

Appendix D

Air Quality and Greenhouse Gas
Modeling Results

1.1. Basic Project Information

Data Field Value
Project: Hai Elk Grove Zoo Phase 1
Contract#: 6/4/2025
Lead Agency:
Land Use S Project/Isite
Analysis In County:
Windspeed: 3
Precipitate: 36.6
Location: 8575 Sammeier Rd, Elk Grove, CA 95757, USA
County: Sacramento
City: Elk Grove
Air District: Sacramento Metropolitan AQMD
Air Basin: Sacramento Valley
TAL: 712
EDFZ: 33
Electric: Uti Sacramento Municipal Utility District
Gas Utility: Pacific Gas & Electric
App Versio: 2022.1.1.14

1.2. Land Use Types

Table with columns: Land Use S Size, Unit, Lot Acreage, Building Ar, Landscape Special Lan, Population Description. Includes entries like General Of, Free-Stand, Health Clud, High Turno, etc.

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector # Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Table with columns: Unl/Mt, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include Daily, Summer (Max), Daily, Winter (Max), Average Daily (Max), and Annual (Max).

2.2. Construction Emissions by Year - Unmitigated

Table with columns: Year, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include Daily - Summer (Max) for years 2025-2028 and Average Daily for years 2025-2028.

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Demolition, Onsite truc, and Offsite for various activities.

3.3. Site Preparation (2025) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, and Offsite for various activities.

3.5. Grading (2025) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, and Offsite for various activities.

High Turno	0	0
Other Non	0.2	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
Free Stand	0	0
Health Clud	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
Medical Of	0	0
Day-Care C	0	0
Day-Care C	0	0
Day-Care C	0	0
Health Clud	0	0
City Park	0	0
Fair Food F	0	0
Fair Food F	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
Medical Of	0	0
High Turno	0	0
Hospital	0	0
City Park	0	0
Automobul	0	0
Health Clud	0	0
Parking Lot	4.5	100
Parking Lot	6.3	100

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per 1000 sq ft	CH ₄	CO ₂ e
2025	0	296	0.01 + 0.005
2026	0	279	0.01 + 0.005
2027	0	267	0.01 + 0.005
2028	0	253	0.01 + 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Type	Initial	Final	Acres
Biomass Cover Type			
5.18.1.1. Unmitigated			
Biomass C Initial			
Final			

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity / Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt's preliminary 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha Result for F Unit

Temperature 21.2 annual days of extreme heat

Extreme Pr 4.1 annual days with precipitation above 20 mm

Sea Level R 0 meters of inundation depth

Wildfire 0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 miles (mi).

Extreme Precipitation data are for the grid cell in which your project are located. The threshold on 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 miles (mi).

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Rabbe et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about storm surge and wave height.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about fire frequency and intensity.

6.2. Initial Climate Risk Scores

Climate Ha Exposure	Sensitivity	Adaptive C	Vulnerability Score
Temperature	1	0	0 N/A
Extreme Pr	1	0	0 N/A
Sea Level R/N/A	N/A	N/A	N/A
Wildfire	1	0	0 N/A
Flooding	0	0	0 N/A
Drought	0	0	0 N/A
Snowpack	N/A	N/A	N/A
Air Quality	0	0	0 N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha Exposure	Sensitivity	Adaptive C	Vulnerability Score
Temperature	1	1	1 2
Extreme Pr	1	1	1 2
Sea Level R/N/A	N/A	N/A	N/A
Wildfire	1	1	1 2
Flooding	1	1	1 2
Drought	1	1	1 2
Snowpack	N/A	N/A	N/A
Air Quality	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CallInEcoScreen 4.0 Scores

The maximum CallInEcoScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ Ozone	45.1
AQ PM	37.5
AQ OPM	24.8
Drinking W	69.9
Lead Risk I	5.61
Pesticides	76.5
Toxic Sites	13.1
Traffic	58.7
Effect Indicators	
CleanSf	61.8
Groundwar	82.1
Hot Waste	97.6
Impaired W	94.6
Solid Waste	64.4
Sensitive Population	
Asthma	24.7
Cardio-was	32
Low Birth's	77.8
Socioeconomic Factor Indicators	
Education	41.6
Housing	42.8
Linguistic	26.4
Poverty	13
Unemploy	7.77

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pow	60.34903
Employed	0.526113
Median HI	67.31682
Education	
Bachelor's	51.50776
High school	19.24804
Preschool	196.7141
Transportation	
Auto Access	43.3081
Active com	34.86482
Social	
2 parent h	66.67522
Voting	91.95432
Neighborhood	
Alcohol inv	90.36846
Park access	6.351854
Retail dens	9.162069
Supermark	16.13499
Tree canopy	25.22777
Housing	
Homeown	70.21686
Housing ha	88.97729
Low-inc ho	91.58219
Low-inc re	68.61799
Uncrowded	66.91903
Health Outcomes	
Injured sd	87.8609
Arthritis	1.2
Asthma Ch	54
High Blood	2.1
Cancer (ew)	2.7
Asthma	28
Coronary h	1.9
Chronic Ob	3.4
Diagnosed	9.5
Life Expect	46
Cognitively	16
Physically	31
Heart Atta	39
Mental He	52
Chronic HC	2.1
Obesity	52
PeDESTIAN	71
Physical He	28
Stroke	4.4

Health Risk Behaviors	
Binge Drink	26
Current Sm	42
No Leisure	36
Climate Change Exposures	
Wildfire Ri	0
SLR Inunda	0
Children	62
Elderly	20
English Sp	78
Foreignbo	43
Outdoor W	43
Climate Change Adaptive Capacity	
Impervious	95
Traffic Den	45
Traffic Acc	23
Other Indices	
Hardship	53
Other Decision Support	77
2016 Vote	77

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroS	46
Healthy Pl	46
Project Loc No	
Project Loc No	

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state

7.4. Health & Equity Measures

Measure T Co-Benefits Achieved

7.5. Evaluation Scorecard

Category Number of Total Point Max Possible/Weighted Score

7.6. Health & Equity Custom Measures

Measure T Sponsor

8. User Changes to Default Data

Screen Justification

Land Use project description

6 days per
week, 36
month
budget

Constructs
Operations 3,554,820 Gallons/year for the exhibits

1. Basic Project Information

1.1. Basic Project Information
Data Field Value
Project Name EGZ Phase 1 operations
Operations 2029
Lead Agency
Land Use S Project/Use
Analysis In County
Windspeed 3
Precipitac 36.6
Location 18.37891510696102, -121.38702398167291
County Sacramento
City Elk Grove
Air District Sacramento Metropolitan AQMD
Air Basin Sacramento Valley
TAD 712
EDFZ 33
Electric Uti Sacramento Municipal Utility District
Gas Utility Pacific Gas & Electric
App Versio 2022.1.1.21

1.2. Land Use Types

Table with 4 columns: Land Use S Size, Unit, Lot Acreag, Building Ar Landscape Special Lan Population Description. Rows include General Of, Free-land, Day Care C, Other Aspt, City Park, and Parking Lot.

1.3. User Selected Emission Reduction Measures by Emissions Sector

Sector # Measure Title
Energy E-10 B Establish Onsite Renewable Energy Systems: Solar Power

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Table with 18 columns: Use/Me, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include Daily, Summer (Max) Unmit., % Reduced, Daily, Winter (Max) Unmit., % Reduced, Average Daily (Max) Unmit., % Reduced, and Annual (Max) Unmit., % Reduced.

2.5. Operations Emissions by Sector, Unmitigated

Table with 18 columns: Sector, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include Mobile, Area, Energy, Water, Waste, Refrig., Total, and Annual for various sectors.

2.6. Operations Emissions by Sector, Mitigated

Table with 18 columns: Sector, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include Mobile, Area, Energy, Water, Waste, Refrig., Total, and Annual for various sectors.

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated
Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available

4.1.2. Mitigated
Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Table with 18 columns: Land Use, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include General Office Building, Free-Standing Discount store, Day-Care Center, Other Asphalt Surfaces, City Park, and Parking Lot.

4.2.2. Electricity Emissions By Land Use - Mitigated

Table with 18 columns: Land Use, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include General Office Building, Free-Standing Discount store, Day-Care Center, Other Asphalt Surfaces, City Park, and Parking Lot.

															0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
															12.1	0	12.1	1.21	0	42.2										
4.5.2. Mitigated																														
Land Use TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
General Office Building	28.8																	0	28.8	2.88	0	101								
Free-Standing Discount store	42																	0	42	4.19	0	147								
Day-Care Center	1.89																	0	1.89	0.19	0	6.62								
Other Asphalt Surfaces	0																	0	0	0	0	0								
City Park	0.27																	0	0.27	0.03	0	0.93								
Parking Lot	0																	0	0	0	0	0								
Total	72.9																	0	72.9	7.29	0	255								
Daily, Winter (Max)																														
General Office Building	28.8																	0	28.8	2.88	0	101								
Free-Standing Discount store	42																	0	42	4.19	0	147								
Day-Care Center	1.89																	0	1.89	0.19	0	6.62								
Other Asphalt Surfaces	0																	0	0	0	0	0								
City Park	0.27																	0	0.27	0.03	0	0.93								
Parking Lot	0																	0	0	0	0	0								
Total	72.9																	0	72.9	7.29	0	255								
Annual																														
General Office Building	4.77																	0	4.77	0.48	0	16.7								
Free-Standing Discount store	6.95																	0	6.95	0.69	0	24.3								
Day-Care Center	0.31																	0	0.31	0.03	0	1.1								
Other Asphalt Surfaces	0																	0	0	0	0	0								
City Park	0.04																	0	0.04	< 0.005	0	0.15								
Parking Lot	0																	0	0	0	0	0								
Total	12.1																	0	12.1	1.21	0	42.2								
4.6. Refrigerant Emissions by Land Use																														
4.6.1. Unmitigated																														
Land Use TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
General Office Building	0																	0	0	0	0	0								
Free-Standing Discount store	0.09																	0.09	0.09											
Day-Care Center	0																	0	0											
City Park	0																	0	0											
Total	0.1																	0.1	0.1											
Daily, Winter (Max)																														
General Office Building	0																	0	0											
Free-Standing Discount store	0.09																	0.09	0.09											
Day-Care Center	0																	0	0											
City Park	0																	0	0											
Total	0.1																	0.1	0.1											
Annual																														
General Office Building	0																	0	0											
Free-Standing Discount store	0.01																	0.01	0.01											
Day-Care Center	< 0.005																	< 0.005	< 0.005											
City Park	0																	0	0											
Total	0.02																	0.02	0.02											
4.6.2. Mitigated																														
Land Use TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
General Office Building	0																	0	0											
Free-Standing Discount store	0.09																	0.09	0.09											
Day-Care Center	0																	0	0											
City Park	0																	0	0											
Total	0.1																	0.1	0.1											
Daily, Winter (Max)																														
General Office Building	0																	0	0											
Free-Standing Discount store	0.09																	0.09	0.09											
Day-Care Center	0																	0	0											
City Park	0																	0	0											
Total	0.1																	0.1	0.1											
Annual																														
General Office Building	0																	0	0											
Free-Standing Discount store	0.01																	0.01	0.01											
Day-Care Center	< 0.005																	< 0.005	< 0.005											
City Park	0																	0	0											
Total	0.02																	0.02	0.02											
4.7. Offroad Emissions By Equipment Type																														
4.7.1. Unmitigated																														
Equipment TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
Total																														
Daily, Winter (Max)																														
Total																														
Annual																														
Total																														
4.7.2. Mitigated																														
Equipment TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
Total																														
Daily, Winter (Max)																														
Total																														
Annual																														
Total																														
4.8. Stationary Emissions By Equipment Type																														
4.8.1. Unmitigated																														
Equipment TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
Total																														
Daily, Winter (Max)																														
Total																														
Annual																														
Total																														
4.8.2. Mitigated																														
Equipment TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
Total																														
Daily, Winter (Max)																														
Total																														
Annual																														
Total																														
4.9. User Defined Emissions By Equipment Type																														
4.9.1. Unmitigated																														
Equipment TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
Total																														
Daily, Winter (Max)																														
Total																														
Annual																														
Total																														
4.9.2. Mitigated																														
Equipment TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
Total																														
Daily, Winter (Max)																														
Total																														
Annual																														
Total																														
4.10. Soil Carbon Accumulation By Vegetation Type																														
4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated																														
Vegetation TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
Total																														
Daily, Winter (Max)																														
Total																														
Annual																														
Total																														
4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated																														
Land Use TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
Total																														
Daily, Winter (Max)																														
Total																														
Annual																														
Total																														
4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated																														
Species TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e													
Daily, Summer (Max)																														
Avoided																														
Subtotal																														
Sequestered																														
Subtotal																														
Removed																														
Subtotal																														
Daily, Winter (Max)																														
Avoided																														
Subtotal																														
Sequestered																														
Subtotal																														
Removed																														
Subtotal																														
Annual																														
Avoided																														
Subtotal																														
Sequestered																														
Subtotal																														
Removed																														
Subtotal																														

4.10.4. Soil Carbon Accumulation by Vegetation Type - Mitigated
Vegetation TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCOx NBCOx CO2T CH4 N2O R CO2e
Daily, Summer (Max)
Total
Daily, Winter (Max)
Total
Annual
Total

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated
Land Use TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCOx NBCOx CO2T CH4 N2O R CO2e
Daily, Summer (Max)
Total
Daily, Winter (Max)
Total
Annual
Total

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated
Species TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCOx NBCOx CO2T CH4 N2O R CO2e
Daily, Summer (Max)
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal
Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.9. Operational Mobile Sources

5.9.1. Unmitigated
Land Use T Trips/WeelTrips/Satur Trips/Sund Trips/Year VMT/Weel VMT/Satur VMT/Sund VMT/Year
Total all La < 0.005 < 0.005 < 0.005 1 1168 1168 1168 426320
5.9.2. Mitigated
Land Use T Trips/WeelTrips/Satur Trips/Sund Trips/Year VMT/Weel VMT/Satur VMT/Sund VMT/Year
Total all La < 0.005 < 0.005 < 0.005 1 1168 1168 1168 426320

5.10. Operational Area Sources

5.10.1. Hearths
5.10.1.1. Unmitigated
Hearth Tyg/Unmitigated (number)

5.10.1.2. Mitigated
Hearth Tyg/Unmitigated (number)

5.10.2. Architectural Coatings
Residential Residential Non-Resid Non-Resid Parking Area Coated (sq ft)

5.10.3. Landscape Equipment

Season Unit Value
Snow Days/day/yr 0
Summer D.days/yr 250

5.10.4. Landscape Equipment - Mitigated

Season Unit Value
Snow Days/day/yr 0
Summer D.days/yr 250

5.11. Operational Energy Consumption

5.11.1. Unmitigated
Land Use Electricity (CO2 CH4 N2O Natural Gas (Btu)/yr)
General Of 1323903 238 0.0129 0.0017 0
Free-Stand 169440 238 0.0129 0.0017 0
Day-Care C 20584 238 0.0129 0.0017 0
Other Asp 0 238 0.0129 0.0017 0
City Park 0 238 0.0129 0.0017 0
Parking Lot 412112 238 0.0129 0.0017 0

5.11.2. Mitigated
Land Use Electricity (CO2 CH4 N2O Natural Gas (Btu)/yr)
General Of 0 238 0.0129 0.0017 0
Free-Stand 137570 238 0.0129 0.0017 0
Day-Care C 20584 238 0.0129 0.0017 0
Other Asp 0 238 0.0129 0.0017 0
City Park 0 238 0.0129 0.0017 0
Parking Lot 412112 238 0.0129 0.0017 0

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use Indoor Wat/Outdoor Water (gal/year)
Governme 11422932 1
Free-Stand 1340713 1
Day-Care C 115802 1
Other Asp 0 1
City Park 0 55338005
Parking Lot 0 0

5.12.2. Mitigated

Land Use Indoor Wat/Outdoor Water (gal/year)
Governme 11422932 1
Free-Stand 1340713 1
Day-Care C 115802 1
Other Asp 0 1
City Park 0 55338005
Parking Lot 0 0

