical and rescue services, the CCSD and the City will be encouraged to work together closely to identify fire station locations, equipment, and personnel needs to support any increased demands on the CCSD (Ramos, pers. comm., 2017). The development review process should minimize service impacts to joint responder agencies, such as SMFD and SFD (Ramos, pers. comm., 2017). ~~Therefore~~ However, this impact is conservatively assumed for the purposes of this EIR to be **significant**.

Mitigation Measures

Mitigation Measure 3.13-1: Demonstrate Adequate Fire Protection Facilities are Available before the Annexation of Territory within the SIOA Area.

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall demonstrate that CCSD fire protection and life safety facilities will meet the service demands of development identified for the annexation territory, or that fair-share funding will be provided for the construction of new or expansion of existing fire protection facilities, as needed, to accommodate the increase in demand resulting from development of the annexation territory. The City of Elk Grove shall demonstrate future development has incorporated adequate water supply and pressure, fire hydrants, and access to structures by firefighting equipment and personnel and where appropriate, identified on-site fire suppression systems for all new commercial and industrial development into design plans consistent with General Plan polices PF-7, PF-21, and SA-32 and Action SA-32-Action 1, SA-32-Action 2, and SA-32-Action 4. Any expansion of service shall not adversely impact current service levels.

Significance after Mitigation

Implementation of Mitigation Measure 3.13-1 would reduce significant impacts associated with increased for fire protection services because the City of Elk Grove would reduce the dependence on fire department equipment and personnel by reducing fire hazards, assisting in fire suppression, and promoting fire safety in Elk Grove. Mitigation presented in this EIR for other environmental topic area addresses potentially significant adverse environmental effects to the extent feasible. This mitigation could apply to the public facilities elements of potential future development, in addition to the private development components.

Construction of future off-site fire protection facilities and expansion of existing facilities is the responsibility of CCSD. Implementation of mitigation measures would be the responsibility of the CCSD. However, physical environmental impacts from construction or operation of new or expansion of existing facilities could remain significant after implementation of mitigation (i.e., significant and unavoidable), or no feasible mitigation may be available to fully reduce impacts to a less-than-significant level. Neither LAFCo nor the City of Elk Grove would have control over CCSD's future fire protection facilities planning or the approval, timing, or construction. There is no additional feasible mitigation. Therefore, the impact is **significant and unavoidable**.

IMPACT 3.13-2 Increased demand for law enforcement services. *Future development could increase demand for EGPD law enforcement services. This could trigger the need for additional police stations and facilities, the construction and operation of which could result in impacts on the physical environment. This impact is considered* ***significant****.*

After annexation, the EGPD will provide ~~fire protection and emergency medical~~ police services to the SOIA. The EGPD operates out of one police station, located at 8400 Laguna Palms Way, part of the City Hall complex,

approximately 5 miles (or 7 minutes) away from the SOIA Area. If there is development in the future in the SOIA Area, this could increase demand for law enforcement services. EGPD currently has a staffing ratio of 0.82 officers per 1,000 residents. With the addition of 13,000 to 16,250 persons identified in the EIR land use scenario, an estimated 11 to 14 (rounded up) officers could be needed.

The EGPD could need to hire additional officers and administrative staff or construct new on-site facilities to accommodate the increased demand for services. Physical impacts associated with construction and operations of on-site public facilities are evaluated throughout this EIR. The placement of any new on-site police protection facilities has been considered in the other sections of this Recirculated Draft EIR, such as Biological Resources, and resource sections in the Draft EIR, such as Air Quality, which specifically analyze the potential for project construction and implementation.

New staff, equipment, and facilities that would be necessary to provide additional law enforcement services would be funded by property taxes, development impact fees, and potentially other mechanisms. The EGPD collects development impact fees for police facilities. The purpose of the fees is to mitigate the impacts caused by development. The City planning department assesses a fee of $480 per single family dwelling (for fewer than 3 units, including duplexes), $317 per multi-family dwelling units,$305 for single family age-restricted housing, $220 for multi-family age restricted housing, $0.09 per square foot of commercial uses, $0.07 per square foot of car sales, $0.05 per square foot of hotel uses, $0.15 per square foot of office space, and $0.03 per square foot of industrial uses (City of Elk Grove 2016~~a~~c). The City reviews development impact fees yearly and adjusts as necessary to adequately fund police protection services (City of Elk Grove 2016~~a~~c). Future development would be required to pay a fair share of costs associated with law enforcement services and facilities through payment of development impact fees, consistent with Elk Grove General Plan Policy PF-21. This would help to ensure sufficient police protection facilities if there is development in the future within the SOIA Area.

It is currently not known if the EGPD's existing ~~fire protection~~ police facilities would be adequate to meet the demands of future development. Due to the substantial number of residents (an estimated 13,000 to 16,250 persons) that could theoretically be accommodated within the SOIA Area in the future, the EGPD could need to construct new off-site facilities and expand existing off-site facilities to maintain service ratios. Therefore, this impact is conservatively assumed for the purposes of this EIR to be **significant**.

Mitigation Measures

> Mitigation Measure 3.13-2: Prepare a Plan for Service that Demonstrates Adequate Police Protection Facilities are Available before the Annexation of Territory within the SOIA Area.
>
> At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall demonstrate that EGPD police protection and public safety facilities will meet the service demands of development identified for the annexation territory, or that fair-share funding will be provided for the construction of new on-site or off-site police protection facilities or expansion of existing police protection facilities, as needed, to accommodate the increase in demand resulting from development of the annexation territory. Any expansion of service shall not adversely impact current service levels.

Significance after Mitigation

Mitigation Measure 3.13-2 would reduce significant impacts associated with increased for police protection services because the City of Elk Grove would demonstrate EGPD police protection facilities will meet the service

demands of development identified for the annexation territory, or that fair-share funding will be provided. This mitigation could apply to the public facilities elements of potential future development, in addition to the private development components. Mitigation presented in other environmental topic area this EIR addresses potentially significant adverse environmental effects to the extent feasible. LAFCo is charged with applying requirements for changes in the organization of service agencies, ensuring efficient provision of government services, and guiding development away from prime agricultural land and other open space unless that development is planned, orderly, and efficient.

Construction of future off-site police protection facilities and expansion of existing facilities is the responsibility of the EGPD. Implementation of mitigation measures would be the responsibility of the EGPD. However, physical environmental impacts from construction or operation of new or expansion of existing facilities could remain significant after implementation of mitigation (i.e., significant and unavoidable), or no feasible mitigation may be available to fully reduce impacts to a less-than-significant level. There is no additional feasible mitigation. Therefore, the impact is **significant and unavoidable**.

IMPACT 3.13-3 Increased demand for schools. *Future development could result in the generation of school-aged children that increases the demand for schools. Future project applicant/s would be required to pay all applicable State-mandated school impact fees to EGUSD and the California Legislature has declared that payment of the applicable school impact fee is deemed to be full and adequate mitigation under CEQA for impacts on school facilities (California Government Code Section 65996). This impact is considered* ***less than significant****.*

Any development within the SOIA Area could lead to a substantial number of school-aged children in the area. ~~The conceptual land use plan has estimated that future development could generate approximately 2,700 students.~~ Using EGUSD's current student yield factors, the EGUSD has determined that the potential development of 1,790 multi-family homes and 3,200 single-family homes would generate 3,287 students. The SOIA Area is currently in the Franklin Elementary School District and the Elizabeth Pinkerton Middle School/Cosumnes Oaks High School District but it should be noted that school attendance boundaries may change, so other schools may eventually provide school services. As described above, ~~Franklin Elementary School, Elizabeth Pinkerton Middle School, and Cosumnes Oaks High School could accept more students.~~ Franklin Elementary School is currently over capacity and has been offloading students to nearby schools for several years. Additionally, any excess capacity currently existing at Elizabeth Pinkerton Middle School and Cosumnes Oaks High School will be used to house future students from the already approved Laguna Ridge Specific Plan, Sterling Meadows, and the Southeast Policy Area. Therefore, the EGUSD indicated that it is unlikely that those schools could accommodate the students who would reside in the SOIA Area (Williams, pers. comm., 2017). ~~Due to the number of students that could be generated by the proposed project, it is possible that adding these students to any existing school could exceed a school's capacity.~~

~~The project does not propose development or land use change. The location, type, and intensity of future development in the SOIA are not known at this time. For the purpose of analysis, a land use scenario was developed that included school facilities within the SOIA Area.~~ Although the project does not propose any development or land use change, future development could occur as a result of the SOIA. If the SOIA is approved, there may be annexation proposed in the future. If annexation is approved and development is proposed that requires discretionary review by the City of Elk Grove, this would require General Plan consistency findings. City General Plan Policy PF-16 requires developments to incorporate new schools in their overall designs, which

would likely help to ensure that adequate school facilities are provided for current and future residents. The City supports State legislative efforts to secure additional State funding for school construction and ensure maintenance of local district priorities for funds in the State school bond program (City General Plan Policy PF-18). In addition, City General Plan Policy PF-21 requires new development to fund its fair share portion of its impacts to all public facilities as provided for in State law.

EGUSD has indicated that approximately two new elementary schools, one new middle school, and one new high school would be required to serve students generate within the SOIA Area. CDE criteria and review by the State Architect would~~will~~ guide the final location and design of on-site schools to avoid adverse effects (e.g., greater than 1,500 feet from a railroad, greater than 1,500 feet from high-pressure water or gas pipelines, greater than 100 feet from high-voltage power lines, greater than 500 feet from a busy roadway, relatively flat topography, site configuration that allows line of sight for playground supervision, and greater than 0.25 mile from permitted sources of hazardous air emissions). City General Plan Policy PF-17 recognizes that school siting and development are not within the jurisdiction of the City to control. However, the City encourages the EGUSD to have new schools serve as a focal point of neighborhood activity; provide new schools within walking distance of all residences; locate new schools adjacent to neighborhood and community parks; and link new schools to trails, bikeways, and pedestrian paths. The actual size, capacity, and timing of new schools would be determined by EGUSD.

It is possible that future residential development within the SOIA Area would generate demand for school facilities that are not met within the SOIA Area or are not for some period of time within the SOIA Area as it builds out. However, depending on how school facilities are located and designed relative to possible future residential development within the SOIA Area, future students could potentially be bused or driven to off-site schools within the EGUSD boundaries resulting in indirect impacts related to transportation, such as air pollutant emissions, greenhouse gas emissions, and transportation noise. The timing and specifics necessary to fully evaluate construction of school projects are unknown and would be determined by the EGUSD.

The proposed project alone would not trigger the need for additional school facilities, and exceeding school capacity would not be considered a physical impact under CEQA. For the purpose of this analysis, a land use scenario was developed that included school facilities within the SOIA Area. Indirect p~~P~~hysical impacts associated with construction and operation of future public facilities within the SOIA Area are evaluated at a program-level in ~~the other sections of~~ this Recirculated Draft EIR and Draft EIR, since these facilities are considered to be part of potential future development consistent with the proposed project. ~~These resource sections, such as Air Quality, Biological Resources, and other sections, which provide analysis and mitigation of buildout of the SOIA Area, including public facilities.~~

As stated above, City General Plan policies require developments to incorporate new schools in their overall designs to ensure adequate school facilities are provided for current and future residents and require new development to fund its fair share portion of its impacts to all public facilities, as provided for in State law. Pursuant to SB 50, the project applicant would be required to pay all applicable State-mandated school impact fees to EGUSD. As of September 2016, EGUSD's fees were $5.01 per square foot for residential construction and $0.56 for commercial construction, although these fees may increase by the time development is proposed (City of Sacramento Community Development Department 2016). The City would determine the assessable square footage that would be subject to the fee at the time of development. The California Legislature has declared that payment of the applicable school impact fee is deemed to be full and adequate mitigation under CEQA for

impacts on school facilities (California Government Code Section 65996). This impact is considered **less than significant**.

Mitigation Measures

No mitigation measures are required.

IMPACT 3.13-4 Increased demand for park and recreation facilities. *Future development would increase demand for park and recreation facilities, the construction of which could result in impacts on the physical environment. This impact is considered less than significant.*

Currently, there are no trails within or adjacent to the SOIA Area. According to the Elk Grove Bicycle, Pedestrian, and Trails Master Plan map, the City has planned for a multipurpose trail along Kammerer Road north of the SOIA Area (City of Elk Grove 2014b).

City and CCSD parkland standards require a minimum of 5 acres of developed parkland per 1,000 residents. Currently, CCSD serves an estimated population of ~~183~~163,000, and manages ~~684~~ 750.7 acres of developed parks and 18 miles of trails~~, 3.7 acres per 1,000 residents~~. In addition, the City and CCSD own 124.4 acres of parkland located within the City limits that is in the process being developed. Future development within the SOIA Area could add an estimated 4,000 to 5,000 housing units, or 13,000 to 16,250 residents to the CCSD service area.[1] This would require the development of an estimated 65 to 81.25 acres of parkland, using standards maintained by the City and CCSD. Whether or not this would occur depends on the amount of residential development within the SOIA Area and recreational interests of this population vis-à-vis the parks and recreational facilities that are developed within the SOIA Area in the future and existing and future parks and recreational facilities within and outside Elk Grove that are accessible to SOIA Area residents.

If there is development within the SOIA Area in the future, this development is assumed to be under the jurisdiction of the City of Elk Grove, and therefore subject to Elk Grove Municipal Code and General Plan policies requiring the dedication of park and recreation facilities and/or the payment of an in-lieu fee. Any new residential development would be required to pay applicable impact fees, including the General Government Fee that funds park facilities and development fees or other fair share funding mechanisms required by the City. These impact fees could fund the development of a new park or the maintenance of existing parks. In addition, the City would ensure that individual development proposals within the SOIA Area would provide trail segments consistent with the Elk Grove Trails Master Plan as part of the development review process of any future development.

The land use scenario used for analysis in this EIR assumes parkland within the SOIA Area. Physical impacts associated with construction and operation of future public facilities within the SOIA Area are evaluated in the other sections of this Recirculated Draft EIR, such as Biological Resources, and resource sections in the Draft EIR, such as Air Quality, ~~other sections,~~ which provide analysis and mitigation of buildout of the SOIA Area, including public facilities. The land use scenario assumes that development of the SOIA Area includes facilities associated with typical development projects, which includes parks. This is consistent with requirements of the

[1] According to the California Department of Finance (2015), the City of Elk Grove, for the most recent year of data (2015), estimated the persons per household rate at 3.25. Approximately 4,000 to 5,000 units multiplied by 3.25 is approximately 13,000 to 16,250 new residents within the SOIA area.

City's Municipal Code, General Plan, and existing development pattern. Consequently, the construction of parks within the SOIA Area is assumed in each of the technical sections of this EIR, and there are no known additional potentially significant impacts related to the provision of parks and recreational facilities or deterioration of existing facilities. This impact is considered **less than significant**.

Mitigation Measures

No mitigation measures are required.

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3.14 TRANSPORTATION

This section summarizes the assumed land use scenario for the SOIA Area, the development of traffic volume forecasts, and the analysis of transportation and traffic impacts associated with implementation of the proposed project. The following scenarios are analyzed in this section:

- **Existing Conditions –** represents the baseline condition upon which project impacts are measured. The baseline condition represents conditions in fall 2014, which, for most of the studied roadways segments were obtained from the City of Elk Grove Average Daily Traffic (ADT) Volumes (Elk Grove 2014a). The segment volumes that were not available in the City's 2014 ADT database were obtained from a 2011 study of the possible impacts of development within the SOIA Area and surrounding areas under a previous SOIA proposal.

- **Existing Plus Project Conditions –** reflects changes in traffic and circulation conditions associated with implementation of the proposed project.

3.14.1 ENVIRONMENTAL SETTING

The SOIA Area is located south of existing City of Elk Grove boundaries (Exhibit 2-1). Roadways are the primary existing type of transportation facility within the SOIA Area. The existing roadway network consists of freeways, thoroughfares, arterials, collectors, and rural roadways. Railroads and related facilities are also present in the vicinity of the SOI Area and are generally used for movement of goods. A description of the major transportation facilities, major roadway segments, current traffic volumes, and alternative transportation modes is provided below.

STUDY AREA

The following 21 roadway and 11 freeway segments (Exhibit 3.14-1) were selected for analysis based on their proximity to the SOIA Area and the expected use of these facilities if the SOIA Area is developed in the future. The roadway and freeway segments identified below represent the study area for the transportation analysis summarized in this EIR.

Roadway Segments

1. Elk Grove Boulevard from Interstate 5 (I-5) to Harbour Point Drive
2. Elk Grove Boulevard from Harbour Point Drive to Franklin Boulevard
3. Elk Grove Boulevard from Franklin Boulevard to Bruceville Road
4. Elk Grove Boulevard from Bruceville Road to Laguna Springs Drive
5. Elk Grove Boulevard from Laguna Springs Drive to State Route 99
6. Elk Grove Boulevard from State Route 99 (SR 99) to East Stockton Boulevard
7. Elk Grove Boulevard from East Stockton Boulevard to Elk Grove Florin Road
8. Elk Grove Boulevard from Elk Grove Florin Road to Waterman Road
9. Grant Line Road from Promenade Parkway to East Stockton Boulevard
10. Grant Line Road from East Stockton Boulevard to Waterman Road
11. Grant Line Road from Waterman Road to Elk Grove Boulevard
12. Bilby Road from Franklin Boulevard to Bruceville Road

13. Kammerer Road from Bruceville Road to Promenade Parkway
14. Eschinger Road from Bruceville Road to SR 99
15. Dillard Road from SR 99 to Wilton Road
16. Lambert Road from I-5 to Bruceville Road
17. Franklin Boulevard from Elk Grove Boulevard to Whitelock Parkway
18. Bruceville Road from Elk Grove Boulevard to Whitelock Parkway
19. Bruceville Road from Whitelock Parkway to Kammerer Road
20. Bruceville Road from Kammerer Road to Eschinger Road
21. Bruceville Road from Eschinger Road to Lambert Road

Freeway Segments

1. I-5 from Twin Cities Road to Hood Franklin Road
2. I-5 from Hood Franklin Road to Elk Grove Boulevard
3. I-5 from Elk Grove Boulevard to Laguna Boulevard
4. I-5 from Laguna Boulevard to north of Laguna Boulevard
5. SR 99 from Mingo Road to Arno Road
6. SR 99 from Arno Road to Dillard Road
7. SR 99 from Dillard Road to Eschinger Road
8. SR 99 from Eschinger Road to Grant Line Road
9. SR 99 from Grant Line Road to Elk Grove Boulevard
10. SR 99 from Elk Grove Boulevard to Laguna Boulevard/Bond Road
11. SR 99 from Laguna Boulevard/Bond Road to north of Laguna Boulevard/Bond Road

EXISTING CONDITIONS

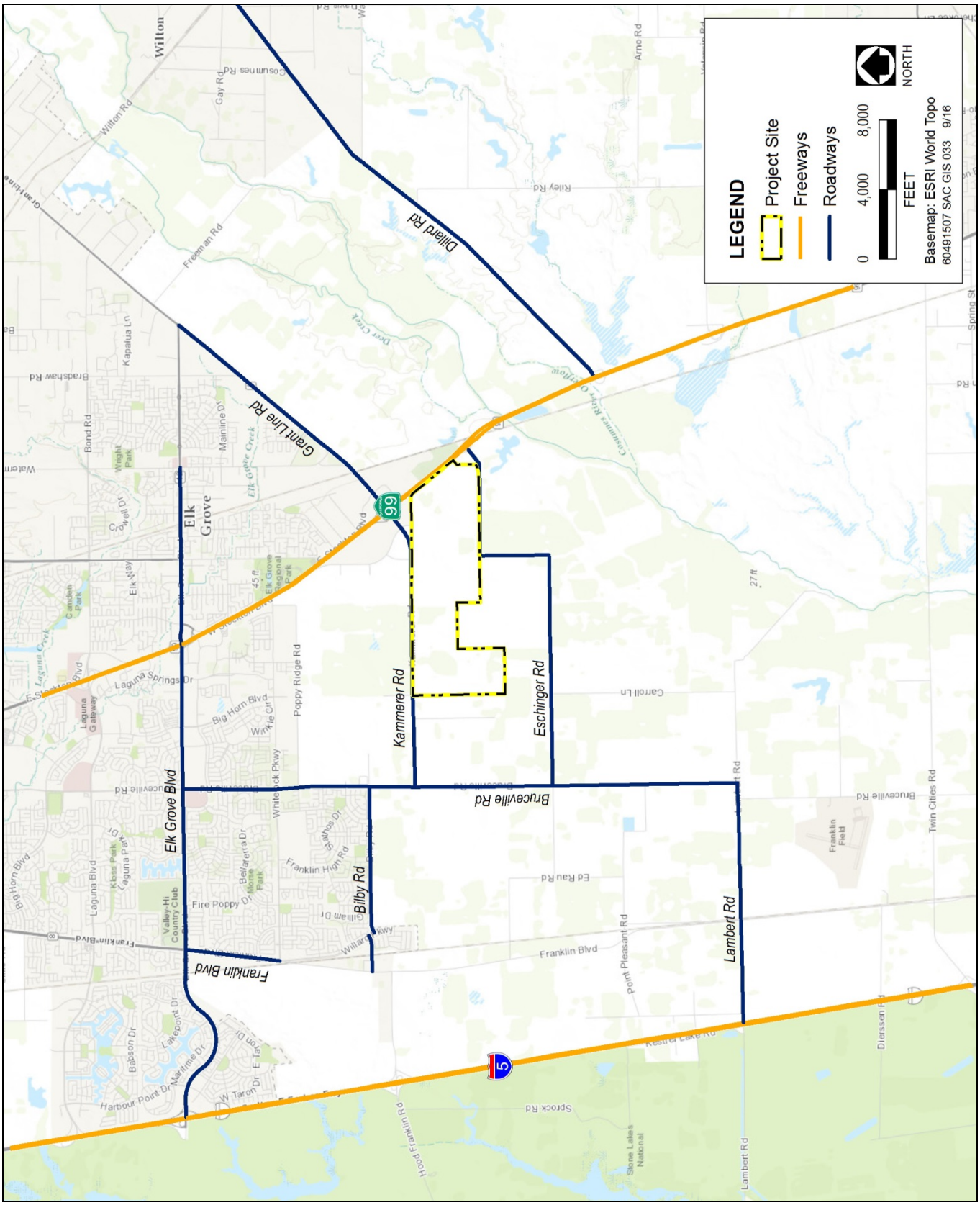
The existing physical and operating characteristics of the roadway system, transit system, and bicycle/pedestrian system are described in this section to provide a context for understanding the severity of impacts caused by the proposed project and future annexation and urbanization activities that could be experienced in the SOIA Area.

Roadway System

Implementation of the proposed project will most directly affect roadways under the jurisdiction of the County of Sacramento and the City of Elk Grove. SR 99 and I-5 will also serve the SOIA Area.

State Route 99 (SR 99)

SR 99 is a north–south freeway within the study area with interchanges at Laguna Boulevard, Elk Grove Boulevard, Grant Line Road, and Dillard Road. It consists of two lanes in each direction from south of Grant Line Road to just south of Elk Grove Boulevard, where a high occupancy vehicle (HOV) lane is added in each direction. The full-access SR 99/Grant Line Road interchange and the partial SR 99/Eschinger Road interchange (SB access only) would provide freeway access to and from the SOIA Area.



Source: AECOM 2016

Exhibit 3.14-1 **Project Roadway Segments**

Interstate 5 (I-5)

I-5 is a north–south freeway within the study area with interchanges at Hood-Franklin Road, Elk Grove Boulevard, and Laguna Boulevard. It consists of two lanes in each direction south of Laguna Boulevard and three lanes in each direction north of Laguna Boulevard. The full-access I-5/Hood-Franklin Road interchange would provide freeway access to the SOIA Area.

Elk Grove Boulevard

Elk Grove Boulevard is a major east–west roadway that extends from I-5 to Grant Line Road. Through the study area, Elk Grove Boulevard is generally a six-lane roadway from I-5 to SR 99 and a four-lane roadway from SR 99 to Elk Grove-Florin Road. East of Elk Grove-Florin Road, Elk Grove Boulevard narrows to two lanes.

Grant Line Road

Grant Line Road is a major north–south arterial that extends from SR 99 to White Rock Road in unincorporated Sacramento County. Grant Line Road has a Type L-9 partial cloverleaf[1] interchange at SR 99 with a six-lane overcrossing that can accommodate eight through lanes. Grant Line Road transitions to two lanes east of Waterman Road ~~SR 99~~.

Bilby Road

Bilby Road is an east–west two-lane collector roadway that extends from Franklin Boulevard to Bruceville Road in the east.

Kammerer Road

Kammerer Road is an east–west roadway that extends from SR 99 to Bruceville Road. Kammerer Road has six lanes between SR 99 and Lent Ranch Parkway and narrows to a two-lane facility to the west.

Eschinger Road

Eschinger Road is an east–west, two-lane roadway between SR 99 and Bruceville Road. Eschinger Road is located outside the County's Urban Services Boundary.

Dillard Road

Dillard Road is an east–west, two-lane rural roadway that extends from SR 99 in the west to Jackson Road in the east. Dillard Road is located outside the County's Urban Services Boundary.

Lambert Road

Lambert Road is an east–west, two-lane rural roadway that extends from Bruceville Road west to River Road. Lambert Road is located outside the County's Urban Services Boundary.

[1] The Type L-9, partial cloverleaf interchange, provides loop on-ramps in addition to the four diamond-type ramps. This interchange is suitable for large volume turning movements. Left-turn movements from the crossroads are eliminated, thereby permitting two-phase operation at the ramp intersections when signalized. Because of this feature, the Type L-9 interchange usually has capacity to handle the higher volume traffic on the crossroad. (Caltrans 2015)

Franklin Boulevard

Franklin Boulevard is a north–south roadway that extends from Twin Cities Road (south of the SOIA Area) to the city of Sacramento in the north. It is a two-lane, rural road between Lambert Road and Hood-Franklin Road and is outside the County's Urban Services Boundary. In the City of Elk Grove, Franklin Boulevard is two lanes to Whitelock Parkway and is a four-lane road between Whitelock Parkway and Elk Grove Boulevard.

Bruceville Road

Bruceville Road is a north–south roadway that extends from Desmond Road in southern Sacramento County north to Valley Hi Drive. From Lambert Road to Kammerer Road, Bruceville Road is a two- lane rural roadway and is outside the County's Urban Services Boundary. In the City of Elk Grove, Bruceville Road is a two-lane arterial between Kammerer Road and Whitelock Parkway. North of Whitelock Parkway, Bruceville Road is four lanes.

Vehicle Miles Traveled (VMT)

Governor Brown signed Senate Bill (SB) 743 in September 2013, which creates a process to change the way that transportation impacts are analyzed under CEQA. Specifically, SB 743 requires the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts and to recommend analysis methodology and thresholds. Once the CEQA Guidelines are amended to include those alternative criteria, auto delay will no longer be considered a significant impact under CEQA (Public Resources Code Section 21099(b)(1).) OPR selected VMT as the preferred metric and is working to finalize guidance material that is anticipated to go into effect in 2019. SB 743 did not change the discretion that lead agencies have to select methodology or define their own significance thresholds.

Under ~~Senate Bill~~SB 743 (SB 743), the focus of transportation analysis shifted from driver delay to travel demand. Measurements of transportation impacts may include vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. ~~SB 743 directs the Governor's Office of Planning and Research (OPR) to develop guidelines for assessing transportation-related impacts that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099[b][1]).~~ Vehicle miles traveled, or VMT, has long been a common metric to use to measure travel demand. A VMT is one vehicle traveling on a roadway for one mile. For this section and most of SACOG's technical analysis, VMT is estimated and projected for a typical weekday, as defined in Chapter 5A of the 2036 MTP/SCS. Many communities have been estimating and developing policy related to VMT for years, including estimates and goals for VMT per person, VMT per employee, or other methods of normalization. SB 743 directs revisions to the CEQA Guidelines that would create criteria for assessing travel demand, such as "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated" (Public Resources Code Section 21099[b][1]). Once the CEQA Guidelines are amended to include guidance for measuring travel demand, the Guidelines will recommend that delay related to congestion no longer be considered a significant impact under CEQA (OPR 2016). VMT has been a primary indicator of travel demand for decades for several reasons, including:

> "First, it is relatively easy to measure by counting traffic on roadways at different locations. It is one of the few measures of transportation performance that has been consistently and comprehensively monitored and documented over time in the region… Second, VMT bears a direct relationship to vehicle emissions…Third, VMT can be influenced by policy in a number of different ways. By

> providing more attractive alternatives to driving alone, VMT can be reduced by shifting from vehicle to non-vehicle modes… or from low occupancy to higher occupancy… VMT can be influenced by land use patterns as well. A better mix of residential, employment, education, and service uses in an area can allow people to accomplish their daily activities with less driving, and consequently, less VMT. Fourth, VMT correlates with congestion… Finally, VMT correlates with frequency of traffic accidents" (SACOG 2016, Chapter 5b, page 76).

The Sacramento Area Council of Governments (SACOG) prepared a regional analysis of VMT and found average daily VMT for Sacramento County to be approximately 32,937,000. This travel demand is forecast to increase to 37,092,000 in 2020 and to 43,669,000 in 2036 under the Metropolitan Transportation Plan (MTP)/Sustainable Communities Strategy (SCS) (SACOG 2016).

Level of Service (LOS)

Roadway operating conditions are described using the concept of level of service (LOS). LOS is a qualitative measure of the effect of a number of factors, including speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort/convenience, and operation costs. LOS ranges from A to F, from the best to worst, which covers the entire range of traffic operations that might occur. In general, LOS A represents free-flow conditions with no congestion, LOS E describes conditions approaching or at maximum capacity, and LOS F represents severe congestion and delay under stop-and-go conditions.

For all roadways in the traffic analysis study area, a segment-based LOS was calculated by dividing the average weekday traffic volumes on a roadway segment by a planning-level daily capacity for that roadway segment to determine the volume/capacity ratio (v/c). The capacity thresholds for arterials and rural facilities are from the Sacramento County Traffic Impact Analysis Guidelines (2004). The capacity thresholds for freeways are from the City's Traffic Impact Analysis Guidelines (2000[2]). These thresholds are used to identify the need for new or upgraded facilities. The daily segment-based analysis criteria used in the LOS analysis are consistent with the methodologies used in the environmental impact analyses on the General Plan Updates for Sacramento County and the City of Elk Grove, as well as by other jurisdictions in the region.

Consistent with assumptions in the City's General Plan Background Report, study segments were analyzed using thresholds for arterial roadways with moderate access control. Table 3.14-1 shows daily volume thresholds for each LOS category for two-, four-, six-, and eight-lane roadways with moderate access control.

Table 3.14-2 summarizes study roadway and freeway segment operations under existing conditions, and includes the following information for each study roadway segment:

- Daily roadway capacity
- Daily traffic volume (two-way total)
- Volume-to-capacity ratio
- LOS

[2] The City of Elk Grove Traffic Impact Analysis Guidelines were adopted from Sacramento County. These guidelines use the highway capacities set forth in 1985 Highway Capacity Manual, which is more conservative than the more recent 2000 Highway Capacity Manual.

Table 3.14-1. Level of Service Definitions for Study Roadways[1]						
Facility Type	Number of Lanes	Maximum Daily Volume				
		LOS A	LOS B	LOS C	LOS D	LOS E
Arterial, Low Access Control[2]	2	9,000	10,500	12,000	13,500	15,000
	4	18,000	21,000	24,000	27,000	30,000
	6	27,000	31,500	36,000	40,500	45,000
Arterial, Moderate Access Control[3]	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000
Arterial, High Access Control[4]	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000
	6	36,000	42,000	48,000	54,000	60,000
Rural, 2-Lane Highway	2	2,400	4,800	7,900	13,500	22,900
Rural 2-Lane Road, 24 feet to 36 feet of pavement, paved shoulders	2	2,200	4,300	7,100	12,200	20,000
Rural 2-Lane Road, 24 feet to 36 feet of pavement, no shoulders	2	1,800	3,600	5,900	10,100	17,000
Freeway[5]	4	28,000	43,200	61,600	74,400	80,000
	6	42,000	64,800	92,400	111,600	120,000
	8	56,000	86,400	123,200	148,800	160,000

Notes:
[1] Both number of lanes and daily volume thresholds are two-way totals.
[2] Low access control roads generally have frequent driveways and speeds of 25 to 35 mph.
[3] Medium access control roads generally have limited driveways and speeds of 30 to 35 mph.
[4] High access control roads generally have no driveways and speeds of 35 to 50 mph.
[5] Freeway capacities from City of Elk Grove Traffic Impact Analysis Guidelines.
LOS = Level of Service
Sources: Sacramento County 2004; Elk Grove 2000; Fehr & Peers 2011

As shown in Table 3.14-2, most of the study roadway segments operate acceptably, except for Elk Grove Boulevard between Laguna Spring Drive and SR 99~~, and the segment of Grant Line Road between Promenade Parkway and Waterman Road~~, which operates at LOS F. Also, as shown, all of the freeway segments operate acceptably at LOS E or better, based on daily traffic volumes. However, the SR 99 segments between Elk Grove Boulevard and Laguna Boulevard/Bond Road, as well as the segment north of Laguna Boulevard/Bond Road operate at LOS F. However, this is consistent with the LOS for SR 99 from Elk Grove Boulevard to Martin Luther King Jr. Boulevard identified in the California Department of Transportation (Caltrans) Transportation Concept Report (TCR) for SR 99, which identifies LOS F for this location (Caltrans 2004).

