



**City of Elk Grove
Proposed Sphere of Influence Amendment
Draft Environmental Impact Report (LAFC # 09-10)**

SCH No. 2010092076



Sacramento LAFCo ■ September 29, 2011



Michael Brandman Associates
2000 "O" Street, Suite 200
Sacramento, CA 95811

DRAFT
Environmental Impact Report
City of Elk Grove
Proposed Sphere of Influence Amendment (LAFC # 09-10)
City of Elk Grove, Sacramento County, California
State Clearinghouse No. 2010092076

Prepared for:



Sacramento Local Agency Formation Commission
1112 "I" Street, Suite 100
Sacramento, CA 95814
916.874.6458

Contact: Don Lockhart, AICP, Assistant Executive Officer

Prepared by:

Michael Brandman Associates
2000 O Street, Suite 200
Sacramento, CA 95811
916.447.1100

Contact: Jason Brandman, Project Director
Trevor Macenski, Project Manager



Michael Brandman Associates

September 29, 2011

TABLE OF CONTENTS

Executive Summary	ES-1
Purpose	ES-1
Project Summary	ES-1
Summary of Environmental Impacts and Mitigation Measures	ES-3
Significant Unavoidable Adverse Impacts	ES-3
Summary of Project Alternatives	ES-4
Areas of Controversy	ES-5
Public Review of the Draft EIR	ES-6
Executive Summary Matrix	ES-7
Section 1: Introduction	1-1
1.1 - Overview of the CEQA Process	1-1
1.2 - Scope of the EIR	1-4
1.3 - Organization of the EIR	1-6
1.4 - Documents Incorporated by Reference	1-9
1.5 - Review of the Draft EIR	1-9
Section 2: Project Description	2-1
2.1 - Project Location and Setting	2-1
2.2 - Project Characteristics	2-17
2.3 - Project Objectives	2-30
2.4 - Intended Uses of This Draft EIR	2-31
Section 3: Environmental Impact Analysis.....	3-1
Organization of Issue Areas	3-1
Issues Addressed in This EIR	3-1
Determination of Significance.....	3-2
Impact Analysis and Mitigation Measure Format	3-3
3.1 - Aesthetics.....	3.1-1
3.2 - Agricultural Resources	3.2-1
3.3 - Air Quality.....	3.3-1
3.4 - Biological Resources.....	3.4-1
3.5 - Cultural Resources.....	3.5-1
3.6 - Geology, Soils, and Seismicity	3.6-1
3.7 - Greenhouse Gas Emissions	3.7-1
3.8 - Hazards and Hazardous Materials.....	3.8-1
3.9 - Hydrology and Water Quality	3.9-1
3.10 - Land Use and Planning.....	3.10-1
3.11 - Mineral Resources	3.11-1
3.12 - Noise	3.12-1
3.13 - Population and Housing	3.13-1
3.14 - Public Services.....	3.14-1
3.15 - Transportation/Traffic	3.15-1
3.16 - Utilities and Service Systems.....	3.16-1
Section 4: Cumulative Effects.....	4-1
4.1 - Introduction.....	4-1
4.2 - Cumulative Impact Analysis	4-3

Section 5: Alternatives to the Proposed Project.....	5-1
5.1 - Introduction	5-1
5.2 - Project Objectives	5-4
5.3 - Alternative 1 – No Project/Existing General Plan Alternative	5-4
5.4 - Alternative 2 – Alternate SOI Boundary Alternative.....	5-11
5.5 - Alternative 3 – Enhanced Regional Alternative	5-15
5.6 - Environmentally Superior Alternative.....	5-19
5.7 - Alternatives Rejected From Further Consideration	5-20
Section 6: Other CEQA Considerations.....	6-1
6.1 - Significant Unavoidable Impacts.....	6-1
6.2 - Growth-Inducing Impacts.....	6-2
6.3 - Energy Conservation	6-3
Section 7: Effects Found Not To Be Significant.....	7-1
7.1 - Introduction	7-1
7.2 - Effects Found Not To Be Significant.....	7-1
Section 8: Persons and Organizations Consulted/List of Preparers	8-1
8.1 - Persons and Organizations Consulted	8-1
8.2 - List of Preparers.....	8-1
Section 9: References	9-1
Appendix A: Notice of Preparation and Responses	
Appendix B: Air Quality Supporting Data	
Appendix C: Hazards	
Appendix D: General Plan Policy Consistency Analysis	
Appendix E: Environmental Noise Assessment	
Appendix F: Transportation Impact Study	