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use Waste (non Cogeneration (kWh/year)
General Of 3.5
Free-Stand 77.8
Day-Care C 3.5
Other Asp 0
City Park 0.49
Parking Lot 0

5.13.2. Mitigated

Land Use Waste (non Cogeneration (kWh/year)
General Of 3.5
Free-Stand 77.8
Day-Care C 3.5
Other Asp 0
City Park 0.49
Parking Lot 0

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use T Equipment Refrigerant GWP Quantity (k) Operations Service Lea Times Serviced
General Of Household R-134a 1430 0.02 0.6 0 1
General Of Other com R-410A 2088 < 0.005 4 4 18
Free-Stand Other com R-410A 2088 < 0.005 4 4 18
Free-Stand Stand-alon R-134a 1430 0.04 1 0 1
Day-Care C Household R-134a 1430 0.02 0.6 0 1
Day-Care C Other com R-410A 2088 < 0.005 4 4 18
Day-Care C Stand-alon R-134a 1430 < 0.005 1 0 1
Day-Care C Walk-in refr-404A 3922 < 0.005 7.5 7.5 20
City Park Other com R-410A 2088 < 0.005 4 4 18
City Park Stand-alon R-134a 1430 0.04 1 0 1

5.14.2. Mitigated

Land Use T Equipment Refrigerant GWP Quantity (k) Operations Service Lea Times Serviced
General Of Household R-134a 1430 0.02 0.6 0 1
General Of Other com R-410A 2088 < 0.005 4 4 18
Free-Stand Other com R-410A 2088 < 0.005 4 4 18
Free-Stand Stand-alon R-134a 1430 0.04 1 0 1
Day-Care C Household R-134a 1430 0.02 0.6 0 1
Day-Care C Other com R-410A 2088 < 0.005 4 4 18
Day-Care C Stand-alon R-134a 1430 < 0.005 1 0 1
Day-Care C Walk-in refr-404A 3922 < 0.005 7.5 7.5 20
City Park Other com R-410A 2088 < 0.005 4 4 18
City Park Stand-alon R-134a 1430 0.04 1 0 1

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Fuel Type Engine Tier Number pt/Hours Per Horsepower Load Factor

5.15.2. Mitigated

Equipment Fuel Type Engine Tier Number pt/Hours Per Horsepower Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Fuel Type Number pt/Hours per Hours per Horsepower Load Factor

5.16.2. Process Boilers

Equipment Fuel Type Number Boiler Rati/Daily Heat Annual Heat Input (MMBtu/yr)

5.17. User Defined
Equipment Fuel Type

5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated
Vegetation/Initial Acre Final Acres

5.18.1.2. Mitigated
Vegetation/Initial Acre Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated
Biomass C/Initial Acre Final Acres

5.18.1.2. Mitigated
Biomass C/Initial Acre Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated
Tree Type Number Electricity/Natural Gas Saved (btu/year)

5.18.2.2. Mitigated
Tree Type Number Electricity/Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary
Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100

Climate Ha Result for 1 Unit
Temperature 19.8 annual days of extreme heat

Extreme Pr 5 annual days with precipitation above 20 mm

Sea Level Rise 0 meters of inundation depth

Wildfire 0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 miles (mi).

Extreme Precipitation data are for the grid cell in which your project are located. The threshold on 20 mm is equivalent to about 1/8 inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 miles (mi).

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Rader et al. (2013), as reported in Cal-Adapt (Rader et al., 2017, CES-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-E3), Cooler/wetter (CNRM-CMS), Average conditions (GCM23), Range of different rainfall and temperature possibilities (MIROC3). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 miles (mi).

6.2. Initial Climate Risk Scores

Climate Ha Exposure Sensitivity Adaptive C Vulnerability Score

Temperature 1 0 0 N/A

Extreme Pr 2 0 0 N/A

Sea Level N/A N/A N/A N/A

Wildfire 1 0 0 N/A

Flooding 0 0 0 N/A

Drought 0 0 0 N/A

Snowpack N/A N/A N/A N/A

Air Quality 0 0 0 N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measure

6.3. Adjusted Climate Risk Scores

Climate Ha Exposure Sensitivity Adaptive C Vulnerability Score

Temperature 1 1 1 2

Extreme Pr 2 2 1 3

Sea Level N/A N/A N/A N/A

Wildfire 1 1 1 2

Flooding 1 1 1 2

Drought 1 1 1 2

Snowpack N/A N/A N/A N/A

Air Quality 1 1 1 2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state

Indicator Result for Project Census Tract

Exposure Indicators

AQ Ozone 45.1

AQ PM 37.5

AQ OPM 24.8

Drinking W 69.9

Lead Risk 1 5.0

Pesticides 76.5

Toxic Relie 13.1

Traffic 58.7

Effect Indicators

Chlamydia 61.8

Groundwat 82.1

Haz Waste 67.6

Impaired V 54.6

Solid Wash 64.4

Sensitive Population 24.7

Asthma 24.7

Cardio-vas 32

Low Birth 1 77.8

Socioeconomic Factor Indicators

Education 41.6

Housing 42.8

Linguistic 26.4

Poverty 13

Unemploy 7.77

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state

Indicator Result for Project Census Tract

Economic

Above Pov 60.84983

Employed 0.526113

Median HI 67.31882

Education

Bachelor's 51.50776

High school 19.24804

Preschool 1 95.7141

Transportation

Auto Acces 43.3081

Active com 34.86462

Social

2 parent th 66.67522

Voting 81.98432

Neighborhood

Alcohol av 90.56846

Park acces 6.931854

Retail dens 8.162069

Supermark 36.13499

Tree canop 52.27777

Housing

Homeown 70.21688

Housing th 88.97729

Low inc ho 91.88219

Low inc rev 88.67799

Unrowded 66.91903

Health Outcomes

Insured ad 87.8609

Arthritis 1.2

Asthma ER 34

High blood 2.1

Cancer (ew 2.7

Asthma 28

Coronary 1.9

Chronic Db 3.4

Diagnosed 9.5

Life Expect 46

Cognitively 16

Physically 31

Heart Actin 39

Mental He 52

Chronic Ri 2.1

Obesity 32

Pedestrian 71

Physical H 28

Stroke 4.4

Health Risk Behaviors

Binge Drink 98

Current Sm 42

No Leisure 36

Climate Change Exposures

Wildfire Ri 0

SLR Inunda 0

Children 60

Elderly 20

English Sp 78

Foreign bo 43

Outdoor V 43

Climate Change Adaptive Capacity

Impervious 95

Traffic Den 45

Traffic Acc 23

Other Indices

Hardship 53

Other Decision Support 2016 Voting 77

7.3. Overall Health & Equity Scores

Metric Result for Project Census Tract

CalEnviroS 46

Healthy Pl 46

Project Loc No

Project Loc No
Project Loc No
a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state

7.4. Health & Equity Measures
Measure T Co-Benefits Achieved

7.5. Evaluation Scorecard
Category Number of Total Point Max Possible Weighted Score

7.6. Health & Equity Custom Measures
Measure T Sponsor

8. User Changes to Default Data
Screen Justification
Operations No Natural Gas, fully electric project
Operations phase 1A-1B water usage

1. Basic Project Information

1.1. Basic Project Information

Data Field Value
Project Nar ESZ Phase 1B
Constructio 3
Lead Agency
Land Use 3
Analysis Le County
Windspeed 3
Precipitatio 36.6
Location 38.37682781111105, -121.38836547957598
County Sacramento
City Elk Grove
Air District Sacramento Metropolitan AQMD
Air Basin Sacramento Valley
TAZ 712
EDFZ 13
Electric Util Sacramento Municipal Utility District
Gas Utility Pacific Gas & Electric
App Versio 2022.1.1.20

1.2. Land Use Types

Table with columns: Land Use, Size, Unit, Lot Acreage, Building Area, Landscape, Special Land, Population, Description. Includes rows for City Park (0.06 to 0.13 acre), Medical Office (7.8 and 0.1 acre), and others.

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Table showing construction emissions compared against thresholds for various pollutants (SO2, PM10, PM2.5, etc.) across different scenarios (Daily, Winter, Annual) and years (2026, 2027, 2028).

2.2. Construction Emissions by Year, Unmitigated

Table showing construction emissions by year (2026-2028) for various pollutants (SO2, PM10, PM2.5, etc.) in an unmitigated scenario.

2.3. Construction Emissions by Year, Mitigated

Table showing construction emissions by year (2026-2028) for various pollutants (SO2, PM10, PM2.5, etc.) in a mitigated scenario.

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Table showing construction emissions details for site preparation (2025) in an unmitigated scenario, including location, TOG, ROG, NOx, CO, SO2, PM10, PM10D, PM10T, PM2.5, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e.

3.2. Site Preparation (2025) - Mitigated

Table showing construction emissions details for site preparation (2025) in a mitigated scenario, including location, TOG, ROG, NOx, CO, SO2, PM10, PM10D, PM10T, PM2.5, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e.

3.3. Grading (2025) - Unmitigated

Table showing construction emissions details for grading (2025) in an unmitigated scenario, including location, TOG, ROG, NOx, CO, SO2, PM10, PM10D, PM10T, PM2.5, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e.

Daily, Winter (Max)
Off-Road E: 1.4 1.51 14.1 14.5 0.02 0.64 0.64 0.59 0.59
Dust From Material Movement
Onsite truc 0 0 0 0 0 7.09 7.09 3.43 3.43
Average Daily
Off-Road E: 0.09 0.07 0.69 0.72 <0.005 0.03 0.35 0.35 0.03 0.17 0.17
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E: 0.02 0.01 0.13 0.11 <0.005 0.01 0.01 0.01 0.01 0.01
Dust From Material Movement
Onsite truc 0 0 0 0 0 0.06 0.06 0.03 0.03 0

3.4. Grading (2025) - Mitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO, NBCCO, CO2T, CH4, N2O, R, CO2e
Onsite
Daily, Summer (Max)
Daily, Winter (Max)
Off-Road E: 0.23 0.23 1.2 14.2 0.02 0.05 7.09 7.09 3.43 3.43
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Off-Road E: 0.01 0.01 0.06 0.7 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E: <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0.03 0.03 0

Daily, Summer (Max)
Daily, Winter (Max)
Worker 0.04 0.04 0.04 0.44 0 0 0.1 0.1 0 0.02 0.02
Vendor 0 0 0 0 0 0 0 0 0 0 0
Hauling 0.11 0.02 1.73 0.63 0.01 0.02 0.23 0.25 0.02 0.06 0.08
Average Daily
Worker <0.005 <0.005 <0.005 0.02 0 0 <0.005 <0.005 0 <0.005 <0.005
Vendor 0 0 0 0 0 0 0 0 0 0 0
Hauling 0.01 <0.005 0.08 0.03 <0.005 <0.005 0.01 0.01 <0.005 <0.005 <0.005
Annual
Worker <0.005 <0.005 <0.005 <0.005 0 <0.005 <0.005 0 <0.005 <0.005
Vendor 0 0 0 0 0 0 0 0 0 0 0
Hauling <0.005 <0.005 0.02 0.01 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005

3.5. Building Construction (2025) - Unmitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO, NBCCO, CO2T, CH4, N2O, R, CO2e
Onsite
Daily, Summer (Max)
Daily, Winter (Max)
Off-Road E: 1.28 1.07 8.95 10 0.02 0.33 0.33 0.3 0.3
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Off-Road E: 0.18 0.15 1.28 1.44 <0.005 0.05 <0.005 0.05 0.04 <0.005 <0.005
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E: 0.03 0.03 0.23 0.26 <0.005 0.01 <0.005 0.01 0.01 <0.005 <0.005
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0

Daily, Summer (Max)
Daily, Winter (Max)
Worker 0.03 0.01 0.01 0.11 0 0 0.03 0.03 0 0.01 0.01
Vendor <0.005 <0.005 0.07 0.03 <0.005 <0.005 0.01 0.01 <0.005 <0.005 <0.005
Hauling 0.11 0.02 1.73 0.62 0.01 0.02 0.23 0.24 0.02 0.06 0.08
Average Daily
Worker <0.005 <0.005 <0.005 0.02 0 0 <0.005 <0.005 0 <0.005 <0.005
Vendor <0.005 <0.005 0.01 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005
Hauling 0.02 <0.005 0.24 0.09 <0.005 <0.005 0.03 0.03 <0.005 0.01 0.01

3.6. Building Construction (2025) - Mitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO, NBCCO, CO2T, CH4, N2O, R, CO2e
Onsite
Daily, Summer (Max)
Daily, Winter (Max)
Off-Road E: 0.32 0.3 4.34 11 0.02 0.06 0.06 0.06 0.06
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Off-Road E: 0.05 0.04 0.62 1.58 <0.005 0.01 <0.005 <0.005 0.01 <0.005 <0.005
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E: 0.01 0.01 0.11 0.29 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0

Daily, Summer (Max)
Daily, Winter (Max)
Worker 0.01 0.01 0.01 0.11 0 0 0.03 0.03 0 0.01 0.01
Vendor <0.005 <0.005 0.07 0.03 <0.005 <0.005 0.01 0.01 <0.005 <0.005 <0.005
Hauling 0.11 0.02 1.73 0.62 0.01 0.02 0.23 0.24 0.02 0.06 0.08
Average Daily
Worker <0.005 <0.005 <0.005 0.02 0 0 <0.005 <0.005 0 <0.005 <0.005
Vendor <0.005 <0.005 0.01 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005
Hauling 0.02 <0.005 0.24 0.09 <0.005 <0.005 0.03 0.03 <0.005 0.01 0.01

3.7. Building Construction (2026) - Unmitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO, NBCCO, CO2T, CH4, N2O, R, CO2e
Onsite
Daily, Summer (Max)
Daily, Winter (Max)
Off-Road E: 1.22 1.01 8.57 9.96 0.02 0.29 0.29 0.27 0.27
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Off-Road E: 0.05 0.04 0.62 1.58 <0.005 0.01 <0.005 <0.005 0.01 <0.005 <0.005
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E: 0.01 0.01 0.11 0.29 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0

Daily, Summer (Max)
Daily, Winter (Max)
Worker 0.01 0.01 0.01 0.14 0 0 0.03 0.03 0 0.01 0.01
Vendor <0.005 <0.005 0.06 0.02 <0.005 <0.005 0.01 0.01 <0.005 <0.005 <0.005
Hauling 0.1 0.02 1.52 0.6 0.01 0.02 0.23 0.24 0.02 0.06 0.08
Average Daily
Worker <0.005 <0.005 <0.005 0.02 0 0 <0.005 <0.005 0 <0.005 <0.005
Vendor <0.005 <0.005 0.02 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005
Hauling 0.09 0.02 1.38 0.52 <0.005 0.01 0.19 0.21 0.01 0.05 0.07

3.8. Building Construction (2026) - Mitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO, NBCCO, CO2T, CH4, N2O, R, CO2e
Onsite
Daily, Summer (Max)
Daily, Winter (Max)
Off-Road E: 0.32 0.3 4.33 11 0.02 0.06 0.06 0.06 0.06
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Off-Road E: 0.32 0.3 4.33 11 0.02 0.06 0.06 0.06 0.06
Dust From Material Movement
Onsite truc 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E: 0.27 0.26 3.71 9.43 0.02 0.05 0.05 0.05 0.05

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO, CO2T, CH4, N2O, R, CO2e. Rows include: Dust From Material Movement, Onsite truc, Annual, Off-Road Ei, Dust From Material Movement, Onsite truc, Offsite, Daily, Summer (Max), Worker, Vendor, Hauling, Daily, Winter (Max), Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling, Annual, Worker, Vendor, Hauling.

3.9. Building Construction (2027) - Unmitigated Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO, CO2T, CH4, N2O, R, CO2e. Rows include: Onsite, Daily, Summer (Max), Off-Road Ei, Dust From Material Movement, Onsite truc, Daily, Winter (Max), Off-Road Ei, Dust From Material Movement, Onsite truc, Average Daily, Off-Road Ei, Dust From Material Movement, Onsite truc, Annual, Off-Road Ei, Dust From Material Movement, Onsite truc, Offsite, Daily, Summer (Max), Worker, Vendor, Hauling, Daily, Winter (Max), Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling, Annual, Worker, Vendor, Hauling.