Bicycle and Pedestrian Facilities

Bicycle and pedestrian trips account for approximately 2.8 percent of all work trips and 4.9 percent of all non-work trips made by residents and employees in suburban areas. This estimate is from the Pre-Census Travel Behavior Report Analysis of the 2000 SACOG Household Travel Survey.

Elk Grove Bicycle, Pedestrian, and Trails Master Plan

The City adopted the City of Elk Grove Bicycle, Pedestrian, and Trails Master Plan in July 2014 (Elk Grove 2014b). The Bicycle, Pedestrian, and Trails Master Plan BPMP identifies existing facilities opportunities, constraints, and destination points for bicycle users and pedestrians in Elk Grove. Below are descriptions of bicycle paths and their classifications.

Table 3.14-2. Roadway Segment Level of Service – Existing Conditions				
Roadway Segment	Daily Capacity[1]	Daily Volume[2]	V/C Ratio	LOS
Elk Grove Boulevard from Interstate 5 to Harbour Point Drive	54,000	25,500	0.47	A
Elk Grove Boulevard from Harbour Point Drive to Franklin Boulevard	54,000	26,300	0.49	A
Elk Grove Boulevard from Franklin Boulevard to Bruceville Road	54,000	33,200	0.61	B
Elk Grove Boulevard from Bruceville Road to Laguna Springs Drive	54,000	43,600	0.81	D
Elk Grove Boulevard from Laguna Springs Drive to State Route 99	54,000	55,200	1.02	**F**
Elk Grove Boulevard from SR 99 to E Stockton Boulevard	36,000	27,000	0.75	C
Elk Grove Boulevard from East Stockton Boulevard to Elk Grove Florin Road	36,000	26,000	0.72	C
Elk Grove Boulevard from Elk Grove Florin Road to Waterman Road	18,000	17,100	0.95	E
Grant Line Road from Promenade Pkwy. to East Stockton Blvd.	~~18,000~~54,000	18,100	~~1.01~~0.3	~~**F**~~A
Grant Line Road from East Stockton Blvd. to Waterman Road	~~18,000~~36,000	22,400	~~1.24~~0.6	~~**F**~~B
Grant Line Road from Waterman Road to Elk Grove Boulevard	18,000	16,100	0.89	D
Bilby Road from Franklin Boulevard to Bruceville Road	18,000	4,771	0.27	A
Kammerer Road from Bruceville Road to Promenade Parkway	20,000	7,200	0.36	A
Eschinger Road from Bruceville Road to SR 99	18,000	1,000	0.06	A
Dillard Road from SR 99 to Wilton Road	17,000	4,676	0.28	A
Lambert Road from I-5 to Bruceville Road	17,000	898	0.05	A
Franklin Boulevard from Elk Grove Boulevard to Whitelock Parkway	36,000	19,700	0.55	A
Bruceville Road from Elk Grove Boulevard to Whitelock Parkway	36,000	22,400	0.62	B
Bruceville Road from Whitelock Parkway to Kammerer Road	18,000	3,700	0.21	A
Bruceville Road from Kammerer Road to Eschinger Road	17,000	2,100	0.12	A
Bruceville Road from Eschinger Road to Lambert Road	17,000	1,500	0.09	A
I-5 from Twin Cities Road to Hood Franklin Road	80,000	50,000	0.63	B
I-5 from Hood Franklin Road to Elk Grove Boulevard	80,000	60,000	0.75	C
I-5 from Elk Grove Boulevard to Laguna Boulevard	80,000	76,000	0.95	E
I-5 from Laguna Boulevard to north of Laguna Boulevard	120,000	91,000	0.76	C
SR 99 from Mingo Road to Arno Road	80,000	77,000	0.96	E
SR 99 from Arno Road to Dillard Road	80,000	70,000	0.88	D
SR 99 from Dillard Road to Eschinger Road	80,000	71,000	0.89	D
SR 99 from Eschinger Road to Grant Line Road	80,000	71,000	0.89	D
SR 99 from Grant Line Road to Elk Grove Boulevard	80,000	73,000	0.91	E
SR 99 from Elk Grove Boulevard to Laguna Boulevard/Bond Road	80,000	119,000	1.49	**F**
SR 99 from Laguna Boulevard/Bond Road to north of Laguna Boulevard/ Bond Road	80,000	152,000	1.90	**F**

Notes:
1 The capacity of each roadway is based on the number of lanes and the facility type.
2 The baseline condition represents conditions in fall 2014, which for most of the studied roadways segments were obtained from the City of Elk Grove Average Daily Traffic (ADT) Volumes. The segment volumes not available in the City's 2014 ADT were obtained from the 2011 study for the proposed project.
LOS = level of service
V/C = volume/capacity ratio
Bold text indicates unacceptable LOS.
Source: Fehr & Peers 2011; Elk Grove 2014a.

- Class I bike paths provide a completely separated right-of-way for the exclusive use of bicycles and pedestrian with cross-flow minimized.
- Class II bike lanes are striped lanes for one-way bike travel on a street or highway.
- Class III bike routes provide for shared use with pedestrians or motor vehicle traffic.

Since the vicinity of the SOIA Area is not developed, it does not have existing bicycle or pedestrian facilities. There are Class II bike lanes along Promenade Parkways northeast of the SOIA Area and Kammerer Road/Grant Line Road have a Class II bike lane in the vicinity of SR 99.

Transit Facilities

The City operates e-Tran, including e-Tran neighborhood shuttle service (ez-tran), limited local transit service, and commuter routes to provide transit service to its residents. Local transit service is provided on weekdays (six routes) and weekends (three routes). E-Tran provides nine commuter routes that operate mid-week, including two reverse commuter routes. e-Tran provides the following services:

- Fixed-route local bus service (e-Tran) within the City;
- Commuter service to Sacramento, Galt, and Lodi;
- Connections to Sacramento Regional Transit District light rail transit stations on the SR 99 and U.S. Highway 50 corridors; and
- Park & ride facilities located throughout the community.

The closest routes to the SOIA Area operate on Bilby Road between Franklin Boulevard and Bruceville Road and on Grant Line Road between Bradshaw Road and Waterman Road. The SOIA Area is not currently served by e-tran, since it is not currently planned for development.

3.14.2 REGULATORY FRAMEWORK

STATE PLANS, POLICIES, LAWS, AND REGULATIONS

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining State-owned roadways. Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the State highway system within the Sacramento County or the City of Elk Grove need to be approved by Caltrans.

Caltrans operates and maintains SR 99, I-5, and SR 160, which provide regional access to the City and the SOIA Area. Additionally, the Caltrans Division of Planning has four major functions: the Office of Advance Planning, Regional Planning/Metropolitan Planning Organization, Local Assistance/Intergovernmental Relations (IGR)/CEQA, and System Planning Public Transportation. The Office of System Planning Public Transportation prepares TCRs in coordination with the regional planning partners and other district divisions. The TCRs are long-term planning documents, which evaluate current and projected conditions along specified routes. The TCRs

establish 20-year planning visions and concepts and recommend long-term improvements to achieve the concept. The TCRs also reflect the plans of the applicable Regional Transportation Planning Agencies and Metropolitan Planning Organizations (MPOs, such as the Sacramento Area Council of Governments [SACOG] for the Sacramento region) for managing local and regional travel demand on State routes. Caltrans has established a Concept Level of Service for all roadways under its jurisdiction. The Concept LOS assumes a 20-year horizon and improvements to the identified facility. For planning purposes, Caltrans has established LOS D as the minimal acceptable level of service for all roadways under its jurisdiction. However, the Concept LOS for SR 99 from Elk Grove Boulevard to Martin Luther King Jr. Boulevard is LOS F (Caltrans 2004).

REGIONAL AND LOCAL PLANS, POLICIES, LAWS AND REGULATIONS

SACOG Metropolitan Transportation Plan

The Sacramento Area Council of Governments (SACOG) is responsible for the preparation of, and updates to, the Metropolitan Transportation Plan (MTP) and the corresponding Metropolitan Transportation Improvement Program (MTIP) for the six-county Sacramento region. The MTP provides a 20-year transportation vision and corresponding list of projects. The MTIP identifies short-term projects (7-year horizon) in more detail. The current MTP, the MTP/SCS 2036, was adopted in February 2016 (SACOG 2016). SACOG is also responsible for the oversight and distribution of most federal and State transportation funding sources.

The Sacramento County Department of Transportation (DOT) Traffic Impact Guidelines

If the SOIA is approved, if annexation is proposed and approved in the future, and if development is proposed and approved in the future, this would occur under the jurisdiction of Elk Grove. However, the SOIA Area is currently in unincorporated Sacramento County, and there would continue to be property in the unincorporated adjacent to the SOIA Area, even if there is development in the future. Therefore, County policies are presented for context.

The Sacramento County Department of Transportation (DOT) Traffic Impact Guidelines (2004) define the significance thresholds for traffic and circulation impacts in the unincorporated County.

Sacramento County General Plan

The County defines the minimum acceptable operation level for its roadways and intersections to be LOS D for rural areas and LOS E for urban areas. The urban areas are those areas within the Urban Service Boundary as shown in the Land Use Element of the Sacramento County General Plan. The areas outside the Urban Service Boundary are considered rural.

The County of Sacramento General Plan, Circulation Element (Amended in May 2014) establishes goals and policies to guide both present and future development within the County's jurisdiction. If the SOIA is approved, if annexation is proposed and approved in the future, and if development is proposed and approved in the future, this would occur under the jurisdiction of Elk Grove. However, County policies and implementation measures are presented for context.

Mobility

Policies

- **CI-1.** Provide complete streets to provide safe and efficient access to a diversity of travel modes for all urban, suburban and rural land uses within Sacramento County except within certain established neighborhoods where particular amenities (such as sidewalks) are not desired. Within rural areas of the County, a complete street may be accommodated through roadway shoulders of sufficient width or other means to accommodate all modes of travel.

- **CI-2.** Promote continued mobility for individuals whose access to automobile transportation is limited by age, illness, income, desire, or disability.

- **CI-3.** Travel modes shall be interconnected to form an integrated, coordinated and balanced multi-modal transportation system, planned and developed consistent with the land uses to be served.

- **CI-4.** Provide multiple transportation choices to link housing, recreational, employment, commercial, educational, and social services.

- **CI-5.** Land use and transportation planning and development should be cohesive, mutually supportive, and complement the objective of reducing per capita vehicle miles travelled (VMT).

- **CI-6.** Provide support for community based corridor planning processes on existing roadways with excess vehicle capacity within built communities to optimize the public right-of-way by utilizing the excess width for other modes of travel or public amenities such as bike lanes, landscaping, walkways, parking, or medians.

Implementation Measures

A. Collaborate with transit providers and planning staff to ensure that all transit oriented development and identified commercial corridors are considered for comprehensive transit service and have full bicycle and pedestrian access.

B. Adopt measures to ensure that all transportation facility construction provides access between modes, or multi-modal connections, so that Sacramento County residents can easily use multiple travel modes in conjunction with one another.

C. Assess the use of developer fees and/or improvement districts to contribute to improved transit, pedestrian and bicycle facilities in commercial corridors.

D. Promote safety education and skills training programs.

Roadways

Policies

- **CI-7.** Plan and construct transportation facilities as delineated on the Transportation Plan of the Sacramento County General Plan. Transportation facilities shall be consistent with the Sacramento County, Municipal Services Agency Improvement Standards and Construction Specifications, the Connector Project Design

Guidelines, and supplemented by the California Department of Transportation (Caltrans) design standards. The County may deviate from the adopted County Improvement Standards and Construction Specifications in circumstances where conditions warrant special treatment. The Capital SouthEast Connector, as designated in the Transportation Plan map, shall be consistent with the most current JPA-approved "Capital SouthEast Connector JPA Project Design Guidelines," provided that the Project Design Guidelines will not be applied to diminish or alter the rights of County-approved projects and provided that the design exception process within the Project Design Guidelines is not amended to diminish the County's land use authority to approve future projects proximate to or its authority to determine access to the Capital SouthEast Connector.

- The Capital SouthEast Connector is intended to serve the transportation demand for both existing land uses and future growth within the Urban Services Boundary (USB). The County reserves all of its rights and powers to assure that sufficient access to and from the Connector roadway is available to accommodate the existing land uses as well as the future growth within the USB. For areas of the unincorporated County outside of the USB, the County will limit access to and from the Connector roadway to only accommodate the existing and future land uses permitted outside of the USB.

- **CI-8.** Maintain and rehabilitate the roadway system to maximize safety, mobility, and cost efficiency.

- **CI-9.** Plan and design the roadway system in a manner that meets Level of Service (LOS) D on rural roadways and LOS E on urban roadways, unless it is infeasible to implement project alternatives or mitigation measures that would achieve LOS D on rural roadways or LOS E on urban roadways. The urban areas are those areas within the Urban Service Boundary as shown in the Land Use Element of the Sacramento County General Plan. The areas outside the Urban Service Boundary are considered rural.

- **CI-10.** Land development projects shall be responsible to mitigate the project's adverse impacts to local and regional roadways.

- **CI-11.** To preserve public mobility, freeways and thoroughfares should have limited access and maintain functional characteristics that predominantly accommodate through- traffic.

- **CI-12.** To preserve public safety and local quality of life on collector and local roadways, land development projects shall incorporate appropriate treatments of the Neighborhood Traffic Management Program.

- **CI-13.** Collaborate with regional transportation planning agencies and neighboring jurisdictions to provide cross jurisdictional mobility.

- **CI-14.** Pursue all available sources of funding for the development, improvement, and maintenance of the roadway system.

- **CI-15.** Support the relinquishment of State Highways to the County when the operation of the highway supports local travel demand rather than longer interregional travel demand. Relinquished State Highways shall be developed as a complete street that accommodates all modes of travel.

- **CI-16.** The County supports creating communities that promote access and mobility for all modes of travel through the development of roadway networks based on a grid or modified grid layout.

- **CI-17.** Ensure that transportation infrastructure improvement projects initiated by the County include a comprehensive public outreach process and involves affected local stakeholders and communities in the beginning and throughout the planning and development process for the project.

- **CI-18.** The County shall plan and prioritize the implementation of intersection improvements, where feasible, in corridors identified as congested.

Implementation Measures

A. Update the County Improvement Standards as needed to maintain consistency with adopted transportation plans and current engineering practices.

B. Fund, design and construct capital improvement projects as adopted in the Transportation Improvement Plan.

C. Establish roadway maintenance and rehabilitation priorities through the Pavement Management System.

D. Assess the transportation impacts of land development projects as set forth in the Sacramento County Traffic Impact Analysis Guidelines.

E. Fund and implement traffic calming and other traffic management improvements in accordance with the Neighborhood Traffic Management Program.

F. Actively participate in regional forums and staff interjurisdictional committees that address regional transportation issues.

G. The County shall establish Level of Service standards and desirable thresholds for all modes of travel including pedestrian, bicycle, and transit modes of travel.

H. The County shall establish connectivity policies and standards that promote walkable and bikeable communities through the development of roadway networks based on a grid or modified grid layout.

I. The County shall establish speed management policies and standards that consider appropriate operating speeds for each mode of travel that will result in a safe environment for all users.

J. Any applicable mitigation measures contained within the JPA's "Mitigation Monitoring and Reporting Program for the Connector Project" (MMRP) incorporated herein by this reference, shall be applied to any portion of the Connector Project that the County decides to carry out, finance, or approve.

Transit

Policies

- **CI-19.** Collaborate with transit service providers to provide transit services within the County that are responsive to existing and future transit demand.

- **CI-20.** Promote transit services in appropriate commercial corridors and where population and employment densities are sufficient or could be increased to support those transit services.

- **CI-21.** Collaborate with neighboring jurisdictions and other agencies to achieve land use patterns and densities in areas planned for development that support transit services, preserve adequate rights-of-way, and enhance transit services in the designated transit corridors.

- **CI-22.** Collaborate with the Sacramento Area Council of Governments and transit service providers to pursue all available sources of funding for transit services when consistent with General Plan policies and long-term funding capabilities.

- **CI-23.** Consider the transit needs of senior, disabled, low-income, and transit-dependent persons in making recommendations regarding transit services.

- **CI-24.** Collaborate with transit service providers for the development of facilities that provide for efficient links and interconnectivity with different transportation modes, including bicyclists and pedestrians.

- **CI-25.** The County shall develop right-of-way acquisition guidelines for the implementation of transit services shown on the Transportation Plan.

- **CI-26.** Consider the expansion of Neighborhood Shuttle services in unincorporated area communities.

- **CI-27.** Public Facilities Financing Plans shall incorporate capital costs for transit. Infrastructure Master Plans shall include transit planning.

- **CI-28.** Collaborate with local transit service providers in obtaining all available sources of funding for the development, improvement, and maintenance of the transit system.

- **CI-29.** The County shall work with transit service providers to establish and implement development guidelines to maximize the ability of new development and redevelopment to support planned transit services. New development and redevelopment shall have an orientation to travel patterns that are conducive to transit service. This will include concentration of development in centers and along linear corridors such that trip origins and destinations are concentrated near transit services.

- **CI-30.** The County shall collaborate with transit service providers to promote the phased implementation of transit services to all growth areas as development occurs.

- **CI-31.** In BRT corridors that are anticipated to be congested in the future, the County shall implement all feasible measures to minimize the effects of congestion on transit travel times.

Bicycle and Pedestrian Facilities

Policies

- **CI-32.** Develop a comprehensive, safe, convenient and accessible bicycle and pedestrian system that serves and connects the County's employment, commercial, recreational, educational, social services, housing and other transportation modes.

- **CI-33.** Adopt, implement and periodically update the Sacramento County Bicycle Master Plan for unincorporated Sacramento County that sets forth the goals, policies, guidelines, programs and improvements necessary to accomplish the goals of this section.

- **CI-34.** Construct and maintain bikeways and multi-use trails to minimize conflicts between bicyclists, pedestrians, and motorists.

- **CI-35.** The applicant/developer of land development projects shall be responsible to install bicycle and pedestrian facilities in accordance with Sacramento County Improvement Standards and may be responsible to participate in the fair share funding of regional multi-use trails identified in the Sacramento County Bicycle Master Plan.

- **CI-36.** Collaborate with neighboring jurisdictions and regional agencies to coordinate planning and development of the County's bikeways, pedestrian facilities and multi-use trails with those of neighboring jurisdictions, and to support a regional bicycle and pedestrian network.

- **CI-37.** Pursue all available sources of funding for the development, improvement, and maintenance of bikeways, pedestrian facilities and multi-use trails, and to support bicycle and pedestrian safety, education, encouragement and enforcement programs.

- **CI-38.** Design and construct pedestrian facilities to ensure that such facilities are accessible to all users.

Implementation Measures

A. Fund, design, construct and maintain bikeways and other bicycle improvement projects, and implement bicycle safety, education, encouragement and enforcement programs, in accordance with the adopted Sacramento County Bicycle Master Plan.

B. Fund, design, construct and maintain pedestrian improvement projects in accordance with the adopted Pedestrian Master Plan.

C. Fund, design, construct and maintain disability access improvements in accordance with the adopted Americans with Disabilities Act (ADA) Transition Plan.

D. Design and construct roadway capital improvement projects consistent with the policies, guidelines and improvements set forth in the Sacramento County Bicycle Master Plan, Pedestrian Master Plan and ADA Transition Plan.

E. Condition land development projects based on the policies, guidelines and improvements set forth in the Sacramento County Bicycle Master Plan, Pedestrian Master Plan and ADA Transition Plan.

Transportation Systems Management

Policies

- **CI-39.** Plan and implement intelligent transportation system (ITS) strategies within the County's high-demand travel corridors and support efforts to deploy ITS strategies on a regional level.

- **CI-40.** Whenever possible, the applicant/developer of new and infill development projects shall be conditioned to fund, implement, operate and/or participate in TSM programs to manage travel demand associated with the project.

- **CI-41.** Consider TSM programs that increase the average occupancy of vehicles and divert automobile commute trips to transit, walking, and bicycling.

- **CI-42.** Collaborate with other agencies to develop measures to provide for more efficient traffic flow, reduce vehicular travel demand and meet air quality goals.

- **CI-43.** The County shall promote transit-supportive programs in new development, including employer-based trip-reduction programs (employer incentives to use transit or non- motorized modes), "guaranteed ride home" for commute trips, and car-share or bike- share programs.

City of Elk Grove

The City of Elk Grove General Plan Circulation Element (March 2015) establishes goals and policies to guide both present and future development within the City's jurisdiction (City of Elk Grove 2015). The City of Elk Grove's General Plan policies regarding transportation that may apply to potential future development in the SOIA Area are provided below.

General

- **Policy CI-1.** Circulation planning for all modes of travel (vehicle, transit, bicycle, pedestrian, etc.) shall be coordinated with efforts to reduce air pollution.

- **Policy CI-2.** The City shall coordinate and participate with the City of Sacramento, Sacramento County and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations. This may include joint transportation planning efforts, roadway construction and funding.

Alternative Transportation

- **Policy CI-3.** The City's efforts to encourage alternative modes of transportation will therefore focus on incentives to reduce vehicle use, rather than disincentives (which are generally intended to make driving and parking less convenient, more costly, or both). Incentives may include:

    - Preferential carpool and vanpool parking,
    - Bus turnouts, and
    - Pedestrian-friendly project designs

- **Policy CI-4.** Specific Plans, Special Planning Areas, and development projects shall be designed to promote pedestrian movement through direct, safe, and pleasant routes that connect destinations inside and outside the plan or project area.

- **Policy CI-5.** The City shall encourage the use of transportation alternatives that reduce the use of personal motor vehicles.

- **CI-5-Action 1.** Funding for development, operations, and maintenance of facilities for mass transit, bicycle, pedestrian modes of transportation shall be given appropriate priority in the City's budgeting process.

- **CI-5-Action 2.** Implement policies and actions in the Conservation/Air Quality Element which seek to encourage non-vehicle transportation alternatives in Elk Grove.

- **CI-5-Action 3.** The City will support positive incentives such as carpool and vanpool parking, bus turnouts, and pedestrian-friendly project designs to promote the use of transportation alternatives.

- **CI-5-Action 4.** The City shall participate in the preparation and implementation of a Congestion Management Plan (CMP) consistent with legal requirements which gives priority to air quality goals, alternatives to automobile travel, and the development of demand reduction measures over additional road capacity.

- **CI-5-Action 5.** The City shall develop and implement Pedestrian and Bikeway Master Plans to provide safe and convenient pedestrian and on- and off-street bicycle facilities throughout the City.

► **Policy CI-6.** The City shall require that transit service is provided in all areas of Elk Grove, including rural areas, so that transit dependent residents of those areas are not cut off from community services, events, and activities.

- **CI-6-Action 1.** The City shall require that RT or any other local or regional transit agency serving Elk Grove include bus service to the rural areas of Elk Grove.

► **Policy CI-7.** The City shall encourage an approach to public transit service in Elk Grove which will provide the opportunity for workers living in other areas of Sacramento County to use all forms of public transit—including bus rapid transit and light rail—to travel to jobs in Elk Grove, as well as for Elk Grove workers to use public transit to commute to jobs outside the city.

Light Rail Service

► **Policy CI-8.** The City shall encourage the extension of bus rapid transit and/or light rail service to the planned office and retail areas north of Kammerer Road and west of Hwy 99.

► **Policy CI-9.** Light rail service in Elk Grove should be designed to serve major employment centers and the regional mall at Kammerer Road/Hwy 99. The City of Elk Grove encourages the development of light rail which will bring workers and shoppers to Elk Grove, while also serving as part of a coordinated, regional transportation network.

- **CI-9-Action 1.** Using the City's preferred alignment, work with Regional Transit to select a final alignment for the extension of bus rapid transit and/or light rail into Elk Grove, and to develop final station and/or park-and-ride locations along the entire transit corridor in Elk Grove. As necessary, update this Circulation Element to reflect the final alignment.

- **CI-9-Action 2.** The City shall require irrevocable offers of dedication of rights-of-way and station sites along the City's preferred light rail alignment. Offers of dedication shall be required as part of the approval of any tentative map or other discretionary approvals as appropriate.

Roadways

- **Policy CI-10.** The City shall implement the roadway master plan shown in Figure CI-2 of the General Plan Circulation Element. The following policies apply to selected roadways:

  - The City shall use the latest version of Caltrans' "Transportation Concept Report" for I-5 and Hwy 99 to determine the planned width of these freeways.

  - "Expanded right-of-way" indicates roadways on which sufficient width is provided for a middle two-way turn lane and/or expanded turn pockets at roadway intersections.

  - The City may make improvements to roadways in the Rural Area, when warranted, consistent with the provisions of the Rural Roads Improvement Policy.

  - Improvements to Grant Line Road shall consider regional planning activities and projects (e.g., the Capital South East Connector) and should be considered after effects to the Rural Area have been identified. To the extent feasible, these effects shall be addressed as part of facility design.

  - **CI-10-Action 1.** Require the dedication of right of way and the installation of roadway improvements as part of the review and approval of development projects. The City shall require the dedication of major road rights of way (generally, arterials and thoroughfares) at the earliest opportunity in the development process in order to implement this policy.

- **Policy CI-11.** The City shall assist Caltrans in implementing improvements to I-5 and Hwy 99 within the city.

  - **CI-11-Action 1.** Require the reservation of right of way for projects adjacent to I-5 and Hwy 99 sufficient to accommodate the freeway facilities outlined in the most recent Caltrans Transportation Concept Report.

  - **CI-11 Action 2.** A new Whitelock Parkway interchange, may be considered by the City Council in the future. Any interchange in this general location shall be designed to minimize impacts to the Elk Grove Regional Park as well as other assets to the fullest extent possible. Consultation with CalTrans, the Cosumnes Community Services District, and other stakeholder groups shall be conducted prior to approval of any interchange design.

- **Policy CI-12.** The City supports efforts to develop the Capital SouthEast Connector, providing a regional roadway connection from Interstate 5 and State Route 99 in Elk Grove to Highway 50.

  - The City recognizes the adopted conceptual route alignment for the Capital SouthEast Connector, utilizing Kammerer Road and Grant Line Road through the City.

  - **CI-12-Action 1.** The City will work with the Capital SouthEast Connector Joint Powers Authority (JPA) in the delivery of the planned roadway improvements pursuant to the JPA's Project Design Guidelines

provided that the Project Design Guidelines will not be applied to diminish or alter the rights of City-approved projects and provided that the Project Design Guidelines are not amended to diminish the City's land use authority to approve future projects proximate to or its authority to determine access to the Capital SouthEast Connector.

- **Policy CI-13.** The City shall require that all roadways and intersections in Elk Grove operate at a minimum Level of Service "D" at all times.

  - The City acknowledges that the Capital SouthEast Connector has identified higher LOS standards for certain segments. The City will strive to achieve these standards to the extent feasible and will work with the JPA as necessary.

- **Policy CI-14.** The City recognizes that Level of Service D may not be achieved on some roadway segments, and may also not be achieved at some intersections. Roadways on which LOS D is projected to be exceeded are shown in the General Plan Background Report, based on the latest traffic modeling conducted by the City. On these roadways, the City shall ensure that improvements to construct the ultimate roadway system as shown in this Circulation Element are completed, with the recognition that maintenance of the desired level of service may not be achievable.

  - **Cl-14-Action 1.** The City shall develop criteria to determine which roadway segments and intersections will not achieve the desired level of service standard.

- **Policy CI-15.** Development projects shall be required to provide funding or to construct roadway/intersection improvements to implement the City's Circulation Master Plan. The payment of established traffic impact or similar fees shall be considered to provide compliance with the requirements of this policy with regard to those facilities included in the fee program, provided that the City finds that the fee adequately funds all required roadway and intersection improvements. If payment of established fees is used to provide compliance with this policy, the City may also require the payment of additional fees if necessary to cover the fair share cost of facilities not included in the fee program.

  - **CI-15-Action 1.** Update the City's traffic analysis guidelines to implement the policies of this General Plan. Items to be addresses should include:

    - Guidelines for determining when traffic analysis is required

    - Guidelines for the preparation of traffic analysis

    - Significance criteria for use in CEQA analysis of proposed projects

    - The guidelines and significance criteria referenced above shall be reviewed by the Elk Grove Planning Commission within six months of adoption of this General Plan.

- **Policy CI-16.** Where a development project is required to perform new roadway construction or road widening, the entire roadway shall be completed to its planned width from curb-to-curb prior to the operation of the project for which the improvements were constructed, unless otherwise approved by the City Engineer.

Such roadway construction shall also provide facilities adequate to ensure pedestrian safety as determined by the City Engineer.

- **Policy CI-17.** The City shall regulate truck travel as appropriate for the transport of goods, consistent with circulation, air quality, congestion management, and land use goals.

    - **CI-17-Action 1.** The City shall on an as-needed basis review existing truck routes within Elk Grove and designate routes consistent with the need to reduce traffic, noise and other impacts, and negative effects on residential areas.

- **Policy CI-18.** To the extent possible, major traffic routes for residential areas should be separate from those used by the city's industrial areas, with the purpose of avoiding traffic conflicts and potential safety problems.

- **Policy CI-19.** The circulation system serving the city's industrial areas should be designed to safely accommodate heavy truck traffic.

- **Policy CI-20.** The City shall discourage the creation of private roadways unless the roadways are:

    - Constructed to public roadway standards, or
    - Are used in an affordable residential development.

- **Policy CI-21.** The City shall require the installation of traffic pre-emption devices for emergency vehicles (police and fire) at all newly constructed intersections, and shall seek to retrofit all existing intersections to incorporate these features.

- **Policy CI-22.** Where traffic calming devices or techniques are employed, the City shall coordinate design and implementation with the Elk Grove Police Department and the Elk Grove CSD to ensure adequate access for police and fire vehicles.

- **Policy CI-23.** All public streets should have sufficient width to provide for parking on both sides of the street and enough remaining pavement width to provide for fire emergency vehicle access.

3.14.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

The transportation impact analysis identifies foreseeable and possible impacts to roadway, transit, and bicycle/pedestrian facilities.

Roadway System (Sacramento County)

Consistent with the County of Sacramento Traffic Impact Analysis Guidelines, a project is considered to have a significant effect if it would result in a roadway operating at an acceptable level of service to deteriorate to an unacceptable LOS. For roadways already operating at an unacceptable LOS, a project is considered to have a significant effect if it increases the volume-to-capacity ratio by more than 0.05.

The County defines the minimum acceptable operation level for its roadways to be LOS D for rural areas and LOS E for urban areas. The urban areas are those areas within the Urban Service Boundary as shown in the Land Use Element of the Sacramento County General Plan. The areas outside the Urban Service Boundary are considered rural.

Roadway System (City of Elk Grove)

Consistent with the City of Elk Grove Traffic Impact Analysis Guidelines, a project is considered to have a significant effect if it causes a roadway to change from LOS D or better to LOS E or F. For roadways that operate at unacceptable levels of service without the project, an impact is considered significant if the project increase the volume-to-capacity ratio by 0.05 or more.

Freeway Facilities

A TCR) assesses a highway's current and future operating conditions and uses and other information to establish a 20-year route concept for each segment of the route. A route concept consists of a concept LOS and a description of the concept facility. The TCR then determines the nature and extent of improvements to attain the route concept. The concept LOS applies to state highway intersections, interchange ramp terminal intersections, freeway segments, and freeway ramp junctions or weaving sections.

The Caltrans State Route 99 Transportation Corridor Concept Report and the Transportation Corridor Concept Report Interstate 5 identify the 20-year concept LOS for SR 99 and I-5 at LOS F in the study area. Caltrans District 3 generally established minimum concept LOS standards for the 20-year horizon at LOS D for rural segments and LOS E for urban segments. The project is evaluated to determine whether it would result in LOS F operations or add traffic to a freeway segment already operating at an unacceptable LOS F.

Bicycle and Pedestrian Facilities The Bicycle, Pedestrian, and Trails Master Plan (adopted in 2014) is intended to increase the mode shares for walking and bicycling for trips to work, to school, and to run errands, as well as promoting recreational walking and cycling. This plan provides direction on where facilities should be located, design standards and guidelines to describe the desired characteristics, identify funding sources, construction, and maintenance, establish prioritization criteria regarding which projects to implement first, and to describe the City and inter-agency collaborative actions required to create the system. The Bicycle, Pedestrian, and Trails Master Plan includes an implementation program, phasing priorities, and a map showing recommended locations of bikeway, pedestrian, and trails paths.