LIST OF TABLES

Table ES-1: Executive Summary Matrix..... ES-8

Table 1-1: NOP Comment Letters 1-4

Table 2-1: Existing Land Use 2-16

Table 2-2: Existing Zoning..... 2-16

Table 2-3: Existing and Proposed Sphere of Influence Area 2-18

Table 2-4: City of Elk Grove Future Land Demand Projections 2-25

Table 2-5: City of Elk Grove General Plan Land Use Summary at Buildout within the City
Limits (General Plan 2003 DEIR) 2-25

Table 2-6: Proposed Land Use Projections within the SOIA Area 2-26

Table 3.2-1: FMMP Agricultural Lands 3.2-2

Table 3.2-2: Williamson Act Contracts 3.2-5

Table 3.2-3: Agricultural Zoning 3.2-5

Table 3.3-1: 2008 Sacramento County Emissions Inventory 3.3-5

Table 3.3-2: Local Air Quality Monitoring (Elk Grove/Bruceville Road Station) 3.3-6

Table 3.3-3: Ambient Air Quality Standards 3.3-11

Table 3.3-4: Sacramento County Air Quality Attainment Status 3.3-13

Table 3.3-5: Indirect Mobile Emissions 3.3-24

Table 3.3-6: Land Use Handbook Guidance on Siting New Sensitive Receptors 3.3-26

Table 3.4-1: Summary of Special-Status Plant Species Review..... 3.4-11

Table 3.4-2: Summary of Special-Status Wildlife Species Review 3.4-13

Table 3.6-1: Fault Summary 3.6-3

Table 3.6-2: Modified Mercalli Intensity Scale 3.6-5

Table 3.6-3: Soils Properties Summary..... 3.6-8

Table 3.7-1: Greenhouse Gases 3.7-2

Table 3.7-2: California Greenhouse Gas Inventory 2000-2008 3.7-3

Table 3.7-3: Unincorporated Sacramento County Greenhouse Gas Inventory 2005 3.7-4

Table 3.7-4: Elk Grove Greenhouse Gas Inventory 2005 3.7-5

Table 3.7-5: On-Road Mobile CO₂ from SOIA Area Potential Future Development..... 3.7-21

Table 3.7-6: Regulatory Emission Reductions for On-Road Mobile CO₂..... 3.7-22

Table 3.7-7: SOIA Area Calculated Greenhouse Gas Inventory (2020 and 2025) 3.7-22