3.10. Building Construction (2027) - Mitigated Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO, CO2T, CH4, N2O, R, CO2e. Rows include: Onsite, Daily, Summer (Max), Off-Road Ei, Dust From Material Movement, Onsite truc, Daily, Winter (Max), Off-Road Ei, Dust From Material Movement, Onsite truc, Average Daily, Off-Road Ei, Dust From Material Movement, Onsite truc, Annual, Off-Road Ei, Dust From Material Movement, Onsite truc, Offsite, Daily, Summer (Max), Worker, Vendor, Hauling, Daily, Winter (Max), Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling, Annual, Worker, Vendor, Hauling.

3.11. Building Construction (2028) - Unmitigated Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO, CO2T, CH4, N2O, R, CO2e. Rows include: Onsite, Daily, Summer (Max), Off-Road Ei, Dust From Material Movement, Onsite truc, Daily, Winter (Max), Off-Road Ei, Dust From Material Movement, Onsite truc, Average Daily, Off-Road Ei, Dust From Material Movement, Onsite truc, Annual, Off-Road Ei, Dust From Material Movement, Onsite truc, Offsite, Daily, Summer (Max), Worker, Vendor, Hauling, Daily, Winter (Max), Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling, Annual, Worker, Vendor, Hauling.

3.12. Building Construction (2028) - Mitigated Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO, CO2T, CH4, N2O, R, CO2e. Rows include: Onsite, Daily, Summer (Max), Off-Road Ei, Dust From Material Movement, Onsite truc, Daily, Winter (Max), Off-Road Ei, Dust From Material Movement, Onsite truc, Average Daily, Off-Road Ei, Dust From Material Movement, Onsite truc, Annual, Off-Road Ei, Dust From Material Movement, Onsite truc, Offsite, Daily, Summer (Max), Worker, Vendor, Hauling, Daily, Winter (Max), Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling, Annual, Worker, Vendor, Hauling.

Paving	Worker	12.5	14.3	LDA/LDT1,LD12
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	12	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur Worker		0.51	14.3	LDA/LDT1,LD12
Architectur Vendor			8.8	HHDT,MHDT
Architectur Hauling		12	20	HHDT
Architectur Onsite truck				HHDT

5.4. Vehicles
5.4.1. Construction Vehicle Control Strategies
Control Str:PM10 Red, PM2.5 Reduction

5.5. Architectural Coatings
Phase Nam:Residential Residential Non-Resid:Non-Resid: Parking Area Coated (sq ft)

Architectur	0	0	11850	3950
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5.6. Dust Mitigation
5.6.1. Construction Earthmoving Activities
Phase Nam:Material In:Material Ex:Acres Grad:Material Di:Acres Paved (acres)

Site Preparation	866	8.44	0
Grading	1733	18	0
Building Construction	86737	1.31	0
Paving	4332	1.31	0
Architectural Coating	4332	1.31	0

5.6.2. Construction Earthmoving Control Strategies
Control Str:Frequency PM10 Red:PM2.5 Reduction

5.7. Construction Paving
Land Use Area Paved:Asphalt

City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
Medical Off	0	0
City Park	0	0
Medical Off	0	0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Yr CO2	CH4	N2O
2025	0	299	0.01 < 0.005
2026	0	279	0.01 < 0.005
2027	0	267	0.01 < 0.005
2028	0	253	0.01 < 0.005

5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated
Vegetation Vegetation Initial Acre:Final Acres

5.18.1.2. Mitigated
Vegetation Vegetation Initial Acre:Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated
Biomass Colonial Acre:Final Acres

5.18.1.2. Mitigated
Biomass Colonial Acre:Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated
Tree Type Number Electricity Natural Gas Saved (btu/year)

5.18.2.2. Mitigated
Tree Type Number Electricity Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha Results for June

Temperature	19.8	annual days of extreme heat
Extreme Pr	5	annual days with precipitation above 20 mm
Sea Level R	0	meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radtke et al. (2017), as reported in Cal-Adapt (Radtke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events.

Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from LIC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Ha Exposure S Sensitivity /Adaptive C/Vulnerability Score	1	0	0	N/A
Temperature	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R N/A	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack IN/A	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt. The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assumptions for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha Exposure S Sensitivity /Adaptive C/Vulnerability Score	1	1	1	2
Temperature	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R N/A	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack IN/A	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt. The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator Result for Project Census Tract

Exposure Indicators	
AQ Ozone	45.1
AQ PM	37.5
AQ OPM	24.8
Drinking W	69.9
Lead Risk H	5.61
Pesticides	76.5
Toxic Release	13.1
Traffic	58.7
Effect Indicators	
CleanUp Sit	61.8
Groundwat	82.1
Haz Waste	67.6
Impaired W	94.6
Solid Waste	64.4
Sensitive Population	
Asthma	28.7
Cardio-vasc	32
Low Birth W	77.8
Socioeconomic Factor Indicators	
Education	41.6
Housing	42.8
Linguistic	26.4
Poverty	13
Unemploye	7.77

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic	
Above Pov	60.54923
Employed	0.526113
Median HI	67.31182
Education	
Bachelor's	51.50776
High school	19.24804
Preschool <	95.7141
Transportation	
Auto Acces	43.3081
Active com	34.86462
Social	
2-parent hc	66.67522
Voting	91.95432
Neighborhood	
Alcohol ave	90.56846
Park access	6.351054
Retail dens	9.160369
Supermark	36.13499

Tree canop 25.22777
 Housing
 Homeowne 70.21686
 Housing Ia 88.97729
 Low-inc ho 91.58229
 Low-inc rer 88.61799
 Uncrowdec 66.91903
 Health Outcomes
 Insured tab 87.8609
 Arthritis 1.2
 Asthma ER 34
 High Blood 2.1
 Cancer (ex 2.7
 Asthma 28
 Coronary H 1.9
 Chronic Ob 3.4
 Diagnosed 9.3
 Life Expect 46
 Cognitively 16
 Physically 31
 Heart Attac 39
 Mental Hez 52
 Chronic Kid 2.1
 Obesity 52
 Pedestrian 71
 Physical He 28
 Stroke 4.4
 Health Risk Behaviors
 Binge Drink 98
 Current Sm 42
 No Leisure 36
 Climate Change Exposures
 Wildfire Ri 0
 SLR Inunda 0
 Children 60
 Elderly 20
 English Spe 78
 Foreign-bo 43
 Outdoor W 43
 Climate Change Adaptive Capacity
 Impervious 95
 Traffic Den 45
 Traffic Ace 23
 Other Indices
 Hardship 53
 Other Decision Support
 2016 Votin 77

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	46
Healthy Pla	46
Project Loc No	
Project Loc No	
Project Loc No	

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
 b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T1-Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Point Max Possib Weighted Score
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7.6. Health & Equity Custom Measures

Measure T1-Sponsor

8. User Changes to Default Data

Screen	Justification
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6 days a
 week
 winter
 2025 to
 beginning
 2029
 added
 mitigation
 measure
 of adding
 six 4 final
 engines to
 equipmen
 t with
 over 50
 horsepower

Constructive

Constructive Grading for entire project so would be spread out through entire phase based on timing of each phase

1. Basic Project Information

1.1. Basic Project Information

Data Field Value
Project Nar EQ2 Phase 1C
Construction 1/1/2029
Lead Agency
Land Use S/Project/site
Analysis Le County
Windspeed 3
Precipitation 36.6
Location 38.37026450856266, -121.3876716480089
County Sacramento
City Elk Grove
Air District Sacramento Metropolitan AQMD
Air Basin Sacramento Valley
TAZ 712
EDFZ 13
Electric Util Sacramento Municipal Utility District
Gas Utility Pacific Gas & Electric
App Verbio 2022.1.1.14

1.2. Land Use Types

Table with columns: Land Use, Size, Unit, Lot Area, Building Area, Landscape, Special Lan, Population, Description. Includes rows for City Park, City Park, City Park, City Park, Medical Of.

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Table with columns: Unit/Mt, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include Daily Summer (Max), Daily Winter (Max), Average Daily (Max), Annual (Max).

2.2. Construction Emissions by Year, Unmitigated

Table with columns: Year, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include Daily Summer (Max) for years 2029, 2030, 2031, 2032 and Average Daily for years 2029, 2030, 2031, 2032.

3. Construction Emissions Details

3.1. Site Preparation (2029) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, Onsite truc, Annual, Off-Road E, Dust From Material Movement, Onsite truc, Offsite, Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling, Annual, Worker, Vendor, Hauling.

3.3. Grading (2029) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, Onsite truc, Annual, Off-Road E, Dust From Material Movement, Onsite truc, Offsite, Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling, Annual, Worker, Vendor, Hauling.

3.5. Building Construction (2029) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, Onsite truc, Annual, Off-Road E, Dust From Material Movement, Onsite truc, Offsite, Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling, Annual, Worker, Vendor, Hauling.

3.7. Building Construction (2030) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, Onsite truc, Daily, Winter (Max).

Total
Daily, Winter (Max)
Total
Annual
Total

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	1D0	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e	
Avoided																			
Subtotal																			
Sequestered																			
Subtotal																			
Removed																			
Subtotal																			

Daily, Winter (Max)

Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per Wk	Work Days	Phase Description
Site Prepar	Site Prepar	1/1/2029	#####	6	22	
Grading	Grading	#####	3/9/2029	6	36	
Building Co	Building Co	3/9/2029	#####	6	103	
Paving	Paving	#####	#####	6	81	
Architectur	Architectur	#####	#####	6	81	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment Fuel Type	Engine Tier	Number	pe Hours	Per 1 Horsepower	Load Factor
Site Prepar	Rubber Tirt Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc Diesel	Average	4	8	84	0.37
Grading	Graders Diesel	Average	1	8	148	0.41
Grading	Excavators Diesel	Average	1	8	36	0.38
Grading	Tractors/Lc Diesel	Average	3	8	84	0.37
Grading	Rubber Tirt Diesel	Average	1	8	367	0.4
Building Co	Cranes Diesel	Average	1	7	367	0.29
Building Co	Rokfills Diesel	Average	3	8	82	0.2
Building Co	Generator Diesel	Average	1	8	14	0.24
Building Co	Welders Diesel	Average	1	8	46	0.45
Building Co	Tractors/Lc Diesel	Average	3	7	84	0.37
Paving	Tractors/Lc Diesel	Average	1	8	84	0.37
Paving	Cement an Diesel	Average	2	6	10	0.56
Paving	Pavers Diesel	Average	1	8	81	0.42
Paving	Paving Equ Diesel	Average	2	6	89	0.36
Paving	Rollers Diesel	Average	2	6	36	0.38
Architectur	Air Compre Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T Miles	per T Vehicle	Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LD,LD1,LD2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading	Worker	15	14.3	LD,LD1,LD2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Co	Worker	7.78	14.3	LD,LD1,LD2
Building Co	Vendor	3.98	8.8	HHDT,MHDT
Building Co	Hauling	0	20	HHDT
Building Co	Onsite truck			HHDT
Paving				
Paving	Worker	20	14.3	LD,LD1,LD2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectur	Coating	1.56	14.3	LD,LD1,LD2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str:PM10 Red,PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam:Residential Residential Non-Reside Non-Reside Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material on Material	Excess Grad	Material	Du:excess Paved (acre)
Site Preparation				33 0
Grading				36 0
Paving	0	0	0	0 0

5.6.2. Construction Earthmoving Control Strategies

Control Str:Frequency PM10 Red,PM2.5 Reduction

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
Medical OF	0	0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Yr	CO2	CH4	N2O
2029	0	375	0.01 < 0.005	
2030	0	375	0.01 < 0.005	
2031	0	375	0.01 < 0.005	
2032	0	375	0.01 < 0.005	

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation:Vegetation Initial Acre:Final Azres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Co:Initial Acre:Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type: Number Electricity+Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard Result for 1 Hour

Temperature	18.8 annual days of extreme heat
Extreme Pr	5 annual days with precipitation above 20 mm
Sea Level R	0 meters of inundation depth
Wildfire	0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about 3/4 inch of rain, which would be light to moderate rainfall if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Budden et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from LIC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard Exposure Sensitivity Adaptive C/Vulnerability Score

Temperature	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R/N/A	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack IN/A	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard Exposure Sensitivity Adaptive C/Vulnerability Score

Temperature	1	1	1	2
Extreme Pr	2	1	1	3

Sea Level Rise	R/N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt. The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator Result for Project Census Tract

Exposure Indicators

AQ-Dzone	45.3
AQ-PM	37.5
AQ-DPM	24.8
Drinking W	60.9
Lead Risk H	5.63
Pesticides	76.5
Toxic Relea	13.3
Traffic	58.7
Effect Indicators	
ChandUp St	61.8
Groundwat	82.3
Haz Waste	67.6
Impaired W	94.6
Solid Waste	64.4
Sensitive Population	
Asthma	24.7
Cardiovasc	32
Low Birth V	77.8
Socioeconomic Factor Indicators	
Education	41.6
Housing	42.8
Linguistic	26.4
Poverty	13
Unemploy	7.77

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic

Above Pov	60.34903
Employed	0.526113
Median HI	67.211682

Education

Bachelor's	51.50776
High school	12.24826
Preschool e	95.7141

Transportation

Auto Acces	43.3081
Active com	34.86462

Social

2 parent hr	66.67522
Voting	91.95432
Neighborhood	
Alcohol use	90.16846
Park access	6.351854
Retail dens	9.162269
Supermark	16.13499
Tree canop	25.22777
Housing	
Homeowne	70.21686
Housing ha	88.97729
Low-inc ho	91.58239
Low-inc rer	88.61799
Uncredwed	66.91903

Health Outcomes

Insured job	87.8629
Arthritis	1.2
Asthma ER	54
High blood	2.1
Cancer (ex	2.7
Asthma	28
Coronary H	1.9
Chronic Ob	3.4
Diagnosed	9.5
Life Expect	46
Cognitively	16
Physically	31
Heart attac	39
Mental He	52
Chronic Kid	2.1
Obesity	52
Pedestrian	71
Physical He	28
Stroke	4.4

Health Risk Behaviors

Binge Drink	98
Current Sm	42
No Leisure	36

Climate Change Exposures

Wildfire Ris	0
SLR Inunda	0
Children	60
Elderly	20
English Spe	78
Foreign bo	43
Outdoor W	43

Climate Change Adaptive Capacity

Impervious	95
Traffic Den	45
Traffic Acc	23

Other Indices

Hardship	53
Other Decision Support	
2016 Votin	77

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	46
Healthy Pla	46
Project Loc No	
Project Loc No	

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure TI Co-Benefits Achieved

7.5. Evaluation Scorecard

Category Number of Total Point Max Possib-Weighted Score

7.6. Health & Equity Custom Measures

Measure TI Sponsor

8. User Changes to Default Data

Screen Justification

ConstructiveProject description and 6 days a week

Paving	Cement on Diesel	Average	2	6	10	0.56
Paving	Powers Diesel	Average	1	8	21	0.42
Paving	Paving Equ Diesel	Average	2	6	89	0.36
Paving	Rollers Diesel	Average	2	6	36	0.38
Architectur Ai Compr	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated Phase Nam Trip Type One-Way T Miles per Vehicle Mx