In the vicinity of the SOIA Area, the Bicycle, Pedestrian, and Trails Master Plan identifies a future Class I multi-use trail along Kammerer Road, along with a Class II bike lane. Additional planned Class I and Class II routes are shown north of Kammerer Road in areas of the City that are planned for development.

Traffic Volume Forecasts

The SOIA application proposes to amend the City of Elk Grove's Sphere of Influence, as well other affected agencies, which are currently coterminous with the respective political boundaries, to include approximately 1,156 acres adjacent to the City's southern boundary. The project does not propose any development or land use change. However, in order to facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario. If the SOIA is approved and annexation to the City of Elk Grove is subsequently

proposed, land use planning would occur under the City's jurisdiction. Pre-zoning of the affected territory by the City would be required prior to any application for annexation.

The applicant estimates that the SOIA Area could accommodate development that could provide 18,000 to 20,000 jobs in office, industrial, and commercial settings. Additionally, for the purposes of analysis, the applicant has identified that the SOI Area could accommodate the development of a broad array of housing types, with a total of 4,000 to 5,000 dwelling units. Trip generation estimates are derived by identifying land use types in this analytical scenario that match land use categories that are included in the Institute of Transportation Engineers Trip Generation handbook, a common reference guide used in transportation analysis. The traffic impact analysis evaluates impacts based on the assumed land use scenario discussed in Table 3.14-3 to provide an indication of possible of future traffic impacts. However, please note that approval of the proposed project itself would not result in any development activities or land use changes. As such, the use of the term "project" in the following sections should not be confused with any proposed development activity. The project is only the proposed SOIA currently before LAFCo.

Roadway Projects in the SOI Area

For purposes of developing the traffic volume forecasts, the concept land use was allocated to the SOIA Area, assuming a roadway network consistent with the MTP for 2036, adopted in 2016, including major programmed improvements in the study area, which includes the western segment of the proposed Capital South East Connector project. Kammerer Road would be widened to ~~six~~ four lanes from SR 99 to Bruceville Road, and would be extended (four lanes) from Bruceville Road to I-5 with UPRR overcrossing. This project is currently in the environmental phase with design work and right-of-way acquisition scheduled to start in early 2018 (City of Elk Grove 2016).

The MTP/SCS road investments emphasize access to infill development areas, congestion relief, support for bus and rail transit, and improved bicycle and pedestrian access. Local road investments increase capacity for local passenger travel, creating a benefit to goods movement on highways. The Capitol Southeast Connector in the MTP/SCS is an expansion of existing segments of Kammerer Road, Bruceville Road, Grant Line Road, and White Rock Road.

The land use scenario used for analytical purposes only in this EIR is included in Table 3.14-3.

Table 3.14-3. Land Use Estimates for Elk Grove SOIA Area

Land Use	Acreage*	KSF	Quantity*	ITE	Trip Rate	Trips
				Code	Daily	Daily
Multi-Family Housing (dwelling units)	--	--	1,790	220	6.65	11,880
Single-Family Detached Housing (dwelling units)	--	--	3,200	210	9.52	30,593
Commercial (1,000 square feet)	--	1,362	--	820	42.70	58,166
Office (1,000 square feet)	--	6,091	--	710	11.03	67,180
Industrial (1,000 square feet)	--	2,338	--	110	6.97	16,295
School (students)	--	--	2,696	520	1.29	3,477
Parks/Open Space, Trails.	110	--	--	411	1.89	204
Gross Trips						**187,796**

*Totals do not add due to rounding.
ITE = Institute of Transportation Engineers
KSF = thousand square feet
Source: AECOM 2016

SOI Amendment Area Trip Generation and Trip Distribution

If the SOIA Area were developed based on the land use scenario, this would generate about 187,796 vehicle trips per day. Of these trips, some portion would stay within the SOIA Area, while others would leave or would originate from outside the SOIA Area. Trip internalization is unknown at this time. Therefore, a conservative assumption was made that all trips would be external to the SOIA Area. The degree of internalization would depend on the mix of land uses, transportation facilities planning, and various other factors that are unknown. Trip distribution is summarized in Table 3.14-4 and is based on a previous EIR that included the SOIA Area and other adjacent lands in a previous SOIA request.

Table 3.14-4. SOIA Area Project Trip Distribution

North	South	East	West
75%	17%	7%	1%

Source: Fehr & Peers 2011

Traffic Forecasts

Existing traffic volumes were obtained from the City of Elk Grove (Elk Grove 2014a). Project traffic volumes were calculated based on the assumptions in Tables 3.14-3 and 3.14-4. Project traffic volumes were also adjusted to account for the volume increases and decreases from the South East Connector to the SOIA Area roadways, including Kammerer Road, I-5, and SR 99.

~~Travel Demand~~

~~Using the land use scenario developed for the purpose of analysis in this EIR, possible future development in the SOIA Area could generate a total daily VMT of 910,037. The annual VMT for potential residential development included in the land use scenario for the SOIA Area is 108,821,820. Daily VMT for the residential uses is estimated to be approximately 298,142, which is approximately 22.3 VMT per day per capita.~~

~~The Sacramento Area Council of Governments (SACOG) prepared a regional analysis of VMT. The regional VMT per capita in 2008 was estimated to be 26.2, decreasing by 2012 to 25.1 miles per day (SACOG 2016, Chapter 5B, page 79). Although regional VMT is anticipated to increase throughout the region, the VMT per capita is forecast to decline slightly during the planning horizon for the MTP/SCS (through 2036). Per capita VMT in 2036 is estimated to be 24.2 per day, which is an 8 percent decrease from 2008 per capita levels (SACOG 2016, Chapter 5B, page 79). On a per capita basis, weekday household VMT was estimated by SACOG to be 17.9 in 2012, decreasing by 5 percent to 17 in 2036. If the SOIA Area were to be developed in accordance with land use scenario, household generated daily VMT would be approximately 22.3 per capita, which is 31 percent higher than the regional estimate for 2036. However, this estimate is based on default assumptions from an air pollutant emissions model based on a land use scenario for the overall SOIA Area.~~

~~If there is annexation and development in the future, the actual travel demand will depend on the density and development intensity of development, mixing of land uses, the relationship between land uses in the SOIA Area and adjacent areas, the level of pedestrian, bicycle, and transit infrastructure, parking standards, the relative affordability of housing, and other factors that are not currently known. In 2036, SACOG estimates that in 2036, 45 percent of all household-generated VMT will be associated with commuting. If development of the SOIA Area were to generate job opportunities for Elk Grove residents that are currently commuting, this could potentially shorten potential commute trips. Whether future SOIA Area residents would commute to jobs outside the city or~~

~~county is unknown, but residents would likely be influenced by commute times, the price of fuel, and other social and economic factors. VMT can be an indicator of potential adverse physical environmental effects. Please refer also to Section 3.3 of this EIR, "Air Quality," which comprehensively analyzes and provides feasible mitigation for air pollutant emissions; Section 3.8, "Greenhouse Gas Emissions," comprehensively analyzes and provides feasible mitigation for GHG emissions; and Section 3.12, "Noise and Vibration," which comprehensively analyzes and provides feasible mitigation for noise and vibration impacts. Please also see the discussion of transportation energy use in Section 3.6 of this EIR, "Energy."~~

THRESHOLDS OF SIGNIFICANCE

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, transportation impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

- Result in inadequate emergency access.

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

ISSUES NOT DISCUSSED FURTHER

- **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks:** Implementation of the proposed project would not be expected to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks during construction or operational phases. The SOIA Area is not located in the vicinity of an airport and/or a private airstrip, and would therefore not be adversely affected by aircraft operations from such a facility.

IMPACT ANALYSIS

IMPACT 3.14-1 Conflict with an applicable transportation plan, ordinance, policy, or congestion management program. *Future annexation and development activities within the proposed project may generate new vehicle trips that may contribute to unacceptable traffic operations under existing plus project conditions. This would conflict with an applicable transportation plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. This would also conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. This impact is considered significant.*

Vehicle Miles Traveled

Using the land use scenario developed for the purpose of analysis in this EIR, possible future development in the SOIA Area could generate a total daily VMT of 910,037. The annual VMT for potential residential development included in the land use scenario for the SOIA Area is 108,821,820. Daily VMT for the residential uses is estimated to be approximately 298,142, which is approximately 22.3 VMT per day per capita.

The Sacramento Area Council of Governments (SACOG) prepared a regional analysis of VMT. The regional VMT per capita in 2008 was estimated to be 26.2, decreasing by 2012 to 25.1 miles per day (SACOG 2016, Chapter 5B, page 79). Although regional VMT is anticipated to increase throughout the region, the VMT per capita is forecast to decline slightly during the planning horizon for the MTP/SCS (through 2036). Per-capita VMT in 2036 is estimated to be 24.2 per day, which is an 8-percent decrease from 2008 per-capita levels (SACOG 2016, Chapter 5B, page 79). On a per-capita basis, weekday household VMT was estimated by SACOG to be 17.9 in 2012, decreasing by 5 percent to 17 in 2036. If the SOIA Area were to be developed in accordance with land use scenario, household-generated daily VMT would be approximately 22.3 per capita, which is 31 percent higher than the regional estimate for 2036. However, this estimate is based on default assumptions from an air pollutant emissions model based on a land use scenario for the overall SOIA Area.

Current planning as part of the General Plan Update will establish VMT performance metrics by land use category and for the City as a whole, based upon the draft Land Use Plan; establish VMT performance metrics based upon the draft land use programs for the Study Areas; identify pre-screening criteria for certain projects based upon size and/or location that would be exempt from VMT analysis; and provide a process for approving projects that exceed the performance metrics consistent with the provisions of CEQA. The City staff are also considering an alternative process to ensure roadway efficiency and safety without using LOS (level of service). An "average daily traffic design target" would be prepared for roadway segments, and "design considerations," such as pedestrian safety/crossing time, bicycle comfort, or queue lengths in turn pockets would be prepared for intersections (City of Elk Grove 2017).

If there is annexation and development in the future, the actual travel demand will depend on the density and development intensity of development, mixing of land uses, the relationship between land uses in the SOIA Area and adjacent areas, the level of pedestrian, bicycle, and transit infrastructure, parking standards, the relative affordability of housing, and other factors that are not currently known. SACOG estimates that in 2036, 45

percent of all household-generated VMT will be associated with commuting. If development of the SOIA Area were to generate job opportunities for Elk Grove residents that are currently commuting, this could potentially shorten potential commute trips. Whether future SOIA Area residents would commute to jobs outside the city or county is unknown, but residents would likely be influenced by commute times, the price of fuel, and other social and economic factors. VMT can be an indicator of potential adverse physical environmental effects. Please refer also to Section 3.3 of this EIR, "Air Quality," which comprehensively analyzes and provides feasible mitigation for air pollutant emissions; Section 3.8, "Greenhouse Gas Emissions," comprehensively analyzes and provides feasible mitigation for GHG emissions; and Section 3.12, "Noise and Vibration," which comprehensively analyzes and provides feasible mitigation for noise and vibration impacts. Please also see the discussion of transportation energy use in Section 3.6 of this EIR, "Energy."

Although mitigation measures in the sections above would reduce the impacts from VMT, LAFCo has conservatively determined this impact to be **significant**.

Existing plus Project Traffic

Table 3.14-5 shows the Average Daily Traffic Volumes for the Existing Plus Project Conditions. The traffic volume forecasts shown on Table 3.14-5 were analyzed using the analysis methodology presented earlier, which included the use of the assumed land use scenario identified in Table 3.14-3.

Roadway and Freeway Segment Operations

As shown in Table 3.14-5 above, if the SOIA Area is developed, this would likely have indirect impacts related to traffic congestion on seven roadway segments and seven freeway segments. The proposed project is likely to have indirect impacts on roadways in the County of Sacramento and City of Elk Grove under existing plus project conditions. The increase in traffic volume would cause deterioration in the daily LOS, resulting in a significant impact for the following existing roadways:

- Elk Grove Boulevard from Bruceville Road to Laguna Springs Drive
- Elk Grove Boulevard from Laguna Springs Drive to State Route 99
- Elk Grove Boulevard from Elk Grove Florin Road to Waterman Road
- ~~Grant Line Road from Promenade Parkway to E Stockton Boulevard~~
- ~~Grant Line Road from E Stockton Boulevard to Waterman Road~~
- Grant Line Road from Waterman Road to Elk Grove Boulevard
- Kammerer Road from Bruceville Road to Promenade Pkwy
- Eschinger Road from Bruceville Road to State Route 99
- Bruceville Road from Whitelock Parkway to Kammerer Road
- Bruceville Road from Kammerer Road to Eschinger Road

Table 3.14-5. Roadway Segment Level of Service – Existing Plus Project Conditions

Roadway Segment	Daily Capacity[1]	Daily Volume[2]	V/C Ratio	LOS
Elk Grove Boulevard from I-5 to Harbour Point Drive	54,000	27,223	0.50	A
Elk Grove Boulevard from Harbour Point Drive to Franklin Boulevard	54,000	28,023	0.52	A
Elk Grove Boulevard from Franklin Boulevard to Bruceville Road	54,000	35,612	0.66	B
Elk Grove Boulevard from Bruceville Road to Laguna Springs Drive	54,000	54,172	1.00	**F**
Elk Grove Boulevard from Laguna Springs Drive to SR 99	54,000	65,772	1.22	**F**
Elk Grove Boulevard from SR 99 to East Stockton Boulevard	36,000	32,169	0.89	D
Elk Grove Boulevard from East Stockton Boulevard to Elk Grove Florin Road	36,000	31,169	0.87	D
Elk Grove Boulevard from Elk Grove Florin Road to Waterman Road	18,000	21,235	1.18	**F**
Grant Line Road from Promenade Pkwy to East Stockton Boulevard	~~18,000~~54,000	27,162	~~1.51~~0.5	~~**F**~~A
Grant Line Road from E Stockton Boulevard to Waterman Road	~~18,000~~36,000	31,462	~~1.75~~0.9	~~**F**~~D
Grant Line Road from Waterman Road to Elk Grove Boulevard	18,000	25,162	1.40	**F**
Bilby Road from Franklin Boulevard to Bruceville Road	18,000	9,189	0.51	A
Kammerer Road from Bruceville Road to Promenade Pkwy	20,000	20,294	1.01	**F**
Eschinger Road from Bruceville Road to SR 99	18,000	25,379	1.41	**F**
Dillard Road from SR 99 to Wilton Road	17,000	6,161	0.36	A
Lambert Road from I-5 to Bruceville Road	17,000	4,259	0.25	A
Franklin Boulevard from Elk Grove Boulevard to Whitelock Parkway	36,000	29,434	0.82	D
Bruceville Road from Elk Grove Boulevard to Whitelock Parkway	36,000	24,812	0.69	B
Bruceville Road from Whitelock Parkway to Kammerer Road	18,000	19,981	1.11	**F**
Bruceville Road from Kammerer Road to Eschinger Road	17,000	25,531	1.50	**F**
Bruceville Road from Eschinger Road to Lambert Road	17,000	4,860	0.29	A
I-5 from Twin Cities Road to Hood Franklin Road	80,000	50,050	0.63	B
I-5 from Hood Franklin Road to Elk Grove Boulevard	80,000	69,735	0.87	D
I-5 from Elk Grove Boulevard to Laguna Boulevard	80,000	83,819	1.05	**F**
I-5 from Laguna Boulevard to north of Laguna Boulevard	120,000	95,341	0.79	C
SR 99 from Mingo Road to Arno Road	80,000	78,663	0.98	**E**
State Route 99 from Arno Road to Dillard Road	80,000	71,663	0.90	D
State Route 99 from Dillard Road to Eschinger Road	80,000	72,663	0.91	**E**
State Route 99 from Eschinger Road to Grant Line Road	80,000	75,376	0.94	**E**
State Route 99 from Grant Line Road to Elk Grove Boulevard	80,000	94,885	1.19	**F**
State Route 99 from Elk Grove Boulevard to Laguna Boulevard/Bond Road	80,000	140,885	1.76	**F**
State Route 99 from Laguna Boulevard/Bond Road to north of Laguna Boulevard/ Bond Road	80,000	173,885	2.17	**F**

Notes:

1 The capacity of each roadway is based on the number of lanes and the facility type.

2 The baseline condition represents conditions in fall 2014, which for most of the studied roadways segments were obtained from the City of Elk Grove Average Daily Traffic (ADT) Volumes. The segment volumes not available in the City's 2014 ADT were obtained from the 2011 study for the proposed project.

Bold text indicates unacceptable LOS.

LOS = level of service

V/C = volume/capacity ratio

Source: Fehr & Peers 2011; Elk Grove 2014a.

Also, the proposed project is likely to have indirect impacts on I-5 and SR 99 under existing plus project conditions. As shown in Table 3.14-5, the increase in traffic volume would cause deterioration in daily level of service from LOS E to LOS F or an increase of more than 0.05 in volume over capacity ratios on the following segments of SR 99 and Interstate 5:

- I-5 from Elk Grove Boulevard to Laguna Boulevard
- SR 99 from Mingo Road to Arno Road
- SR 99 from Dillard Road to Eschinger Road
- SR 99 from Eschinger Road to Grant Line Road
- SR 99 from Grant Line Road to Elk Grove Boulevard
- SR 99 from Elk Grove Boulevard to Laguna Boulevard/Bond Road
- SR 99 from Laguna Boulevard/Bond Road to north of Laguna Boulevard/Bond Road

As referenced previously, the methodology used throughout this EIR is conservative, which means it would tend to overestimate impacts of the proposed SOIA. One example relates to trip internalization. Not all trips would leave the SOIA Area. The degree of internalization would depend on the mix of land uses, transportation facilities planning, and various other factors that are unknown. A conservative assumption was made that all trips would leave the SOIA Area.

Congestion Management Plan (CMP) also requires establishment of LOS standards to measure congestion at specific monitoring locations on the freeway and arterial systems. Policy CI-5-Action 4 indicates that the City shall participate in the preparation and implementation of a CMP consistent with legal requirements which gives priority to air quality goals, alternatives to automobile travel, and the development of demand reduction measures over additional road capacity. Policy CI-17 requires the City to regulate truck travel as appropriate for the transport of goods, consistent with circulation, air quality, congestion management, and land use goals.

Also, the MTP/SCS road investments emphasize access to infill development areas, congestion relief, support for bus and rail transit, and improved bicycle and pedestrian access. Local road investments increase capacity for local passenger travel, creating a benefit to goods movement on highways. The Capitol Southeast Connector in the MTP/SCS is an expansion of existing segments of Kammerer Road, Bruceville Road, Grant Line Road and White Rock Road in the SOIA Area.

However, the above impacts would occur because over 187,500 vehicle trips per day would be added to the existing roadway network without adding new roadways or assuming that existing roadways would be widened. Adequate roadways have not yet been identified to support the conceptual land use changes that could potentially result from the proposed project. Under these circumstances, many of the study roadways would operate at levels worse than the stated significance criteria, resulting in a **significant** impact.

Mitigation Measures

There is no feasible mitigation beyond that presented in Section 3.3, Air Quality; Section 3.8, Greenhouse Gas Emissions; and Section 3.12, Noise and Vibration of the Draft EIR, that would reduce adverse physical environmental effects related to transportation. The following mitigation is intended to address impacts associated with LOS.

Mitigation Measure 3.14-1a: Impacted Roadway and Freeway Segments Improvement

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall consult with ~~Sacramento County and Caltrans~~affected agencies to establish transportation ~~improvement~~ plans and funding mechanisms to provide service levels consistent with the City's and County's General Plans.

Future development within the SOIA Area will be responsible for constructing or contributing on a fair-share basis to roadway improvements necessary to serve development within the SOIA Area.

In addition, a detailed traffic study will be completed after a more defined land use plan has been developed. Improvements needed as a result of development in the SOIA Area will be established by subsequent traffic studies and LOS standards of affected agencies. Annexation and development activity within the SOIA Area will require the preparation of traffic impact report/s to establish the fair share and costing of required improvements.

Mitigation Measure 3.14-1b: Implement Mitigation Measure 3.3-2a

Mitigation Measure 3.14-1c: Implement Mitigation Measure 3.3-2b

Mitigation Measure 3.14-1d: Implement Mitigation Measure 3.8-1

Significance after Mitigation

The project would likely lead to the increase in VMTs. LAFCo has conservatively assumed that impacts would be significant. No feasible mitigation is available. Thus, the impact would be **significant and unavoidable**.

The project could indirectly result in future urbanization of the SOIA Area and could contribute to unacceptable roadway and freeway operations under existing plus project conditions. Necessary improvements to improve operations to acceptable levels are discussed above. However, the actual improvements needed in the future would depend on the location, type, and level of intensity of future growth in the SOIA Area and, at that time, appropriate mitigation would be designed. The mitigation would require the preparation of traffic studies for future projects and consultation with appropriate agencies. However, because the location and intensity of future development is not known at this time, including potential off-site infrastructure improvements, it is not possible to identify what improvements may be necessary to comply with LOS policies of the relevant affected agencies. In certain instances, improvements to facilities that could be affected by future development within the SOIA Area may require coordination among multiple agencies (e.g., City of Elk Grove, Sacramento County, and Caltrans). Also, the methodology used throughout this EIR is conservative, which means it would tend to overestimate impacts of the proposed SOIA. One example relates to trip internalization. Not all trips would leave the SOIA Area. The degree of internalization would depend on the mix of land uses, transportation facilities planning, and various other factors that are unknown. It is possible the SOIA Area could include land uses that complement other land uses in Elk Grove or that would be in Elk Grove in the future, thus shortening trips or facilitating additional bicycle, pedestrian, or transit mobility. However, for this EIR, a conservative assumption was made that all trips would leave the SOIA Area.

Implementation of this mitigation would reduce the impact; however, given the uncertainty of future potential land uses, LAFCo finds that it is not now possible to define mitigation with certainty. In addition, if updated guidance is published on SB 743 or if the City's General Plan is updated, additional analysis may be required to ensure that future projects comply. With enforcement of the above mitigation measure, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. However, it is not possible to know at this time whether this mitigation would avoid a significant effect in every instance. There is no additional feasible mitigation. Thus, the impact would be **significant and unavoidable**.

IMPACT 3.14-2 Hazards due to a design feature. *The project would not increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This impact is less than significant.*

This impact is related to site-specific design features and potential incompatible uses. Potential hazardous design features that may occur to provide access to future development include sharp curves, dangerous intersections, or shared turn lanes. However, Policy CI-2 indicates that the City shall coordinate and participate with the City of Sacramento, Sacramento County and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations. This may include joint transportation planning efforts, roadway construction and funding. Therefore, any future roadway improvements required within the Elk Grove city limits or SOIA Area would be constructed to American Association of State Highway and Transportation Officials (AASHTO), Caltrans, Sacramento County, and City of Elk Grove roadway standards, as applicable, and would therefore not result in potential traffic related hazards. Therefore, impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

IMPACT 3.14-3 Inadequate emergency access. *Future development would not result in inadequate emergency access. This impact is less than significant.*

This impact is related to site-specific design features and emergency access. Emergency access impacts would be evaluated at a project-specific level by the City at the time of future development application submittal. Existing Policy CI-21 indicates that the City shall require the installation of traffic pre-emption devices for emergency vehicles (police and fire) at all newly constructed intersections, and shall seek to retrofit all existing intersections to incorporate these features. Also, existing Policy CI-23 indicates that all public streets should have sufficient width to provide for parking on both sides of the street and enough remaining pavement width to provide for fire emergency vehicle access. In addition, compliance with City of Elk Grove General Plan Policy CI-2, which indicates that the City will coordinate and participate with the City of Sacramento, Sacramento County, and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations, would assure that continuous and adequate emergency access would occur throughout the SOIA Area. Therefore, impacts would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

IMPACT 3.14-4 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. *Future annexation and development activities within the SOIA Area may conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, this impact is considered* ***potentially significant****.*

Bicycles and Pedestrian

The proposed SOIA would not construct or develop any structures or infrastructure (including roadways) that could potentially result in the decreased performance or safety of public transit, bicycle, or pedestrian facilities. However, future annexation and development activities within the proposed SOIA Area may substantially increase demand for bicycle and pedestrian facilities. If there is future annexation and development of the SOIA Area, this will require planning to ensure access and mobility for transit users, bicyclists, and pedestrians.

Policy CI-5 (CI-5-Action 5) of the Elk Grove General Plan states that the City will develop and implement Pedestrian and Bikeway Master Plans to provide safe and convenient pedestrian and on- and off-street bicycle facilities throughout the City. The City's current Bicycle and Pedestrian Master Plan includes proposed facilities on Kammerer Road, Grant Line Road, and potential extension on Bruceville Road into the SOIA Area and along the planned alignment of the Kammerer Road extension to Franklin Road. The City has not planned for comprehensive bicycle and pedestrian facilities in the SOIA Area, as the area is not within the City's jurisdiction. However, if there is annexation and development proposed to the City in the future, such development would require consistency findings with the City's General Plan, including policies addressing transit, bicycle, and pedestrian access and mobility. As this planning has not occurred, there is the potential for conflicts with policies that may be relevant in the future and the impact is conservatively assumed to be **potentially significant**.

Public Transit

The proposed project would not construct or develop any structures or infrastructure (including roadways) that could potentially result in the decreased performance or safety of public transit, bicycle, or pedestrian facilities. However, future annexation and development activities within the proposed SOIA Area may substantially increase demand for public transit service.

Policy CI-5 of the Elk Grove General Plan states that the City will require transit service to be provided in all areas of Elk Grove, including rural areas, so that transit-dependent residents of those areas are not cut off from community services, events, and activities. Policy CI-7 states that the City will encourage an approach to public transit service in Elk Grove that will provide the opportunity for workers living in other areas of Sacramento County to use all forms of public transit, including bus rapid transit and light rail, to travel to jobs in Elk Grove, as well as for Elk Grove workers to use public transit to commute to jobs outside the City. As this planning has not occurred, there is the potential for conflicts with policies that may be relevant in the future and the impact is conservatively assumed to be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.14-4: Implement Mitigation Measure 3.3-2b

Significance after Mitigation

Implementation of the above mitigation measure would ensure that future pedestrian, bicycle, and transit needs are properly planned and designed to support potential developments. With enforcement of the above mitigation measure, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. The impact is **less than significant with mitigation**.

3.15 UTILITIES AND SERVICE SYSTEMS

This section provides an overview of existing utilities and service systems as relevant to the proposed project, including water supply, wastewater service, and solid waste disposal. Impacts are evaluated in relation to increased demand for utilities and public services associated with the proposed project and actions needed to provide the infrastructure that could potentially lead to physical environmental effects.

Section 3.6 of ~~this~~ this Recirculated Draft EIR, "Energy" addresses energy demand and facilities.

3.15.1 ENVIRONMENTAL SETTING

Utilities and service systems would be provided to future development by the Sacramento County Water Agency (SCWA), the Sacramento Area Sewer District (SASD) (formerly known as County Sanitation District-1), and Sacramento Regional County Sanitation District (SRCSD).The following discussion provides an overview of these utility service providers.

WATER SUPPLY

Presently, there are no public water supply facilities within the SOIA Area, and non-treated water supplies are provided by irrigation wells. There are also idle wells on-site which have not been abandoned. The water use for the SOIA Area was estimated using average annual water demand factors and the acreage of crop types within the SOIA Area. As shown in Table 3.15-1, the total annual water usage for agricultural crops on the SOIA Area is 1,833.5 acre-feet per year (afy).

Table 3.15-1. Estimate of Crop Water Usage within the SOIA Area

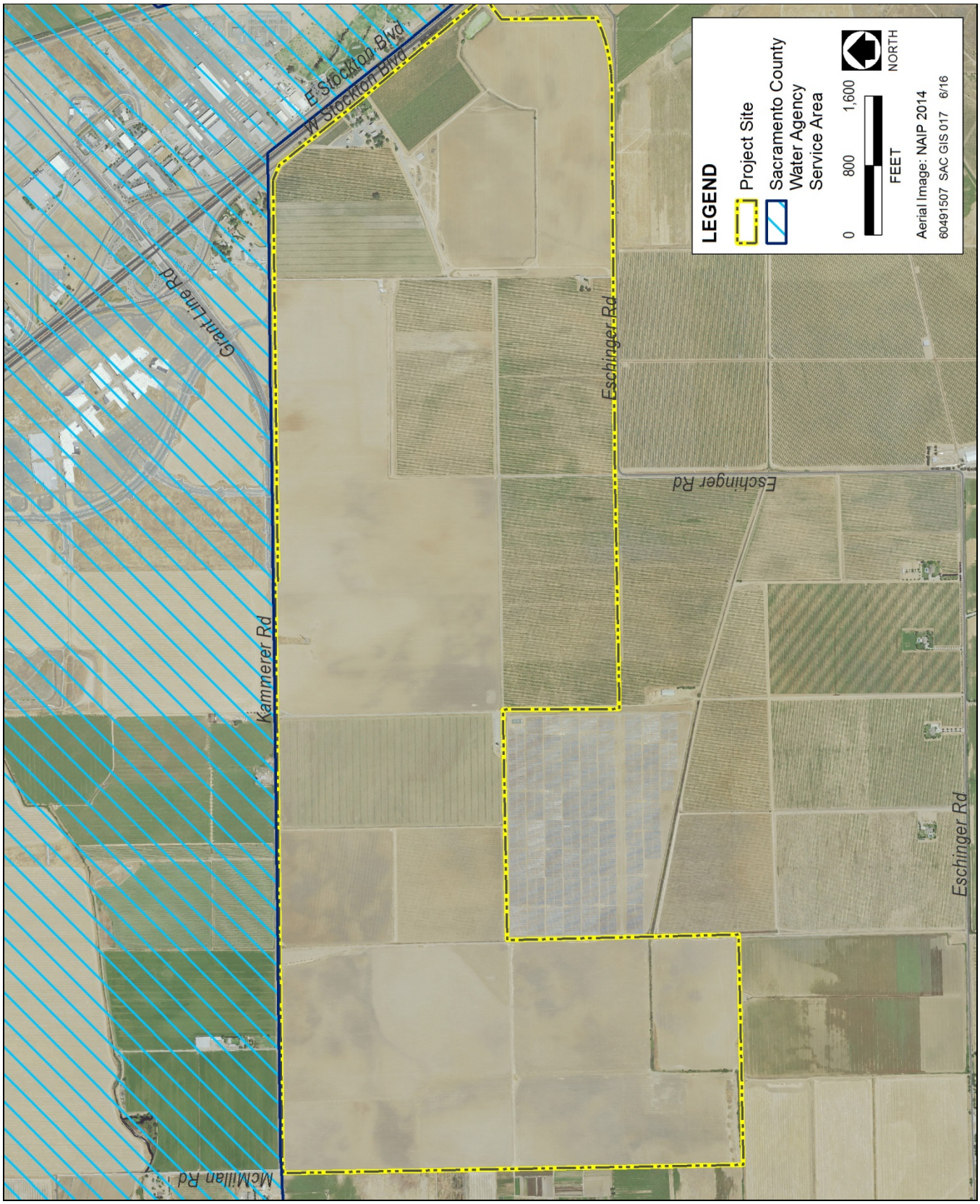
Crop Type	Average Annual Water Use per Acre		Estimated Acres within SOIA Area	Total Annual Water Usage (afy)
	Acre-Feet	Gallons		
Alfalfa	5.0	1,629,257	46.9	234.5
Hay Grass	1.4	456,192	626.0	876.4
Vineyard	1.9	619,118	380.3	722.6
Non-Crop uses (canal, developed, ditch, fallow, pond)	N/A	N/A	99.97	N/A
Total	**8.3**	**2,704,567**	**1,153.17**	**1,833.5**

Notes: afy = acre-feet per year

Note: Average acre-feet applied per acre values used from Johnson and Cody 2015. For hay grass, the value for grains was used. For vineyard, the value for vines was used.

Source: Average Annual Water Use per Acre from Johnson and Cody 2015.

Future development of the SOIA Area would require adequate treated water service. The SCWA provides water supplies to the majority of the city, including the area north of Kammerer Road. Because the SOIA Area is immediately adjacent to the southwestern boundary of SCWA's Zone 40, it is most likely that water service would be provided by SCWA (Exhibit 3.15-1). SCWA is not subject to LAFCo purview; any changes to the SCWA service area would be overseen by the County Board of Supervisors.