Table 3.8-1: Regulatory Agency Databases Searched 3.8-2

Table 3.9-1: Annual Average Water Consumption by Crop 3.9-5

Table 3.9-2: Annual Average Water Consumption by Land Use 3.9-5

Table 3.10-1: Land Use Designations within the SOIA Area 3.10-2

Table 3.10-2: Zoning Designations within the SOIA Area 3.10-2

Table of Contents

Table 3.10-3: Sacramento County General Plan Consistency Analysis.....	3.10-17
Table 3.10-4: City of Elk Grove General Plan Consistency Analysis	3.10-30
Table 3.10-5: Sacramento LAFCo Policy Consistency Analysis	3.10-45
Table 3.12-1: Community Noise Measurement Survey Results	3.12-9
Table 3.12-2: Existing Traffic Noise Levels and Contour Distances.....	3.12-10
Table 3.12-3: Estimated Distances to Railroad Noise Contours (feet)	3.12-15
Table 3.12-4: Maximum Allowable Noise Exposure Transportation Noise Sources	3.12-17
Table 3.12-5: Noise Level Performance Standards for New Projects Affected by or Including Non-Transportation Noise Sources	3.12-18
Table 3.12-6: Requirements for Acoustical Analysis	3.12-18
Table 3.12-7: Predicted Traffic Noise Level and Project-Related Traffic Noise Level Increases.....	3.12-20
Table 3.13-1: Sacramento County Projected Population Growth.....	3.13-1
Table 3.13-2: Growth Assumptions for the SOIA Area – Employment.....	3.13-2
Table 3.13-3: Growth Assumptions for the SOIA Area – Households and Enrollment	3.13-2
Table 3.14-1: Fire Station Summary	3.14-1
Table 3.14-2: Joint Powers Authority Units.....	3.14-2
Table 3.15-1: Level of Service Definitions for Study Roadways ¹	3.15-3
Table 3.15-2: Roadway Segment Level of Service – Existing Conditions.....	3.15-8
Table 3.15-3: Freeway Segment Level of Service – Existing Conditions	3.15-10
Table 3.15-4: Sub Area Model Validation Summary.....	3.15-17
Table 3.15-5: Program Level Land Use Estimates for Elk Grove SOIA Area.....	3.15-18
Table 3.15-6: MTP 2035 Roadway Projects	3.15-19
Table 3.15-7: SOIA Area Project Trip Distribution	3.15-19
Table 3.15-8: Roadway Segment Level of Service – Existing Plus Project Conditions.....	3.15-27
Table 3.15-9: Freeway Segment Level of Service – Existing Plus Project Conditions.....	3.15-29
Table 3.15-10: Roadway Segment Level of Service – Cumulative Plus Project Conditions	3.15-33
Table 3.15-11: Freeway Segment Level of Service – Cumulative Plus Project Conditions	3.15-35
Table 3.16-1: Zone 40 Current and Projected Water Demand (acre-feet annually).....	3.16-2
Table 3.16-2: Zone 40 Water Supply (acre-feet annually).....	3.16-2
Table 3.16-3: Landfill Summary	3.16-12
Table 4-1: Cumulative Projects.....	4-2
Table 5-1: Summary of Alternatives.....	5-19
Table 6-1: Electricity Savings Projected From the 2005 Standards	6-7
Table 6-2: Demand Savings Projected From the 2005 Standards	6-7

LIST OF EXHIBITS

Exhibit 2-1: Regional Location Map.....	2-3
Exhibit 2-2: Local Vicinity Map, Aerial Base	2-5
Exhibit 2-3a: Site Photographs	2-7
Exhibit 2-3b: Site Photographs	2-9
Exhibit 2-4: Existing Land Uses.....	2-11
Exhibit 2-5: Williamson Act Lands	2-13
Exhibit 2-6: Surrounding Communities	2-19
Exhibit 2-7: Existing County General Plan Land Use Designations	2-21
Exhibit 2-8: Existing County Zoning Classifications	2-23
Exhibit 3.2-1: Farmland Mapping & Monitoring Program Agricultural Lands	3.2-3
Exhibit 3.4-1: Wetlands within the Proposed Sphere of Influence Amendment Area	3.4-3
Exhibit 3.4-2a: CNDDDB-Recorded Occurrences of Special Status Plants	3.4-7
Exhibit 3.4-2b: CNDDDB-Recorded Occurrences of Special Status Wildlife.....	3.4-9
Exhibit 3.6-1: Soils Map.....	3.6-19
Exhibit 3.9-1: Regional Hydrology	3.9-3
Exhibit 3.9-2: FEMA Designated Flood Hazard Zones.....	3.9-9
Exhibit 3.10-1: City of Elk Grove Planning Area.....	3.10-3
Exhibit 3.10-2: Urban Services Boundary and Urban Policy Area Map	3.10-5
Exhibit 3.10-3: Conservation Areas	3.10-9
Exhibit 3.12-1: Noise Measurement Locations.....	3.12-7
Exhibit 3.12-2: Land Use Matrix	3.12-13
Exhibit 3.14-1: Fire Protection Service Providers.....	3.14-3
Exhibit 3.14-2: Parks and Recreation Service Providers.....	3.14-7
Exhibit 3.15-1: Average Daily Traffic Volumes – Existing Conditions	3.15.2-5
Exhibit 3.15-2: Average Daily Traffic Volumes – Existing Plus Project Conditions.....	3.15-21
Exhibit 3.15-3: Average Daily Traffic Volumes – Cumulative No Project Conditions.....	3.15-23
Exhibit 3.15-4: Average Daily Traffic Volumes – Cumulative Plus Project Conditions	3.15-25
Exhibit 3.16-1: Municipal Water Service Providers	3.16-3
Exhibit 3.16-2: Wastewater Service Providers	3.16-7
Exhibit 3.16-3: County Sanitation District-1 Expansion Trunk Project	3.16-27
Exhibit 5-1: Alternate SOI Boundary Location.....	5-5
Exhibit 5-2: Enhanced Regional Alternative Location Map	5-7