Site Preparation						
Site Prepar Worker	17.5	14.3	LD,LD1,LD12			
Site Prepar Vendor		8.8	HHOT,MHDT			
Site Prepar Hauling	0	20	HHOT			
Site Prepar Onsite truck			HHOT			
Grading						
Grading Worker	15	14.3	LD,LD1,LD12			
Grading Vendor		8.8	HHOT,MHDT			
Grading Hauling	0	20	HHOT			
Grading Onsite truck			HHOT			
Building Construction						
Building Co Worker	15.5	14.3	LD,LD1,LD12			
Building Co Vendor	7.21	8.8	HHOT,MHDT			
Building Co Hauling	0	20	HHOT			
Building Co Onsite truck			HHOT			
Paving						
Paving Worker	20	14.3	LD,LD1,LD12			
Paving Vendor		8.8	HHOT,MHDT			
Paving Hauling	0	20	HHOT			
Paving Onsite truck			HHOT			
Architectur Coating						
Architectur Worker	3.1	14.3	LD,LD1,LD12			
Architectur Vendor		8.8	HHOT,MHDT			
Architectur Hauling	0	20	HHOT			
Architectur Onsite truck			HHOT			

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str:PM10 Red,PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam Residential Residential Non-Resid Non-Resid Parking Area Coated (sq ft)

Architectur	0	0	66000	23000
-------------	---	---	-------	-------

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam Material In Material Ex Acres Grad Material Di Acres Paved (acres)

Site Preparation		16.5	0
Grading		18	0
Paving	0	0	0

5.6.2. Construction Earthmoving Control Strategies

Control Str:Frequency PM10 Red,PM2.5 Reduction

5.7. Construction Paving

Land Use Area Paved % Asphalt

Hospital	0	0
Fast Food R	0	0
Health Clu	0	0
Hotel	0	0
General Of	0	0
Recreation	0	0
Day Care C	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
General Of	0	0
Medical Of	0	0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per YEC2	CH4	N2O
2033	0	178	0.01 < 0.005
2034	0	163	0.01 < 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Vegetation Initial Acre/Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Coalbit Acre/Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type Number Electricity Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha Result for June

Temperatu	19.8	annual days of extreme heat
Extreme Pr	5	annual days with precipitation above 20 mm
Sea Level R	0	meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radtke et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Ha Exposure 5 Sensitivity /Adaptive Cv Vulnerability Score

Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R/N/A	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack IN/A	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha Exposure 5 Sensitivity /Adaptive Cv Vulnerability Score

Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R/N/A	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack IN/A	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. California Screen A-D Scores

The maximum California Screen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator Result for Project Census Tract

Exposure Indicators	
AQ Ozone	46.1
AQ PM	37.5
AQ DPM	24.8
Drinking W	69.9
Lead Risk H	5.61
Pesticides	76.5
Toxic Releases	13.1
Traffic	58.7
Effect Indicators	
Chronic SI	61.8
Groundwat	82.1
Haz Waste	67.6
Impaired W	94.6
Solid Wast	64.4
Sensitive Population	
Asthma	24.7
Cardio-vasc	32
Low Birth V	77.8
Socioeconomic Factor Indicators	
Education	41.6
Housing	42.8
Linguistic	26.4
Poverty	1.3
Unemploy	7.77

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic	
----------	--

Above Pov 60.34903
 Employed 0.326113
 Median HI 67.31682
 Education
 Bachelor's 51.50776
 High school 19.24804
 Preschool 95.7141
 Transportation
 Auto Acces 83.3081
 Active com 34.86462
 Social
 7 parent hc 66.67522
 Voting 91.95432
 Neighborhood
 Alcohol ava 90.56846
 Park access 6.351854
 Retail dem 9.162069
 Supermark 36.13499
 Tree canop 25.22777
 Housing
 Homeown 70.21686
 Housing ha 88.97729
 Low inc ho 91.58239
 Low inc rer 88.61799
 Uncrowdec 66.91903
 Health Outcomes
 Insured lab 87.8609
 Arthritis 1.2
 Asthma ER 54
 High blood 2.1
 Cancer (ex 2.7
 Asthma 28
 Coronary H 1.9
 Chronic Ob 3.4
 Diagnosed 9.5
 Life Expect 46
 Cognitively 16
 Physically 31
 Heart attac 39
 Mental Hez 52
 Chronic Kid 2.1
 Obesity 52
 Pedestrian 71
 Physical He 28
 Stroke 4.4
 Health Risk Behaviors
 Binge Drink 98
 Current Sm 42
 No Leisure 36
 Climate Change Exposures
 Wildfire Ri 0
 SLR Inunda 0
 Children 60
 Elderly 20
 English Spe 78
 Foreign Bo 43
 Outdoor W 43
 Climate Change Adaptive Capacity
 Impervious 95
 Traffic Den 45
 Traffic Accr 23
 Other Indices
 Hardship 53
 Other Decision Support
 2016 Vote 77

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CallEnviroSc	46
Healthy Pla	46
Project Loc No	
Project Loc No	

a: The maximum CallEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
 b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T1-Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Point Max Possib Weighted Score
----------	---

7.6. Health & Equity Custom Measures

Measure T1-Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	Project description
Constructio	6 days a week, schedule timing from PD
Operations	got rid of NaN

1.1. Basic Project Information

Data Field Value
Project Nar EQZ Phase 3
Construction: 1/1/2035
Lead Agency
Land Use S/Project/site
Analysis Le County
Windspeed 3
Precipitation 36.6
Location 38-380785679189576, -121.38934529264463
County Sacramento
City Elk Grove
Air District Sacramento Metropolitan AQMD
Air Basin Sacramento Valley
TAZ 712
EDFZ 13
Electric Util Sacramento Municipal Utility District
Gas Utility Pacific Gas & Electric
App Verbio 2022.1.1.14

1.2. Land Use Types

Land Use 5 Size Unit Lot Acreage/Building F Landscape Special Lan Population Description
General Off 10.6 1000sqft 0.24 10600 10600

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector # Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Table with 18 columns: Un/Mit, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include Daily, Summer (Max), Wint, Winter (Max), Average Daily (Max), and Annual (Max) for Unmitigated and Mitigated scenarios.

2.2. Construction Emissions by Year, Unmitigated

Table with 18 columns: Year, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows show data for years 2035, 2036, 2037, 2038, and 2039, including Daily, Winter (Max), Average Daily, and Annual emissions.

3. Construction Emissions Details

3.1. Demolition (2035) - Unmitigated

Table with 18 columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Demolition Onsite, Average Daily, Annual, and Worker emissions for Demolition (2035).

3.3. Site Preparation (2035) - Unmitigated

Table with 18 columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, Average Daily, Annual, and Worker emissions for Site Preparation (2035).

3.5. Grading (2035) - Unmitigated

Table with 18 columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, Average Daily, Annual, and Worker emissions for Grading (2035).

3.7. Building Construction (2035) - Unmitigated

Table with 18 columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, Average Daily, Annual, and Worker emissions for Building Construction (2035).

Phase Nam Residential Residential Non-Reside Non-Reside Parking Area Coated (sq ft)
Architectur 0 0 15900 5300

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities
Phase Nam Material In Material Ex Acres Grad Material Di Acres Paved (acres)
Demolition 0 0 0
Site Preparation 7 7 0
Grading 21 0
Paving 0 0 0 0 0

5.6.2. Construction Earthmoving Control Strategies

Control Str:Frequency PM10 Red,PM2.5 Reduction

5.7. Construction Paving

Land Use Area Paved% Asphalt
General OH 0 0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per sqCO2	CH4	N2O
2035	0	149	0.01 < 0.005
2036	0	134	0.01 < 0.005
2037	0	119	0.01 < 0.005
2038	0	104	0.01 < 0.005
2039	0	89	0.01 < 0.005

5.18. Vegetation

5.18.1. Land Use Change
5.18.1.1. Unmitigated
Vegetation Vegetation Initial Acre:Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated
Biomass C:Initial Acre:Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated
Tree Type Number Electricity Natural Gas Saved (Btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha Result for #Unit

Temperatu 19.8 annual days of extreme heat
Extreme Pr 5 annual days with precipitation above 20 mm
Sea Level R 0 meters of inundation depth
Wildfire 0 annual hectares burned

Temperature and Extreme Heat data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about 1/4 inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about 1/4 inch of rain, which would be light to moderate rainfall if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Hader et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadEM2-E5), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC3). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadEM2-E5), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC3). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Ha Exposure Sensitivity Adaptive Cvulnerability Score

Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt. The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha Exposure Sensitivity Adaptive Cvulnerability Score

Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt. The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator Result for Project Census Tract

Exposure Indicators

AQ Ozone
AQ PM
AQ OPM
Drinking Water
Lead Risk Housing
Pesticides
Toxic Releases
Traffic
Effect Indicators
CleanUp Sites
Groundwater
Hazard Waste Facilities/Generators
Impaired Water Bodies
Solid Waste
Sensitive Population
Asthma
Cardio-vascular
Low Birth Weights
Socioeconomic Factor Indicators
Education
Housing
Linguistic
Poverty
Unemployment

7.2. Healthy Places Index Score

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic

Above Poverty
Employed
Median HI
Education
Bachelor's or higher
High school enrollment
Preschool enrollment
Transportation
Auto Access
Active commuting
Social
2-parent households
Voting
Neighborhood
Alcohol availability
Park access
Retail density
Supermarket access
Tree canopy
Housing
Homeownership
Housing instability
Low-inc homeowner severe housing cost burden
Low-inc renter severe housing cost burden
Uncrowded housing
Health Outcomes
Insured Adults
Asthma
Asthma ER Admissions
High Blood Pressure
Cancer (excluding skin)
Asthma
Coronary Heart Disease
Chronic Obstructive Pulmonary Disease
Diagnosed Diabetes
Life Expectancy at Birth
Cognitively Disabled
Physically Disabled
Heart Attack ER Admissions
Mental Health Not Good
Chronic Kidney Disease
Obesity
Pedestrian Injuries
Physical Health Not Good
Stroke
Health Risk Behaviors
Binge Drinking
Current Smoker
No Leisure Time for Physical Activity
Climate Change Exposures
Wildfire Risk
SIR Foundation Area
Children

Elderly
English Speaking
Foreign-born
Outdoor Workers
Climate Change Adaptive Capacity
Impervious Surface Cover
Traffic Density
Traffic Access
Other Indices
Hardship
Other Decision Support
2016 Voting

7.3. Overall Health & Equity Scores

Metric Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)
Health Places Index Score for Project Location (b)
Project Loc No
Project Loc No
Project Loc No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure TI Co-Benefits Achieved

7.5. Evaluation Scorecard

Category Number of Total Point Max Possib Weighted Score

7.6. Health & Equity Custom Measures

Measure TI Sponsor

8. User Changes to Default Data

Screen Justification

Constructic 6 days a week

1. Basic Project Information

1.1. Basic Project Information

Data Field Value
Project Nar EQ2 Phase 4
Construction 1/1/2040
Lead Agency
Land Use SrProject/site
Analysis Le County
Windspeed 3
Precipitation 36.6
Location 38.38033334658811, -121.3901237359456
County Sacramento
City Elk Grove
Air District Sacramento Metropolitan AQMD
Air Basin Sacramento Valley
TAZ 712
EDF2 13
Electric Util Sacramento Municipal Utility District
Gas Utility Pacific Gas & Electric
App Versio 2022.1.1.14

1.2. Land Use Types

Table with columns: Land Use S, Unit, Lot Acreage, Building Area, Landscape, Special Lan, Population, Description. Rows include General Off, Fast Food R, Health Clc, Racquet Cl, Automobile, City Park, etc.

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Table with columns: Unit/Me, TOG, ROG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include Daily, Summer (Max), Daily, Winter (Max), Average Daily (Max), Annual (Max).

2.2. Construction Emissions by Year, Unmitigated

Table with columns: Year, TOG, ROG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include 2040, 2041, 2042 for various metrics.

3. Construction Emissions Details

3.1. Site Preparation (2040) - Unmitigated

Table with columns: Location, TOG, ROG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Off-Road E, Dust From Material Movement, Onsite truc, Annual, Off-Road E, Dust From Material Movement, Onsite truc, Offsite, Daily, Summer (Max), Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling.

3.3. Grading (2040) - Unmitigated

Table with columns: Location, TOG, ROG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Daily, Summer (Max), Off-Road E, Dust From Material Movement, Onsite truc, Annual, Off-Road E, Dust From Material Movement, Onsite truc, Offsite, Daily, Summer (Max), Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling.

3.5. Building Construction (2040) - Unmitigated

Table with columns: Location, TOG, ROG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCCO2, CO2T, CH4, N2O, R, CO2e. Rows include Onsite, Daily, Summer (Max), Off-Road E, Dust From Material Movement, Onsite truc, Annual, Off-Road E, Dust From Material Movement, Onsite truc, Offsite, Daily, Summer (Max), Worker, Vendor, Hauling, Average Daily, Worker, Vendor, Hauling.

Drought	1	1	1	2
Snowpack (N/A)	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt. The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator Result for Project Census Tract

Exposure Indicators

- AQ-Dzone
- AQ-PM
- AQ-DPM
- Drinking Water
- Lead Risk Housing
- Pesticides
- Toxic Releases
- Traffic
- Effect Indicators
- CleanUp Sites
- Groundwater
- Haz Waste Facilities/Generators
- Impaired Water Bodies
- Solid Waste
- Sensitive Population
- Asthma
- Cardio-vascular
- Low Birth Weights
- Socioeconomic Factor Indicators
- Education
- Housing
- Linguistic
- Poverty
- Unemployment

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic

- Above Poverty
- Employed
- Median HI
- Education
- Bachelor's or higher
- High school enrollment
- Preschool enrollment
- Transportation
- Auto Access
- Active commuting
- Social
- 2 parent households
- Voting
- Neighborhood
- Alcohol availability
- Park access
- Retail density
- Supermarket access
- Tree canopy
- Housing
- Homeownership
- Housing habitability
- Low-inc homeowner severe housing cost burden
- Low-inc renter severe housing cost burden
- Uncrowded housing
- Health Outcomes
- Insured adults
- Arthritis
- Asthma ER Admissions
- High Blood Pressure
- Cancer (excluding skin)
- Asthma
- Coronary Heart Disease
- Chronic Obstructive Pulmonary Disease
- Diagnosed Diabetes
- Life Expectancy at Birth
- Cognitively Disabled
- Physically Disabled
- Heart Attack ER Admissions
- Mental Health Not Good
- Chronic Kidney Disease
- Obesity
- Pedestrian Injuries
- Physical Health Not Good
- Stroke
- Health Risk Behaviors
- Binge Drinking
- Current Smoker
- No Leisure Time for Physical Activity
- Climate Change Exposures
- Wildfire Risk
- SLR Inundation Area
- Children
- Elderly
- English Speaking
- Foreign born
- Outdoor Workers
- Climate Change Adaptive Capacity
- Impervious Surface Cover
- Traffic Density
- Traffic Access
- Other Indices
- Hardship
- Other Decision Support
- 2016 Voting

7.3. Overall Health & Equity Scores

Metric Result for Project Census Tract

CalEnviroScreen 4.0 Score for Project Location (a)

Healthy Places Index Score for Project Location (b)

Project Loc No

Project Loc No

Project Loc No

Project Loc No

Project Loc No

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1. Basic Project Information

1.1. Basic Project Information

Data Field Value
Project Name: Project NarEZ Operations
Operations: 2043
Lead Agency: 2043
Land Use: 2043
Analysis Le/County: 2043
Widespread: 3
Precipitation: 36.6
Location: 38.3783488117008, -121.38807759275002
County: Sacramento
City: Elk Grove
Air District: Sacramento Metropolitan AQMD
Air Basin: Sacramento Valley
TAZ: 712
EDF#: 13
Electric Util: Sacramento Municipal Utility District
Gas Utility: Pacific Gas & Electric
App Version: 2022.1.1.19

1.2. Land Use Types

Table with columns: Land Use, Size, Unit, Lot Acreage, Building Area, Landscape, Special, Land Population, Description. Rows include General OH, Free Stand, Day Care C, Fast Food R, City Park, Hotel, Other Asphalt, Parking Lot.

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector # Measure Title
Energy E-10-B Establish Onsite Renewable Energy Systems: Solar Power

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Table with columns: Land Use, TSG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include Daily, Summer (Max), Winter (Max), Average Daily (Max), Annual (Max) for various land uses.