Source: Sacramento County 2011

Exhibit 3.15-1 **Sacramento County Water Agency Service Area**

Zone 40 consists of approximately 86,000 acres of agricultural, residential, and industrial land in central Sacramento County. Zone 40 is bordered by the County's Urban Services Boundary on the northeast, east, and southeast, and the northern edge of the 100-year floodplain of Deer Creek is also located to the east and southeast within the Zone 40 boundaries. Interstate 5 forms the western boundary and the Douglas Road and Grant Line Road areas form the southern boundary.

There are three primary planning documents that form the planning basis for the Zone 40 service area:

- The *2005 Zone 40 Water Supply Master Plan* (WSMP) (SCWA 2005) was developed in response to the requirements of the Water Forum Agreement (WFA).[1] As a signatory to the WFA, SCWA has agreed to ensure that water conservation and demand management—necessary steps to achieve WFA objectives—are integrated into future growth and water planning activities in its service area. The Zone 40 WSMP provides a flexible plan of water management options that can be implemented and modified if conditions that affect the availability and feasibility of water supply sources change in the future. The Zone 40 WSMP evaluates several options for facilities to deliver surface water and groundwater to development to a subarea within Zone 40 known as the 2030 Study Area, as well as the financing mechanisms to provide water to the 2030 Study Area. The 2030 Study Area encompasses approximately 46,600 acres where development of industrial, commercial, office, and residential land uses is expected to occur and where demand for water is expected to be concentrated during the planning horizon of the WSMP.

- The *2010 Zone 41 Urban Water Management Plan* (Zone 41 UWMP) (SCWA 2011) addresses water supply and demand issues, water supply reliability, water conservation, water shortage contingencies, and recycled-water usage for the areas within Sacramento County where Zone 41 provides retail water services, including the Zone 40 service area and other areas outside of Zone 40 where Zone 41 has contracts to provide water (e.g., Zone 50, Sacramento Suburban Water District). Because SCWA's conjunctive-use groundwater program would be implemented only within Zone 40, the Zone 41 UWMP presents information about projected water supply and demand separately for areas within Zone 40 and areas outside of Zone 40.

- The *Zone 40 Water System Infrastructure Plan* (Zone 40 WSIP) (November 2006) addresses how 2030 water supplies addressed in both the Zone 41 UWMP and the Zone 40 WSMP would be allocated among users within its service area. The Zone 40 WSIP provides the most up-to-date information on Zone 40's water supplies, demands, and infrastructure; provides project-level detail that is necessary for implementation of the preferred pipeline alignment alternatives that were identified in the 2005 Zone 40 WSMP; and it fills in the gaps of associated smaller infrastructure requirements, including a description of facility construction and phasing, as well as operational requirements from existing conditions through ultimate buildout of the water system.

Water Supply Sources for SCWA Zone 40

Since its formation, Zone 40 has had as its goal the development of a conjunctive-use water supply system. As such, the areas inside Zone 40 are served conjunctively with groundwater (pumped from the South American Sub-basin of the Sacramento Valley Groundwater Basin, which is identified locally as the Central Basin), surface water, and recycled water. SCWA's conjunctive use program is a coordinated approach to manage surface water

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

and groundwater supplies to maximize the yield of available water resources. In wet and normal water years, SCWA would divert surface water from the American and Sacramento Rivers, consistent with the entitlement contracts described above. The underlying groundwater basin would be replenished in wet years as a result of this reliance on surface water. In dry water years, SCWA's surface water could be reduced based on recommended dry-year cutback volumes outlined in the Water Forum Agreement—those volumes that purveyors have agreed not to divert from the American River during dry years. During dry years, SCWA would increase groundwater pumping so that it could continue to meet the water demand of its customers.

Surface-Water Supplies

SCWA surface-water supplies are obtained from the following sources (SCWA 2005):

- Central Valley Project Water (Public Law 101-514 ["Fazio water"]) – SCWA executed a Central Valley Project (CVP) water-service contract pursuant to Public Law 101-514 (referred to as "Fazio water") that provides a permanent water supply of 22,000 acre-feet per year (afy), with 15,000 afy allocated to SCWA and 7,000 afy allocated to the City of Folsom.

- SMUD 1 Assignment – 15,000 afy of SMUD's CVP contract water has been assigned to the SCWA under the terms of an agreement with SMUD. The long-term availability of SMUD 1 water is 13,000 afy.

- SMUD Assignment 2 – 15,000 afy of SMUD's CVP contract water has been assigned to the SCWA under the terms of an agreement with SMUD. The long-term availability of SMUD 1 water is 13,000 afy.

- Appropriative Water Supplies – the State Water Resources Control Board (SWRCB) appropriates water from the American River to SCWA under Permit 21029. This water is considered "intermittent water" that typically would be available during normal years or wet years. The maximum, minimum, and average annual use of appropriative water is 44,800 acre-feet (af), 0 af, and 21,700 af, respectively.

- City of Sacramento's American River Place of Use Agreement – The City of Sacramento provides wholesale American River water to SCWA for use in a portion of the SCWA 2030 Study Area that lies within the City of Sacramento's American River POU. The estimated long-term average volume of water that would be used by SCWA within this Place of Use Agreement would be approximately 9,300 afy.

- Other Transfer Supplies – SCWA is pursuing purchase and transfer agreements with other entities north of its service area in the Sacramento River basin. SCWA's estimated long-term average use of these water supplies would be approximately 5,200 afy. This water would be purchased only in dry and critically dry years.

Recycled Water

Approximately 4,400 afy of recycled water is currently provided to SCWA by SRCSD. This water is used within the Zone 40 service area to offset demand by parks and for other nonpotable uses.

Groundwater Supplies within SCWA Zone 40

Approximately 75 percent of SCWA's water supply comes from groundwater wells. SCWA pumps groundwater from the South American Sub-basin of the Sacramento Valley Groundwater Basin (identified locally as the Central Basin). This groundwater basin is not adjudicated. As a signatory to the Water Forum Agreement, SCWA

is committed to adhering to the ~~According to the Water Forum Agreement, the annual~~ long-term average sustainable yield of ~~this basin is~~ the Central Basin (273,000 acre-feet) (SCWA 2011). As shown in Table 3.10-2 in Section 3.10, "Hydrology and Water Quality," of this Recirculated Draft EIR, groundwater extraction has been within the Water Forum Agreement's sustainable yield from 2005 to 2015. (See Section 3.10, "Hydrology and Water Quality," for further discussion of groundwater conditions in the Central Basin.)

SCWA Zone 40 Water Supplies and Demands

The Zone 41 UWMP addresses water supply and demand issues, water supply reliability, water conservation, water shortage contingencies, and recycled-water usage for the areas within Sacramento County where Zone 41 provides retail water services, including Zone 40. In accordance with Senate Bill (SB) x7-7, the Zone 41 UWMP estimates water demands are based on an estimated gallons per-capita, per-day target chosen by SCWA (SCWA 2011:5). Water supplies and demands within SCWA Zone 40 would be the same during normal, single-dry, and multiple-dry years; however, the year-to-year mix of surface and groundwater would be adjusted, as necessary, to meet the demands as part of its conjunctive use water supply program. Table 3.15-1 identifies surface water and groundwater supply and demand within SCWA Zone 40 from 2010 to 2035 in normal, single dry, and multiple dry years. As shown in Table 3.15-2, SCWA would have water supplies that exceed demands in all water years.

SCWA anticipates that at buildout of its service area, and assuming that appropriative water and CVP contract water continue to be available, surface water will account for approximately 70 percent of water supplies during average and wet years and account for approximately 30 percent of water supplies in the driest years, thereby resulting in a long-term average of approximately 60 percent of water demands being met by surface water supplies (SCWA 2017).

WATER SUPPLY INFRASTRUCTURE

SCWA prepared the Zone 40 WSIP to address how water supplies in both the Zone 41 UWMP and the Zone 40 WSMP would be allocated among users within its service area. The purposes of this WSIP are to describe and quantify the facilities necessary to extract, treat, and convey groundwater to the Zone 40 service area. The SOIA Area is outside of the Zone 40 Water Supply Master Plan Study Area (SCWA 2006).

There are several major points of connection to major SWCA infrastructure near the SOIA Area boundaries. SWCA's nearest water transmission mains are located in Promenade Parkway and Kammerer Road adjacent to the northern boundary of this SOIA Area. Additional SCWA infrastructure is located along Bilby Road at West Stockton Boulevard and at the Grant Line Road/State Route 99 interchange (LAFCo 2013). The Poppy Ridge Water Treatment Plant (WTP) is located near the intersection of Bruceville Road and Poppy Ridge Road (SCWA 2006). The Zone 40 WSIP shows the future Big Horn WTP, located near the intersection of Elk Grove Boulevard and Big Horn Boulevard, planned as a Phase 1 facility, and the Whitelock WTP, planned as a Phase 2 facility in The Zone 40 WSIP. Additional water conveyance pipelines are proposed along Big Horn Boulevard and Whitelock Parkway (SCWA 2006).

Table 3.15-2 Comparison of Water Supply and Demand in Zone 40 (2010–2035)[1]

Water Year	Source	Projected Demands (afy)					
		2010	2015	2020	2025	2030	2035
Normal Year	**Supply**						
	Groundwater	35,000	20,000	15,000	20,000	25,000	15,000
	Surface water	12,320	35,000	42,500	50,000	57,500	81,200
	Recycled water	1,000	3,000	4,400	4,400	4,400	4,400
	Remediated groundwater to serve Rio del Oro in Zone 40	0	0	2,500	5,000	7,500	8,900
	Total Supply	**48,320**	**58,000**	**64,400**	**79,400**	**103,700**	**109,500**
	Total Demand	**34,511**	**44,425**	**50,662**	**57,583**	**67,565**	**77,712**
	Difference (Supply minus Demand)	13,806	13,575	13,738	21,817	36,135	31,788
Single-Dry Year	**Supply**						
	Groundwater	39,930	46,300	48,800	61,300	64,500	68,600
	Surface water	7,390	8,700	8,700	8,700	18,000	27,600
	Recycled water	1,000	3,000	4,400	4,400	4,400	4,400
	Remediated groundwater to serve Rio del Oro in Zone 40	0	0	2,500	5,000	7,500	8,900
	Total Supply	**48,320**	**58,000**	**64,400**	**79,400**	**103,700**	**109,500**
	Total Demand	**34,511**	**44,425**	**50,662**	**57,583**	**67,565**	**77,712**
	Difference (Supply minus Demand)	13,806	13,576	13,738	21,817	26,832	31,788
Multiple-Dry Year 1	**Supply**						
	Groundwater	36,232	32,500	30,500	38,500	37,200	36,800
	Surface water	11,088	22,500	27,000	31,500	45,300	59,400
	Recycled water	1,000	3,000	4,400	4,400	4,400	4,400
	Remediated groundwater to serve Rio del Oro in Zone 40	0	0	2,500	5,000	7,500	8,900
	Total Supply	**48,320**	**58,000**	**64,400**	**79,400**	**103,700**	**109,500**
	Total Demand	**34,511**	**44,425**	**50,662**	**57,583**	**67,565**	**77,712**
	Difference (Supply minus Demand)	13,806	13,576	13,738	21,817	26,832	31,788
Multiple-Dry Year 2	**Supply**						
	Groundwater	37,464	35,000	33,500	42,000	41,200	41,300
	Surface water	9,856	20,000	24,000	28,000	41,300	54,900
	Recycled water	1,000	3,000	4,400	4,400	4,400	4,400
	Remediated groundwater to serve Rio del Oro in Zone 40	0	0	2,500	5,000	7,500	8,900
	Total Supply	**48,320**	**58,000**	**64,400**	**79,400**	**103,700**	**109,500**
	Total Demand	**34,511**	**44,425**	**50,662**	**57,583**	**67,565**	**77,712**
	Difference (Supply minus Demand)	13,806	13,576	13,738	21,817	26,832	31,788
Multiple-Dry Year 3	**Supply**						
	Groundwater	38,080	36,250	35,000	43,750	43,200	43,550
	Surface water	9,240	18,750	22,500	26,250	39,300	52,650
	Recycled water	1,000	3,000	4,400	4,400	4,400	4,400
	Remediated groundwater to serve Rio del Oro in Zone 40	0	0	2,500	5,000	7,500	8,900
	Total Supply	**48,320**	**58,000**	**64,400**	**79,400**	**103,700**	**109,500**
	Total Demand	**34,511**	**44,425**	**50,662**	**57,583**	**67,565**	**77,712**
	Difference (Supply minus Demand)	13,806	13,576	13,738	21,817	26,832	31,788

Notes: afy = acre-feet per year

[1] Water supplies and demands within SCWA Zone 40 would be the same during normal, single-dry, and multiple-dry years; however, the year-to-year mix of surface and groundwater would be adjusted as necessary to meet the demands as part of its conjunctive use water supply program.

Source: SCWA 2011; Data compiled by AECOM 2016

WASTEWATER COLLECTION, AND CONVEYANCE, TREATMENT FACILITIES

The SOIA Area is not served by a municipal wastewater service provider. Rather, wastewater service is currently provided by on-site septic systems. If there is future development within the SOIA Area, such development would receive municipal wastewater collection and treatment services through extension of SASD and SRCSD infrastructure.

Sacramento Area Sewer District

SASD provides local wastewater collection and conveyance services and infrastructure throughout the Sacramento region. SASD maintains and provides wastewater collection and conveyance from the local residences and businesses in the urbanized, unincorporated areas of Sacramento County; the cities of Elk Grove, Rancho Cordova, and Citrus Heights; portions of the city of Sacramento; and a very small area in the city of Folsom. The service area covers approximately 270 square miles and has a population of over 750,000. The smaller local pipelines that SASD operates connect to the larger regional interceptors maintained by SRCSD.

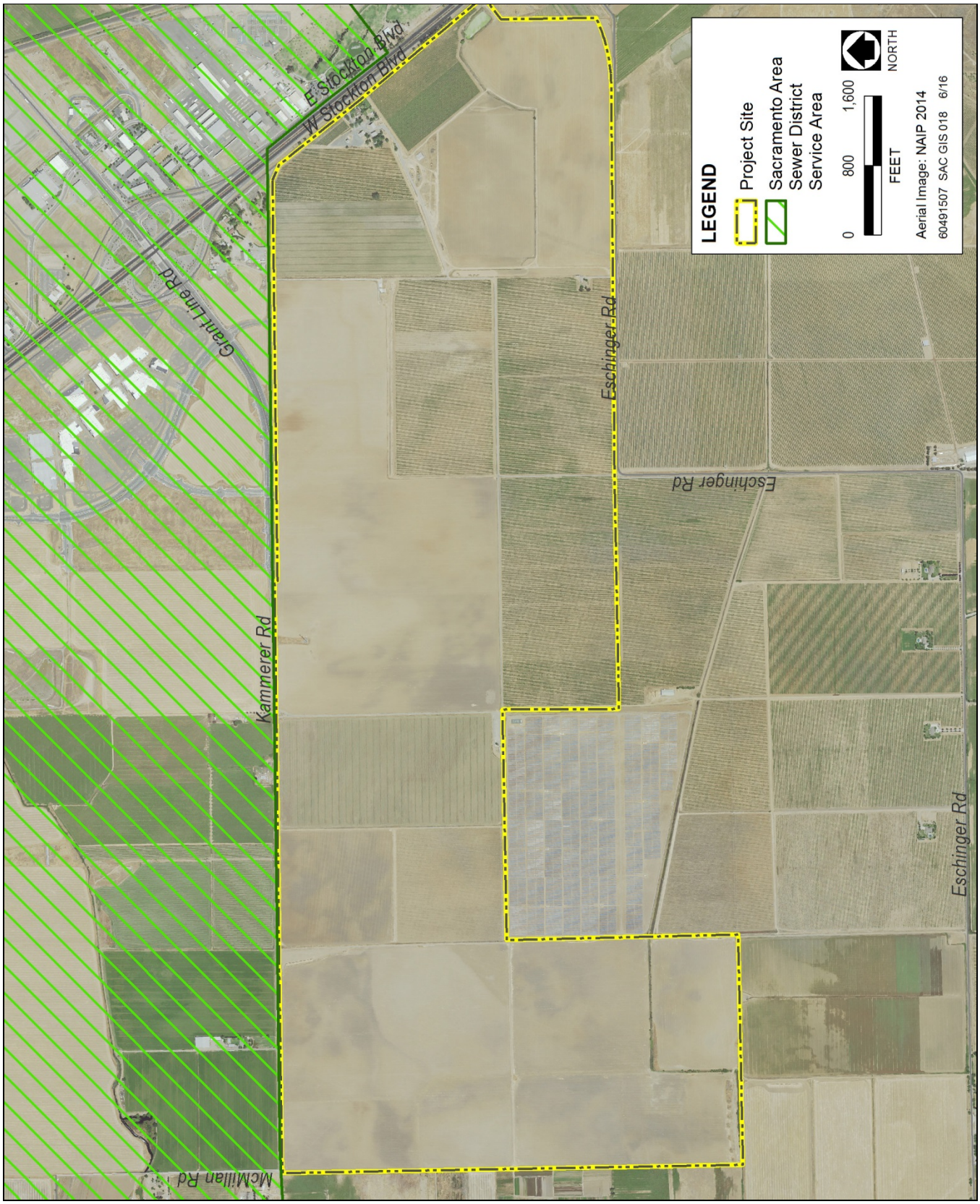
The SOIA Area is located outside of the SASD service area. Currently there are no SASD trunk facilities located in or planned to serve the project area. However, the SASD has indicated that they may provide sewer service to the SOIA Area (Moore, pers. comm., 2016). The closest point of connection to major SASD infrastructure near the SOIA area boundaries would be within the Laguna Ridge Specific Plan and Southeast Policy Area projects along the north side of Kammerer Road. These areas are located in the LA Laguna Ridge Trunk Shed. SASD has indicated that all existing connection points adjacent to the SOIA Area are not designed to accommodate any additional flows from this project and the applicant will need to construct new facilities or upgrade the existing pipelines (Moore, pers. comm., 2017).

The LA Laguna Ridge Trunk Shed is located south of Elk Grove Boulevard between Bruceville Road and State Route 99 (SR 99) (Exhibit 3.15-2). The northern portion of this shed has been constructed and remaining portions to be constructed include a major trunk, a minor trunk, and the Laguna Ridge South Pump Station. The Laguna Ridge South Pump Station will require two force mains and the downstream portion of one of the force mains has already been constructed in Bruceville Road. The timing for these improvements would occur by 2020 or potentially beyond 2020, depending on the amount of conveyance capacity required to serve future development in SASD's LA Laguna Trunk Shed.

Sacramento Regional County Sanitation District

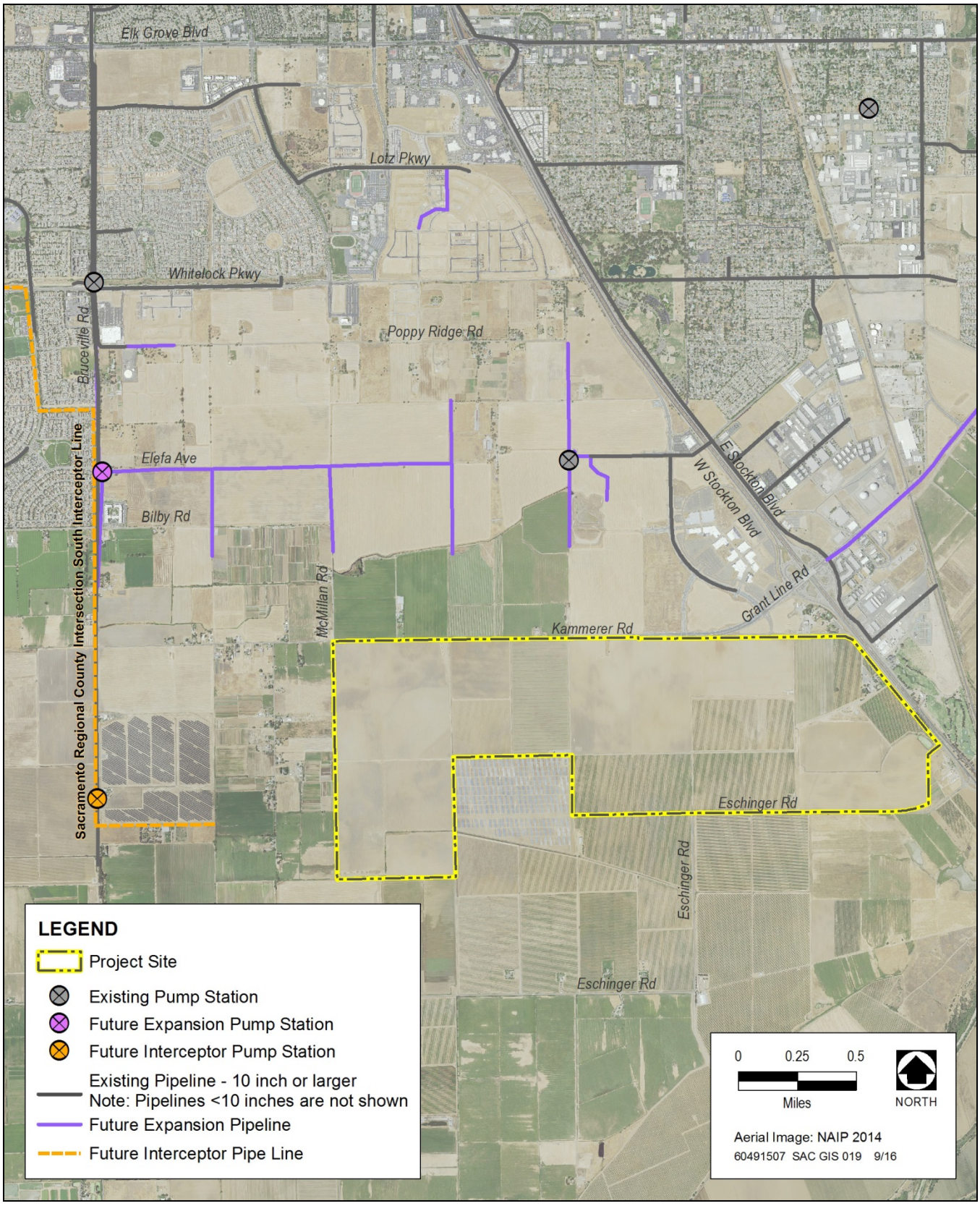
SRCSD is responsible for collection by interceptors (sanitary sewers that are designed to carry flows in excess of 10 million gallons per day [mgd]) and for wastewater treatment in Sacramento County. This district owns, operates, and is responsible for the collection, trunk, and interceptor sewer systems throughout Sacramento County, as well as the Sacramento Regional Wastewater Treatment Plant (SRWTP) located west of Elk Grove.

SRCSD has completed an Interceptor Sequencing Study that will aid in planning and implementing regional conveyance projects and assisting contributing agencies in coordination of collection system facilities. The SOIA Area is not within the SRCSD service area; however, off-site wastewater facilities to serve the SOIA Area have been planned for in the SRCSD Interceptor Sequencing Study. The Interceptor Sequencing Study identifies the SOIA Area as the South Area that would be served by the future South Area Interceptor (Exhibit 3.15-3).



Source: SASD 2011

Exhibit 3.15-2 **Sacramento Area Sewer District Service Area**



Source: SASD Sewer System Capacity Plan 2010 Update

Exhibit 3.15-3 **Existing and Future Infrastructure Expansion Plan**

Sacramento Regional Wastewater Treatment Plant

Wastewater flows collected from SRCSD interceptors are ultimately transported into the SRWTP. The SRWTP is located west of Elk Grove and is owned and managed by SRCSD. Currently, the SRWTP has a National Pollutant Discharge Elimination System (NPDES) permit issued by the Central Valley Regional Water Quality Control Board (RWQCB) for discharge of up to 181 mgd average dry-weather flow of treated effluent into the Sacramento River. The SRWTP has the potential for expansion to 218 mgd. As of 2015, the SRWTP receives and treats an average of 150 mgd each day and the SRWTP discharge constituents are below permitted discharge limits specified in the NPDES permit (SRCSD 2015).

In 2005, the SRCSD sought an expansion to increase the design capacity of the SRWTP to 218 mgd. In June 2010 the SRCSD removed its formal request to the Central Valley RWQCB for an increase in permitted wastewater discharge capacity. Water conservation and a reduction in water-using industries reversed the growth in wastewater capacity use, despite the substantial growth in its service area. The SRCSD expects per capita consumption to fall 25 percent over the next 20 or more years through the ongoing installation and use of water meters as well as compliance with conservation mandates such as the state Water Conservation Act of 2009 (SB x7- 7). As such, substantial additional conservation is expected throughout the service area, allowing the existing 181 mgd average dry-weather flow capacity to be adequate for at least 40 more years (SRCSD 2014:6-2).

~~SRCSD is upgrading the SRWTP. The upgrade, known as the EchoWater Project, must be built by 2021–2023 to meet new water quality requirements that were issued by the Central Valley RWQCB as part of SRCSD's 2010 discharge permit. The requirements are designed primarily to help protect the Sacramento–San Joaquin Delta ecosystem downstream by removing most of the ammonia and nitrates and improving the removal of pathogens from wastewater discharge. The upgrade will include deployment of new treatment technologies and facilities, and will increase the quality of effluent discharged into the Sacramento River and ensure that the SRWTP discharge constituents are below permitted discharge limits specified in the NPDES permit. The upgrade will not, however, result in a net increase in permitted capacity of the SRWTP (SRCSD 2015).~~

The SRWTP provides secondary treatment using an activated sludge process. Incoming wastewater flows through mechanical bar screens through a primary sedimentation process. This allows most of the heavy organic solids to settle to the bottom of the tanks. These solids are later delivered to the digesters. Next, oxygen is added to the wastewater to grow naturally occurring microscopic organisms, which consume the organic particles in the wastewater. These organisms eventually settle on the bottom of the secondary clarifiers.

Clean water pours off the top of these clarifiers and is chlorinated, removing any pathogens or other harmful organisms that may still exist. Chlorine disinfection occurs while the wastewater travels through a two-mile "outfall" pipeline to the Sacramento River, near the town of Freeport. Before entering the river, sulfur dioxide is added to neutralize the chlorine.

The design of the SRWTP and collection system was balanced to have SRWTP facilities accommodate some of the wet-weather flows, while minimizing idle SRWTP facilities during dry weather. The SCRSD designed the SRWTP to accommodate some wet-weather flows with the storage basins and interceptors designed to accommodate the remaining wet weather flows. The Central Valley RWQCB issued an NPDES Discharge Permit to the SCRSD in December 2010.

In adopting the new Discharge Permit, the Central Valley RWQCB required the SCRSD to meet substantially more restrictive treatment levels over its current levels. Regional San began the necessary activities, studies, and projects to meet the permit conditions in August of 2014. The SCRSD must complete construction of the new treatment facilities to achieve the permit and settlement requirements by May of 2021 for ammonia and nitrate and by May of 2023 to meet these pathogen requirements.

Recycle Water

The SRCSD currently owns and operates a 5-mgd Water Reclamation Facility (WRF) that has been producing Title 22 tertiary recycled water since 2003. The WRF is located within the SRWTP property. The SRCSD uses a portion of the recycled water at the SRWTP and the remainder is wholesaled to SCWA. SCWA retails the recycled water, primarily for landscape use, to select customers in the city. It should be noted that the SRCSD currently does not have any planned facilities that could provide recycled water to the SOIA Area or its vicinity. Additionally, the SRCSD is not a water purveyor and potential use of recycled water in the SOIA Area must be coordinated between the key stakeholders (e.g., land use jurisdictions, water purveyors, users, and the recycled water producers.

SOLID WASTE

If there is future development within the SOIA Area, this EIR assumes such development would be within the City of Elk Grove. The Integrated Waste Department manages the City of Elk Grove's residential solid waste franchise and plans, coordinates, promotes and implements citywide solid waste reduction, recycling, composting, and public education activities. In 2014, the City disposed of a total of 78,316 tons of solid waste (CalRecycle 2014).

Residential solid waste services in Elk Grove are provided by Republic Services (formally known as Allied Waste) under an exclusive franchise agreement. Commercial solid waste is collected by private franchised haulers and disposed of at various facilities – primarily Kiefer Landfill, L and D Landfill, and Yolo County Landfill. Table 3.15-3 shows the maximum capacity, remaining capacity, and closure date of these landfills.

Table 3.15-3. City of Elk Grove Primary Landfills

Facility (County)	Location	Capacity
Kiefer Landfill (Sacramento County)	12701 Kiefer Boulevard Sloughhouse, CA 95683	Maximum permitted capacity: 117.4 million cubic yards Remaining capacity: 112.9 million cubic yards Closure date: January 1, 2064
L and D Landfill (Sacramento County)	8635 Fruitridge Road Sacramento, CA 95826	Maximum permitted capacity: 6.0 million cubic yards Remaining capacity: 4.1 million cubic yards Closure date: January 1, 2023
Yolo County Central Landfill (Yolo County)	County Road 28 and County Road 104 Davis, CA 95616	Maximum permitted capacity: 49.0 million cubic yards Remaining capacity: 23.7 million cubic yards Closure date: January 1, 2080

Sources: CalRecycle 2016a, 2016b, 2016c

The City of Elk Grove provides a Special Waste Collection Center program that helps residents dispose/recycle their residential and business hazardous waste properly. Elk Grove residents and participating jurisdictions may drop off a full range of hazardous wastes, such as motor oil, antifreeze, batteries, and flammable liquids and

paints. All waste collected is either reused, recycled, processed for energy recovery, or stabilized for proper disposal. As of April 2015, the Special Waste Collection Center received over 123 tons of household hazardous waste.

The California Integrated Waste Management Board of 1989 requires local agencies to implement source reduction, recycling, and composting that would result in a minimum of 50 percent diversion of solid waste from landfills, thereby extending the life of landfills (see below under "Regulatory Framework" for more detail).[2] For 2014, the target solid waste generation rate for the City of Elk Grove was 5.9 per person and 27.5 pounds per day (ppd) per employee, and the actual measured generation rate was 2.7 ppd per person and 14.2 ppd per employee, which is less than the target solid waste generation rate (CalRecycle 2014).

3.15.2 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulation, or laws pertaining to utilities and service systems are applicable to this project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Senate Bill 610

The State of California has enacted legislation that is applicable to the consideration of larger projects under CEQA. SB 610 (Chapter 643, Statutes of 2001; Section 21151.9 of the Public Resources Code and Section 10910 et seq. of the Water Code) requires the preparation of "water supply assessments" for large developments (i.e., more than 500 dwelling units or nonresidential equivalent). These assessments, prepared by "public water systems" responsible for serving project areas, address whether existing and projected water supplies are adequate to serve the project, while also meeting existing urban and agricultural demands and the needs of other anticipated development in the service area in which the project is located. If the UWMP did not account for the project's water demand, or if the public water system has no UWMP, the project's WSA must discuss whether the system's total projected water supplies (available during normal, single-dry, and multiple-dry water years during a 20-year projection) would meet the project's water demand in addition to the system's existing and planned future uses, including agricultural and manufacturing uses.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) of 2014 provides for local control of groundwater sustainability with State oversight. The law became effective January 1, 2015 and states that groundwater resources should be managed sustainably for long-term reliability and multiple economic, social, and environmental benefits for current and future beneficial uses. The SGMA requires local agencies to develop and implement groundwater sustainability plans in high and medium priority groundwater basins throughout California. In 2014, the California Department of Water Resources (DWR) designated the South American

[2] As of 2007, the 50 percent diversion requirement is measured in terms of per-capita disposal expressed as pounds per day (ppd) per resident and per employee. The new per capita disposal and goal measurement system uses an actual disposal measurement based on population, disposal rates reported by disposal facilities, and evaluates program implementation efforts.

groundwater subbasin as high priority (DWR 2014). However, the South American Subbasin is not included on DWR's list of critically overdrafted basins (DWR 2016a).

Local agencies must form groundwater sustainability agencies by 2017, then agencies in critically overdrafted basins must develop plans by 2020, while agencies in all other high and medium priority basins must prepare plans by 2022. Designation of a groundwater sustainability agency is not required until 2017, and groundwater sustainability plans are not required until 2020 at the earliest.

The Sacramento Central Groundwater Authority is moving forward with SGMA compliance and submitted a notice of intent on July 21, 2016, to become a Groundwater Sustainability Agency for its area within the South American Subbasin and exclusive status was granted for the majority of that area by the California Department of Water Resources (DWR) (Sacramento Central Groundwater Authority 2016). The northern portions of the Omochumne-Hartnell Water District and the Sloughhouse Resource Conservation District overlap areas along the southern boundary of the South American Subbasin (DWR 2016b). Both water districts have submitted notices to be groundwater sustainability agencies. This process is not subject to LAFCo purview. ~~As of May 4, 2016, two Resource Conservation Districts have submitted notice to be the groundwater sustainability agency for the South American Subbasin.~~ (See Section 3.10, "Hydrology and Water Quality," for further discussion.)