ACRONYMS AND ABBREVIATIONS

°F	Fahrenheit
2020 Master Plan	Sacramento Wastewater Treatment Plant Master Plan
AB 32	Global Warming Solutions Act
AB 5	Assembly Bill 5
AB 70	Assembly Bill 70
AB	Assembly Bill
Act	Cortese-Knox-Hertzberg Local Government Reorganization Act
ADWF	Average Dry Weather Flows
afy	Acre-feet per year
APCD	Air Pollution Control District
AQMD	Air Quality Management District
ARA	Aggregate Resource Areas
ARB	Air Resource Board
ASTM	American Society for Testing Materials
Authority	Sacramento Central Groundwater Authority
AWWF	Average Wet Weather Flows
BAC	Bollard Acoustical Consultants, Inc.
BACT	Best Available Control Technology
Basin Plan	Water Quality Control Plan
BAT	Best available technology
BCT	Best conventional pollution technology
BMP	Best management practice
BNSF	Burlington Northern Santa Fe
CAFE	Corporate Average Fuel Economy

Acronyms and Abbreviations

Cal EPA	California Environmental Protection Agency
Cal OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	Air Resources Board
CCOMWP	City-County Office of Metropolitan Water Planning
CCP	Cities for Climate Protection
CCR	Code of Regulations
CCSD	Cosumnes Community Service District
CCTS	Central California Taxonomic System
CDFG	California Department of Fish and Game
CEC	California Energy Commission
Central Basin	Central Sacramento County Groundwater Basin
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CHP	California Highway Patrol
City	City of Elk Grove
CKH	Cortese-Knox-Hertzberg Local Government Reorganization Act
CLUP	Comprehensive Land Use Plan
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	Carbon monoxide
CO ₂	Carbon dioxide

CPUC	California Public Utilities Commission
CR	California Register of Historical Resources
CSD-1	County Sanitation District 1
CTR	California Toxics Rule
CVFPB	Central Valley Flood Protection Board
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationships
dB	Decibel
dBA	A-weighted decibels
DERA	Department of Environmental Review and Assessment
DHS	Department of Health Services
DOT	Department of Transportations
DPM	Diesel particulate matter
DPR	Department of Pesticide Regulation
Draft EIR	Draft Environmental Impact Report
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources
EGCSD	Elk Grove Community Services District
EGPD	Elk Grove Police Department
EGUSD	Elk Grove Unified School District
EGWS	Elk Grove Water Service
EIR	Environmental Impact Report

Acronyms and Abbreviations

EMD	Environmental Management Department
EMF	Electric and magnetic field
EMT	Emergency medical technician
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
Farmland	Farmland of Statewide Importance
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FICON	Federal Interagency Commission on Noise
FMMP	Farmland Mapping and Monitoring Program
FY	Fiscal year
GWh/y	Gigawatt-hours per year
HCMP	Habitat Conservation Management Plan
HOV	High occupancy vehicle
HVAC	Heating, ventilation, and air conditioning
I-5	Interstate 5
ICLEI	International Council for Local Environmental Initiatives
IRF	Intermediate Regional Flood
ISO	Insurance Services Office
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
IWMB	Integrated Waste Management Board
JPA	Joint Powers Agreement
Kv	Kilovolt
LAFCo	Local Agency Formation Commission