2.5. Operations Emissions by Sector, Unmitigated

Table with columns: Sector, TSG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include Mobile, Area, Energy, Water, Waste, Refrig. for various sectors.

2.6. Operations Emissions by Sector, Mitigated

Table with columns: Sector, TSG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include Mobile, Area, Energy, Water, Waste, Refrig. for various sectors.

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Table with columns: Land Use, TSG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include General OH, Free Stand, Day Care C, Fast Food R, City Park, Hotel, Other Asphalt, Parking Lot, Daily, Summer (Max), Winter (Max), Annual.

4.1.2. Mitigated

Table with columns: Land Use, TSG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO, NBCCO, CO2T, CH4, N2O, R, CO2e. Rows include General OH, Free Stand, Day Care C, Fast Food R, City Park, Hotel, Other Asphalt, Parking Lot, Daily, Summer (Max).

Consumer Products		3																			2.82						
Architectural Coatings		0.33																			2.82						
Landscape		0.13		0.12		0.01		0.75 <0.005		<0.005		<0.005		<0.005		<0.005		2.81		2.81 <0.005		<0.005		2.82			
Total		0.13		3.45		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		2.81		2.81 <0.005		<0.005		2.82			
4.3.2. Mitigated																											
Source	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e									
Daily, Summer (Max)																											
Consumer Products																											
Architectural Coatings																											
Landscape																											
Total																											
Daily, Winter (Max)																											
Consumer Products																											
Architectural Coatings																											
Landscape																											
Total																											
Annual																											
Consumer Products																											
Architectural Coatings																											
Landscape																											
Total																											
4.4. Water Emissions by Land Use																											
4.4.1. Unmitigated																											
Land Use	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e									
Daily, Summer (Max)																											
General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
Parking Lot																											
Total																											
Daily, Winter (Max)																											
General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
Parking Lot																											
Total																											
Annual																											
General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
Parking Lot																											
Total																											
4.4.2. Mitigated																											
Land Use	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e									
Daily, Summer (Max)																											
General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
Parking Lot																											
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Daily, Winter (Max)																											
General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
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Other Asphalt Surfaces																											
Parking Lot																											
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General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
Parking Lot																											
Total																											
4.5. Waste Emissions by Land Use																											
4.5.1. Unmitigated																											
Land Use	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e									
Daily, Summer (Max)																											
General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
Parking Lot																											
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General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
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Other Asphalt Surfaces																											
Parking Lot																											
Total																											
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General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
Parking Lot																											
Total																											
4.5.2. Mitigated																											
Land Use	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e									
Daily, Summer (Max)																											
General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
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Other Asphalt Surfaces																											
Parking Lot																											
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General Office Building																											
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General Office Building																											
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Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
Parking Lot																											
Total																											
4.6. Refrigerant Emissions by Land Use																											
4.6.1. Unmitigated																											
Land Use	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e									
Daily, Summer (Max)																											
General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
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General Office Building																											
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General Office Building																											
Free-Standing Discount store																											
Day-Care Center																											
Fast Food Restaurant w/o Drive Thru																											
City Park																											
Hotel																											
Other Asphalt Surfaces																											
Parking Lot																											
Total																											

Subtotal

Daily, Winter (Max)

Avoided

Subtotal

Sequestered

Subtotal

Removed

Subtotal

Annual

Avoided

Subtotal

Sequestered

Subtotal

Removed

Subtotal

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use	Trips/Week	Trips/Satur	Trips/Year	VMT/Week	VMT/Satur	VMT/Year
General OH	286	286	286	104527	3755	3755
Free-Stand	286	286	286	104527	3755	3755
Day-Care C	286	286	286	104527	3755	3755
Fast Food R	286	286	286	104527	3755	3755
City Park	286	286	286	104527	3755	3755
Hotel	286	286	286	104527	3755	3755
Other Asph	286	286	286	104527	3755	3755
Parking Lot	286	286	286	104527	3755	3755

5.9.2. Mitigated

Land Use	Trips/Week	Trips/Satur	Trips/Year	VMT/Week	VMT/Satur	VMT/Year
General OH	286	286	286	104527	3755	3755
Free-Stand	286	286	286	104527	3755	3755
Day-Care C	286	286	286	104527	3755	3755
Fast Food R	286	286	286	104527	3755	3755
City Park	286	286	286	104527	3755	3755
Hotel	286	286	286	104527	3755	3755
Other Asph	286	286	286	104527	3755	3755
Parking Lot	286	286	286	104527	3755	3755

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Typ Unmitigated (number)

5.10.1.2. Mitigated

Hearth Typ Unmitigated (number)

5.10.2. Architectural Coatings

Residential Residential / Non-Reside Non-Reside Parking Area Coated (sq ft)

0 0 135683 462278 28743

5.10.3. Landscape Equipment

Season Unit Value

Snow Days day/yr 0

Summer D day/yr 365

5.10.4. Landscape Equipment - Mitigated

Season Unit Value

Snow Days day/yr 0

Summer D day/yr 365

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Land Use	Electricity (CO2)	CH4	N2O	Natural Gas (kBtu/yr)
General OH	418583	30	0.0129	0.0017
Free-Stand	248011	30	0.0129	0.0017
Day-Care C	96819	30	0.0129	0.0017
Fast Food R	208785	30	0.0129	0.0017
City Park	0	30	0.0129	0.0017
Hotel	12421	30	0.0129	0.0017
Other Asph	0	30	0.0129	0.0017
Parking Lot	412112	30	0.0129	0.0017

5.11.2. Mitigated

Land Use	Electricity (CO2)	CH4	N2O	Natural Gas (kBtu/yr)
General OH	0	30	0.0129	0.0017
Free-Stand	217441	30	0.0129	0.0017
Day-Care C	96819	30	0.0129	0.0017
Fast Food R	208785	30	0.0129	0.0017
City Park	0	30	0.0129	0.0017
Hotel	12421	30	0.0129	0.0017
Other Asph	0	30	0.0129	0.0017
Parking Lot	412112	30	0.0129	0.0017

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use Indoor Wat Outdoor Water (gal/year)

Medical OH 22812362 1

Free-Stand 1970329 1

Day-Care C 544698 1

Fast Food R 16223877 1

City Park 0 78204343

Hotel 253668 1

Other Asph 0 1

Parking Lot 0 1

5.12.2. Mitigated

Land Use Indoor Wat Outdoor Water (gal/year)

Medical OH 22812362 1

Free-Stand 1970329 1

Day-Care C 544698 1

Fast Food R 16223877 1

City Park 0 78204343

Hotel 253668 1

Other Asph 0 1

Parking Lot 0 1

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use Waste (ton Cogeneration (kWh/year)

General OH 169

Free-Stand 114

Day-Care C 16.5

Fast Food R 656

City Park 1.29

Hotel 5.47

Other Asph 0

Parking Lot 0

5.13.2. Mitigated

Land Use Waste (ton Cogeneration (kWh/year)

General OH 169

Free-Stand 114

Day-Care C 16.5

Fast Food R 656

City Park 1.29

Hotel 5.47

Other Asph 0

Parking Lot 0

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use T Equipment Refrigerant GWP Quantity (Operations Service Lea Times Serviced)

General OH Household R-134a 1430 0.02 0.6 0 1

General OH Other com R-410A 2088 < 0.005 4 4 18

Free-Stand Other com R-410A 2088 < 0.005 4 4 18

Free-Stand Stand alone R-134a 1430 0.04 1 0 1

Day-Care C Household R-134a 1430 0.02 0.6 0 1

Day-Care C Other com R-410A 2088 < 0.005 4 4 18

Day-Care C Stand alone R-134a 1430 < 0.005 1 0 1

Day-Care C Walk in ref R-404A 3922 < 0.005 7.5 7.5 20

Fast Food R Household R-134a 1430 0 0.6 0 1

Fast Food R Other com R-410A 2088 1.8 4 4 18

Fast Food R Walk in ref R-404A 3922 < 0.005 7.5 7.5 20

City Park Other com R-410A 2088 < 0.005 4 4 18

City Park Stand alone R-134a 1430 0.04 1 0 1

Hotel Household R-134a 1430 0 0.6 0 1

Hotel Other com R-410A 2088 1.8 4 4 18

Hotel Walk in ref R-404A 3922 < 0.005 7.5 7.5 20

5.14.2. Mitigated

Land Use T Equipment Refrigerant GWP Quantity (Operations Service Lea Times Serviced)

General OH Household R-134a 1430 0.02 0.6 0 1

General OH Other com R-410A 2088 < 0.005 4 4 18

Free-Stand Other com R-410A 2088 < 0.005 4 4 18

Free-Stand Stand alone R-134a 1430 0.04 1 0 1

Day-Care C Household R-134a 1430 0.02 0.6 0 1

Day-Care C Other com R-410A 2088 < 0.005 4 4 18

Day-Care C Stand alone R-134a 1430 < 0.005 1 0 1

Day-Care C Walk in ref R-404A 3922 < 0.005 7.5 7.5 20

Fast Food R Household R-134a 1430 0 0.6 0 1

Fast Food R Other com R-410A 2088 1.8 4 4 18

Fast Food R Walk in ref R-404A 3922 < 0.005 7.5 7.5 20

City Park Other com R-410A 2088 < 0.005 4 4 18

City Park Stand alone R-134a 1430 0.04 1 0 1

Hotel Household R-134a 1430 0 0.6 0 1

Hotel	Other comR-410a	2088	1.8	4	4	18
Hotel	Walk in ref R-404a	3922	< 0.005	7.5	7.5	20

5.15. Operational Off-Road Equipment
5.15.1. Unmitigated

Equipment Fuel Type	Engine Tier	Number	per Hours	Per 1 Horsepower Load Factor
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5.15.2. Mitigated

Equipment Fuel Type	Engine Tier	Number	per Hours	Per 1 Horsepower Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Fuel Type	Number	per Hours	Per 1 Horsepower Load Factor
---------------------	--------	-----------	------------------------------

5.16.2. Process Boilers

Equipment Fuel Type	Number	Boiler Rating	Daily Heat	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation Initial	Acre/Final Acres
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5.18.1.2. Mitigated

Vegetation	Vegetation Initial	Acre/Final Acres
------------	--------------------	------------------

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass	Co Initial	Acre/Final Acres
---------	------------	------------------

5.18.1.2. Mitigated

Biomass	Co Initial	Acre/Final Acres
---------	------------	------------------

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hi Result for FUnit

Temperature	19.8 annual days of extreme heat
Extreme Pr	5 annual days with precipitation above 20 mm
Sea Level R	0 meters of inundation depth
Wildfire	0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about 1/2 inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Stedje et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from US DOW, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hi Exposure 5 Sensitivity / Adaptive C/Vulnerability Score

Temperature	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R/N/A	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack IN/A	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hi Exposure 5 Sensitivity / Adaptive C/Vulnerability Score

Temperature	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R/N/A	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack IN/A	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator Result for Project Census Tract

Exposure Indicators

AQ Ozone	45.1
AQ PM	37.5
AQ DPM	24.8
Drinking W	69.9
Lead Risk H	5.63
Pesticides	76.5
Toxic Release	22.1
Traffic	58.7

Effect Indicators

Chemistry SI	62.8
Groundwat	82.1
Haz Waste	67.6
Impaired W	96.6
Solid Waste	64.4

Sensitive Population

Asthma	24.7
Cardio-vasc	32
Low Birth Y	77.8

Socioeconomic Factor Indicators

Education	41.6
Housing	42.8
Linguistic	26.4
Poverty	13
Unemploy	7.77

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic

Above Pow	60.34903
Employed	0.526113
Median HI	67.31862
Education	
Bachelor's	51.58776
High school	19.24804
Preschool	95.7141
Transpiration	
Auto Acces	41.3081
Active com	34.86462
Social	
2 parent hc	66.67522
Voting	91.95432
Neighborhood	
Alcohol use	90.56846
Park access	6.351854
Retail dens	9.362069
Supermark	36.13499
Tree canop	25.22777
Housing	
Homeowne	70.21686
Housing ha	88.97729
Low-inc ho	91.98219
Low-inc ref	88.61799
Uncredwee	66.91903
Health Outcomes	
Insured pop	97.8609
Arthritis	1.2
Asthma ER	54
High Blood	2.1
Cancer (exc	2.7
Asthma	28
Coronary H	1.9
Chronic Ob	3.4
Diagnosed	9.5
Life Expect	46
Cognitively	16
Physically	31
Heart Atax	39
Mental Hei	52
Chronic Kid	2.1
Obesity	52
Pedestrian	71
Physical He	28
Stroke	4.4
Health Risk Behaviors	
Binge Drink	98
Current Sm	42
No Leisure	36

Climate Change Exposures

Wildfire Ris	0
SLR Inunda	0
Children	60
Elderly	20
English Spe	78
Foreign bo	43
Outdoor W	43
Climate Change Adaptive Capacity	
Impervious	95
Traffic den	45
Traffic Acc	23
Other Indices	
Hardship	53
Other Decision Support	
2016 Votin	77

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	46
Health Pla	46
Project Loc No	
Project Loc No	
Project Loc No	

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure TI Co-Benefits Achieved

7.5. Evaluation Scorecard

Category Number of Total Point Max Possib Weighted Score

7.6. Health & Equity Custom Measures

Measure TI Sponsor

8. User Changes to Default Data

Screen Justification

Land Use Totals of each category from each phase

Operations from Water Supply Assessment: Water demand = 239.7 acre-feet annually -> 78204343 gallons per year

natural
60% fully
electric
project
Retail
building =
20kW
array,
office
buildings
= 14 kW
array,
total solar
output =
54,174
kWh/year
(in
mitigation
section)
applied
retail
output to
free
standing
discount
and office

Operations no architectural coating needed

Operations Zoo

Operations 10,864,600 Net VMT change

Year	TOG	RDG	NOx	CO	SO _x	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e	Phases	
2025	1.17	1.05	10.67	51.90	0.09	0.26	27.22	27.38	0.26	13.61	13.77	0.00	520.00	520.00	0.04	0.02	0.09	514.00	1A, 1B	
2026	0.99	0.82	9.85	28.90	0.06	0.16	0.75	0.91	0.16	0.19	0.34	0.00	845.00	845.00	0.04	0.04	0.28	558.00	1A, 1B	
2027	0.97	0.81	9.70	28.70	0.06	0.16	0.75	0.91	0.16	0.19	0.34	0.00	839.00	839.00	0.04	0.03	0.25	851.00	1A, 1B	
2028	0.94	0.84	9.54	28.10	0.06	0.16	0.85	0.98	0.16	0.21	0.34	0.00	420.20	420.20	PVALUE1	PVALUE1	0.12	427.50	1A, 1B	
2029	0.62	0.61	6.78	28.50	0.05	0.10	19.80	19.90	0.10	10.10	10.20	0.00	404.00	404.00	0.02	0.01	0.03	406.00	1B, 1C	
2030	0.39	0.36	2.99	15.20	0.02	0.08	0.11	0.19	0.07	0.03	0.10	0.00	365.00	365.00	0.01	0.01	0.02	367.00	1C	
2031	0.38	0.35	2.98	15.20	0.02	0.07	0.11	0.19	0.07	0.03	0.10	0.00	364.00	364.00	0.01 < 0.005		0.02	366.00	1C	
2032	0.38	0.36	2.96	15.20	0.02	0.07	0.20	0.25	0.07	0.05	0.10	0.00	238.00	238.00	0.01 < 0.005		0.02	239.00	1C	
2033	3.17	2.67	21.20	24.90	0.05	0.86	19.80	20.70	0.79	10.10	10.90	0.00	398.00	398.00	0.02	0.01	0.03	401.00	1C, 2	
2034	1.08	7.52	7.76	13.40	0.02	0.19	0.20	0.39	0.18	0.05	0.23	0.00	313.00	313.00	0.01 < 0.005		0.02	315.00	2	
2035	1.43	1.20	9.31	15.30	0.03	0.31	5.43	5.76	0.30	2.60	2.90	0.00	196.00	196.00	0.01	0.01	0.01	197.00	3	
2036	0.46	0.39	3.34	6.87	0.01	0.08	0.05	0.13	0.07	0.01	0.08	0.00	195.00	195.00	0.01	0.01	0.01	196.00	3	
2037	0.45	0.38	3.26	6.81	0.01	0.07	0.05	0.12	0.07	0.01	0.08	0.00	194.00	194.00	0.01	0.01	0.01	195.00	3	
2038	0.45	0.38	3.21	6.79	0.01	0.07	0.05	0.12	0.06	0.01	0.08	0.00	194.00	194.00	0.01	0.01	0.01	195.00	3	
2039	0.49	1.16	3.52	6.75	0.01	0.09	0.18	0.26	0.08	0.04	0.12	0.00	143.00	143.00	0.01	0.01	0.01	144.00	3	
2040	2.61	2.20	16.00	20.20	0.05	0.58	19.80	20.40	0.53	10.10	10.70	0.00	443.00	443.00	0.02	0.01	0.01	446.00	4	
2041	1.01	0.84	6.94	13.10	0.03	0.14	0.32	0.46	0.13	0.08	0.21	0.00	396.00	396.00	0.02	0.01	0.01	399.00	4	
2042	1.01	7.76	6.89	13.10	0.03	0.14	0.32	0.45	0.13	0.08	0.20	0.00	288.00	288.00	0.01	0.01	0.01	290.00	4	
MAX	3.17	52.94	21.20	51.90	0.09	0.86	27.22	27.38	0.79	13.61	13.77	0.00	845.00	845.00	PVALUE1	PVALUE1	0.28	858.00	4	
Total	18.00	81.79	136.90	339.42	0.63	3.55	95.99	99.50	3.33	47.49	50.79	0.00	6755.20	6755.20	PVALUE1	PVALUE1	0.94	6816.90	4	
SMAQMD None	65	85	None	None	None	None	0/82												1100	
Exceeds? NA	NO	NO	NO				NO												NO	