California Integrated Waste Management Act

The California Integrated Waste Management Act (CIWMA) of 1989 is the result of two pieces of legislation, Assembly Bill (AB) 939 and SB 1322. The CIWMA was intended to minimize the amount of solid waste that must be disposed of by transformation and land disposal by requiring all cities and counties to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000.

The CIWMA created the California Integrated Waste Management Board (now known as CalRecycle). CalRecycle is the agency designated to oversee, manage, and track California's 92 million tons of waste generated each year. CalRecycle provides grants and loans to help cities, counties, businesses, and organizations meet the state's waste reduction, reuse, and recycling goals. In addition to many programs and incentives, CalRecycle promotes the use of new technologies for the practice of diverting resources away from landfills. CalRecycle is responsible for ensuring that waste management programs are primarily carried out through local enforcement agencies (LEAs).

The State Water Resources Control Board and the Central Valley RWQCB also regulate waste disposal (the latter regulated solid waste prior to CalRecycle). In Sacramento County, the County is responsible for municipal solid waste management planning and compliance efforts required by CalRecycle.

California Green Building Standards Code

The standards included in the ~~2013~~ 2016 California Green Building Standards Code (CALGreen Code) (Title 24, Part 11 of the California Code of Regulations) became effective on January 1, ~~2014~~ 2017.[3] The CALGreen Code was developed to enhance the design and construction of buildings, and the use of sustainable construction practices, through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental air quality (California Building Standards Commission ~~2013~~ 2016).

[3] ~~The CALGreen Code is currently being updated and the new code will become effective January 1, 2017.~~

Chapter 6 of the ~~2013~~ 2016 CALGreen Code describes measures to reduce indoor demand for potable water by 20 percent and to reduce landscape water usage by 50 percent. It also requires separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects.

Chapter 7, Section 708, of the ~~2013~~ 2016 CALGreen Code requires all construction contractors to reduce construction waste and demolition debris by 50 percent. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials collected will be taken. The code also specifies that the amount of materials diverted should be calculated by weight or volume, but not by both. In addition, the ~~2013~~ 2016 CALGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Construction and Demolition Debris Reduction, Reuse, and Recycling Ordinance

The Construction and Demolition Debris Reduction, Reuse, and Recycling Ordinance (City Municipal Code Title 30, Chapter 30.70), adopted on July 1, 2010, makes construction and demolition debris recycling mandatory for all new construction (with a valuation greater than $250,000) and demolition projects. Materials required to be recycled include scrap metal, inert materials (concrete, asphalt paving, bricks, etc.), corrugated cardboard, wooden pallets, and clean wood waste. A Waste Management Plan must be completed to identify waste that would be generated by a project as well as the proposed recycling and hauling methods. During construction and/or demolition, a waste log must be maintained on the project area and submitted to the City at project completion.

Space Allocation and Enclosure Design Guidelines for Trash and Recycling

The Space Allocation and Enclosure Design Guidelines for Trash and Recycling (City Municipal Code Title 30, Chapter 30.90) provides recycling and waste collection requirements for all developments in the City. Integrated collection areas with recycling components assist in the reduction of waste materials, thereby prolonging the life of landfills and helping the City meet the State-mandated recycling requirements described previously in this subsection. The guidelines provide information and resources for designing trash and recycling sites that will be used by building occupants in new developments or significant remodels. Conventional recycling and greenwaste recycling must be designed into projects sites along with the trash capacity.

City of Elk Grove General Plan

If there is future development within the SOIA Area, this EIR assumes this development would be within the City of Elk Grove. If there is future development within the SOIA Area requiring discretionary approval from the City, this would require consistency findings with the City's General Plan, including the following policies and actions from the Public Facilities and Finance Element of the Elk Grove General Plan (2015) that relate to utilities and service systems.

- **Policy PF-1:** Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

- **Policy PF-2:** The City shall coordinate with outside service agencies—including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District--during the review of plans and development projects.

- **Policy PF-3:** Water supply and delivery systems shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City's satisfaction.

  - **PF-3-Action 1:** The following shall be required for all development projects, excluding subdivisions:

    - An assured water supply and delivery system shall be available at the time of project approval. The water agency providing service to the project may provide several alternative methods of supply and/or delivery, provided that each is capable individually of providing water to the project.

    - All required water infrastructure for the project shall be in place at the time of project approval, or shall be assured through the use of bonds or other sureties to the City's satisfaction. Water infrastructure may be phased to coincide with the phased development of large-scale projects.

  - **PF-3-Action 2:** The following shall be required for all subdivisions to the extent permitted by state law:

    - Proposed water supply and delivery systems shall be identified at the time of tentative map approval to the satisfaction of the City. The water agency providing service to the project may provide several alternative methods of supply and/or delivery, provided that each is capable individually of providing water to the project.

    - The agency providing water service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects in the same service area, and other projects that have received commitments for water service.

    - Offsite and onsite water infrastructure sufficient to provide adequate water to the subdivision shall be in place prior to the approval of the Final Map or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.

    - Offsite and onsite water distribution systems required to serve the subdivision shall be in place and contain water at sufficient quantity and pressure prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.

- **Policy PF-8:** Sewage conveyance and treatment capacity shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City's satisfaction.

  - **PF-8-Action 1:** The following shall be required for all development projects, excluding subdivisions:

    - Sewer/wastewater treatment capacity shall be available at the time of project approval.

- All required sewer/wastewater infrastructure for the project shall be in place at the time of project approval, or shall be assured through the use of bonds or other sureties to the City's satisfaction.

- **PF-8-Action 2:** The following shall be required for all subdivisions to the extent permitted by state law:

  - Sewage/wastewater treatment capacity shall be available at the time of tentative map approval.

  - The agency providing sewer service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects using the same conveyance lines, and projects which have received sewage treatment capacity commitment.

  - Onsite and offsite sewage conveyance systems required to serve the subdivision shall be in place prior to the approval of the Final Map, or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.

  - Sewage conveyance systems within the subdivision shall be in place and connected to the sewage disposal system prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.

- **Policy PF-21:** New development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.

3.15.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

There is no development and no land use change proposed as part of this SOIA application. However, in order to facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario. For the purposes of analysis, the applicant has identified that the SOIA Area could accommodate the development of a broad array of housing types, with a total of 4,000 to 5,000 dwelling units. In addition, future land uses could include commercial, office, and industrial uses as well as public land uses, such as parks. This scenario assumes development of the SOIA Area could accommodate approximately 18,000 to 20,000 jobs.

Impacts related to utilities and service systems that would result from the proposed project were identified by comparing existing service capacity against future demand associated with implementation of the proposed project. Environmental impacts related to constructing the infrastructure to serve the future development are analyzed throughout the various environmental topic specific sections of this EIR. The placement of these utilities has been considered in the other sections of this EIR, such as Section 3.3 of this EIR, "Air Quality," Section 3.4, "Biological Resources," Section 3.5, "Cultural Resources," and other sections, which specifically analyze the potential for future development. Impacts related to stormwater management are addressed in Section 3.10, "Hydrology and Water Quality."

Evaluation of potential utility and service system impacts was based on a review of the following planning documents pertaining to the proposed project and surrounding area:

- *Elk Grove General Plan* (City of Elk Grove 2015),

- *Sacramento County Water Agency Zone 40 Water Supply Master Plan* (SCWA 2005),
- *Sacramento County Water Agency Zone 40 Water System Infrastructure Plan* (SCWA 2006),
- *2010 Zone 41 Urban Water Management Plan* (SCWA 2011),
- *Sewer System Capacity Plan 2010 Update* (SASD 2011), and
- *Sacramento Regional County Sanitation District Interceptor Sequencing Study* (SRCSD 2013).

Additional background information on current services, staffing, and equipment was obtained through consultation with appropriate agencies.

THRESHOLDS OF SIGNIFICANCE

Based on the CEQA Guidelines, Appendix G, the proposed project would result in a significant impact related to utilities and service systems if the project would:

- Exceed wastewater treatment requirements of the applicable RWQCB;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Have insufficient water supplies available to serve the project from existing or permitted entitlements and resources, or require new or expanded entitlements;
- Generate solid waste beyond the capacity of existing landfills; or
- Violate federal, State, or local statutes or regulations related to solid waste.

IMPACT ANALYSIS

IMPACT 3.15-1 **Increased demand for water supplies and water system facilities.** *Future development would require new treated water supplies and construction of on-site and off-site water supply system facilities. SCWA would likely be the future water service provider to the SOIA Area. It is currently not known if SCWA's existing water supplies would be adequate to meet the water demands of future development. In addition, on-site and off-site water system facilities necessary to serve future development have not been identified at this time. This impact is considered* ***significant****.*

Presently, there are no public water supply facilities within the SOIA Area and water supplies are provided by irrigation wells. As shown in Table 3.15-1, the total annual water usage for agricultural crops on the SOIA Area is estimated to be approximately 1,830 afy. There are no changes to land uses proposed as part of this SOIA

application. Therefore, the proposed project would not immediately increase the demand for water supplies or water system facilities.

However, this EIR includes analysis of a conceptual land use scenario that is intended to represent possible development of the SOIA Area. Future development included in the conceptual land use scenario would increase demands for water supply and water system facilities. Because the SOIA Area is adjacent to the southwestern boundary of SCWA's Zone 40, it is most likely that water service would be provided by SCWA (Exhibit 3.15-1). SCWA's Zone 40 water-demand factors were applied to the acreage for each land use designation that generates water use within the SOIA Area. As shown on Table 3.15-4, the estimated water supply demand based on the conceptual land use scenario has been conservatively estimated as 3,233 afy.[4] If a SRCSD recycled water program becomes available in the future, recycled water could be used for parks, landscape corridors, schools athletic fields and open space areas, which would substantially reduce potable water demand.

Table 3.15-4 Projected Water Demands for Build-Out of Future Development

Land Use Category	Unit Water Demand Factors (af/ac/yr)	Land Use (acres)	Water Demand (afy)
Single-Family	2.89	430	1,243
Multifamily	4.12	90	371
Commercial[1]	2.75	380	1,045
Industrial	2.71	130	352
Public Recreation[2]	3.46	140	484
Subtotal	**--**	**1,156**	**3,495**
Water System Losses (7.5%)	--	--	262
Total Demand	**--**	**--**	**3,233**

Notes: af/ac/yr = acre-feet per acre per year; afy = acre-feet per year.
[1] Future commercial and office development is included in the Commercial land use category.
[2] Future schools and parks/open space are included in the Public Recreation land use category.
Source: SCWA 2005a:2-5

As discussed above, the Zone 41 UWMP indicates that water supplies and demands within SCWA Zone 40 would be the same during normal, single-dry, and multiple-dry years; however, the year-to-year mix of surface and groundwater would be adjusted, as necessary, to meet the demands as part of its conjunctive use water supply program. As shown in Table 3.15-2, SCWA would have surface water and groundwater supplies that exceed demands within Zone 40 from 2010 to 2035 in all water years. ~~Surplus water supplies could potentially meet water supply demands of future development.~~ SCWA anticipates that at buildout of its service area, and assuming that appropriative water and CVP contract water continue to be available, surface water will account for approximately 70 percent of water supplies during average and wet years and account for approximately 30 percent of water supplies in the driest years thereby resulting in a long-term average of approximately 60 percent of water demands being met by surface water supplies (SCWA 2017).

The City outlines specific requirements to ensure water systems are available to meet demands created by new development (Policy PF-3 of the City General Plan). These requirements include demonstrating that on-site and off-site water systems are available to serve proposed development (Action PF-3-Action 1 and PF-3-Action 2 of the City General Plan) or that new development would contribute its fair share portion for funding new water

[4] This water supply demand does not reflect 2016 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requirements to reduce indoor demand for potable water by 20 percent and to reduce landscape water usage by 50 percent or water conservation measures that may be implemented by future development.

systems (Policy PF-21 of the City General Plan). In addition, the City requires assured water supplies are available prior to approval of new development projects (Policy PF-3, Action PF-3-Action 1, and PF-3-Action 2 of the City's General Plan).

Although the City of Elk Grove has recently committed advance funding of major infrastructure improvements along its southern boundary (i.e., water transmission mains to be in Kammerer Road), the current SCWA existing and proposed facilities for serving this Elk Grove area were not planned or designed to serve beyond the existing Elk Grove city limits. However, existing SCWA off-site water storage and conveyance facilities in the vicinity of the SOIA Area could serve future development. SWCA's nearest water transmission mains are located in Promenade Parkway and Kammerer Road adjacent to the northern boundary of this SOIA area and along Bilby Road, approximately 0.5 mile northwest of the SOIA Area; at West Stockton Boulevard, adjacent to the eastern edge of the SOIA Area; and at the Grant Line Road/State Route 99 interchange, approximately 0.5 mile east of the eastern edge of the SOIA Area (LAFCo 2013). The Poppy Ridge WTP is located near the intersection of Bruceville Road and Poppy Ridge Road. SCWA would need to assess the available capacity in these water system facilities if there is proposed annexation and proposed development within the SOIA Area in the future.

Other planned SCWA water system improvements may also serve future development. The Zone 40 WSIP shows the future Whitelock WTP, planned as a Phase 2 facility in The Zone 40 WSMP, and additional water conveyance pipelines are proposed along Whitelock Parkway, approximately 1.5 miles north of the SOIA Area (SCWA 2006). These water system improvements were identified in the 2005 Zone 40 WSMP EIR, and the environmental impacts of the construction and operation were analyzed at a programmatic level. ~~SCWA would conduct project-level CEQA or NEPA analysis, if necessary, to analyze specific impacts and identify any required mitigation measures for construction and operation of new off-site facilities.~~

Future development would require construction of an on-site water system to serve new development and construction of new or improvements to off-site SCWA water systems. ~~On-site water systems would be constructed to serve new development.~~ SCWA has indicated on-site and off-site water systems could consist of a groundwater treatment plant, storage tanks, pump stations, groundwater wells, and transmission and distribution mains (SCWA 2017). Physical impacts associated with construction and operations of on-site utilities are evaluated throughout this Recirculated Draft EIR and the Draft EIR since these facilities are considered to be part of potential future development consistent with the proposed project. ~~These resource sections, such as~~ include~~.~~ ~~The placement of these utilities has been considered in the other sections of this EIR, such as Air Quality, Biological Resources, and other sections, which specifically analyze the potential for project construction and implementation.~~

SCWA would conduct project-level CEQA or NEPA analysis, if necessary, to analyze specific impacts and identify any required mitigation measures for construction and operation of new off-site facilities. Impacts resulting from off-site water conveyance infrastructure improvements could include, but are not limited to, short-term impacts on air quality and greenhouse gas emissions associated with construction, potential impacts on special-status plants and wildlife or sensitive habitats; potential disturbance of known or unknown cultural or paleontological resources; short-term increases in erosion and stormwater runoff; and short-term increases in construction noise levels. The size and number of new on-site and off-site facilities would be determined by SCWA based on water supply demands of the SOIA Area. The existing Zone 40 WSMP would be updated or amended to include these new facilities and an estimate of infrastructure costs (SCWA 2017).

The SOIA Area is not within SCWA's Zone 40 2030 Study Area and water supply demands to the SOIA Area were not accounted for in the Zone 41 UWMP or Zone 40 WSMP. It is currently not known if SCWA's existing water supplies would be adequate to meet the water demands of future development but SCWA has indicated that it is likely additional surface water and groundwater supplies will be procured to meet the water supply demands of the SOIA Area (SCWA 2017).

SCWA would need annex the SOIA Area into ~~its service area~~ Zone 40 and Zone 41 and plan and extend infrastructure and services to serve the SOIA Area. SCWA is not subject to LAFCo purview and the SCWA Board of Supervisors would oversee any changes to the SCWA service area. SCWA would need to conduct future water supply assessments to determine if existing water supplies would meet the demand of future development and the Zone 41 UWMP would be updated to include water supply demands of the SOIA Area. SCWA will require the updating or amending of its existing Zone 40 WSMP in conjunction with the water supply assessments. SCWA would update or amend the existing Zone 40 WSIP to include details on calculations and infrastructure requirements added to the amended Zone 40 WSMP (SCWA 2017). In addition, on-site and off-site water supply facilities necessary to serve future development have not been identified at this time. Therefore, the impact is considered **significant**.

Mitigation Measures

Mitigation Measure 3.15-1: Prepare a Plan for Service that Demonstrates Adequate Water Supplies and On-Site and Off-Site Water System Facilities are Available before the Annexation of Territory within the SOIA Area.

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall prepare a Plan for Services as required by Government Code Section 56430, or its successor. The Plan for Services shall demonstrate that SCWA water supplies are adequate to serve the amount of future development identified in the annexation territory in addition to existing and planned development under normal, single dry, and multiple dry years, without adverse impacts to existing ratepayers. The Plan for Services shall demonstrate that the SCWA is a signatory to the Water Forum Agreement, that groundwater management would occur consistent with the Central Sacramento County Groundwater Management Plan, and that groundwater will be provided in a manner that ensures no overdraft will occur. The Plan for Services shall depict the locations and appropriate sizes of all on-site water system facilities to accommodate the amount of development identified for the annexation territory, demonstrate SCWA has modified its service area boundary to include ~~annexed~~ the territory ~~into~~within its Zone 40 and Zone 41 service area~~s~~, and demonstrate adequate SCWA off-site water facilities are available to accommodate the amount of development identified in the annexation territory or that fair share funding will be provided for the construction of new or expansion and/or improvement of existing off-site water system facilities with no adverse impacts on existing ratepayers.

Significance after Mitigation

Implementation of Mitigation Measure 3.15-1 would reduce significant impacts associated with increased for water supplies and demand for on-site and off-site water facilities because the City of Elk Grove would demonstrate adequate SCWA water supplies and on-site and off-site water systems would be available for the amount of development identified in the annexation territory.

LAFCo would condition future annexation on compliance with Mitigation Measure 3.15-1. However, SCWA's water supply planning and off-site improvements to their facilities are the responsibility of SCWA. SCWA would conduct project-level CEQA or NEPA analysis, if necessary, to analyze specific impacts and identify any required mitigation measures for construction and operation of new off-site facilities. Impacts resulting from off-site water infrastructure improvements could include, but are not limited to, short-term impacts on air quality and greenhouse gas emissions associated with construction, potential impacts on special-status plants and wildlife or sensitive habitats; potential disturbance of known or unknown cultural or paleontological resources; short-term increases in erosion and stormwater runoff; and short-term increases in construction noise levels.

Implementation of mitigation measures and updates or amendments to the Zone 40 WSMP, Zone 40 WSIP, and Zone 41 UWMP would be the responsibility of the SCWA. In addition, physical environmental impacts from construction or operation of new off-site improvements could remain significant after implementation of mitigation (i.e., significant and unavoidable), or no feasible mitigation may be available to fully reduce impacts to a less-than-significant level. Neither LAFCo nor the City of Elk Grove would have control over SCWA's future water supply planning or the approval, timing, or construction of any SCWA off-site water facility improvements. There is no additional feasible mitigation. Therefore, the impact remains **significant and unavoidable**.

IMPACT 3.15-2 Increased demand for wastewater collection, conveyance, and treatment facilities. *Future development would require construction of on-site wastewater collection and conveyance facilities and construction of new and/or expansion of existing SASD and SRCSD facilities. The on-site wastewater collection and conveyance facilities necessary to serve future development are not known at this time, but could include gravity sewers, force mains, and pump stations. SASD has not identified future off-site wastewater collection and conveyance facilities required to serve future development and the SCRSD South Area Interceptor has been conceptually identified but not constructed. Although the SRWTP would have capacity to treat wastewater generated by future development, verification of SRWTP treatment capacity to serve future development would still be required. Therefore, this is considered a* ***significant*** *impact.*

Physical impacts associated with construction and operations of utilities are evaluated throughout this EIR. The placement of these utilities has been considered in the other sections of this EIR, such as Air Quality, Biological Resources, and other sections, which specifically analyze the potential for project construction and implementation.

The SOIA Area is not currently served by a municipal wastewater service provider. Rather, wastewater service is currently provided by septic systems. Future development would receive municipal wastewater service through construction of on-site wastewater transmission facilities and construction of new and/or expansion of existing off-site SASD and SRCSD infrastructure. The SOIA Area is not within the SASD or SRCSD service areas. As part of this project, both providers would annex the SOIA Area into their respective service area, which would not be subject to LAFCo purview. In general, development projects are required to design and build project-specific infrastructure, sized appropriately for anticipated demand.

On-site wastewater collection and conveyance facilities could consist of gravity sewers, force mains, and pump stations. Given the relatively flat terrain in this area, a series of pump stations will be required to collect wastewater flows from future development and convey flows via a twin 12-inch diameter force mains from the SOIA Area to a point of connection with SASD off-site infrastructure. The City outlines specific requirements to ensure wastewater facilities are available to meet demands created by new development (Policy PF-8 of the

General Plan). These requirements include demonstrating on-site and off-site wastewater infrastructure provides sufficient capacity to serve proposed development (Action PF-8-Action 1 and PF-8-Action 2 of the City General Plan).

The SASD has indicated that may provide sewer service to the SOIA Area (Moore, pers. comm., 2016). However, the locations of these improvements to serve the SOIA Area have not been identified in SASD's most recent sewer system capacity study prepared in 2010 (Exhibit 3.15-3).

Although the SOIA Area is not currently within the SRCSD service area, off-site wastewater infrastructure has been planned for in the SRCSD Interceptor Sequencing Study. The Interceptor Sequencing Study identifies the SOIA Area as the South Area that would be served by the future South Area Interceptor (Exhibit 3.15-3). There is currently no timeframe for construction of the South Area Interceptor. However, SRCSD staff has stated that future sewer service to the South Area cannot be planned until annexation into SRCSD has occurred (LAFCo 2013).

SASD bases wastewater generation rates early master planning estimates on 6 ESD's (equivalent single-family dwellings) per gross acre within the planning area. Based on this estimate, the 1,156-acre project site would generate 2.15 mgd average dry-weather flow and 5.1 mgd peak wet-weather flow that would be conveyed to the SRWTP via the South Area Interceptor. The SRWTP has a design capacity of 181 mgd with the potential to expand to 218 mgd. As of 2015, the SRWTP receives and treats an average of 150 mgd each day. The SRCSD expects that substantial water conservation measures throughout the service area would allow the existing 181 mgd average dry-weather flow capacity to be adequate for at least 40 more years (SRCSD 2014:6-2). Therefore, the SRWTP would have adequate capacity to treat wastewater flows generated by future development. The on-site wastewater collection and conveyance facilities necessary to serve future development are not known at this time, but could include gravity sewers, force mains, and pump stations. SASD has not identified future off-site wastewater collection and conveyance facilities required to serve future development and the SCRSD South Area Interceptor has been conceptually identified but not constructed. Although it is likely that the SRWTP would have capacity to treat wastewater generated by future development, verification of SRWTP treatment capacity to serve future development would still be required. Therefore, this is considered a **significant** impact.

Mitigation Measures

Mitigation Measure 3.15-2: Prepare a Plan for Service that Demonstrates Adequate On-Site and Off-Site Wastewater Collection and Conveyance Facilities and Wastewater Treatment Facilities are Available before the Annexation of Territory within the SOIA Area.

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall provide a Plan for Services that that depicts the locations and appropriate sizes of wastewater collection and conveyance facilities to accommodate the amount of development identified for the annexation territory. The Plan for Services shall demonstrate SCSD and SRCSD have annexed the territory into their respective service areas. The Plan for Services shall demonstrates that SCSD and SRCSD wastewater collection and conveyance facilities and that the SRWTP will have sufficient capacity to accommodate the amount of development identified for the annexation territory or that fair-share funding will be provided for the expansion and/or improvement of existing wastewater facilities, as needed, to accommodate the increase in demand resulting from development of the annexation territory with no adverse impact to existing ratepayers.

Significance after Mitigation

Implementation of Mitigation Measure 3.15-2 would reduce significant impacts because the City of Elk Grove would demonstrate adequate on-site and off-site wastewater collection, conveyance, and treatment facilities would be available for the amount of development identified in the annexation territory. LAFCo would condition future annexation on compliance with Mitigation Measure 3.15-2. Off-site improvements to SASD and SRCSD wastewater facilities are the responsibility of SASD and SRCSD. Implementation of mitigation measures would be the responsibility of the SASD and SRCSD, and such measures would be implemented in accordance with the certified CEQA documents. However, physical environmental impacts from construction or operation of off-site improvements could remain significant after implementation of mitigation (i.e., significant and unavoidable), or no feasible mitigation may be available to fully reduce impacts to a less-than-significant level. Neither LAFCo nor the City of Elk Grove would have control over the approval, timing, or implementation any SASD and SRCSD wastewater facility improvements. Therefore, the impact remains **significant and unavoidable**.

IMPACT 3.15-3 Increased generation of solid waste and compliance with solid waste regulations. *Future development would result in the increase generation of solid waste. The Kiefer Landfill, L and D Landfill, and Yolo County Landfill have sufficient permitted capacity to accommodate solid-waste disposal needs of future development would be required to comply with applicable federal, State, or local solid waste regulations. This impact is considered than* less than significant*.*

Construction of future development could result in site clearing and the generation of various construction-period wastes, including scrap lumber, scrap finishing materials, various scrap metals, and other recyclable and nonrecyclable construction-related wastes. The ~~2013~~ 2016 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requires all construction contractors to reduce construction waste and demolition debris by 50 percent. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials collected will be taken. The code also specifies that the amount of materials diverted should be calculated by weight or volume, but not by both (California Building Standards Commission ~~2013~~ 2016). In addition, the 2013 CALGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

Future development would result in increased long-term generation of solid waste during operation. The City provides recycling programs, such as curbside recycling of paper, plastics, and bottles, to reduce the volume of solid waste transported to landfills. In addition, the Space Allocation and Enclosure Design Guidelines for Trash and Recycling (City Municipal Code Title 30, Chapter 30.90) reduces wastes further by requiring businesses and multi-family residential uses to provide integrated collection areas with recycling components.

Residential solid waste in the City of Elk Grove is disposed of at the Kiefer Landfill and commercial solid waste is primarily disposed of at the Kiefer Landfill, the L and D Landfill, and the Yolo County Landfill. The residential uses on the SOIA Area could generate approximately 17.6 to 21.9 tpd of solid waste.[5] Future development of

[5] Based on CalRecycle's estimated 2014 annual per capita disposal rate of 2.7 pounds per resident per day, the estimated total population for the proposed project (13,000 to 16,250 persons) would generate approximately 35,100 to 43,875 pounds per day of solid waste, which equates to 17.6 to 21.9 tpd (CalRecycle 2014).

commercial, office, and industrial uses could generate approximately 127.8 to 142.0 tpd of solid waste.[6] Combined, these landfills have a large volume of landfill capacity (254 million cubic yards) available to serve future development. The closure dates of the Kiefer Landfill, L and D Landfill, and Yolo County Central Landfill are anticipated to be approximately January 1, 2064, January 1, 2023, and January 1, 2080, respectively.

Future development would comply with all statues and regulations related to solid waste. Compliance with the CalGreen Code; the City's the Construction and Demolition Debris Reduction, Reuse, and Recycling Ordinance; Space Allocation and Enclosure Design Guidelines; and other City recycling programs would ensure that sufficient landfill capacity would be available to accommodate solid-waste disposal needs for future development. This impact is considered **less than significant**.

Mitigation Measures

No mitigation measures are required.

[6] Based on CalRecycle's estimated 2014 annual per capita disposal rate of 14.2 pounds per employee per day and an estimated 18,000 to 20,000 employees for the proposed project, approximately 255,600 to 284,000 pounds per day of solid waste would be generated per day, which equates to 127.8 to 142.0 tpd (CalRecycle 2014).

4 ALTERNATIVES

CEQA requires that an EIR describe the relative environmental effects of alternatives to the proposed project and evaluate their comparative impacts and merits. LAFCo has considered a range of alternatives that can feasibly attain most of the basic project objectives and avoid or substantially lessen one or more significant effects. Alternatives that would impede to some degree the attainment of the project objectives or would be more costly may also be considered.

The alternatives analysis must identify the potential alternatives, and include sufficient information about each to allow meaningful evaluation, analysis, and comparison with the proposed project. The discussion must focus on potentially feasible alternatives that can avoid or substantially reduce the significant effects of the proposed project. The environmentally superior alternative must be identified among the alternatives considered.

Qualitative and quantitative measures of alternative feasibility may include site suitability, economic viability, availability of infrastructure, general plan consistency, consistency or conflict with other plans or regulatory limitations, jurisdictional boundaries, and whether the project applicant can reasonably acquire, control, or otherwise have access to an alternative site. Similarly, if an alternative would cause one or more significant effects, in addition to those that would be caused by the proposed project, the significant effects of the alternative must be discussed, but in less detail than the project analysis.

As required by CEQA, the alternatives analysis must evaluate the "no project" alternative. "No project" is defined as what would occur within the project site if the project were not to be approved. The "no project" alternative may consider what could reasonably occur on the project site if existing development trends continue, to the degree that adopted or proposed general plans and zoning, and existing infrastructure, services, or other relevant conditions allow.

4.1 SELECTION OF ALTERNATIVES

Alternatives were selected for evaluation in this EIR based on criteria in the CEQA Guidelines (California Code of Regulations [CCR] Section 15126.6). These criteria include (1) ability of the alternative to attain most of the basic project objectives; (2) feasibility of the alternative; and (3) ability of the alternative to avoid or substantially reduce one or more significant environmental effects of the proposed project. These criteria are discussed in more detail below.

LAFCo also received input as a part of the Notice of Preparation (NOP) and scoping process regarding potential alternatives.

- A commenter suggested an alternative that provides a buffer between urban development and the potential future Urban Services Boundary. The buffer could be used for habitat restoration or agricultural activities.
- Several commenters suggested that the SOIA Area be expanded to include their property.
- A commenter suggested that the EIR consider development of the area for wildlife and farmland buffers dedicated to such uses in perpetuity. Such development could include commercial farming, eco-tourism, wildlife research, recreation, establishment of refuges, and agricultural education programs.

- A commenter suggested that development occur on vacant land within the City limits instead.

Commenters also provided remarks on environmental issues of interest, some of which are addressed by the alternatives provided in this section:

- The impact on public services and utilities
- Concerns about water availability
- Concerns about Suburban Propane
- Impacts to biological resources, including Swainson's Hawk
- Concerns about the ability of the as-yet-unpublished South Sacramento Habitat Conservation Plan (SSHCP) to meet required mitigation standards
- Transportation and traffic impacts
- Growth-inducing impacts
- Concerns about Farmland of Local Importance
- Effects of greenhouse gas emissions
- Consistency with the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy

Please see Appendix A for the NOP and comment letters and Section 1.0, "Introduction" for a summary of responses to the NOP.

4.1.1 ABILITY OF THE ALTERNATIVE TO ATTAIN MOST PROJECT OBJECTIVES

LAFCo has evaluated potential alternatives relative to the objectives of the proposed project. For the purpose of alternatives analysis under CEQA, project objectives may not be defined so narrowly that the range of alternatives is unduly constrained.

PROJECT PURPOSE AND OBJECTIVES

The purpose of a city SOI is to provide holding capacity for the city to be able to plan for employment opportunities and an expanding population. The nature of this project – a SOIA request – has important implications for the project objectives, as does LAFCo's role as the lead agency for this project. As detailed in Chapter 2 of this EIR, "Project Description," the project is a landowner initiated proposal to amend the spheres of influence of the City of Elk Grove, Sacramento Area Sewer District (SASD), and the Sacramento Regional County Sanitation District (SRCSD). The project does not propose land use change or development. Therefore, project objectives do not focus on outcomes that relate to land use, development type or scale, or spatially specific planning components within the proposed SOIA Area. Also, LAFCo has the authority to approve, modify and approve, or disapprove applications, and to impose mitigation measures and conditions of approval, but cannot impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements. Consistent with LAFCo's role, the project objectives do not dictate outcomes related to

future land use, density, development intensity, or related topics that are the purview of local land use entitlement authorities in California.

The project objectives include the following:

- Amend the SOI boundary beyond the existing Elk Grove City limits to accommodate orderly and sustainable growth consistent with the City's General Plan.
- Implement the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 consistent with public service conditions present or reasonably foreseeable in the proposed SOIA Area.
- Establish a logical boundary within which future annexation requests into the City of Elk Grove may be considered.
- Consider providing land to accommodate a jobs-housing ratio for the City of Elk Grove that provides for sufficient residential and employment-generating lands uses to minimize the need for commuting to or from other jurisdictions.
- Establish an SOI for the City of Elk Grove that will facilitate the protection of important environmental, cultural, and agricultural resources.