Ldn	Day-Night Average Level
LEA	Local Enforcement Agency
L _{eq}	Equivalent sound level
LEV	Low-emission vehicle
LNG	Liquid natural gas
LOS	Level of service
LRSP	Laguna Ridge Specific Plan
LUST	Leaking underground storage tank
LUTIS	Leaking Underground Storage Tank Information System
MBA	Michael Brandman Associates
MBTA	Migratory Bird Treaty Act
MCE	Maximum Credible Earthquake Magnitude
mgd	million gallons a day
MMI	Modified Mercalli Intensity
MMTCO _{2e}	Million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
MSR	Municipal Service Review
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
MW	megawatts
NCIC	North Central Information Center
NEHRP	National Earthquake Hazards Reduction Program
NEHRPA	National Earthquake Hazards Reduction Program Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966

Acronyms and Abbreviations

NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	Nitrogen
NPDES	National Pollutant Discharge Elimination System
NPS	Non-point source
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OHWD	Omochumne-Hartnell Water District
OPSC	Office of Public School Construction
OSHA	Occupational Safety and Health Administration
PCC	Portland cement concrete
PG&E	Pacific Gas and Electricity
PM	Particulate matter
PM ₁₀	Particulate matter smaller than 10 microns in diameter
PM _{2.5}	Particulate matter smaller than 2.5 microns in diameter
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
Registry	California Climate Action Registry
ROG	Reactive organic gases
RTAC	Regional Targets Advisory Committee
RWQCB	Regional Water Quality Control Board

SAB	State Allocation Board
SACOG	Sacramento Area Council of Governments
SAFCA	Sacramento Area Flood Control Agency
SASD	Sacramento Area Sewer District
SB 5	Senate Bill 5
SB 50	Senate Bill No. 50
SB	Senate Bill
Scoping Plan	Climate Change Scoping Plan
SCSD	Sacramento County Sheriff's Department
SCWA	Sacramento County Water Agency
SDWA	Safe Drinking Water Act
SEL	Sound Exposure Level
SFNA	Sacramento Federal Ozone Nonattainment Area
SIP	State Implementation Plan
SM	Surface Mining Combining Land Use Zone
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act of 1975
SMUD	Sacramento Municipal Utility District
SOI	Sphere of Influence
SOIA	Sphere of Influence Amendment
SO _x	Sulfur dioxides
SPCA	Society for Prevention of Cruelty to Animals
SPL	Sacramento Public Library Authority
SR-99	State Route 99
SRB	State Reclamation Board

Acronyms and Abbreviations

SRCS	Sacramento Regional County Sanitation District
SRCS	Sacramento Regional County Sanitation District
SRPD	State Regulatory Programs Division
SRWTP	Sacramento Regional Wastewater Treatment Plant
SSHCP	South Sacramento Habitat Conservation Plan
SSJDD	Sacramento-San Joaquin Drainage District
STC	Sound Transmission Class
SVAB	Sacramento Valley Air Basin
SWA	Solid Waste Authority
SWPPP	Stormwater Pollution Protection Plan
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TAZ	Traffic analysis zone
TCR	Transportation Concept Report
TEA-21	Transportation Equity Act for the 21st Century
therms/y	Therms per year
TMDL	Total Maximum Daily Loading
TOD	Transit Oriented Development
tpd	Tons per day
U.S.	United States
UBC	Uniform Building Code
UFC	Uniform Fire Code
UPA	Urban Policy Area
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers

USB	Urban Services Boundary
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
VFR	Visual flight rated
VMT	Vehicle miles traveled
WDR	Waste Discharge Requirement
WFA	Water Forum Agreement