NOTE: Nil = 0

Per Appendix G of the CEQA Guidelines and SMAQMD recommendations, the project's impact to air quality is considered significant if it would do any of the following:

Conflict with or obstruct implementation of the applicable air quality plan;
 Construction-generated criteria air pollutant or precursor emissions to exceed SMAQMD-recommended thresholds of 85 lb/day for NO_x, 0 lb/day of PM₁₀, and 0 lb/day of PM_{2.5}. As noted in SMAQMD's recommended significance thresholds, if all feasible "Best Management Practices" (BMPs), as defined by SMAQMD, for controlling construction emissions are applied, the applicable threshold would be 80 lb/day and 14.6 tons/year for PM₁₀, and 82 lb/day and 15 tons/year for PM_{2.5};
 A net increase in long-term operational criteria air pollutant or precursor emissions that exceed the SMAQMD-recommended thresholds of 65 lb/day for RDG and NO_x, 0 lb/day of PM₁₀, and 0 lb/day of PM_{2.5}; if all feasible BMPs, as defined by SMAQMD, for controlling operational phase emissions are applied, the applicable threshold would be 80 lb/day and 14.6 tons/year for PM₁₀, and 82 lb/day and 15 tons/year for PM_{2.5};
 Expose sensitive receptors to a substantial pollutant concentration, which could include an incremental increase in TAC emissions that exceed 10 in one million for carcinogenic risk (i.e., the risk of contracting cancer) and/or a noncarcinogenic hazard index of 1.0 or greater; and/or
 Create objectionable odors affecting a substantial number of people.

Year	RDG	NOx	CO	SOx	PM10	PM2.5
2025	1.05	10.67	51.90	0.09	27.38	13.77
2026	0.82	9.85	28.90	0.06	0.91	0.34
2027	0.81	9.70	28.70	0.06	0.91	0.34
2028	0.84	9.54	28.10	0.06	0.98	0.34
2029	0.61	6.78	28.50	0.05	19.90	10.20
2030	0.36	2.99	15.20	0.02	0.19	0.10
2031	0.35	2.98	15.20	0.02	0.19	0.10
2032	0.35	2.96	15.20	0.02	0.25	0.10
2033	2.67	21.20	24.90	0.05	20.70	10.90
2034	7.52	7.76	13.40	0.02	0.39	0.23
2035	1.20	9.31	15.30	0.03	5.76	2.90
2036	0.39	3.34	6.87	0.01	0.13	0.08
2037	0.38	3.26	6.81	0.01	0.12	0.08
2038	0.38	1.21	6.79	0.01	0.12	0.08
2039	1.16	3.52	6.75	0.01	0.26	0.12
2040	2.20	16.00	20.20	0.05	20.40	10.70
2041	0.84	6.94	13.20	0.03	0.46	0.21
2042	7.76	6.89	13.10	0.03	0.45	0.20
MAX	52.94	21.20	51.90	0.09	27.38	13.77
Threshold	65.00	85.00			0/82	0/82
Exceeds? NO	NO	NO	0.00	0.00	NO	NO

5.18.2.1. Unmitigated
Tree Type Number Electricity % Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary
Cal-Adapt Midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100

Climate Hazard for Event
Temperature 21.2 annual days of extreme heat
Extreme Pt 4.1 annual days with precipitation above 20 mm
Sea level ft 0 meters of inundation depth
Wildfire 0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about 0.8 inch of rain, which would be light to moderate rainfall if received over a 60 day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m
Wildfire data are for the grid cell in which your project are located. The projections are from Beale et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different treatments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/Wet (HwBEM2-E5), Cooler/Wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or about 3.7 miles (mi) by 3.7

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/Wet (HwBEM2-E5), Cooler/Wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7

6.2. Initial Climate Risk Scores

Climate H4 Exposure 5 Sensitivity 5 Adaptive Cap/Vulnerability Score

Temperature 1 0 0 N/A
Extreme Pt 1 0 0 N/A
Sea level (N/A) N/A N/A N/A
Wildfire 1 0 0 N/A
Flooding 0 0 0 N/A
Drought 0 0 0 N/A
Snowpack N/A N/A N/A N/A
Air Quality 0 0 0 N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate H4 Exposure 5 Sensitivity 5 Adaptive Cap/Vulnerability Score

Temperature 1 1 1 2
Extreme Pt 1 1 1 2
Sea level (N/A) N/A N/A N/A
Wildfire 1 N/A 1 2
Flooding 1 1 1 2
Drought 1 1 1 2
Snowpack N/A N/A N/A N/A
Air Quality 1 1 1 2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. California's 45 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state

Indicator Result for Project Census Tract

Exposure Indicators
AQ-Climate 45.1
AQ-PM 37.5
AQ-DPM 24.8
Drinking W 60.8
Lead Risk N 5.63
Pesticides 76.5
Toxic Metals 31.1
Traffic 58.7
Effect Indicators
Cleanup \$ 61.8
Groundwater 82.1
HAI Waste 67.4
Impaired W 94.6
Solid Waste 64.4
Sensitive Population
Asthma 24.7
Cardio-vasc 32
Low Birth 77.8
Sociodemographic Factor Indicators
Education 41.6
Housing 42.8
Linguistic 26.4
Poverty 13
Unemployed 7.77

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic
Jobless Pct 60.34003
Employed 0.526113
Median HI 67.31882
Education
Bachelor's 51.50776
High School 39.24804
PreSchool 4 95.7141
Transportation
Auto Access 41.3081
Active comm 34.86462
Social
2-parent h 66.67522
Voting 99.95442
Neighborhood
Alcohol use 90.56846
Park scores 6.301854
Retail dens 9.152309
Supermarket 36.23499
Tree canopy 25.22777
Housing
Homeless 70.21886
Housing NA 88.97729
Low-inc ht 31.58218
Low-inc mt 88.61799
Uninsured 66.91901
Health Outcomes
Insured ad 87.8609
Asthma 9.2
Asthma ER 54
High Blood 2.1
Cancer (see 2.7
Asthma 28
Carcinry m 1.9
Chronic Ob 3.4
Diagnosed 9.5
Life Expect 46
Cognitively 16
Physically 31
Heart Attack 39
Mental Hse 52
Chronic Kid 2.1
Obesity 52
Pedestrian 71
Physical NA 28
Stroke 4.4
Health Risk Behaviors
Binge Drink 98
Current Sm 42
No leisure 36
Climate Change Exposures
Wildfire Ris 0
L&H Hazards 0
Children 60
Elderly 20
English Spa 78
Foreign-b 43
Outdoor W 43
Climate Change Adaptive Capacity
Impervious 95
Traffic Den 45
Traffic Acc 23
Other Indices
Healthcare 13
Other Decision Support
2016 Vote 77

7.3. Overall Health & Equity Scores

Metric Result for Project Census Tract

CalEnviro 45

Healthy Pla 45

Project LocNo

Project LocNo

a. The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b. The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T Co-Benefit Achieved

7.5. Evaluation Scorecard

Category Number of Total Points Max Possible (Weighted Score)

7.6. Health & Equity Custom Measures

Measure T Sponsor

8. User Changes to Default Data

Screen Justification

Land Use project description

6 days per

week 36

month

building

Constructs

Operations 1,554,820 Gallons/year for the exhibits

Operations 1,554,820 Gallons/year for the exhibits

1. Basic Project Information

Table with 1 column: Data Field Value. Includes Project Name (2022 Phase 2B), Lead Agency (City of Elk Grove), and Location (283740720111305).

1.2. Land Use Types

Table with columns: Land Use / Use, Units, Lot Acreage, Building Area, Landscaping, Special Land, Population, Description. Lists various land uses like City Park, Medical Of, etc.

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Table with columns: Sector #, Measure Title, Un/Mt, TOD, ROG, NOx, CO, SO2, PM10E, etc. for Construction Emissions Summary.

2. Construction Emissions Details

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, etc. for Site Preparation (2025) - Unmitigated.

3.3. Grading (2025) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, etc. for Grading (2025) - Unmitigated.

3.5. Building Construction (2025) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, etc. for Building Construction (2025) - Unmitigated.

1. Basic Project Information

1.1 Basic Project Information

Project Name: Project 12345
Address: 123 Main St, Sacramento, CA 95811
City: Sacramento
County: Sacramento
State: CA
Zip: 95811
Project Type: Residential
Start Date: 2023-01-01
End Date: 2023-12-31

1.2 Land Use Types

Table with 4 columns: Land Use, Area (Acres), Density (Units/Acre), and Description. Includes categories like City Park, City Park, City Park, City Park, Medical Of.

1.3 User Selected Emission Reduction Measures by Emissions Sector

Table with 2 columns: Sector, Measure Title. Lists various emission reduction measures.

2. Emissions Summary

2.1 Construction Emissions Compared Against Thresholds

Table with 18 columns: Pollutant, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBCO2, CO2T, CH4, N2O, R, CO4e. Shows emissions for various pollutants.

2.2 Construction Emissions by Year, Mitigated

Table with 18 columns: Year, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBCO2, CO2T, CH4, N2O, R, CO4e. Shows emissions for years 2020-2022.

3. Construction Emissions Details

3.1 Site Preparation (2020) - Unmitigated

Table with 18 columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBCO2, CO2T, CH4, N2O, R, CO4e. Details emissions for site preparation in 2020.

3.2 Grading (2020) - Unmitigated

Table with 18 columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBCO2, CO2T, CH4, N2O, R, CO4e. Details emissions for grading in 2020.

3.3 Building Construction (2020) - Unmitigated

Table with 18 columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBCO2, CO2T, CH4, N2O, R, CO4e. Details emissions for building construction in 2020.

3.4 Building Construction (2020) - Unmitigated

Table with 18 columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBCO2, CO2T, CH4, N2O, R, CO4e. Details emissions for building construction in 2020.

Summary table with 18 columns: TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBCO2, CO2T, CH4, N2O, R, CO4e. Shows totals for various pollutants.

Climate Change
2020 13.22 393
2021 10.7 355.3
2022 12.4 227.39

Voting	91.95432
Neighborhood	
Alcohol av.	90.56846
Park score	6.253524
Retail dens	9.162569
Supermark	36.13499
Tree canopy	25.22777
Housing	
Homeown	70.21886
Housing hi	88.97729
Low-inc ho	91.58219
Low-inc re	88.61799
Uncrowded	66.91903
Health Outcomes	
Insured ad	87.86209
Arthritis	1.2
Asthma ER	54
High Blood	2.1
Cancer low	2.7
Asthma	28
Coronary p	1.9
Chronic CO	3.4
Diagnosed	9.5
Life Expect	46
Comorbity	16
Physically	31
Heart Rate	39
Mental He	52
Chronic Kid	2.1
Obesity	52
Pedestrian	71
Physical H	28
Stroke	4.4
Health Risk Behaviors	
Binge Drin	98
Current Sm	42
No Leisure	36
Climate Change Exposures	
Wildfire H	0
SLR Inund	0
Children	60
Elderly	20
English Sp	78
Foreign-b	43
Outdoor W	43
Climate Change Adaptive Capacity	
Impervious	95
Traffic Den	45
Traffic Acc	23
Other Indice	
Hardship	53
Other Decision Support	
2016 Vote	77

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CallEWS	46
Healthy PE	46
Project Loc No	
Project Loc No	

a: The maximum CallEWS/score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state

7.4. Health & Equity Measures

Measure T Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Points	Max Possible/Weighted Score
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Measure T Sponsor

8. User Changes to Default Data

Screen	Justification
Constructs Project description and 6 days a week	

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated																		
Species	TOE	NO2	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BC02	NEC02	CO2T	CH4	N2O	R	CO4e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Min)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data					
5.1. Construction Schedule					
Phase Name/Phase Type	Start Date	End Date	Days Per Week	Days	Phase Description
Site Prep/Site Prep	1/1/2033	1/13/2033	6	11	
Grading	1/14/2033	2/3/2033	6	18	
Building/Building Co.	2/16/2033	3/28/2034	6	356	
Paving	9/29/2034	11/14/2034	6	40	
Architectur/Architectur	11/15/2034	12/30/2034	6	40	

5.2. Off-Road Equipment					
5.2.1. Unmitigated					
Phase Name/Equipment Fuel Type	Engine Tier	Number	per Hours	Per	Chassis/Load Factor
Site Prep/Rubber Tire/Diesel	Average	3	8	307	0.4
Site Prep/Tractor/Ld/Diesel	Average	4	8	84	0.37
Grading/Graders/Diesel	Average	1	8	148	0.41
Grading/Excavators/Diesel	Average	1	8	36	0.38
Grading/Tractor/Ld/Diesel	Average	3	8	84	0.37
Grading/Rubber Tire/Diesel	Average	1	8	307	0.4
Building/Ce/Canvas/Diesel	Average	1	7	387	0.29
Building/Ce/Concrete/Diesel	Average	3	8	82	0.2
Building/Ce/Generator/Diesel	Average	1	8	14	0.74
Building/Ce/Welders/Diesel	Average	1	8	46	0.45
Building/Ce/Tractor/Ld/Diesel	Average	3	7	84	0.37
Paving/Tractor/Ld/Diesel	Average	1	8	84	0.37
Paving/Cement-on/Diesel	Average	2	6	10	0.56
Paving/Pavers/Diesel	Average	1	8	81	0.42
Paving/Paving/Equip/Diesel	Average	2	6	89	0.36
Paving/Rollers/Diesel	Average	2	6	36	0.38
Architectur/Air Compr/Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles					
5.3.1. Unmitigated					
Phase Name/Trip Type	One-Way Tri	Miles per Trip	Vehicle	Mile	
Site Preparation					
Site Prep/Worker	17.5	14.3	LD4,LD71,LD72		
Site Prep/Vendor			8.8	HHOT,MHDT	
Site Prep/Hauling	0	20	HHOT		
Site Prep/Onsite truck				HHOT	
Grading					
Grading/Worker	15	14.3	LD4,LD71,LD72		
Grading/Vendor			8.8	HHOT,MHDT	
Grading/Hauling	0	20	HHOT		
Grading/Onsite truck				HHOT	
Building/Construction					
Building/Ce/Worker	15.5	14.3	LD4,LD71,LD72		
Building/Ce/Vendor	7.21	8.8	HHOT,MHDT		
Building/Ce/Hauling	0	20	HHOT		
Building/Ce/Onsite truck				HHOT	
Paving					
Paving/Worker	20	14.3	LD4,LD71,LD72		
Paving/Vendor			8.8	HHOT,MHDT	
Paving/Hauling	0	20	HHOT		
Paving/Onsite truck				HHOT	
Architectur/Coating					
Architectur/Worker	3.1	14.3	LD4,LD71,LD72		
Architectur/Vendor			8.8	HHOT,MHDT	
Architectur/Hauling	0	20	HHOT		
Architectur/Onsite truck				HHOT	