4.1.2 FEASIBILITY OF THE ALTERNATIVES

Alternatives were evaluated according to the "rule of reason" and general feasibility criteria suggested by the CEQA Guidelines CCR Section 15126.6 as follows:

> The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

The inclusion of an alternative in an EIR does not necessarily mean the alternative is feasible. Rather, the inclusion of an alternative in an EIR indicates that lead agency staff has determined that the alternative is potentially feasible. Criteria include the suitability of the site or alternative site; the economic viability of the alternative; the availability of infrastructure; the consistency of the alternative with the General Plan, zoning, and other plans and regulatory limitations; and the effect of applicable jurisdictional boundaries.

4.1.3 AVOIDANCE OR SUBSTANTIAL REDUCTION OF SIGNIFICANT EFFECTS

The evaluation of alternatives must also take into account the potential of the alternative to avoid or substantially lessen any of the significant effects of the proposed project, as identified in this EIR. The potential environmental effects of the proposed project are summarized in the "Executive Summary" of this EIR.

4.2 ALTERNATIVES CONSIDERED BUT REJECTED FROM DETAILED ANALYSIS IN THE EIR

4.2.1 PROVIDE A BUFFER

A commenter suggested an alternative that provides a buffer between urban development and the potential future Urban Services Boundary. The buffer could be used for habitat restoration or agricultural activities.

The proposed project does not propose any development or identify any specific areas for development. In the future, if annexation and development is proposed, mitigation measures or design features such as a buffer could be considered as a part of future planning that would be under the jurisdiction of the City of Elk Grove. While LAFCo has elected not to examine this alternative in detail, LAFCo has elected to examine a reduced size alternative that would effectively create a buffer between urban development and existing agricultural activities and sensitive habitats, helping to preserve those areas.

4.2.2 EXPANDED SOIA AREA

Several commenters suggested that the SOIA Area be expanded to include their property. This alternative would not reduce any significant environmental effects. LAFCo has elected not to examine this alternative in detail.

4.2.3 CONSISTENCY OF THE SOIA AREA'S LAND USE DESIGNATIONS WITH THE CITY'S GENERAL PLAN UPDATE

The SOIA Area is part of the larger 3,675-acre area identified in the General Plan Update as the South Study Area (City of Elk Grove 2017). The General Plan updated EIR NOP presents two land plan program scenarios for the South Study Area. Table 3.11-1 in Section 3.11 shows the proposed General Plan Update land use designations for the South Study Area and a percent range of total acreage for each land use. In addition, Table 3.11-1 compares the applicant's proposed conceptual land use scenario for the SOIA Area and the percent of proposed acreage for each land use. As shown in Table 3.11-1, the conceptual land use plan's proposed multi-family residential land uses (8 percent), commercial land uses (4 percent), schools (3 percent), and parks (10 percent) are in the range of both scenarios, while the percent of single-family residential land uses (37 percent) and industrial land uses (11 percent) exceed Scenario 1 but are within the range of Scenario 2. However, the percent of the SOIA Area potentially designated for office land uses (29 percent) exceed the range of both scenarios.

It is not known how closely the future land use designations for the SOIA Area would reflect those of the conceptual land use plan. Furthermore, a final General Plan Update land plan program scenario has not been selected; therefore, the proposed SOIA Area conceptual land use plan cannot be accurately compared to the City General Plan Update land use program scenarios. LAFCo has elected not to examine any alternative uses of the project site in detail.

4.2.4 ALTERNATIVE USE OF PROJECT SITE

A commenter suggested that the EIR consider development of the area for wildlife and farmland buffers dedicated to such uses in perpetuity. Such development could include commercial farming, eco-tourism, wildlife research, recreation, establishment of refuges, and agricultural education programs.

The proposed project does not propose any development or identify any specific areas for development. In the future, if annexation and development is proposed, the type of development would be under the jurisdiction of Elk Grove. However, this alternative would not meet the project purpose to "provide holding capacity for the City to be able to plan for employment opportunities and expanding population." LAFCo has elected not to examine any alternative uses of the project site in detail.

4.2.5 ALTERNATE LOCATION ALTERNATIVE FOR FUTURE DEVELOPMENT

One potential alternative location would entail the expansion of the City of Elk Grove's SOI to the northeast of the existing City limits and would encompass an area that is larger than the currently proposed SOIA Area. While this alternate location could provide holding capacity for the City to be able to plan for employment opportunities and an expanding population and to meet the project objective of a SOI, this area is under the planning jurisdiction of Sacramento County, which is currently processing specific plans and development applications, including the 2,650-acre Sacramento County Vineyard Springs Comprehensive Plan (County of Sacramento 2000) and a 2,550-acre area to the west that is bounded by Eagle Nest Road to the east, Excelsior Road to the west, Calvine Road to the south, and Grant Line Road to the southeast. Given the County's ongoing planning activities in this area, this alternate location would not meet the project objectives related to amending the City's SOI policy boundary. The Southeast Policy Area also encompasses an area that is larger than the currently proposed SOIA Area is located north and adjacent to the project site. The 1,200-acre Southeast Policy Area could meet the proposed project's purpose to provide holding capacity for the City and to meet the proposed project objective to provide land to accommodate a jobs-housing ratio for the City of Elk Grove that provides for sufficient residential and employment-generating lands uses to minimize the need for commuting to or from other jurisdictions. However, the Southeast Policy Area is within the city limits and under the jurisdiction of the City of Elk Grove. Therefore, this alternate location would not meet any of the project objectives related to amending the SOI policy boundary.

Additional areas of vacant land abut the southern and southeast portion of the City of Elk Grove's existing jurisdictional boundary. LAFCo has received applications to expand the City's SOI to include the Bilby SOIA, which consists of 480 acres of land north of Kammerer Road, east of Willard Parkway, south of Bilby Road, and east of Bruceville Road; and the Multi-Sport Complex SOIA, which consists of 579 acres located south of Grant Line Road (near its intersection with New Waterman Road) and east of the Union Pacific Railroad tracks (east of State Route 99). Similar to the proposed project, the Bilby SOIA is a landowner-initiated proposal to amend the City of Elk Grove SOI and does not include any development proposal or propose any changes to land use; however, future development will be considered based on a proposed land use scenario. The Multi-Sports Complex SOIA is a proposal by the City to amend the City's SOI for development of a multi-sport complex and residential, commercial, and industrial development. Therefore, The Bilby SOIA and Multi-Sports Complex SOIA areas could not be used as an alternate location for the proposed project.

LAFCo has elected not to examine any alternative locations of the project site in detail.

4.3 ALTERNATIVES CONSIDERED IN DETAIL IN THE EIR

This section provides a comparative analysis of the alternatives that were selected by LAFCo for detailed analysis in the EIR: Alternative 1: No-Project Alternative and Alternative 2: Reduced Size Alternative.

4.3.1 ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

CEQA Guidelines CCR Section 15126.6(e)(2) states that a discussion of the "No Project" alternative must consider "what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans."

The project site is zoned and designated by Sacramento County to be used for agriculture and the majority of the site is currently used for agriculture. Therefore, the No-Project Alternative for purposes of this analysis consists of continued agricultural use.

ABILITY OF ALTERNATIVE TO MEET PROJECT OBJECTIVES

This alternative would not meet the project objectives since it would not amend the SOI boundary beyond existing Elk Grove city limits to accommodate orderly and sustainable growth within which future annexation requests into the City of Elk Grove could be considered.

4.3.2 ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Instead of the 1,156-acre proposed SOIA Area, Alternative 2 is a reduced size alternative that would avoid the ditches as shown on Exhibit 4-1. The ditches may be sensitive for biological resources, including giant garter snake, and Sanford's arrowhead (and other special-status plants). The SSCHP does not show modeled giant garter snake or western pond turtle habitat as occurring in or near the SOIA Area. In addition, the waters may be subject to federal protection under Section 404 of the CWA due to ultimate connectivity to the Sacramento-San Joaquin River Delta via South Stone Lake thence Snodgrass Slough; however, a jurisdictional determination has not been completed. Avoidance of the ditches would reduce the acreage of the proposed SOIA Area from approximately 1,200 acres to 530 acres, which is less than half the land area of the proposed project. If there is development in this alternative area, the reduced land area means that less foraging habitat for special status raptors (Swainson's hawk, white-tailed kite, northern harrier, and burrowing owl) and common raptors protected under California Fish and Game Code and the MBTA would be converted.

ABILITY OF ALTERNATIVE TO MEET PROJECT OBJECTIVES

This alternative could generally meet the project objectives, albeit potentially not to the same degree as the proposed project.

4.4 COMPARISON OF ALTERNATIVES

As described in Chapter 2 of this EIR, "Project Description," the project does not propose any development or land use change, but this EIR uses a conceptual land use scenario in order to disclose possible future impacts if the SOIA Area were to develop. A similar approach is used for the comparison of alternatives to the proposed project. This EIR assumes that Alternative 2 could potentially develop with a similar mix of land uses as envisioned under the conceptual land use alternative for the proposed project.

Following is a comparison of the environmental effects of each alternative relative to the proposed project for each of the environmental topics examined in this EIR.



Source: AECOM 2016

Exhibit 4.1 **Alternative 2 Reduced Size Alternative**

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4.4.1 AESTHETICS

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.1-1:** Degrade the existing visual character of the project site or impact scenic vistas
- **Impact 3.1-2:** Create light or glare

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. It is likely that no visual change would occur, or that any future activities permitted under the zoning and designation such as the construction of minor outbuildings or farming facilities or changes in agricultural operations would not entail a significant change in the visual character of the project site. No damage to scenic vistas or scenic resources within a state scenic highway would occur. There would be no additional sources of light or glare. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Therefore, this alternative would have reduced impacts on aesthetics compared to the proposed project. No impact would occur.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Alternative 2 is less than half the size of the proposed project. As such, if there were urban development within this alternative area, the type of aesthetics impacts would be similar to those of the proposed project, but the level of impact would be reduced. However, if this alternative area was developed, this would still represent a substantial change in the existing visual character of the project site from agricultural uses to urban development. In addition, just as with the proposed project, Alternative 2 would bring sources of nighttime lighting and could allow for facilities with reflective surfaces that could cause glare. This would increase ambient nighttime lighting and daytime glare in the vicinity of the project. However, with the substantial reduction in the project size, aesthetics impacts would be reduced compared to the proposed project.

4.4.2 AGRICULTURAL RESOURCES

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.2-1:** Direct loss of agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance or Farmland under Williamson Act Contract

- **Impact 3.2-2:** Indirect loss of adjacent agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Local Importance or Lands Under Williamson Act Contract

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agriculture. No direct or indirect loss of agricultural land would occur. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Therefore, this alternative would have reduced impacts compared to the proposed project. No impact would occur.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Alternative 2 would likely result in less urbanization and associated direct conversion of agricultural land, including Important Farmland as shown in Table 4-1. The reduction in land area would allow expansion of the SOI into areas with Prime Farmland, Farmland of Statewide Importance, and Unique Farmland in the western and southern portions of the proposed SOIA Area. This alternative would not avoid impacts to lands with Williamson Act contracts, since none occurs in the proposed SOIA Area. In addition, this alternative would increase the distance between development and adjacent agricultural lands, including Important Farmland and Williamson Act contracts, which could protect the agricultural lands from indirect conversion. Impacts would be reduced compared to the proposed project.

Table 4-1. Farmland Classifications for Alternative 2

Alternative	Classification	Acres
Alternative 2	Farmland of Local Importance	215.9
	Farmland of Statewide Importance	240.1
	Other Land	8.5
	Prime Farmland	58.7
	Urban and Built-Up Land	6.3
Alternative 2 Total		**529.5**

4.4.3 AIR QUALITY

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.3-1:** Short-term construction emissions of criteria air pollutants and precursors
- **Impact 3.3-2:** Long-term operational emissions of criteria air pollutants and precursors
- **Impact 3.3-3:** Exposure of sensitive receptors to substantial pollutant concentrations
- **Impact 3.3-4:** Exposure of sensitive receptors to emissions of odors

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agriculture. Existing air pollutant emissions associated with agricultural activities would still occur. However, since no construction or development would occur, the amount of construction -related air pollutants that would be generated would be substantially reduced as compared to the proposed project. It is possible that there could be temporary emissions associated with maintenance activities or construction of new agriculture-related structures on-site. Operational generation of criteria air pollutants and precursors, as well as toxic air contaminants, would also be reduced compared to the proposed project. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Thus, the air quality impacts would be reduced compared to the proposed project. Impacts would be less than significant under this alternative.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Alternative 2 would facilitate a reduced amount of development compared to the proposed project. Just as with the proposed project, construction of Alternative 2 would involve the temporary and short-term generation of criteria air pollutants and precursors, as well as toxic air contaminant emissions resulting construction activities.

Due to the reduced land area, if there is development in the future in the Alternative 2 area, the total amount of daily air pollutant emissions would be reduced relative to the proposed project. Although the timing and type of future development is unknown and could still exceed the applicable significance thresholds, air quality impacts would be reduced compared to the proposed project.

4.4.4 BIOLOGICAL RESOURCES

The proposed project was found to have the following significant and unavoidable impact:

- **Impact 3.4-2:** Special-status raptors and other nesting raptors

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. It would continue to be nesting and foraging habitat for special status raptors (Swainson's hawk, white-tailed kite, northern harrier, and burrowing owl) and common raptors protected under California Fish and Game Code and the Migratory Bird Treaty Act (MBTA). Property owners would still be required to comply with Sections 1602, 3503, 3511, 4700, 5050, and 5515 of the California Fish and Game Code, which prohibit diversion or obstruction of streamflow and streambeds, prohibit "take" [1]of protected species (including raptors), and prohibit destruction of nests or eggs of any bird. Property owners would also still be required to comply with Section 404 of the Federal Clean Water Act, which requires that a permit be obtained from the U.S. Army Corps of Engineers before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Finally, the Federal Endangered Species Act (16 U.S.C. Section 1531 et seq.) prohibits private parties from engaging in any activity that may result in "take" of a species listed as threatened or endangered. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Thus, impacts would be reduced to less than significant compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

As with the proposed project, if there is future development, Alternative 2 could adversely affect special-status plants and habitat for special-status species. Impacts related to the loss and degradation of habitat for special-status wildlife and plant species would be similar in type, although they would be reduced due to the smaller acreage. Alternative 2 would focus development away from sensitive canals and ditches that could accommodate giant garter snake, Sanford's arrowhead (and other special-status plants), and western pond turtle. If there is development in this alternative area, the reduced land area means that less foraging habitat for special status raptors (Swainson's hawk, white-tailed kite, northern harrier, and burrowing owl) and common raptors protected under California Fish and Game Code and the MBTA would be converted. Thus, impacts would be reduced compared to the proposed project but likely would still be significant for protected raptors.

[1] "Take" is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The U.S. Fish and Wildlife Service has also interpreted the definition of "harm" to include substantial habitat modification that could result in take.

4.4.5 CULTURAL RESOURCES

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.5-2:** Substantial adverse change to undiscovered historical resources or unique archeological resources

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agriculture. If cultural materials are unearthed, they would be subject to regulations protecting cultural resources. Because Alternative 1 would entail continuing agricultural uses, a very small amount of earth-moving activities would occur as compared to the proposed project. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Therefore, the potential for adverse impacts to cultural resources would be reduced compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Since Alternative 2 is reduced in land area, the amount of ground moving activities and the associated potential to unearth cultural materials would be similarly reduced if future development were to occur. Cultural materials would be subject to regulations protecting cultural resources. Therefore, the *potential* for adverse impacts to cultural resources would be reduced compared to the proposed project, but since it is not possible to know whether or not there are subsurface resources that could be affected if there was development in the Alternative 2 area, it is not possible to determine at this time whether actual impacts would be reduced relative to the proposed project. Because this alternative would result in similar potential to unearth cultural resources if development were to occur and would be subject to similar regulations protecting cultural resources, it would have impacts on cultural resources similar to the proposed project.

4.4.6 ENERGY

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.6-1:** Energy efficiency
- **Impact 3.6-2:** New or expanded electrical and natural gas utilities

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Energy requirements would be similar to existing conditions and the impact would be reduced to less than significant compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Since Alternative 2 would be reduced in size compared to the proposed project, energy demands would likely be similarly reduced. The location of the Alternative 2 area relative to the proposed project site is the same as the

proposed SOIA Area and therefore would produce similar results if it were to be developed relative to the efficiency of transportation energy demand. Similarly, if there is development in the Alternative 2 area, this development would be subject to the same State building energy efficiency requirements as would occur under the proposed project. The impact would be similar to the proposed project.

4.4.7 GEOLOGY, SOILS, MINERALS, AND PALEONTOLOGICAL RESOURCES

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Impacts geology, soils, minerals, and paleontological resources would be reduced to less than significant compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Under Alternative 2, less development would occur. The same regulations related to site preparation and the construction of buildings, including the California Building Code, which provides minimum standards for building design throughout California, would apply under this alternative. Alternative 2 also has the potential to contain paleontological resources. Although the amount of ground moving activities and the associated potential to unearth paleontological resources would be reduced, it is not possible to know whether or where subsurface resources are within the Alternative 2 area. Thus, impacts would be similar to the proposed project.

4.4.8 GREENHOUSE GAS EMISSIONS

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.8-1:** Contribution to significant climate change cumulative impact

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. It is possible that there could be temporary greenhouse gas (GHG) emissions associated with maintenance activities or construction of new agriculture-related structures on-site. Livestock and fertilizer application are sources of GHG emissions. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Although agricultural operations produce some GHG emissions, the ongoing agriculture on-site would generate fewer GHG emissions compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Since Alternative 2 would be reduced in land area compared to the proposed project, if there is development in the Alternative 2 area in the future, both short-term and long-term GHG emissions would likely be similarly reduced. It is not known what land use, transportation, pricing, or design strategies would be incorporated under Alternative 2, and therefore not possible to know the rate of GHG emissions relative to the proposed project.

However, it is reasonable to assume that the total GHG emissions would be reduced compared to the proposed project.

4.4.9 HAZARDS AND HAZARDOUS MATERIALS

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. Any activity would be required to comply with applicable building, health, fire, and safety codes. No construction would occur that would require road closures that would interfere with an emergency response or evacuation plan. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Thus, impacts would be reduced to less than significant compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Similar to the proposed project, hazardous materials, such as fuels, oils and lubricants, paints, glues, and cleaning fluids, could be required for future development under Alternative 2, although the amount of development would be reduced. Facilities that would use hazardous materials on site after any future development and any off-site improvements are constructed 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, and therefore construction companies and businesses (during the operational phase) that would handle any hazardous substances would be required by law to implement and comply with these existing hazardous-materials regulations. Construction of subsequent projects under this alternative would be required to comply with applicable building, health, fire, and safety codes, as described for the proposed project. Although Alternative 2 would likely result in less development, the timing is not known. Thus, Alternative 2 could also require road closures which would interfere with emergency response or evacuation plans and impacts would be similar compared to the proposed project.

4.4.10 HYDROLOGY AND WATER QUALITY

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.10-2:** Depletion of groundwater supplies

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural production. The project area is currently used for dry farming and irrigated croplands, as well as vineyard operations. Agricultural production—which would allow the use of fertilizers and pesticides—could affect water quality. Based on California crop information and estimated amount of water applied to each crop type, the SOIA Area is estimated to use over 597 million gallons of water a year (See Section 3.10 of this EIR, "Hydrology and Water Quality"). Although, depending on crop types and agricultural practices, existing water demand could be considerable, if the SOIA Area were to develop as contemplated under the conceptual land use scenario, this would increase water demand on-site relative to the existing environment. While under the proposed project, the future water supply could involve a conjunctive-use water supply, under Alternative 1, it is assumed water supply

would continue to be exclusively groundwater. It is possible that, should agricultural uses continue, there would be the need to maintain or construct new irrigation or drainage facilities on-site or conduct other potentially earth-disturbing activities that could affect water quality. However, the level of construction anticipated under the conceptual land use scenario for the proposed project is assumed to exceed that which would occur under Alternative 1. Alternative would not substantially change impacts related to long-term water quality compared to baseline conditions since it would not result in increased impervious surfaces and urban stormwater runoff. The same is true with regard to potential groundwater recharge impacts – since Alternative 1 would not add any significant amount of impervious surface, and would, therefore, not impact groundwater recharge. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Since Alternative 1 would not add housing or other occupied uses, it would not result in any impact related to flood risk. Overall, the impact would be reduced compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

As with the proposed project, Alternative 2 would affect long-term water quality due to increased impervious surfaces and urban stormwater runoff. Construction and grading activities have the potential to cause temporary and short-term increased erosion and sedimentation and increase pollutant loads in stormwater runoff. Development could involve substantial earth-disturbing activities (e.g., cut and fill, vegetation removal, grading, trenching, movement of soil) that could expose disturbed areas and stockpiled soils to winter rainfall and stormwater runoff. With the substantial reduction in the land area under Alternative 2, the level of temporary, construction-related impacts could be reduced ~~under Alternative 2~~ compared to the proposed project. In addition, Alternative 2 would reduce the amount of impervious surfaces added on-site compared to the proposed project and therefore would decrease the peak discharge flow and rate of stormwater runoff generated on the project site. No portion of Alternative 2 is within the 100-year or 5~~1~~00-year floodplain. Impacts would be reduced compared to the proposed project.

4.4.11 LAND USE, POPULATION, HOUSING, EMPLOYMENT, ENVIRONMENTAL JUSTICE, AND UNINCORPORATED DISADVANTAGED COMMUNITIES

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.11-4:** Consistency with the SACOG 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy
- **Impact 3.11-5:** Conversion of open space
- **Impact 3.11-6:** Induce population growth

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. The continued use of the project site for agricultural production would not impact land use and planning, population, housing, or employment. It would not conflict with any applicable land use or habitat conservation plan, displace people or housing, induce population growth, or divide an established community. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure

improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Impacts would be reduced to less than significant compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Similar to the proposed project, Alternative 2 could induce population growth, although to a lesser extent. Development of housing, infrastructure, and facilities and services to serve this growth could have significant environmental impacts through land conversions, commitment of resources, and other mechanisms. In addition, Alternative 2 would have similar consistency issues compared to the proposed project. Alternative 2 would convert less open space but if it were to develop with the same ratio of land uses as the proposed project, may create fewer opportunities to improve the jobs-housing balance. However, this alternative could also possibly reduce or eliminate the residential component and maintain the same level of employment opportunity – since neither the proposed project nor Alternative 2 propose any land use change, it is not possible to determine the relative impacts of this alternative and the proposed project. But, overall, impacts would be reduced compared to the proposed project.

4.4.12 NOISE AND VIBRATION

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.12-1:** Temporary, short-term exposure of sensitive receptors to construction noise
- **Impact 3.12-3:** Temporary, short-term exposure of sensitive receptors to potential groundborne noise and vibration from project construction
- **Impact 3.12-4:** Long-term traffic noise levels at existing noise-sensitive receivers
- **Impact 3.12-5:** Land use compatibility of on-site sensitive receptors with future traffic noise levels
- **Impact 3.12-6:** Land use compatibility of on-site sensitive receptors to or generation of non-transportation noise levels in excess of local standards

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. Noise associated with the use of agricultural equipment would continue on the project site and could potentially increase or change in type, depending on any changes in agricultural activities including a change in crops or farming techniques, or other activities that would be permitted under the current zoning and designations. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. There would be no increase in noise or vibration. Thus, impacts would be reduced compared to the proposed project. No impact would occur.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Under Alternative 2, the same types of construction equipment would be used, but for less time compared to the proposed project, given the substantially reduced project site. In addition, operational noise impacts would be reduced since, if there is development of the Alternative 2 area, it would likely be a reduced amount of

development compared with the proposed project. Thus, impacts would be reduced compared to the proposed project.

4.4.13 PUBLIC SERVICES AND RECREATION

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.13-1:** Increased demand on fire protection and emergency medical services
- **Impact 3.13-2:** Increased demand for law enforcement services

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. There would be no increased demand on fire protection, emergency medical, or law enforcement services. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Thus, impacts would be reduced compared to the proposed project. The two significant effects of the proposed project would be less than significant under the No-Project Alternative.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Since Alternative 2 would reduce the development potential on-site, the law enforcement, fire protection, public school services, and parks and recreational services needs would be proportionally reduced compared with the proposed project. However, it cannot be determined if or when the increased demand for services would require the expansion of construction of new facilities, the construction of which could cause environmental impacts. Thus, impacts would be similar compared to the proposed project.

4.4.14 TRANSPORTATION AND TRAFFIC

The proposed project was found to have the following significant and unavoidable impact:

- **Impact 3.14-1:** Conflict with an applicable transportation plan, ordinance, policy, or congestion management program

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agricultural uses. If agricultural operations continue consistent with existing operations, no increase in traffic would occur and no conflicts with transportation-related policies would occur. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Thus, impacts would be reduced to less than significant compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Relative to conflicts with transportation-related policies, since neither Alternative 2 nor the proposed project have any specificity at this time on transportation planning or design, it is not possible to determine whether or not there would be conflicts that would arise that would represent significant adverse physical environmental effects.

Under Alternative 2, less development would occur. Since travel demand is typically determined based on the size and type of development proposed, the traffic and transportation effects would be reduced under this alternative relative to the proposed project. Impacts would be reduced compared to the proposed project.

4.4.15 UTILITIES AND SERVICE SYSTEMS

The proposed project was found to have the following significant and unavoidable impacts:

- **Impact 3.15-1:** Increased demand for water supplies and water system facilities
- **Impact 3.15-2:** Increased demand for wastewater collection, conveyance, and treatment facilities

ALTERNATIVE 1: NO-PROJECT ALTERNATIVE

Under the No-Project Alternative, the project site would likely continue to be used for agriculture. There would be no increased demand for utilities and services. Although, depending on crop types and agricultural practices, existing water demand could be considerable, if the SOIA Area were to develop as contemplated under the conceptual land use scenario for the proposed project, this would increase water demand on-site relative to the existing environment. Alternative 1 would not involve any off-site changes and therefore would not have any effects related to possible off-site infrastructure improvements that could be required if the conceptual land use scenario for the proposed project is implemented. Thus, impacts would be reduced to less than significant compared to the proposed project.

ALTERNATIVE 2: REDUCED SIZE ALTERNATIVE

Under Alternative 2, annexation would be required to the Sacramento Area Sewer District ~~County Water Agency~~ and Sacramento County Regional Sanitation District service area. Also Sacramento County Water Agency service area boundary would require change to encompass the project site. Although Alternative 2 would result in less future development and associated demand for utilities, it cannot be determined if or when the increased demand for services would require the expansion of construction of new facilities, the construction of which could cause environmental impacts. Thus, impacts would be similar compared to the proposed project.

4.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Alternative 1: No Project Alternative would be the Environmentally Superior Alternative, as shown in Table 4-6. This alternative provides the greatest opportunity for reduction in environmental effects of the proposed project. Alternative 2 would provide the most reduction in environmental effects compared to the proposed project.

Table 4-2. Comparison of Significant Environmental Effects of the Alternatives to the Proposed Project		
Environmental Issue Area	Alternative 1: No-Project Alternative (No Development)	Alternative 2: Reduced Size Alternative
Aesthetics	Reduced	Reduced
Agricultural Resources	Reduced	Reduced
Air Quality	Reduced	Reduced
Biological Resources	Reduced	Reduced
Cultural Resources	Reduced	Reduced~~Similar~~
Energy	Reduced	Reduced~~Similar~~
Geology, Soils, Minerals, and Paleontological Resources	Reduced	Reduced~~Similar~~
Greenhouse Gas Emissions	Reduced	Reduced
Hazards and Hazardous Materials	Reduced	Reduced~~Similar~~
Hydrology and Water Quality	Reduced	Reduced
Land Use, Population, Housing, Employment, Environmental Justice, and Unincorporated Disadvantaged Communities	Reduced	Reduced
Noise and Vibration	Reduced	Reduced
Public Services and Recreation	Reduced	Reduced~~Similar~~
Transportation and Traffic	Reduced	Reduced
Utilities and Service Systems	Reduced	Reduced~~Similar~~
Total Reduced Impact Topics	**15**	**9**

Note: Some environmental issue areas are split into subsections. In this case, if any of the subsections had reduced or increased impacts, the entire environmental issue is shown as reduced or increased (even if another subsection had similar impacts).

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5 OTHER CEQA CONSIDERATIONS

This chapter provides a summary of significant environmental impacts; significant and unavoidable impacts; significant irreversible environmental changes; growth-inducing effects; and cumulative impacts.

5.1 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

Section 15226.2(b) of the CEQA Guidelines requires EIRs to include a discussion of any significant environmental impacts that cannot be avoided if the proposed project is implemented.

Chapter 3 of this Recirculated Draft EIR provides a detailed analysis of significant and potentially significant environmental impacts related to approval of the SOIA and future development; identifies feasible mitigation measures, where available, that could avoid or reduce these significant and potentially significant impacts; and presents a determination whether these mitigation measures would reduce these impacts to less-than-significant levels.

Following is a listing of significant and unavoidable impacts associated with implementation of the SOIA identified in this Recirculated Draft EIR. Cumulative impacts associated with the SOIA, including significant impacts, are summarized in Section 5.3.

Section 3.2, Agricultural Resources

- **Impact 3.2-1:** Direct loss of agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance or Farmland under Williamson Act Contract
- **Impact 3.2-2:** Indirect loss of adjacent agricultural land, including Prime Farmland, Unique Farmland, or Farmland of Local Importance or Lands Under Williamson Act Contract

Section 3.4, Biological Resources

- **Impact 3.4-2:** Special-status raptors and other nesting raptors

Section 3.6, Energy

- **Impact 3.6-1:** Energy Efficiency
- **Impact 3.6-2:** New or Expanded Electrical and Natural Gas Utilities

Section 3.10, Hydrology and Water Quality

- **Impact 3.10-2:** Depletion of groundwater supplies

Section 3.11, Land Use, Population, Housing, Employment, Environmental Justice, and Unincorporated Disadvantaged Communities

- **Impact 3.11-4:** Consistency with the SACOG 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy
- **Impact 3.11-5:** Conversion of open space

- **Impact 3.11-6:** Induce population growth

Section 3.13, Public Services and Recreation

- **Impact 3.13-1:** Increased demand on fire protection and emergency medical services
- **Impact 3.13-2:** Increased demand for law enforcement services

Section 3.14, Transportation

- **Impact 3.14-1:** Conflict with an applicable transportation plan, ordinance, policy, or congestion management program

Section 3.15, Utilities and Service Systems

- **Impact 3.15-1:** Increased demand for water supplies and water system facilities
- **Impact 3.15-2:** Increased demand for wastewater collection, conveyance, and treatment facilities

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA requires that significant irreversible environmental changes caused by a plan be addressed in an EIR. Specifically, the EIR must consider whether "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely" (CEQA Guidelines Section 15126.2[c]). Nonrenewable resources, as used in this discussion, refer to the physical features of the natural environment: land, air, and waterways.

If the SOIA Area is developed consistent with the assumptions embodied in the conceptual land use scenario, this would result in commitment of land to this mix of urban uses instead of the agricultural uses that exist today.

Future development of the SOIA Area would use both renewable and nonrenewable natural resources during both construction and operational phases – both within the SOIA Area and also to construct any required off-site improvements. Future development would likely use nonrenewable fossil fuels during construction and operation. Other nonrenewable and slowly-renewable resources consumed as a result of development of the SOIA Area would include, but not necessarily be limited to, lumber and other forest products, sand and gravel, asphalt, petrochemical construction materials, steel, copper, and water. Future development would consume energy for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, electronics, office equipment, and commercial machinery. Energy could also be consumed during each vehicle trip associated with these proposed uses. It is important to note that actual energy usage could vary substantially, depending upon factors such as the type of uses that would occupy the buildings, actual miles driven by future residents and employees, and the degree to which energy conservation measures are incorporated into the design of the various facilities.

Irreversible changes would likely occur as a result of future excavation, grading, and construction activities associated with implementation of the conceptual land use scenario of the proposed project. If there is future development, this would also generate additional transportation demand, construction, energy demand, and other activities that would increase emissions of greenhouse gases and other air pollutants, as well as generation of noise. Different air pollutants and different greenhouse gas emissions remain in the atmosphere for different amounts of time, ranging from a few years to thousands of years.

If there is development in the future within the SOIA Area, this could result in irreversible damage from environmental accidents, such as an accidental spill or explosion of a hazardous material. During construction of projects, equipment on the site would use various types of fuel. Operation of projects could include the use of hazardous materials, which could increase the risk of an accidental spill or release.

During construction, equipment would be using various types of fuel and material classified as hazardous. In the State of California, the storage and use of hazardous substances are strictly regulated and enforced by various local, regional, and state agencies. The enforcement of these existing regulations would preclude credible significant impacts related to environmental accidents.

Detailed assessments for each of the above mentioned topics are provided throughout Chapter 3 of this EIR. Cumulative impacts associated with each of these topics are additionally addressed in detail in this chapter.