5.4. Vehicles			
5.4.1. Construction Vehicle Control Strategies			
Control Str	PM10 Reduc	PM2.5 Reduction	
Architectur	0	0	6600 22000

5.5. Architectural Coatings					
5.5.1. Construction Earthmoving Activities					
Phase Name/Material	Material Exp	Acres	Graded Material	D. Acres	Paved (acres)
Site Preparation					
Grading	0	0	0	0	0
Paving	0	0	0	0	0

5.6. Dust Mitigation					
5.6.1. Construction Earthmoving Activities					
Phase Name/Material	Material Exp	Acres	Graded Material	D. Acres	Paved (acres)
Site Preparation					
Grading	0	0	0	0	0
Paving	0	0	0	0	0

5.6.2. Construction Earthmoving Control Strategies					
Control Str	Frequency	PM10 Reduc	PM2.5 Reduction		
Land Use	Area Paved <td>% Asphalt</td> <td></td> <td></td> <td></td>	% Asphalt			
Hospital	0	0			
Fast Food	0	0			
Health Care	0	0			
Hotel	0	0			
General Of	0	0			
Recreation	0	0			
Day-Care C	0	0			
City Park	0	0			
City Park	0	0			
City Park	0	0			
City Park	0	0			
General Of	0	0			
City Park	0	0			
City Park	0	0			
City Park	0	0			
City Park	0	0			
General Of	0	0			
Medical Of	0	0			

5.8. Construction Electricity Consumption and Emissions Factors					
Year	kWh per kW/CO2	CH4	N2O		
2033	0	138	0.01 < 0.005		
2034	0	163	0.01 < 0.005		

5.18. Vegetation	
5.18.1. Land Use Change	
5.18.1.1. Unmitigated	
Vegetation	Vegetation/Initial Acres
Final Acres	

5.18.1. Biomass Cover Type	
5.18.1.1. Unmitigated	
Biomass	Critical Area
Final Acres	

5.18.2. Sequenatation			
5.18.2.1. Unmitigated			
Tree Type	Number	Electricity Sa	Natural Gas Saved (Btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary
 Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100

Climate Hazard Result for Unit
 Temperature: 20.8 annual days of extreme heat
 Extreme Pt: 5 annual days with precipitation above 20 mm
 Sea Level R: 0 meters of inundation depth
 Wildfire: 0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th percentile of daily maximum/minimum temperatures from observed historical data (2 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi
 Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about 0.8 in. of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi

Sea level rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (PdsEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC3). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 feet (ft) for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (PdsEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC3). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi

6.2. Initial Climate Risk Scores

Climate Hazard Exposure Sensitivity S:	Adaptive Cap Vulnerability Score
Temperature	1 0 0 N/A
Extreme Pt	2 0 0 N/A
Sea Level R/N/A	N/A N/A N/A
Wildfire	1 0 0 N/A
Flooding	0 0 0 N/A
Drought	0 0 0 N/A
Sea Level R/N/A	N/A N/A
Air Quality	0 0 0 N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
 The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
 The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard Exposure Sensitivity S:	Adaptive Cap Vulnerability Score
Temperature	1 1 1 2
Extreme Pt	2 1 1 3
Sea Level R/N/A	N/A N/A N/A
Wildfire	1 1 1 2
Flooding	1 1 1 2
Drought	1 1 1 2
Sea Level R/N/A	N/A N/A
Air Quality	1 1 1 2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
 The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
 The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Data

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Diense	46.3
AQ-PM	37.5
AQ-PM	24.8
Drinking W	69.9
Lead Risk r	5.55
Pesticides	76.5
Toxic Release	13.1
Traffic	58.7
Effect Indicators	
Chronic S	63.8
Groundwater	82.1
Haz Waste	67.6
Impaired W	94.6
Solid Waste	64.4
Sensitive Populations	
Asthma	24.7
Cardio-vas	32
Low Birth r	77.8
Socioeconomic Factor Indicators	
Education	41.6
Housing	42.8
Linguistic	26.4
Poverty	13
Unemploy	7.77

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	60.34903
Employed	0.526113
Median H	67.21682
Education	
Bachelor's	53.20776
High school	19.24404
Preschool r	95.7141
Transportation	
Auto Acces	43.3081
Active com	34.85642
Social	
2 parent H	66.67322
Voting	91.61432
Neighborhood	
Alcohol use	95.56846
Park access	6.311854
Retail dem	5.152209
Supermark	36.21499
Tree canopy	25.22777
Housing	
Homeowns	70.21586
Housing In	88.87729
Low inc ho	91.58219
Low inc re	88.61799
Unrepaired	66.1903
Health Outcomes	
Injured ad	87.8609
Arthritis	1.2
Asthma ER	54
High Blood	2.1
Cancer (ex	2.7
Asthma	78
Coronary H	1.9
Chronic Ob	3.4
Diagnosed	9.5
Life Expect	46
Cognitive	16
Physically	31
Heart Atck	39
Mental Hsu	52
Chronic Ed	2.1
Obesity	52
Pedestrian	71
Physical Ho	28
Stroke	4.4
Health Risk Behaviors	
Binge Drink	98
Current Sm	42
No Leisure	36
Climate Change Exposures	
Wildfire R	0
SLR Inunda	0
Chilren	60
Elderly	20
English-Spe	78
Foreign-bn	41
Outdoor W	43
Climate Change Adaptive Capacity	
Impervious	95
Traffic Den	45
Traffic Acc	23
Other Indices	
Headship	53
Other Decision Support	
2016 vote	71

7.3. Overall Health & Equity Score
 Metric: Result for Project Census Tract
 CalEnviro 46

Healthy PE 46

Project Loc No

Project Loc No

Project Loc No

a. The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b. The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T: Co-benefits Achieved

7.5. Evaluation Scorecard

Category Number of Total Points Max Possible Weighted Score

7.6. Health & Equity Custom Measures

Measure T: Sponsor

8. User Changes to Default Data

Screen Justification

Land Use Project description

Constructs 6 days a week, schedule timing from PD

Operations/eng of at least

2. Basic Project Information

2.1. Basic Project Information

Data Field Value
Project Name/ID Phase 3
Construction 12/2025
Lead Agency
Land Use Sub-Project/Use
Address Location
Windspeed 3
Precipitation 36.5
Location 38.3807895279189176, -121.3894929244461
County Sacramento
City
Air District Sacramento Metropolitan AQMD
Air Basin Sacramento Valley
TAP 712
EDEC 13
Electric Use Sacramento Municipal Utility District
Gas Utility Pacific Gas & Electric
App Version 2022.1.1.14

2.2. Land Use Types
Land Use Sub-Unit Lot Average Building Area/Landcover Special Land-Use/Population Description
General Off 0.4 10500 10500

2.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector # Measure Title

2.4. Emissions Summary

2.4.1. Construction Emissions Compared Against Thresholds

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10SD, PM10T, PM2.5E, PM2.5SD, PM2.5T, BC0, NBC0, CO2, CH4, N2O, R, CO4e. Rows include Daily Summer (Max), Daily Winter (Max), Average Daily (Max), and Annual (Max) for various years (2025, 2026, 2027, 2028, 2029).

2.4.2. Construction Emissions by Year - Unmitigated

Table with columns: Year, TOG, ROG, NOx, CO, SO2, PM10E, PM10SD, PM10T, PM2.5E, PM2.5SD, PM2.5T, BC0, NBC0, CO2, CH4, N2O, R, CO4e. Rows include Daily Summer (Max), Daily Winter (Max), Average Daily (Max), and Annual (Max) for years 2025 through 2029.

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10SD, PM10T, PM2.5E, PM2.5SD, PM2.5T, BC0, NBC0, CO2, CH4, N2O, R, CO4e. Rows include Daily Summer (Max), Daily Winter (Max), Off-Road E, On-Road E, Average Daily, and Annual for various activities like Worker, Vendor, Hauling, etc.

3.2. Site Preparation (2025) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10SD, PM10T, PM2.5E, PM2.5SD, PM2.5T, BC0, NBC0, CO2, CH4, N2O, R, CO4e. Rows include Daily Summer (Max), Daily Winter (Max), Off-Road E, On-Road E, Average Daily, and Annual for various activities like Worker, Vendor, Hauling, etc.

3.3. Grading (2025) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10SD, PM10T, PM2.5E, PM2.5SD, PM2.5T, BC0, NBC0, CO2, CH4, N2O, R, CO4e. Rows include Daily Summer (Max), Daily Winter (Max), Off-Road E, On-Road E, Average Daily, and Annual for various activities like Worker, Vendor, Hauling, etc.

3.4. Building Construction (2025) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10SD, PM10T, PM2.5E, PM2.5SD, PM2.5T, BC0, NBC0, CO2, CH4, N2O, R, CO4e. Rows include Daily Summer (Max), Daily Winter (Max), Off-Road E, On-Road E, Average Daily, and Annual for various activities like Worker, Vendor, Hauling, etc.

Control Str Frequency PM10 Reduce PM2.5 Reduction

5.7. Construction Paving

Land Use Area Pavement Asphalt			
General Of	0	0	
Fast Food	0	0	
Health Care	0	0	
Racquet Cl	0	0	
Automobile	0	0	
City Park	0	0	
City Park	0	0	
City Park	0	0	
General Of	0	0	
General Of	0	0	
City Park	0	0	
City Park	0	0	
City Park	0	0	
City Park	0	0	
City Park	0	0	
City Park	0	0	
Medical Of	0	0	

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per kWCO2	CO4	A2D
2040	0	375	0.01 + 0.005
2041	0	375	0.01 + 0.005
2042	0	375	0.01 + 0.005

5.18. Vegetation

- 5.18.1. Land Use Change
- 5.18.1.1. Unmitigated
 - Vegetation Vegetation Initial Acres Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cerebral Acce Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Se Natural Gas Saved (Btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100

Climate HA Result for Flood

Temperature 20.8 annual days of extreme heat

Extreme Pr 5 annual days with precipitation above 20 mm

Sea Level R 0 meters of inundation depth

Wildfire 0 annual hectares burned

Temperatures and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (22 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (HfaEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 feet (ft)

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire possibilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (HfaEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m

6.2. Initial Climate Risk Scores

Climate HA Exposure Sensitivity Sc: Adaptive Cap Vulnerability Score

Temperature 1 0 0 N/A

Extreme Pr 2 0 0 N/A

Sea Level R N/A N/A N/A

Wildfire 1 0 0 N/A

Flooding 0 0 0 N/A

Drought R 0 0 0 N/A

Seawatch N/A N/A N/A

Air Quality 0 0 0 N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate HA Exposure Sensitivity Sc: Adaptive Cap Vulnerability Score

Temperature 1 1 1 2

Extreme Pr 2 1 1 3

Sea Level R N/A N/A N/A

Wildfire 1 1 1 2

Flooding 1 1 1 2

Drought R 1 1 1 2

Seawatch N/A N/A N/A

Air Quality 1 1 1 2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state

Indicator Result for Project Census Tract

Exposure Indicators

Air Quality

Air PM

Air Ozone

Drinking Water

Lead Risk Housing

Pesticides

Toxic Releases

Traffic

Effect Indicators

CleanUp Sites

Groundwater

Haz Waste Facilities/Generators

Impaired Water Bodies

Solid Waste

Sensitive Population

Asthma

Cardio-vascular

Low Birth Weights

Socioeconomic Factor Indicators

Education

Housing

Linguistic

Poverty

Unemployment

7.2. Healthy Places Index Score

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic

Above Poverty

Employed

Medicare

Education

Bachelor's or higher

High school enrollment

Preschool enrollment

Transportation

Auto Access

Active commuting

Social

2 parent households

Voting

NeighborHood

Alcohol availability

Park access

Retail density

Supermarket access

Tree canopy

Housing

Homeownership

Housing habitability

Low-inc. homeowner severe housing cost burden

Low-inc. renter severe housing cost burden

Uncrowded housing

Health Outcomes

Insured adults
Asthma
Asthma ER Admissions
High Blood Pressure
Cancer (excluding skin)
Asthma
Coronary Heart Disease
Chronic Obstructive Pulmonary Disease
Diagnosed Diabetes
Life Expectancy at Birth
Cognitively Disabled
Physically Disabled
Heart Attack ER Admissions
Mental Health Not Good
Chronic Kidney Disease
Obesity
Pedestrian Injuries
Physical Health Not Good
Stroke
Health Risk Behaviors
Binge Drinking
Current Smoker
No Leisure Time for Physical Activity
Climate Change Exposures
Wildfire Risk
S&B inundation Area
Children
Elderly
English Speaking
Foreign-Born
Outdoor Workers
Climate Change Adaptive Capacity
Impervious Surface Cover
Traffic Density
Traffic Access
Other Indices
Handicap
Other Decision Support
2016 Voting

7.3. Overall Health & Equity Scores

Metric: Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)
Healthy Places Index Score for Project Location (b)

Project Loc No

Project Loc No

a. The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b. The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T Co-Benefits Achieved

7.5. Evaluation Scorecard

Category Number of Total Points (Max Possible Weighted Score)

7.6. Health & Equity Custom Measures

Measure T Sponsor

8. User Changes to Default Data

Screen justification

Constructs 6 days a week

Year	Gasoline (workers)	Diesel (offroad eq, vendor)	Phases
2025	24.84	951.45	1A, 1B
2026	54.4	802.24	1A, 1B
2027	53.45	797.46	1A, 1B
2028	14.58	413.49	1A, 1B
2029	13.22	393	1C
2030	10.9	355.9	1C
2031	10.7	355.3	1C
2032	12.4	227.39	1C
2033	19.1	382	2
2034	17.61	296.83	2
2035	5	192.58	3
2036	4.21	191.24	3
2037	4.15	191.07	3
2038	4.12	190.91	3
2039	7.11	136.67	3
2040	25.1	420	4
2041	27.5	370.8	4
2042	21.02	269.03	4
Total	329.41	6937.36	

Year	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e	Phases	
2025	6	5	48	47	0	2	27	29	2	14	16	0	520	520	0.03	0.02	0.09	524	1A, 1B	
2026	3	2	21	26	0	1	1	1	1	0	1	0	845	845	0.04	0.04	0.28	858	1A, 1B	
2027	3	2	20	26	0	1	1	1	1	0	1	0	839	839	0.04	0.03	0.25	851	1A, 1B	
2028	3	53	19	25	0	1	1	1	1	0	1	0	420.2	420.2	#VALUE!	#VALUE!	0.12	428	1A, 1B	
2029	4	3	26	29	0	1	20	21	1	10	11	0	404	404	0.02	0.01	0.03	406	1B, 1C	
2030	1	1	9	13	0	0	0	0	0	0	0	0	365	365	0.01	0.01	0.02	367	1C	
2031	1	1	8	13	0	0	0	0	0	0	0	0	364	364	0.01 < 0.005		0.02	366	1C	
2032	1	1	8	13	0	0	0	0	0	0	0	0	238	238	0.01 < 0.005		0.02	239	1C	
2033	3	3	21	25	0	1	20	21	1	10	11	0	398	398	0.02	0.01	0.03	401	1C, 2	
2034	1	8	8	13	0	0	0	0	0	0	0	0	313	313	0.01 < 0.005		0.02	315	2	
2035	1	1	9	15	0	0	5	6	0	3	3	0	196	196	0.01	0.005	0.005	197	3	
2036	0	0	3	7	0	0	0	0	0	0	0	0	195	195	0.01	0.005	0.005	196	3	
2037	0	0	3	7	0	0	0	0	0	0	0	0	194	194	0.01	0.005	0.005	195	3	
2038	0	0	3	7	0	0	0	0	0	0	0	0	194	194	0.01	0.005	0.005	195	3	
2039	0	1	4	7	0	0	0	0	0	0	0	0	143	143	0.01	0.005	0.005	144	3	
2040	3	2	16	20	0	1	20	20	1	10	11	0	443	443	0.02	0.01	0.01	446	4	
2041	1	1	7	13	0	0	0	0	0	0	0	0	396	396	0.02	0.01	0.01	399	4	
2042	1	8	7	13	0	0	0	0	0	0	0	0	288	288	0.01	0.005	0.01	290	4	
MAX	6	53	48	47	0	2	27	29	2	14	16	0	845	845	#VALUE!	#VALUE!	0.28	858		
Total	21.71	83.42	151.52	220.72	0.42	4.92	67.27	72.11	4.52	33.5	38.05	0	4551.2	4551.2	#VALUE!	#VALUE!	0.315	4583.9		
SMAQMD None		65	85	None	None	None	None	80			82								1100	
Exceeds?	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	