5.3 CUMULATIVE IMPACTS

This section provides an analysis of cumulative impacts of the SOIA, taken together with other past, present, and reasonably anticipated future projects producing related impacts, as required by Section 15130 of the California Environmental Quality Act Guidelines (CEQA Guidelines). Other past, present, and future projects that would contribute to environmental impacts of the proposed SOIA are referred to as "related projects."

The goal of such an exercise is twofold:

1. first, to determine whether the overall long-term impacts of all such related projects, when considered together, would be cumulatively significant; and

2. second, to determine whether the SOIA itself would cause a "cumulatively considerable" (and thus significant) incremental contribution to any such cumulatively significant impacts. (See CEQA Guidelines Sections 15130[a]-[b], Section 15355[b], Section 15064[h], and Section 15065[c]).

Pursuant to Section 15130 of the CEQA Guidelines: "(t)he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impacts to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact." The proposed project is considered to have a significant cumulative effect if:

3. 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

4. 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 either the impact must be noticeable to a reasonable person, or must exceed an established threshold of significance.

5.3.1 CUMULATIVE CONTEXT

The CEQA Guidelines Section 15130(b)(1) identifies two approaches to preparing the cumulative context for analysis of cumulative impacts. The first is the summary approach (also known as the "plan" approach), which summarizes the relevant projections from an adopted general plan or related planning document evaluating regional or areawide conditions. The second is the list approach, which requires a listing of past, present, and reasonably anticipated future projects producing related or cumulative impacts.

For this EIR, both the plan and the list approach have been combined and the cumulative context is specific to each environmental impact. For some environmental issues, the cumulative scope should be broad. This is appropriate given the regional context of transportation, air quality, and greenhouse gas emissions issues. Issues considered in the more localized context (i.e., construction noise, public services) are not addressed in the regional context because cumulative impacts in these topic areas are generally limited to the service area of the service providers.

The broadest cumulative context used in this EIR is the state of California for greenhouse gas (GHG) emissions impacts. Although the effects of climate change are experienced globally, as detailed in Section 3.8 of this EIR, "Greenhouse Gas Emissions," the assessment of GHG emissions impacts is established by State legislation. Please see Section 3.8 for the cumulative analysis of GHG emissions impacts.

The next broadest cumulative context used in this EIR is the Sacramento Valley Air Basin, which is comprised of Sacramento, Shasta, Tehama, Butte, Glenn, Colusa, Sutter, Yuba, Yolo, the northeast portion of Solano, and western portion of Placer counties. California's air basins have been created to group together regions that have similar natural factors that affect air quality.

The next broadest cumulative context is past, present, and probable future plans and projects that are described by the Sacramento Area Council of Governments (SACOG) in the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). This is a land use change scenario for the Sacramento region that includes anticipated past development and future development through 2036 (SACOG 2016). Currently, the population is more than 2.4 million, and there are 952,214 housing units (DOF 2016). Developed acreage in the region is forecast to increase by 7 percent between 2012, the baseline year for the MTP/SCS, and 2036, the MTP/SCS planning horizon. This 7-percent increase in developed acreage contrasts with an anticipated increase in housing units of 32 percent and an increase in jobs of 49 percent, indicating that new development could accommodate jobs and population on relatively less acreage. SACOG estimates that Elk Grove will grow by a total of 13,910 housing units between the baseline year for the MTP/SCS and 2036. This is a 27-percent increase. The MTP/SCS identifies a 64-percent increase in employment in Elk Grove by 2036 (19,864 new jobs).

The next broadest cumulative context used in this Chapter is Sacramento County's General Plan, which was updated and adopted on June 7th, 2011, and provides a complete and current representation of cumulative conditions for the County. The land use assumptions embodied in the General Plan include not only new development, but also existing development and development currently in entitlement review by the County.

Finally, some cumulative impacts are experienced more locally, and this Recirculated Draft EIR considers buildout of the City of Elk Grove's General Plan, and future development outside of the City limits, including ~~along with a potential SOIA and possible potential development of approximately 579 acres, including a 100-acre~~ a multi-sport park complex and potentially future commercial and industrial development southeast of Grant Line

Road and northeast of the SOIA Area (East Study Area); and Bilby Ridge, west of Bruceville Road and west of the SOIA Area (West Study Area), which is proposed to include a range of residential densities and commercial and light industrial uses~~of the proposed project southeast of the existing City limits~~.

5.3.2 CUMULATIVE IMPACT ANALYSIS

AGRICULTURAL RESOURCES

Past, present, and future projects throughout the region have, and will continue to convert existing agricultural land to other uses – predominantly urban use. This includes plans and projects in Sacramento County, including the cities of Elk Grove, Sacramento, Rancho Cordova, Folsom, Citrus Heights, and all existing, approved, proposed, and reasonably foreseeable development projects within these jurisdictions. This includes the SEPA north of the SOIA Area, the Lent Ranch Marketplace, and other large regional projects, including the potential casino north of the SOIA Area and the proposed multi-sport park complex project. In addition to these local development projects, there are several urban development projects in Sacramento County and throughout the Central Valley that are contributing to the cumulative loss of agricultural resources, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance and lands under Williamson Act Contract. Continued urbanization of the region in accordance with applicable land use plans, as well as those approved and proposed development projects described previously, would continue to convert agricultural and open space land to urban uses with residential and commercial buildings and associated roadways and other infrastructure. The continued conversion of farmland in the region is a **significant cumulative** impact.

Based on analysis of the Sacramento County Important Farmland map (DOC 2014), an estimated 510 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance could be directly and permanently converted to nonagricultural, urban use. In 2014, an estimated 149,798 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance existed in Sacramento County. A conversion of an estimated 510 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would account for approximately one-third of one percent of this total. The total conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be relatively small in the context of the county's entire agricultural land base and would not likely cause a substantial reduction in the county's total agricultural production. However, the conversion of agricultural land would contribute to the incremental decline of Important Farmland in the county and would result in the irreversible conversion of this agricultural land. In addition, future development in the SOIA Area could impact nearby agricultural uses and result in the conversion of adjacent agricultural lands. The impact is **cumulatively considerable**.

According to the Elk Grove General Plan and EIR, the loss of agricultural productivity on lands designated for urban uses is a significant and unavoidable consequence of future development. Implementation of the proposed project would contribute to the incremental decline of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance Farmland in the county, region, and state and contribute to the irreversible conversion of this agricultural land. Individual development projects would be responsible for incorporating any feasible mitigation to avoid or minimize impacts to agricultural resources. However, this would not create new farmland. There is no additional feasible mitigation. The cumulative impact would be **significant and unavoidable**.

BIOLOGICAL RESOURCES

Past and present actions by humans have substantially altered biological resources in the Central Valley region of California including Sacramento County, specifically, compared to historical conditions. Among the most important of these past actions have been conversion of natural vegetation and habitats to agricultural and developed land uses; fill and alteration of aquatic habitats; flood control and water supply projects; and the introduction of nonnative species, which in many cases have competed with, preyed upon, and degraded habitat for native species. More recently, the large-scale conversion of agricultural habitats to urban land uses has resulted in substantial loss of habitat for species such as State-listed Swainson's hawk and greater sandhill crane, and to the State- and federally-listed giant garter snake that have adapted to use agricultural habitats in response to loss of their natural habitats. Past, present, and foreseeable future urbanization in the city of Elk Grove has contributed substantially to the loss of grassland, wetland, and agricultural habitats that are important to many species in the region, including listed species like Swainson's hawk, greater sandhill crane, and giant garter snake.

Climate change and associated sea-level rise may also contribute to human-caused impacts to these species in the future. The Central Valley is generally becoming hotter and drier as a result of climate change and the region has been experiencing more frequent droughts with reduced precipitation and snowpack contributing to the system. With regards to the effects of sea-level rise, it should be noted that the Delta is surrounded by levees and is a highly regulated system, and it is likely that measures would be taken to compensate for rising levels within the Delta. It is difficult to predict with any certainty the degree to which climate change and sea-level rise may affect the local Swainson's hawk and greater sandhill crane population. For Swainson's hawk, climate change is another human-induced factor that could substantially reduce the extent and quality of habitat for this species. The SOIA could have a cumulatively considerable contribution to this significant cumulative impact on Swainson's hawk. No feasible mitigation would avoid this impact on Swainson's hawk because there is a limited amount of suitable habitat land available and there would be a net loss of habitat regardless of the acreage preserved as compensatory mitigation.

As specified in the CEQA guidelines (Section 15126.2), when evaluating the impacts of a proposed project, the lead agency should normally limit its examination to changes in the existing physical conditions at the time of the NOP or at the time the environmental analysis commenced (in this case, 2016). What specific changes to habitats and shifts in distribution of plants and animals in the region may occur as a result of climate change within the time frame of the development that could eventually occur as a result of the SOIA is too speculative for meaningful evaluation.

These past and present actions have resulted in significant adverse effects on the extent, species composition, and functioning of natural habitats that occur in the region; and on the distribution and abundance of plant and wildlife species associated with these habitats. Large areas of freshwater marsh, riparian, valley oak woodland, grassland, and vernal pool vegetation have been lost or degraded in the region over the past 100 years. The increase in the distribution and abundance of invasive plant species and nonnative plant communities, the large number of plant and wildlife species listed as threatened or endangered or considered sensitive by the California Department of Fish and Wildlife (CDFW), and the dramatic reductions in the extent of aquatic habitats and natural vegetation in the Central Valley region are evidence of these overall significant adverse effects. These actions have altered habitats, biotic interactions, and physical processes that continue to affect species in the region today. This is a **cumulatively significant** impact.

While the project could result in direct loss of individuals of western pond turtle and song sparrow, approval of the SOIA would not result in a cumulatively considerable contribution to the significant cumulative impact on these species because habitat for these species in the SOIA Area is marginal.

The SOIA Area is comprised entirely of agricultural land that provides limited habitat values to most species; however, agricultural lands provide important foraging habitat for Swainson's hawk, white-tailed kite, northern harrier, sandhill crane, and loggerhead shrike, and the agricultural ditches and canal provide aquatic dispersal habitat for giant garter snake. The SOIA Area also contains burrow habitat for burrowing owl. Although mitigation measures are proposed to compensate for the loss of habitat from the SOIA Area, fully compensating for the impact by preserving existing habitat in the vicinity is infeasible because there is a limited amount of suitable habitat land available and there would be a net loss of habitat regardless of the acreage preserved as compensatory mitigation. Because there has been a substantial loss of natural and agricultural habitats for these species that has resulted in a notable decline in their regional population numbers, loss of habitat from the region is considered a significant cumulative impact. Therefore, the loss of 1,156 acres of agricultural habitat from the SOIA Area could have a **cumulatively considerable contribution** to this significant cumulative impact. Impacts on the sensitive biological resources resulting from future development of the SOIA Area requires implementation of mitigation measures 3.4-1, 3.4-2a, 3.4-2b, 3.4-2c, 3.4-3, 3.4-4, 3.4-5, 3.4-6, 3.4-7, and 3.4-8a, 3.4-8b, 3.4-9, 3.4-0a, and 3.4-10b. Implementation of these mitigation measures would reduce impacts on sensitive biological resources resulting from future development of the SOIA Area. But, there is no additional feasible mitigation available that would avoid this impact. The impact is **significant and unavoidable**.

ENERGY

Energy Use

Increased demand for electrical and natural gas supplies and infrastructure is a byproduct of all future land uses and development throughout the Sacramento region. Energy is consumed for heating, cooling, and electricity in homes and businesses; for public infrastructure and service operations; and for agriculture, industry, and commercial uses. Each service provider is responsible for ensuring adequate provision of these utilities within their jurisdictional boundaries and would be responsible for upgrading their existing electrical and natural gas distribution systems or constructing new distribution systems to meet the demands of individual projects.

As noted in Section 3.6 of this EIR, "Energy," transportation is, by far, the largest energy consuming sector in California, accounting for approximately 39 percent of all energy use in the state (U.S. Energy Information Administration 2015). Since transportation accounts for more energy consumption than heating, cooling, and powering of buildings, powering industry, or any other use, the overall efficiency of energy use in the region will depend importantly on the ability of local lead agencies to plan in a way that reduces travel demand. SACOG's 2016 MTP/SCS demonstrates an increase in energy efficiency through 2035 in relation to transportation energy use – household generated vehicle miles traveled (VMT) per capita is forecast to decrease by more than 8 percent; SACOG also estimates that total VMT will decrease by almost 7 percent during the 2016 MTP/SCS planning period (SACOG 2016, Chapter 5B, page 91).

Energy efficiency will also increase in relation to heating and cooling of buildings. The State of California adopted the California Green Building Standards Code (CALGreen Code), which establishes mandatory standards for all buildings in California, including for energy efficiency. This Code is updated over time and in each instance, the energy efficiency standards are increased. The next update takes effect on January 1, 2017.

The City of Elk Grove 2030 General Plan and Climate Action Plan includes energy conservation strategies for land use, transportation, community design, public facilities and infrastructure, which also support the reductions in GHG emissions and increased emissions in criteria pollutants. However, the demand for energy and consumption of energy resources would still increase should the area become developed. Future land use patterns, new construction and building renovations, and commuting patterns would increase demand for energy in the City. This would result in a significant cumulative increase in the demand for energy and the need for construction and/or extension of additional facilities to generate and/or distribute electricity and natural gas to serve the SOIA Area. This is considered a **significant cumulative** impact.

As previously stated, the project does not include direct changes to land use or the City of Elk Grove General Plan goals and policies. In addition, no specific land use entitlements, development proposals, and land development activities are proposed at this time in conjunction with the proposed SOIA. There are no direct impacts to energy as a result of the proposed project. However, the indirect effects of energy consumption and demand should the SOIA Area be annexed to the City and developed could contribute to cumulative impacts. Individual development projects would be required to assess project impacts during the environmental review process to ensure that PG&E has sufficient electrical and natural gas supplies to meet demand. Future development could eventually generate a need for new infrastructure, the construction of which could cause impacts on the environment. Construction and operation of off-site electrical and natural gas facilities are the responsibility of SMUD and PG&E, respectively. SMUD and PG&E would prepare separate CEQA documentation in the future to evaluate the cumulative environmental impacts and would be required to implement feasible mitigation to reduce impacts found to be significant. However, cumulative impacts could remain significant after implementation of mitigation (i.e., cumulatively significant and unavoidable), or no feasible mitigation may be available to fully reduce cumulative impacts to a less-than-significant level. The SOIA could have an indirect **cumulatively considerable contribution** to this significant cumulative impact. No additional feasible mitigation is available. The impact is **significant and unavoidable**.

Electricity and Natural Gas

Future development within the SOIA Area would increase demand for electricity and natural gas services and require the development of new utility infrastructure to deliver services to future development. Electrical and natural gas service in the City of Elk Grove is provided by SMUD and PG&E, respectively.

Projects in the SMUD and PG&E service areas would vary in size and have different amounts of development. However, they would be expected to increase the demand for electricity and natural gas supplies and related infrastructure. Individual development projects would be required to assess project impacts during the environmental review process to ensure that PG&E has sufficient electrical and natural gas supplies to meet demand. Future development could eventually generate a need for new infrastructure, the construction of which could cause impacts on the environment. Construction and operation of off-site electrical and natural gas facilities are the responsibility of SMUD and PG&E, respectively. SMUD and PG&E would prepare separate CEQA documentation in the future to evaluate the cumulative environmental impacts and would be required to implement feasible mitigation to reduce impacts found to be significant. However, cumulative impacts could remain significant after implementation of mitigation (i.e., cumulatively significant and unavoidable), or no feasible mitigation may be available to fully reduce cumulative impacts to a less-than-significant level. Thus, impacts would be **cumulatively significant**.

Future development in the SOIA Area could contribute to the cumulatively significant or potentially significant cumulative impacts associated with the increased demand for electrical and natural gas supplies. Therefore, future development within the SOIA Area could result in a **cumulatively considerable incremental contribution to a significant cumulative impact** related to the increased demand for electrical and natural gas supplies and facilities. No additional feasible mitigation is available. This is considered a **significant and unavoidable** impact.

HAZARDS AND HAZARDOUS MATERIALS

The health and safety impacts associated with a proposed project usually occur on a project-by-project basis, rather than cumulatively. Development associated with the project and future development within the area could result in increased hazard related impacts. As previously described, development would involve the storage, use, disposal, and transport of hazardous materials (such as asphalt, fuel, lubricants, and solvents) to varying degrees during demolition, construction, and operation. Facilities that would use hazardous materials on site after the project and any off-site improvements are constructed 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, and therefore construction companies and businesses (during the operational phase) that would handle any hazardous substances would be required by law to implement and comply with these existing hazardous-materials regulations.

Past, present, and future related project sites likely contain existing hazards materials (e.g., piles of debris, underground or aboveground storage tanks, septic systems, stained soils [indicating potential contamination], lead-based paints, asbestos-containing materials, or PCBs. However, if hazardous materials are encountered on site during construction of the related projects, the associated impacts would be localized to those projects and would not be additive to other hazardous materials-related impacts in the SOIA Area.

Federal, State, and local regulations would determine appropriate land uses and would assist in reducing the impacts. Because future development would be required to undergo environmental review and include mitigation measures to abate the site-specific hazards, any potential cumulative impacts associated with the project would be expected to be decreased. There is **no significant cumulative** impact.

HYDROLOGY AND WATER QUALITY

Groundwater

The SOIA Area is located within Groundwater Basin 5-21.65 Sacramento Valley, South American subbasin (identified locally as the Central Basin). This subbasin encompasses the area bounded on the north by the American River, on the south by the Cosumnes and Mokelumne rivers, on the west by the Sacramento River, and on the east by the Sierra Nevada mountain range. Sacramento Central Groundwater Authority monitoring data shows that groundwater elevations generally declined by approximately 20 to 30 feet consistently until about 1980. Water levels recovered by about 10 feet from 1980 through 1983, and remained stable until the beginning of the 1987–1992 drought, where until 1995, water levels declined by about 15 feet. Most water levels recovered between 1995 and 2003 generally to levels higher than prior to the 1987–1992 drought. The difference in total annual average change in storage over the 2005 to 2015 timeframe is calculated to be approximately 4,000 acre-feet per year (afy). Over the 10-year period, the basin continues to recover at its deepest points and management is now focused on working with outside agencies to keep water from leaving the basin, and improving basin

conditions where and when possible, in accordance with the Central Sacramento County Groundwater Management Plan (Central Sacramento County GMP) (Sacramento Central Groundwater Authority 2016).

Groundwater storage in the recharge area underlying Elk Grove and surrounding areas is continuing to increase as a result of recharge from the construction of large conjunctive use and surface water infrastructure facilities, increased use of recycled water, and water conservation. The increase in storage in this portion of the subbasin has filled the long-term cone of depression and has eroded the ridge of higher groundwater separating it from the Cosumnes Subbasin (Sacramento Central Groundwater Authority 2016). New development within the subbasin will increase the need for groundwater. It is unknown what effect additional groundwater pumping, if required, would have on the Central Basin. This is considered a **significant cumulative** impact.

As described in Section 3.10, "Hydrology and Water Quality," future development included in the conceptual land use scenario would increase demands for water supply and thus groundwater uses. Sacramento County Water Agency (SCWA) would need to conduct future water supply assessments to determine if existing water supplies would meet the demand of future development. It is currently not known if SCWA's existing water supplies would be adequate to meet the water demands of future development but SCWA has indicated that it is likely additional surface water and groundwater supplies will be procured to meet the water supply demands of the SOIA Area (SCWA 2017). It is unknown what effect additional groundwater pumping, if required, would have on the Central Basin. As described in Mitigation Measure 3.10-2, prior to approval of any application to annex territory within the SOIA Area, the City of Elk Grove shall prepare a Plan for Services which shall demonstrate that SCWA water supplies are adequate to serve existing and planned development under normal, single dry, and multiple dry years as required by law. The Plan for Services required by Mitigation Measure 3.10-2 (also known as Mitigation Measure 3.15-1) shall demonstrate that the SCWA is a signatory to the Water Forum Agreement, that groundwater management would occur consistent with the Central Sacramento County Groundwater Management Plan, and that groundwater will be provided in a manner that ensures no overdraft will occur. However, given the uncertainty of future potential land uses, LAFCo finds that it is not now possible to determine the effectiveness of mitigation with certainty. LAFCo would condition future annexation on compliance with Mitigation Measure 3.10-2. Cumulative impacts could remain significant after implementation of mitigation (i.e., cumulatively significant and unavoidable), or no feasible mitigation may be available to fully reduce cumulative impacts to a less-than-significant level.

Future development in the SOIA Area and related projects could contribute to the cumulatively significant or potentially significant cumulative impacts associated with the future groundwater uses that would be needed to serve future development and other development within the SCWA service area. The SOIA could have an indirect **cumulatively considerable contribution** to this significant cumulative impact. No additional feasible mitigation is available. The impact is **significant and unavoidable**.

Erosion, Siltation, Polluted Runoff, Flooding and Flood Hazards

Development in Elk Grove and Sacramento County would result in increased impervious surfaces, excavation and grading activities, and construction of buildings, homes, and other structures which could affect hydrology and water quality in the cumulative study area. However, compliance with the National Pollutant Discharge Elimination System permitting requirements, Clean Water Act permitting requirements, and applicable local regulations such as flood control ordinances and grading permits would ensure that there would be **no significant cumulative impact**.

LAND USE AND PLANNING / POPULATION / HOUSING

Land Use

The cumulative setting for land use impacts is Sacramento County, including the cities of Elk Grove, Sacramento, Rancho Cordova, Folsom, Citrus Heights, and all existing, approved, proposed and reasonably foreseeable development projects within these jurisdictions. This includes the SEPA north of the SOIA Area, the Lent Ranch Marketplace, and other large regional projects, including the potential casino north of the SOIA Area; ~~and~~ the proposed multi-sport park complex project and additional future development anticipated in the East Study Area; and Bilby Ridge and additional future development anticipated in the West Study Area. Land use inconsistencies are not physical effects in and of themselves and combinations of policy inconsistencies would not rise to the level of a physical effect. There would be **no cumulative impact** related to land use. Cumulative effects of the physical changes related to the project are discussed in the other topics in this section.

Population, Housing, and Employment

Like land use policy inconsistency, population growth is not considered a significant cumulative effect because it is not a physical environmental impact. However, the direct and indirect effects, such as housing and infrastructure needs that are related to population growth, can lead to physical environmental effects.

At a regional level, the population of the six-county SACOG region is expected to increase to 3,078,772 by 2036. The number of housing units is expected increase to 1,188,347 and the numbers of jobs are expected increase to 1,327,265 during the same time period (SACOG 2015). Those counties and their incorporated cities implement general plans, along with specific plans that are outside the development assumptions from local general plans, that could potentially accommodate substantially greater population and employment growth compared to regional forecasts and planning efforts. Increased population and employment in the region could generate the need for additional housing and infrastructure, which could lead to conversion of undeveloped land and associated adverse physical environmental impacts of the sort that are considered in this topic-specific sections of this EIR. Considering the indirect effects from past, present, and future development under the cumulative plans, this is a **significant cumulative** impact.

As discussed in Section 3.11, "Land Use, Population, Housing, Employment, Environmental Justice, and Unincorporated Disadvantaged Communities," there are no land uses changes proposed as part of this SOIA application. Therefore, the proposed project would not directly induce population growth through development of new housing and employment opportunities or extension of infrastructure. **No direct cumulative** impact would occur.

Future development could indirectly facilitate population growth through development of 4,000 to 5,000 dwelling units and creation of 18,000 to 20,000 jobs. The SOIA Area is located outside of the City of Elk Grove's Planning Area; therefore, the population that could be accommodated within the SOIA Area was not considered as part of the adopted Elk Grove General Plan. In addition, the 2016 MTP/SCS designates the SOIA Area as "Blueprint Vacant Urban Designated Lands Not Identified for Development in the MTP/SCS Planning Period (SACOG 2016)." The increase in population and housing attributed to future development is not accounted for in these planning documents.

The SOIA Area is not included in SACOG's future employment projection; therefore, the number of jobs potentially generated by future development would represent a substantial number of jobs not accounted for in SACOG's employment projections for the City. The proposed SOIA would indirectly result in a **cumulatively considerable** contribution to a significant cumulative impact. The purpose of the proposed project itself is to provide for future annexation of the SOIA Area and subsequent development of housing and employment opportunities. There is no feasible mitigation to reduce this impact to a less-than-cumulatively considerable level. The impact is considered **significant and unavoidable**.

PUBLIC SERVICES AND RECREATION

Future development in service provider's boundaries, including within the SOIA Area, would increase the demand for public services. In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public services within their jurisdictional boundaries.

Although a cumulative shortage of public services and facilities would not in and of itself represent a significant environmental impact under CEQA because these are not physical impacts on the environment, such a shortage could lead to the need to develop additional public-services facilities, which could in turn lead to significant construction- and operation-related environmental impacts. It is assumed that future development and/or development of the additional public-services facilities required to serve them would be preceded by the required environmental review. However, conducting the required CEQA review of the related projects would not necessarily guarantee that significant environmental effects associated with construction of new fire, police, school facilities, and other public services would not occur. Hence, the development of new fire, police, and other public services could result in **potentially significant cumulative** impacts.

Fire Protection Services

The Cosumnes Community Services District (CCSD) Fire Department provides fire protection, fire prevention, and emergency medical services to a 157-square-mile area encompassing the city of Elk Grove, the city of Galt, and areas of unincorporated southern Sacramento County. Implementation of Mitigation Measure 3.13-1 would ensure that the City demonstrate fire protection facilities would meet the service demand of any future development.

Individual development projects within the CCSD Fire Department service area would incorporate California Fire Code and City or County standards into project designs and provide funding for additional fire protection services and facilities. Any construction or expansion of CCSD Fire Department facilities would require additional analysis in subsequent CEQA documents, prepared at the time such improvements are proposed. CCSD Fire Department would conduct a CEQA analysis to analyze specific impacts and identify any required mitigation measures to reduce potentially significant or significant impacts to a less-than-significant level. Implementation of mitigation measures would be the responsibility of the CCSD Fire Department, and such measures would be implemented in accordance with the certified CEQA documents. However, impacts could remain significant after implementation of mitigation (i.e., significant and unavoidable), or no feasible mitigation may be available to fully reduce impacts to a less-than-significant level. Therefore, a **significant cumulative** impact would occur, and the proposed SOIA could result in a **cumulatively considerable** incremental contribution to impacts related to increased fire protection services and facilities. No additional feasible mitigation measures exist for these cumulative impacts. Thus, impacts would be **significant and unavoidable**.

Law Enforcement Services

The SOIA Area is currently served by the Sacramento County Sheriff's Department (SCSD), which provides specialized law enforcement services to the County and local police protection to both the incorporated and unincorporated areas. The Elk Grove Police Department (EGPD) also provides certain law enforcement services to the SOIA Area through a mutual aid agreement and would be the main provider if future annexation requests were approved. Implementation of Mitigation Measure 3.13-2 would ensure that the City demonstrate police protection facilities would meet the service demand of any future development.

Development within the unincorporated areas of the county, or within Elk Grove, would increase the demand for SCSD and EGPD law enforcement services and facilities. Individual development projects would be required to assess impacts related to law enforcement services during the environmental review process to ensure that the SCSD and EGPD have sufficient facilities and equipment to meet demand and provide funding for additional police protection facilities through payment of development impact fees. As appropriate, future facility construction would be subject to project-level environmental analysis and mitigation. However, impacts could remain significant after implementation of mitigation (i.e., significant and unavoidable), or no feasible mitigation may be available to fully reduce impacts to a less-than-significant level. Therefore, a **significant cumulative** impact would occur, and the proposed SOIA would result in a **cumulatively considerable** incremental contribution to impacts related to increased law enforcement services and facilities. No additional feasible mitigation measures exist for these cumulative impacts. Thus, impacts would be cumulatively **significant and unavoidable**.

Schools

The Elk Grove Unified School District (EGUSD) provides K–12 education to the City of Elk Grove and the SOIA Area. Development within the EGUSD service area could increase the demand for school facilities. City General Plan Policy PF-16 requires developments to incorporate new schools in their overall designs, which would render any impacts to school facilities created by the increase in residential population resulting from potential future development less than significant by assuring that adequate school facilities are provided for current and future residents. The City supports state legislative efforts to secure additional state funding for school construction and ensure maintenance of local district priorities for funds in the State school bond program (City General Plan Policy PF-18). In addition, City General Plan Policy PF-21 requires new development to fund its fair share portion of its impacts to all public facilities as provided for in State law. Pursuant to SB 50, new development would be required to pay all applicable State-mandated school impact fees to EGUSD. ~~However, new development within the EGUSD would be required to pay state-mandated school impact fees that may be used to finance new schools and equipment, and to reconstruct existing facilities to maintain adequate housing for EGUSD's students as described in Mitigation Measure 3.13-3.~~ The California Legislature has declared that the school impact fee is deemed to be full and adequate mitigation under CEQA. However, depending on how school facilities are located and designed relative to possible future residential development within the SOIA Area and other areas within the School District service area, there could be indirect impacts related to transportation, such as air pollutant emissions, greenhouse gas emissions, and transportation noise. This is a **potentially significant cumulative impact**.

It is possible that future residential development within the SOIA Area would generate demand for school facilities that are not met within the SOIA Area or are not for some period of time within the SOIA Area as it builds out. Off-site impacts associated with possible school facility development are not knowable at this time and

are conservatively assumed for the purposes of this Recirculated Draft EIR to be cumulatively considerable. There is no additional feasible mitigation. The impact is **significant and unavoidable**.

Parks and Recreation

The CCSD provides parks and recreation facilities for residents of the city of Elk Grove, as well as portions of Sacramento County. CCSD serves an area of roughly 157 square miles, including the city limits of the City of Elk Grove, plus unincorporated areas of Sacramento County.

New development, including future development within the SOIA Area, would generate demand for new and existing recreational facilities in Elk Grove and the unincorporated county. Payment of the development impact fees would provide financing for public facilities, including parks and recreational facilities, which are required to serve new development. Individual development projects would be required to assess impacts related to parks and recreational facilities during the environmental review process to ensure sufficient facilities to meet demand. As appropriate, future facility construction would be subject to project-level CEQA analysis and mitigation. However, impacts could remain significant after implementation of mitigation. A **significant cumulative** impact would occur, and the proposed SOIA would result in a **cumulatively considerable** incremental contribution to impacts related to increased parks and recreation facilities. No feasible mitigation measures exist for these cumulative impacts. Thus, impacts would be **cumulatively significant and unavoidable.**

TRANSPORTATION AND TRAFFIC

The purpose of the cumulative (2035) transportation impact analysis is to determine whether implementation of the proposed project in addition to planned cumulative growth will adversely affect the planned transportation system. The MTP for 2036 identifies roadway and transit improvements that are proposed to accommodate future travel demand and includes the western segment of the proposed Capital SouthEast Connector project.

The SOIA Area is located just south of the western segment of the proposed Capital SouthEast Connector project, which is a 35-mile roadway that will link communities in El Dorado County and Sacramento County and the cities of Elk Grove, Rancho Cordova, and Elk Grove. It will connect between U.S. 50 in El Dorado Hills and I-5 at Hood-Franklin Road southwest of Elk Grove. Many of the roadway improvements are located along potential alignments of the SouthEast Connector project, including improvements on Grant Line Road, Kammerer Road, and Hood-Franklin Road. There are planned roadway improvements under SouthEast Connector in the SOIA Area that include widening Kammerer Road to six lanes from SR 99 to Bruceville Road, and extension of Kammerer Road (four lanes) from Bruceville Road to I-5 with UPRR overcrossing.

Roadway and Freeway Segment Operations

Table 5-1 and Table 5-2 summarize study roadway and freeway segment operations under cumulative and cumulative plus conditions, respectively, and include the following information for each study roadway segment:

- Daily roadway capacity
- Daily traffic volume (two-way total)
- Volume-to-capacity ratio
- LOS

As shown in Table 5-1, the cumulative no project conditions may not meet the minimal acceptable operation level for the City or County. The County defines the minimum acceptable operation level for its roadways and intersections to be LOS D for rural areas and LOS E for urban areas. The urban areas are those areas within the Urban Service Boundary as shown in Figure 1 of the Land Use Element of the Sacramento County General Plan (Sacramento County 2016). The areas outside the Urban Service Boundary are considered rural. Also, Policy CI-13 indicates that the City shall require that all roadways and intersections in Elk Grove operate at a minimum Level of Service "D" at all times. This would be a **significant cumulative** impact.

Table 5-2 shows whether the studied roadways are within the urban/City boundary or in rural areas (as identified in the County's Land Use Element). Table 5-2 also shows existing no project and cumulative no project LOS for the studied roadway segments and provides comparison between cumulative no project conditions and existing no project conditions. As shown, four roadway segments and five freeway segments already operate with LOS E or F under existing conditions. These roadway and free segments are labeled "Yes" under Impact column for existing conditions in Table 5-2. The cumulative no project condition would have indirect impacts related to traffic congestion on additional four roadway segments and four freeway segments. These roadway and free segments are labeled "Yes" under Impact column for cumulative no project conditions in Table 5-2.

However, as shown in Table 5-2, the cumulative no project condition would only cause deterioration in daily level of service from LOS E to LOS F or an increase of more than 0.05 in volume over capacity ratios on the following roadway and freeway segments:

- Elk Grove Boulevard from Bruceville Road to Laguna Springs Drive
- Elk Grove Boulevard from Laguna Springs Drive to SR 99
- Kammerer Road from Bruceville Road to Promenade Parkway
- SR 99 from Grant Line Road to Elk Grove Boulevard
- SR 99 from Elk Grove Boulevard to Laguna Boulevard/Bond Road
- SR 99 from Laguna Boulevard/Bond Road to north of Laguna Boulevard/ Bond Road

Table 5-1. Roadway Segment Level of Service – Cumulative No Project Conditions				
Roadway Segment	Daily Capacity[1]	Daily Volume[2]	V/C Ratio	LOS
Elk Grove Boulevard from I-5 to Harbour Point Drive	54,000	25,500	0.47	A
Elk Grove Boulevard from Harbour Point Drive to Franklin Boulevard	54,000	26,300	0.49	A
Elk Grove Boulevard from Franklin Boulevard to Bruceville Road	54,000	35,331	0.65	B
Elk Grove Boulevard from Bruceville Road to Laguna Springs Drive	54,000	59,720	1.11	**F**
Elk Grove Boulevard from Laguna Springs Drive to SR 99	54,000	75,609	1.40	**F**
Elk Grove Boulevard from SR 99 to East Stockton Boulevard	36,000	33,016	0.92	**E**
Elk Grove Boulevard from East Stockton Boulevard to Elk Grove Florin Road	36,000	31,793	0.88	D
Elk Grove Boulevard from Elk Grove Florin Road to Waterman Road	18,000	32,093	1.78	**F**
Grant Line Road from Promenade Parkway to East Stockton Boulevard	~~18,000~~54,000	28,589	~~1.59~~0.5	~~**F**~~A
Grant Line Road from E Stockton Boulevard to Waterman Road	~~18,000~~36,000	35,381	~~1.97~~1.0	~~**F**~~F
Grant Line Road from Waterman Road to Elk Grove Boulevard	18,000	25,430	1.41	**F**
Bilby Road from Franklin Boulevard to Bruceville Road	18,000	8,400	0.47	A
Kammerer Road from Bruceville Road to Promenade Parkway	20,000	29,179	1.46	**F**
Eschinger Road from Bruceville Road to SR 99	18,000	1,100	0.06	A
Dillard Road from SR 99 to Wilton Road	17,000	4,700	0.28	A
Lambert Road from I-5 to Bruceville Road	17,000	900	0.05	A
Franklin Boulevard from Elk Grove Boulevard to Whitelock Parkway	36,000	14,916	0.41	A
Bruceville Road from Elk Grove Boulevard to Whitelock Parkway	36,000	22,400	0.62	B
Bruceville Road from Whitelock Parkway to Kammerer Road	18,000	3,700	0.21	A
Bruceville Road from Kammerer Road to Eschinger Road	17,000	2,100	0.12	A
Bruceville Road from Eschinger Road to Lambert Road	17,000	1,500	0.09	A
I-5 from Twin Cities Road to Hood Franklin Road	80,000	65,890	0.82	D
I-5 from Hood Franklin Road to Elk Grove Boulevard	80,000	72,067	0.90	**E**
I-5 from Elk Grove Boulevard to Laguna Boulevard	80,000	88,912	1.11	**F**
I-5 from Laguna Boulevard to north of Laguna Boulevard	120,000	103,341	0.86	D
SR 99 from Mingo Road to Arno Road	80,000	94,355	1.18	**F**
SR 99 from Arno Road to Dillard Road	80,000	85,778	1.07	**F**
SR 99 from Dillard Road to Eschinger Road	80,000	87,003	1.09	**F**
SR 99 from Eschinger Road to Grant Line Road	80,000	88,580	1.11	**F**
SR 99 from Grant Line Road to Elk Grove Boulevard	80,000	89,361	1.12	**F**
SR 99 from Elk Grove Boulevard to Laguna Boulevard/Bond Road	80,000	145,671	1.82	**F**
SR 99 from Laguna Boulevard/Bond Road to north of Laguna Boulevard/ Bond Road	80,000	186,067	2.33	**F**

Notes:

1 The capacity of each roadway is based on the number of lanes and the facility type.

2 The baseline condition represents conditions in fall 2014, which for most of the studied roadways segments were obtained from the City of Elk Grove Average Daily Traffic (ADT) Volumes. The segment volumes not available in the City's 2014 ADT were obtained from the 2011 study for the proposed project.

Bold text indicates unacceptable LOS.

Source: Fehr & Peers 2011; Elk Grove 2014.

Table 5-2. Roadway Segment Level of Service – Comparison between Cumulative No Project and Existing No Project Conditions

Roadway Segment	Urban/City or Rural	LOS			Impact?	
		Existing No Project	Cum. No Project	VOC Ratio Increase	Existing	Cum. No Project
Elk Grove Boulevard from Interstate 5 to Harbour Point Drive	Urban/City	A	A	0.03		
Elk Grove Boulevard from Harbour Point Drive to Franklin Boulevard	Urban/City	A	A	0.03		
Elk Grove Boulevard from Franklin Boulevard to Bruceville Road	Urban/City	B	B	0.04		
Elk Grove Boulevard from Bruceville Road to Laguna Springs Drive	Urban/City	D	**F**	0.20		**Yes**
Elk Grove Boulevard from Laguna Springs Drive to State Route 99	Urban/City	**F**	**F**	0.20	Yes	**Yes**
Elk Grove Boulevard from State Route 99 to E Stockton Boulevard	Urban/City	C	**E**	0.14		Yes
Elk Grove Boulevard from E Stockton Boulevard to Elk Grove Florin Road	Urban/City	C	D	0.14		
Elk Grove Boulevard from Elk Grove Florin Road to Waterman Road	Urban/City	**E**	**F**	0.23	Yes	**Yes**
Grant Line Road from Promenade Pkwy to E Stockton Boulevard	Urban/City	~~**F**~~A	~~**F**~~A	~~0.50~~0.20	~~Yes~~No	~~Yes~~No
Grant Line Road from E Stockton Boulevard to Waterman Road	Urban/City	~~**F**~~B	~~**F**~~**F**	~~0.50~~0.40	~~Yes~~No	Yes
Grant Line Road from Waterman Road to Elk Grove Boulevard	Urban/City	D	**F**	0.50		Yes
Bilby Road from franklin Boulevard to Bruceville Road	Urban/City	A	A	0.25		
Kammerer Road from Bruceville Road to Promenade Pkwy	Urban/City	A	**F**	0.65		**Yes**
Eschinger Road from Bruceville Road to State Route 99	Rural	A	A	1.35		
Dillard Road from State Route 99 to Wilton Road	Rural	A	A	0.09		
Lambert Road from Interstate 5 to Bruceville Road	Rural	A	A	0.20		
Franklin Boulevard from Elk Grove Boulevard to Whitelock Pkwy	Urban/City	A	A	0.27		
Bruceville Road from Elk Grove Boulevard to Whitelock Pkwy	Rural	B	B	0.07		
Bruceville Road from Whitelock Parkway to Kammerer Road	Rural	A	A	0.90		
Bruceville Road from Kammerer Road to Eschinger Road	Rural	A	A	1.38		
Bruceville Road from Eschinger Road to Lambert Road	Rural	A	A	0.20		
Interstate 5 from Twin Cities Road to Hood Franklin Road	Rural	B	D	0.00		
Interstate 5 from Hood Franklin Road to Elk Grove Boulevard	Rural	C	**E**	0.12		Yes
Interstate 5 from Elk Grove Boulevard to Laguna Boulevard	Urban/City	**E**	**F**	0.10	Yes	**Yes**
Interstate 5 from Laguna Boulevard to North of Laguna Boulevard	Urban/City	C	D	0.04		
State Route 99 from Mingo Road to Arno Road	Rural	**E**	**F**	0.02	Yes	Yes
State Route 99 from Arno Road to Dillard Road	Rural	D	**F**	0.02		Yes
State Route 99 from Dillard Road to Eschinger Road	Rural	D	**F**	0.02		Yes
State Route 99 from Eschinger Road to Grant Line Road	Rural	D	**F**	0.05		Yes
State Route 99 from Grant Line Road to Elk Grove Boulevard	Urban/City	**E**	**F**	0.27	Yes	**Yes**
State Route 99 from Elk Grove Boulevard to Laguna Boulevard/Bond Road	Urban/City	**F**	**F**	0.27	Yes	**Yes**
State Route 99 from Laguna Boulevard/Bond Road to North of Laguna Boulevard/ Bond Road	Urban/City	**F**	**F**	0.27	Yes	**Yes**

Notes: VOC Ration = volume-to-capacity ration
Bold text indicates significant increase in VOC ratio. For roadways already operating at an unacceptable LOS, a project is considered to have a significant effect if it increases the volume-to-capacity ratio by more than 0.05. (Sacramento County 2004)
Source: Fehr & Peers 2011; Elk Grove 2014, Sacramento County 2016

Table 5-3 summarizes study roadway and freeway segment operations under cumulative plus project conditions.

Table 5-3. Roadway Segment Level of Service – Cumulative Plus Project Conditions

Roadway Segment	Daily Capacity[1]	Daily Volume[2]	V/C Ratio	LOS
Elk Grove Boulevard from Interstate 5 to Harbour Point Drive	54,000	26,923	0.50	A
Elk Grove Boulevard from Harbour Point Drive to Franklin Boulevard	54,000	27,723	0.51	A
Elk Grove Boulevard from Franklin Boulevard to Bruceville Road	54,000	37,643	0.70	B
Elk Grove Boulevard from Bruceville Road to Laguna Springs Drive	54,000	70,192	1.30	**F**
Elk Grove Boulevard from Laguna Springs Drive to State Route 99	54,000	86,481	1.60	**F**
Elk Grove Boulevard from State Route 99 to E Stockton Boulevard	36,000	38,385	1.07	**F**
Elk Grove Boulevard from E Stockton Boulevard to Elk Grove Florin Road	36,000	37,062	1.03	**F**
Elk Grove Boulevard from Elk Grove Florin Road to Waterman Road	18,000	36,528	2.03	**F**
Grant Line Road from Promenade Pkwy to E Stockton Boulevard	18,000	39,651	2.20	**F**
Grant Line Road from E Stockton Boulevard to Waterman Road	18,000	46,542	2.59	**F**
Grant Line Road from Waterman Road to Elk Grove Boulevard	18,000	36,892	2.05	**F**
Bilby Road from franklin Boulevard to Bruceville Road	18,000	12,818	0.71	C
Kammerer Road from Bruceville Road to Promenade Pkwy	20,000	43,273	2.16	**F**
Eschinger Road from Bruceville Road to State Route 99	18,000	25,479	1.42	**F**
Dillard Road from State Route 99 to Wilton Road	17,000	6,185	0.36	A
Lambert Road from Interstate 5 to Bruceville Road	17,000	4,261	0.25	A
Franklin Boulevard from Elk Grove Boulevard to Whitelock Pkwy	36,000	24,750	0.69	B
Bruceville Road from Elk Grove Boulevard to Whitelock Pkwy	36,000	24,712	0.69	B
Bruceville Road from Whitelock Parkway to Kammerer Road	18,000	19,981	1.11	**F**
Bruceville Road from Kammerer Road to Eschinger Road	17,000	25,531	1.50	**F**
Bruceville Road from Eschinger Road to Lambert Road	17,000	4,860	0.29	A
Interstate 5 from Twin Cities Road to Hood Franklin Road	80,000	65,940	0.82	D
Interstate 5 from Hood Franklin Road to Elk Grove Boulevard	80,000	80,802	1.01	**F**
Interstate 5 from Elk Grove Boulevard to Laguna Boulevard	80,000	96,731	1.21	**F**
Interstate 5 from Laguna Boulevard to North of Laguna Boulevard	120,000	107,682	0.90	D
State Route 99 from Mingo Road to Arno Road	80,000	96,018	1.20	**F**
State Route 99 from Arno Road to Dillard Road	80,000	87,440	1.09	**F**
State Route 99 from Dillard Road to Eschinger Road	80,000	88,666	1.11	**F**
State Route 99 from Eschinger Road to Grant Line Road	80,000	92,956	1.16	**F**
State Route 99 from Grant Line Road to Elk Grove Boulevard	80,000	111,246	1.39	**F**
State Route 99 from Elk Grove Boulevard to Laguna Boulevard/Bond Road	80,000	166,556	2.08	**F**
State Route 99 from Laguna Boulevard/Bond Road to North of Laguna Boulevard/ Bond Road	80,000	207,952	2.60	**F**

Notes:

1 The capacity of each roadway is based on the number of lanes and the facility type.

2 The baseline condition represents conditions in fall 2014, which for most of the studied roadways segments were obtained from the City of Elk Grove Average Daily Traffic (ADT) Volumes. The segment volumes not available in the City's 2014 ADT were obtained from the 2011 study for the proposed project.

Bold text indicates unacceptable LOS.

Source: Fehr & Peers 2011; Elk Grove 2014.

As shown in Table 5-3, if there is development of the SOIA Area in the future, this may have indirect impacts on County of Sacramento and City of Elk Grove facilities under cumulative plus project conditions.

Table 5-4 shows whether the studied roadways are within the urban/City boundary or in rural areas (as identified in the County's Land Use Element). Table 5-4 also shows cumulative no project LOS and with project LOS for the studied roadway segments and provides comparison between cumulative no project conditions and existing no project conditions. As shown, eight roadway segments and nine freeway segments already operate with LOS E or F under cumulative no project conditions. These roadway and free segments are labeled "Yes" under Impact column for cumulative no project conditions in Table 5-3. The cumulative plus project condition would have indirect impacts related to traffic congestion on additional three roadway segments. These roadway and free segments are labeled "Yes" under Impact column for cumulative plus project conditions in Table 5-3.

However, as shown in Table 5-4, the cumulative no project condition would only cause increase in traffic volume would cause deterioration in daily level of service from LOS E to LOS F or an increase of more than 0.05 in volume over capacity ratios on the following roadway and freeway segments:

- Elk Grove Boulevard from State Route 99 to E Stockton Boulevard
- Eschinger Road from Bruceville Road to State Route 99
- Bruceville Road from Whitelock Parkway to Kammerer Road
- Bruceville Road from Kammerer Road to Eschinger Road
- Interstate 5 from Hood Franklin Road to Elk Grove Boulevard

Congestion Management Plan (CMP) also requires establishment of LOS standards to measure congestion at specific monitoring locations on the freeway and arterial systems. Policy CI-5-Action 4 indicates that the City shall participate in the preparation and implementation of a CMP consistent with legal requirements which gives priority to air quality goals, alternatives to automobile travel, and the development of demand reduction measures over additional road capacity. Policy CI-17 requires the City to regulate truck travel as appropriate for the transport of goods, consistent with circulation, air quality, congestion management, and land use goals.

Also, the MTP/SCS road investments emphasize access to infill development areas, congestion relief, support for bus and rail transit, and improved bicycle and pedestrian access. Local road investments increase capacity for local passenger travel, creating a benefit to goods movement on highways. The Capitol SouthEast Connector in the MTP/SCS is an expansion of existing segments of Kammerer Road, Bruceville Road, Grant Line Road and White Rock Road in the SOI Area.

However, the above impacts on the studied roadway and freeway segments would occur because adequate roadways and adequate capacity is not planned on I-5 or SR 99 to accommodate cumulative traffic volumes with buildout of the proposed SOIA Area have not yet been identified to support the conceptual land use changes that would occur under implementation of the proposed project. Under these circumstances, many of the study roadways would operate at levels worse than the stated significance criteria. This is a **cumulatively considerable contribution** to a significant cumulative impact.

Section 3.14, "Transportation," includes mitigation measures to reduce impacts on transportation. Impacts on local roadways outside of the City's jurisdiction would require consultation with other agencies (e.g., Sacramento County, the Capital SouthEast Connector JPA, and Caltrans), and the City cannot assure that mitigation for improvements outside its jurisdiction would be implemented. Therefore, this impact would remain **significant and unavoidable**.

Table 5-4. Roadway Segment Level of Service – Comparison between Cumulative No Project and Cumulative Plus Project Conditions

Roadway Segment	Urban/City or Rural	LOS		VOC Ratio Increase	Impact	
		Cum. No Project	Cum. Plus Project		Cum. No Project	Cum. Plus Project
Elk Grove Boulevard from Interstate 5 to Harbour Point Drive	Urban/City	A	A	0.03		
Elk Grove Boulevard from Harbour Point Drive to Franklin Boulevard	Urban/City	A	A	0.03		
Elk Grove Boulevard from Franklin Boulevard to Bruceville Road	Urban/City	B	B	0.04		
Elk Grove Boulevard from Bruceville Road to Laguna Springs Drive	Urban/City	**F**	**F**	0.19	Yes	**Yes**
Elk Grove Boulevard from Laguna Springs Drive to State Route 99	Urban/City	**F**	**F**	0.20	Yes	**Yes**
Elk Grove Boulevard from State Route 99 to E Stockton Boulevard	Urban/City	**E**	**F**	0.15	Yes	**Yes**
Elk Grove Boulevard from E Stockton Boulevard to Elk Grove Florin Road	Urban/City	D	**F**	0.15		**Yes**
Elk Grove Boulevard from Elk Grove Florin Road to Waterman Road	Urban/City	**F**	**F**	0.25	Yes	**Yes**
Grant Line Road from Promenade Pkwy to E Stockton Boulevard	Urban/City	**F**	**F**	0.61	Yes	**Yes**
Grant Line Road from E Stockton Boulevard to Waterman Road	Urban/City	**F**	**F**	0.62	Yes	**Yes**
Grant Line Road from Waterman Road to Elk Grove Boulevard	Urban/City	**F**	**F**	0.64	Yes	**Yes**
Bilby Road from franklin Boulevard to Bruceville Road	Urban/City	A	C	0.25		
Kammerer Road from Bruceville Road to Promenade Pkwy	Urban/City	**F**	**F**	0.70	Yes	**Yes**
Eschinger Road from Bruceville Road to State Route 99	Rural	A	**F**	1.35		**Yes**
Dillard Road from State Route 99 to Wilton Road	Rural	A	A	0.09		
Lambert Road from Interstate 5 to Bruceville Road	Rural	A	A	0.20		
Franklin Boulevard from Elk Grove Boulevard to Whitelock Pkwy	Urban/City	A	B	0.27		
Bruceville Road from Elk Grove Boulevard to Whitelock Pkwy	Rural	B	B	0.06		
Bruceville Road from Whitelock Parkway to Kammerer Road	Rural	A	**F**	0.90		**Yes**
Bruceville Road from Kammerer Road to Eschinger Road	Rural	A	**F**	1.38		**Yes**
Bruceville Road from Eschinger Road to Lambert Road	Rural	A	A	0.20		
Interstate 5 from Twin Cities Road to Hood Franklin Road	Rural	D	D	0.00		
Interstate 5 from Hood Franklin Road to Elk Grove Boulevard	Rural	**E**	**F**	0.11	Yes	**Yes**
Interstate 5 from Elk Grove Boulevard to Laguna Boulevard	Urban/City	**F**	**F**	0.10	Yes	**Yes**
Interstate 5 from Laguna Boulevard to North of Laguna Boulevard	Urban/City	D	D	0.04		
State Route 99 from Mingo Road to Arno Road	Rural	**F**	**F**	0.02	Yes	Yes
State Route 99 from Arno Road to Dillard Road	Rural	**F**	**F**	0.02	Yes	Yes
State Route 99 from Dillard Road to Eschinger Road	Rural	**F**	**F**	0.02	Yes	Yes
State Route 99 from Eschinger Road to Grant Line Road	Rural	**F**	**F**	0.05	Yes	**Yes**
State Route 99 from Grant Line Road to Elk Grove Boulevard	Urban/City	**F**	**F**	0.27	Yes	**Yes**
State Route 99 from Elk Grove Boulevard to Laguna Boulevard/Bond Road	Urban/City	**F**	**F**	0.26	Yes	**Yes**
State Route 99 from Laguna Boulevard/Bond Road to North of Laguna Boulevard/ Bond Road	Urban/City	**F**	**F**	0.27	Yes	**Yes**

Notes: VOC Ration = volume-to-capacity ration

Bold text indicates significant increase in VOC ratio. For roadways already operating at an unacceptable LOS, a project is considered to have a significant effect if it increases the volume-to-capacity ratio by more than 0.05. (Sacramento County 2004)

Source: Fehr & Peers 2011; Elk Grove 2014, Sacramento County 2016

UTILITIES AND SERVICE SYSTEMS

In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public utilities within their service boundaries. Utilities and service systems would be provided to future development by the Sacramento County Water Agency (SCWA), the Sacramento Area Sewer District (SASD) (formerly known as County Sanitation District-1), Sacramento Regional County Sanitation District (SRCSD), SMUD, and PG&E. The related projects discussed in this section include future development that would occur within each provider's service area

Water Supply and Water Systems

The SOIA Area is adjacent to the southwestern boundary of SCWA's Zone 40; therefore, it is most likely that water service would be provided by SCWA. SWCA's nearest water transmission mains are along Bilby Road at West Stockton Boulevard and at the Grant Line Road/State Route 99 interchange. The Poppy Ridge WTP is located near the intersection of Bruceville Road and Poppy Ridge Road (see Exhibit 3.15-1 in Section 3.15, "Utilities and Service Systems"). Zone 40 provides water supply through a conjunctive-use water supply system consisting of surface water, groundwater, and recycled water. The Zone 41 UWMP addresses water supply and demand issues, water supply reliability, water conservation, water shortage contingencies, and recycled-water usage for the areas within Sacramento County where Zone 41 provides retail water services, including Zone 40. As shown in Table 3.15-2 in Section 3.15, SCWA would have surface water and groundwater supplies that exceed demands within Zone 40 from 2010 to 2035 in normal, single dry, and multiple dry years. The SOIA Area is not with SCWA's Zone 40 service area and water supply demands to the SOIA Area were not accounted for in the Zone 41 UWMP or Zone 40 WSMP.

Planned SCWA water system improvements could serve future development in the service area. The Zone 40 WSIP shows the future Whitelock WTP, planned as a Phase 2 facility in The Zone 40 WSMP, and additional water conveyance pipelines are proposed along Whitelock Parkway (SCWA 2006). These water system improvements were identified in the 2005 Zone 40 WSMP EIR, and the environmental impacts of the construction and operation were analyzed at a programmatic level. SCWA would conduct project-level CEQA or NEPA analysis, if necessary, to analyze specific cumulative impacts and identify any required mitigation measures for construction and operation of new off-site facilities.

As shown in Section 3.15, "Utilities and Service Systems," SCWA would have water supplies that exceed demands in all water years. Future development within the SCWA service area could require SCWA water. If capacity is not available, SCWA may need to expand or construct water systems facilities. SCWA would prepare separate CEQA documentation in the future to evaluate the environmental impacts of constructing or expanding facilities and would be required to implement mitigation for any impacts found to be significant. However, impacts could remain significant after implementation of mitigation or no feasible mitigation may be available to fully reduce impacts to a less-than-significant level. Thus, future development within the service area could lead to a **significant cumulative** impact.

As shown on Table 3.15-3, the estimated water supply demand based on build-out of the conceptual land use scenario has been conservatively estimated as 3,233 afy. SCWA would have water supplies that exceed demands in all water years. ~~Surplus water supplies could potentially meet water supply demands of future development.~~ SCWA has indicated that it is likely additional surface water and groundwater supplies will be procured to meet the water supply demands of the SOIA Area. Off-site water supply facilities necessary to serve future

development have not been identified at this time. Implementation of Mitigation Measure 3.15-1 would reduce significant impacts associated with increased for water supplies and demand for off-site water facilities because the City of Elk Grove would demonstrate adequate water supplies and water system facilities would be available for the amount of development identified in the annexation territory.

However, future development in the SOIA Area could contribute to the cumulatively significant or impacts associated with the future construction of water facilities that would be needed to serve development within the SCWA service area. Impacts resulting from off-site water infrastructure improvements could include, but are not limited to, short-term impacts on air quality and greenhouse gas emissions associated with construction, potential impacts on special-status plants and wildlife or sensitive habitats; potential disturbance of known or unknown cultural or paleontological resources; short-term increases in erosion and stormwater runoff; and short-term increases in construction noise levels.

Therefore, ~~is~~ the effects of future development within the SOIA Area is considered a **cumulatively considerable** impact. There is no additional feasible mitigation. The impact is **significant and unavoidable**.

Wastewater Collection, Conveyance, and Treatment Facilities

Future development within the SASD or SRSCD service areas would receive municipal wastewater service through existing infrastructure or the construction of on-site wastewater transmission facilities and new and/or expansion of existing infrastructure. Planned construction of the SASD infrastructure in the LA Laguna Trunk shed and the SRCSD South Area Interceptor and expansion of the SRWTP would be required to serve future development within their service areas regardless of whether development within the SOIA Area occurs. However, it cannot be determined if the SRWTP and other facilities would have capacity to treat wastewater generated by future development. If SASD or SRCSD are not able to provide wastewater service to new development with existing infrastructure, construction or expansion of existing infrastructure may be required, the construction of which could have environmental impacts. Both SASD and SRCSD would prepare separate CEQA documentation in the future to evaluate the environmental impacts associated with increased demand for wastewater collection, conveyance, and treatment facilities and would be required to implement feasible mitigation measures to reduce any impacts found to be significant. However, cumulative impacts could remain significant after implementation of mitigation (i.e., cumulatively significant and unavoidable), or no feasible mitigation may be available to fully reduce cumulative impacts to a less-than-significant level. Thus, future development within the service area would be a **potentially cumulative considerable** impact.

Future development in the SOIA Area could contribute to the cumulatively significant impacts associated with the future construction of wastewater collection, conveyance, and treatment facilities that would be needed to serve development within the SASD and SCRSD service areas. Mitigation Measure 3.15-3 would reduce impacts because the City of Elk Grove would demonstrate adequate on-site and off-site wastewater collection, conveyance, and treatment facilities would be available for the amount of development identified in the annexation territory. However, LAFCo would not have control over the City's approval, timing, or implementation of on-site wastewater collection and conveyance facilities. Therefore, future development could result in a **cumulatively considerable contribution** to a significant cumulative impact related to the increased demand for SASD and SCRSD wastewater collection, conveyance, and treatment facilities. There is no additional feasible mitigation. The impact is **significant and unavoidable**.

Solid Waste

Residential solid waste in the City of Elk Grove is disposed of at the Kiefer Landfill and commercial solid waste is primarily disposed of at the Kiefer Landfill, the L and D Landfill, and the Yolo County Landfill. These landfills currently provide solid waste disposal services to both municipal and commercial customers in Sacramento and Yolo Counties. Development of new land uses within those counties would increase the amount of solid waste disposal at the Kiefer Landfill, the L and D Landfill, and the Yolo County Landfill. The Kiefer Landfill, the L and D Landfill, and the Yolo County Landfill have a large volume of landfill capacity (254 million cubic yards) available to serve future development within their service areas through 2064. Therefore, **no significant cumulative** impact would occur.

5.4 GROWTH-INDUCING IMPACTS

According to Section 15126.2(d) of the CEQA Guidelines, an EIR should:

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

A project has the potential to induce growth both directly and indirectly. Direct growth inducement would result if a project involved construction of new housing. Indirect growth inducement would result, for instance, if implementing a project resulted in substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises); or a construction effort with substantial short-term employment opportunities that indirectly stimulates the need for additional housing and services to support the new employment demand; and/or removal of an obstacle to additional growth and development, such as improving the capacity of a public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

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

5.4.1 GROWTH INDUCING IMPACTS OF THE PROJECT

There are no land uses changes proposed as part of this SOIA application. Therefore, the proposed project would not directly induce population growth through development of new housing and employment opportunities or extension of infrastructure.

However, future development could indirectly facilitate population growth by generating a population of approximately 13,000 to 16,250 people in the City of Elk Grove. The SOIA Area is located outside of the City of Elk Grove's Planning Area; therefore, the population that could be accommodated within the SOIA Area was not considered as part of the adopted Elk Grove General Plan. However, the City is currently updating its General Plan and although no draft has been released, preliminary maps show the SOIA Area within the future planning area. It is anticipated that the population, housing, and employment that could be accommodated under the future land use scenario would be addressed in the City's General Plan update.

The proposed project could develop approximately 4,000 to 5,000 dwelling units. In addition to residential development, future development could generate a substantial amount of employment-generating land uses. The conceptual land plan assumes a broad range of commercial, office, and industrial uses that generate 18,000 to 20,000 jobs.

In addition, the future development under the SOIA could require off-site improvements for services, facilities, and utilities. Some of these improvements could benefit development elsewhere within Elk Grove and in other portions of the County. Potential growth-inducing impacts resulting from the extension of circulation facilities and expansion of utility infrastructure are addressed in Sections 3.14, "Transportation," and 3.15, "Utilities and Service Systems," respectively.

Future development in the SOIA Area would require construction workers. Because construction workers typically do not change where they live each time they are assigned to a new construction site, it is not anticipated that there would be any substantial relocation of construction workers to Elk Grove or Sacramento County associated with the SOIA. LAFCo does not anticipate substantial impacts associated with growth inducement associated with the temporary relocation of construction workers.

The additional population associated with the future development within the SOIA Area could spur an increase in demand for goods and services in the surrounding area, which could potentially result in additional development to satisfy this demand. In this respect, the SOIA Area would be growth inducing. It would be speculative to attempt to predict where and when any such new services would be developed, and whether or not existing and future planned industrial and commercial development would satisfy additional demand for goods and services created by the project. Existing vacant light industrial and commercial space may be sufficient to meet additional demand created by implementation of the SOIA that is not accommodated within the SOIA Area.

The SOIA Area is located within unincorporated Sacramento County and the Sacramento County General Plan establishes land use designations and zoning within the SOIA Area. The entire SOIA Area and areas south, east, and west of the SOIA Area are zoned AG-80 (Agricultural, 80-acre minimum). The AG-80 zoning code is used to eliminate the encroachment of land uses incompatible with the long term agricultural use of land, to preserve the maximum amount of the limited supply of agricultural land in order to conserve the County's economic resources that are vital for a healthy agricultural economy, to discourage the premature and unnecessary conversion of agricultural land to urban uses, and to encourage the retention of sufficiently large agricultural lots to assure maintenance of viable agricultural units. In addition, the SOIA Area and land south and west of the SOIA Area are located outside of the County's Urban Service Boundary (USB) and Urban Policy Area (UPA). The USB defines the ultimate boundary of urban development and is intended to be permanent, allowing modification only under special circumstances. Lands outside of the UPA are not intended to receive urban levels of public infrastructure and services to support urban development.

If future development occurs, it would place urban development adjacent to agricultural lands south and west of the SOIA Area. Historically, economic returns from urban development are typically substantially higher than continued use of undeveloped land, and encroaching urban uses typically make attractive the conversion of other undeveloped land to urban uses. Thus, it could be reasoned that implementing the proposed project would be growth inducing by placing pressure on land south and west of the SOIA Area to convert to urban uses. An application has been submitted to Sacramento LAFCo that proposes future development in the Bilby Ridge SOIA, west of the SOIA Area. Conversion of this agricultural land to urban land uses is being proposed, and conversion of agricultural land to urban uses could occur regardless of future development within the SOIA Area. No urban development is currently proposed immediately south of the SOIA Area. Additional agricultural land uses occur near the SOIA Area east of State Route 99. Sacramento County has initiated the South of Grantline Visioning process with property owners of approximately 1,070 acres inside the USB northeast of State Route 99 and the City of Elk Grove's proposed multi-sport park complex. This planning effort is intended to permanently define the relationship of urban uses within the USB with adjacent agriculture and open space outside the USB and will attempt to ensure compatibility of land uses with the proposed multi-sport park complex and other surrounding land uses.

In summary, the SOIA would maintain existing land use designations and zoning and would not result on the construction of new homes, businesses, roads, or utilities. Therefore, the proposed project would not directly induce substantial population growth and impacts; however, the project may indirectly induce substantial population growth because the increased population and employment opportunities associated with the future development could increase demand for goods and services, thereby fostering population and economic growth in unincorporated Sacramento County and other nearby communities. It is possible that a successful SOIA could place pressure on adjacent areas to seek development entitlements or annexation applications.

However, the SOIA Area would provide sufficient acreage to accommodate population and employment growth. Therefore, the SOIA would likely not induce substantial growth outside of the SOIA Area. Furthermore, any growth outside of the SOIA Area would require its own LAFCo SOI amendment and environmental review outside of the SOIA process.

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