NOTE: All values in lb/day except for CO2e which is in MT/year

Per Appendix G of the CEQA Guidelines and SMAQMD recommendations, the project's impact to air quality is considered significant if it would do any of the following:

Conflict with or obstruct implementation of the applicable air quality plan;

Construction-generated criteria air pollutant or precursor emissions to exceed SMAQMD-recommended thresholds of 85 lb/day for NO_x, 0 lb/day of PM10, and 0 lb/day of PM2.5. As noted in SMAQMD's recommended significance thresholds, if all feasible "Best Management Practices" (BMPs), as defined by SMAQMD, for controlling construction emissions are applied, the applicable threshold would be 80 lb/day and 14.6 tons/year for PM₁₀, and 82 lb/day and 15 tons/year for PM2.5;

A net increase in long-term operational criteria air pollutant or precursor emissions that exceed the SMAQMD-recommended thresholds of 65 lb/day for ROG and NO_x, 0 lb/day of PM10, and 0 lb/day of PM2.5. If all feasible BMPs, as defined by SMAQMD, for controlling operational phase emissions are applied, the applicable threshold would be 80 lb/day and 14.6 tons/year for PM₁₀, and 82 lb/day and 15 tons/year for PM2.5;

Expose sensitive receptors to a substantial pollutant concentrations, which could include an incremental increase in TAC emissions that exceed 10 in one million for carcinogenic risk (i.e., the risk of contracting cancer) and/or a noncarcinogenic hazard index of 1.0 or greater; and/or

Create objectionable odors affecting a substantial number of people

AQ Report Table

Year	ROG	NOx	CO	SOx	PM10	PM2.5
2025	5	48	47	0	29	16
2026	2	21	26	0	1	1
2027	2	20	26	0	1	1
2028	53	19	25	0	1	1
2029	3	26	29	0	21	11
2030	1	9	13	0	0	0
2031	1	8	13	0	0	0
2032	1	8	13	0	0	0
2033	3	21	25	0	21	11
2034	8	8	13	0	0	0
2035	1	9	15	0	6	3
2036	0	3	7	0	0	0
2037	0	3	7	0	0	0
2038	0	3	7	0	0	0
2039	1	4	7	0	0	0
2040	2	16	20	0	20	11
2041	1	7	13	0	0	0
2042	8	7	13	0	0	0
MAX	53.06	47.5	46.8	0.09	29.28	15.52
Threshold	65	85	None	None	80	82
Exceeds?	NO	NO	-	-	NO	NO

Mitigated to 38.05
Unmitigated 38.05

9656
8316
7737
5546
10827

1. Basic Project Information
 1.1. Basic Project Information
 Data Field Value
 Project Name: Elk Grove Zoo Phase 1
 Constructed: 6/1/2025
 Lead Agency
 Land Use Project/Use
 Analysis for County
 Winterset 3
 Precipitate 36.6
 Location: 8075 Kammerer Rd, Elk Grove, CA 95757, USA
 County: Sacramento
 City: Elk Grove
 Air District: Sacramento Metropolitan AQMD
 Air Basin: Sacramento Valley
 TAZ: 712
 OFZ: 13
 Electric: US Sacramento Municipal Utility District
 Gas Utility: Pacific Gas & Electric
 App Ver: 2022.1.1.14

1.2. Land Use Types

Land Use	Size	Unit	Lot Acreage	Building Area	Landscape Special	Pop	Population	Description
General Of	4.7	1000sqft	0.11	4700				guest services/ticketing
Free-Stand	10	1000sqft	0.23	10000				retail building
Health-Cul	0.5	1000sqft	0.01	500				educational entry restroom
High Turno	12	1000sqft	0.28	12000				gift/rafe cafe
Other Non	4.8	1000sqft	0.11	0				concrete pad
City Park	0.02	Acre	0.01	0				dwarf mongoose
City Park	0.06	Acre	0.06	0				giraffe feeding shelter
City Park	0.04	Acre	0.04	0				giraffe enclosure
Free-Stand	1	1000sqft	0.02	1000				train station and tickets
Health-Cul	1	1000sqft	0.02	1000				multi-purpose room 1
City Park	0.2	Acre	0.2	0				flamingo aviary
City Park	0.53	Acre	0.53	0				giraffe
City Park	0.06	Acre	0.06	0				thick billed parrot
City Park	0.28	Acre	0.28	0				okapi
Medical Of	9	1000sqft	0.21	9000				animal care quarters
Day-Care C	1	1000sqft	0.02	1000				educational building 1
Day-Care C	1	1000sqft	0.02	1000				educational building 2
Day-Care C	1	1000sqft	0.02	1000				educational building 3
Health-Cul	0.8	1000sqft	0.02	800				restrooms
City Park	0.02	Acre	0.01	0				hay, browse, fodder storage
Fast Food F	0.25	1000sqft	0.01	250				beer garden 1
Fast Food F	0.25	1000sqft	0.01	250				beer garden 2
City Park	0.55	Acre	0.51	0				Lion
City Park	1.2	Acre	1.2	0				Savanna West
City Park	1.81	Acre	1.81	0				Savanna East
City Park	0.65	Acre	0.65	0				rhino
City Park	0.34	Acre	0.34	0				cheetah
City Park	0.05	Acre	0.01	0				African Small Mammal
Medical Of	25.1	1000sqft	0.59	25100				Animal Care Quarters
High Turno	3.2	1000sqft	0.07	3200				Giraffe Cafe
Hospital	21	1000sqft	0.48	21000				Animal Care Center
City Park	0.07	Acre	0.07	0				viewing area
Automobils	8.7	1000sqft	0.2	8700				maintenance shed/shops
Parking Lot	508	Space	4.5	0				north lot
Parking Lot	700	Space	6.3	0				south lot
Health-Cul	1	1000sqft	0.02	1000				multi-purpose room 2
Health-Cul	1	1000sqft	0.02	1000				multi-purpose room 3
City Park	0.01	Acre	0.01	0				0
Health-Cul	1	1000sqft	0.02	1000				Medical Guest Restrooms

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Unit/Rate	TOG	ROG	NOx	CO	SO ₂	PM ₁₀ SE	PM ₁₀ SD	PM ₁₀ TOT	PM _{2.5} SE	PM _{2.5} SD	PM _{2.5} TOT	BC ₁₀	NBC ₁₀	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Daily, Summer (Max)	4.02	52.1	31.7	31.2	0.06	1.37	19.8	21.2	1.26	10.1	11.4		6826	6826	0.27	0.11	2.83	6852
Daily, Winter (Max)	1.55	1.31	11.5	15	0.03	0.44	0.49	0.93	0.4	0.12	0.52		3249	3249	0.14	0.11	0.07	3285
Average Daily (Max)	1.43	7.28	10.9	12.7	0.02	0.45	3.32	3.77	0.41	1.44	1.85		2778	2778	0.12	0.09	0.95	2809
Annual (Max)	0.26	1.33	1.99	2.31	<0.005	0.08	0.61	0.69	0.08	0.26	0.34		460	460	0.02	0.02	0.16	465

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO ₂	PM ₁₀ SE	PM ₁₀ SD	PM ₁₀ TOT	PM _{2.5} SE	PM _{2.5} SD	PM _{2.5} TOT	BC ₁₀	NBC ₁₀	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Daily, Summer (Max)	4.02	3.38	31.7	31.2	0.06	1.37	19.8	21.2	1.26	10.1	11.4		6826	6826	0.27	0.11	2.83	6852
2024	1.49	1.33	10.8	15.3	0.03	0.39	0.49	0.87	0.35	0.12	0.47		3277	3277	0.13	0.11	0.38	3314
2027	1.42	1.59	10.3	15.1	0.03	0.34	0.49	0.81	0.32	0.12	0.44		3258	3258	0.11	0.1	2.31	3294
2028	0.87	52.1	6.66	10.7	0.01	0.26	0.15	0.41	0.24	0.04	0.27		1672	1672	0.06	0.01	0.49	1678
Daily, Winter (Max)	1.55	1.28	11.5	15	0.03	0.44	0.49	0.93	0.4	0.12	0.52		3249	3249	0.14	0.11	0.07	3285
2024	1.46	1.23	10.9	14.8	0.03	0.39	0.49	0.87	0.36	0.12	0.47		3232	3232	0.14	0.11	0.07	3267
2027	1.41	1.16	10.3	14.4	0.03	0.34	0.49	0.81	0.32	0.12	0.44		3215	3215	0.13	0.1	0.06	3249
2028	1.95	1.31	9.81	14.5	0.03	0.31	0.49	0.8	0.28	0.12	0.4		3196	3196	0.13	0.1	0.05	3230
Average Daily	1.43	1.19	10.9	12.7	0.02	0.45	3.32	3.77	0.41	1.44	1.85		2504	2504	0.11	0.04	0.38	2519
2024	1.26	1.04	9.29	12.7	0.02	0.33	0.41	0.74	0.3	0.1	0.4		2778	2778	0.12	0.09	0.95	2809
2027	1.21	0.99	8.84	12.6	0.02	0.29	0.41	0.7	0.27	0.1	0.37		2763	2763	0.11	0.09	0.86	2793
2028	0.26	7.28	1.95	2.39	<0.005	0.07	0.07	0.14	0.06	0.02	0.08		551	551	0.02	0.01	0.13	555
Annual	0.26	0.22	1.99	2.1	<0.005	0.08	0.61	0.69	0.08	0.26	0.34		415	415	0.02	0.01	0.06	417
2024	0.28	0.29	1.7	2.31	<0.005	0.06	0.07	0.14	0.06	0.02	0.07		460	460	0.02	0.02	0.16	462
2027	0.22	0.18	1.61	2.29	<0.005	0.05	0.07	0.13	0.05	0.02	0.07		457	457	0.02	0.02	0.14	462
2028	0.06	1.33	0.35	0.54	<0.005	0.01	0.01	0.01	<0.005	0.01			91.2	91.2	<0.005	<0.005	0.02	91.9

Unit/Rate	TOG	ROG	NOx	CO	SO ₂	PM ₁₀ SE	PM ₁₀ SD	PM ₁₀ TOT	PM _{2.5} SE	PM _{2.5} SD	PM _{2.5} TOT	BC ₁₀	NBC ₁₀	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
2026 max	4.02	3.38	31.7	31.2	0.06	1.37	19.8	21.2	1.26	10.1	11.4		6826	6826	0.27	0.11	2.83	6852
2026 max	1.49	1.23	10.9	15.3	0.03	0.39	0.49	0.87	0.35	0.12	0.47		3277	3277	0.13	0.11	0.38	3314
2027 max	1.42	1.59	10.3	15.1	0.03	0.34	0.49	0.81	0.32	0.12	0.44		3258	3258	0.11	0.1	2.31	3294
2028 max	0.87	52.1	6.66	10.7	0.01	0.26	0.15	0.41	0.24	0.04	0.27		1672	1672	0.06	0.01	0.49	1678
2026 max	1.46	1.23	10.9	14.8	0.03	0.39	0.49	0.87	0.36	0.12	0.47		3232	3232	0.14	0.11	0.07	3267
2025	23.25	845.48																
2026	52	413.7																
2027	51.1	411																
2028	10.35	81.56																

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO ₂	PM ₁₀ SE	PM ₁₀ SD	PM ₁₀ TOT	PM _{2.5} SE	PM _{2.5} SD	PM _{2.5} TOT	BC ₁₀	NBC ₁₀	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Daily, Summer (Max)	2.86	2.4	22.2	19.9	0.03	0.92		0.02	0.84		0.84		3425	3425	0.14	0.03		3437
Off-Road E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diesel Trac	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)	0.02	0.02	0.18	0.16	<0.005	0.01		0.01	0.01		0.01		28.2	28.2	<0.005	<0.005		28.2
Off-Road E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diesel Trac	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	0.005	0.005	0.03	0.03	<0.005	0.01		<0.005	<0.005		<0.005		4.66	4.66	<0.005	<0.005		4.68
Off-Road E - <0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demolition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diesel Trac	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Summer (Max)	0.07	0.06	0.04	0.9	0	0	0.15	0.15	0	0.04	0.04		170	170	<0.005	0.01	0.65	173
Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily	<0.005	<0.005	0.01	0	0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		1.28	1.28	<0.005	<0.005	<0.005	1.29
Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	<0.005	<0.005	<0.005	0.005	0	0	<0.005	<0.005	0	<0.005	<0.005		0.21	0.21	<0.005	<0.005	<0.005	0.21
Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.2. Site Preparation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO ₂	PM ₁₀ SE	PM ₁₀ SD	PM ₁₀ TOT	PM _{2.5} SE	PM _{2.5} SD	PM _{2.5} TOT	BC ₁₀	NBC ₁₀	CO ₂ T</
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Vendor	0.01 < 0.005	0	0.13	0.05 < 0.005	< 0.005	0.02	0.02 < 0.005	0.01	0.01	0.01	0.01	66.9	66.9 < 0.005	0.01	0.06	70
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.1.3 Building Construction (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BC _{2.5}	NBC _{2.5}	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e	
Onsite																			
Daily, Summer (Max)																			
Off-Road E	1.18																		
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average Daily																			
Off-Road E	0.11	0.09	0.84	1.22 < 0.005	0.03			0.03	0.03		0.03			225	225	0.01 < 0.005		226	
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual																			
Off-Road E	0.02	0.02	0.15	0.22 < 0.005	0.01			0.01 < 0.005			< 0.005			37.3	37.3 < 0.005	< 0.005		37.4	
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Offsite																			
Daily, Summer (Max)																			
Worker	0.12	0.11	0.1	1.31	0	0	0.36	0.36	0	0.08	0.08			339	339	0.01	0.01	0.03	346
Vendor	0.05	0.02	0.78	0.3 < 0.005	0.01	0.13	0.14	0.01	0.03	0.04				409	409	0.03	0.07	0.02	402
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																			
Worker	0.01	0.01	0.01	0.13	0	0	0.03	0.03	0	0.01	0.01			32.7	32.7 < 0.005	< 0.005		0.05	33.1
Vendor	< 0.005	< 0.005	0.07	0.03 < 0.005	< 0.005	0.01	0.01 < 0.005	< 0.005	< 0.005	< 0.005				43.1	43.1 < 0.005	0.01	0.04	0.04	45.2
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																			
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005			5.41	5.41 < 0.005	< 0.005	0.01	0.01	5.48
Vendor	< 0.005	< 0.005	0.01	0.01 < 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005				7.14	7.14 < 0.005	< 0.005	0.01	0.01	7.48
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.1.5 Paving (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BC _{2.5}	NBC _{2.5}	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e	
Onsite																			
Daily, Summer (Max)																			
Off-Road E	0.82	0.69	6.63	9.91	0.01	0.26		0.26	0.24		0.24			1511	1511	0.06	0.01		1516
Paving	0.58																		
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																			
Off-Road E	0.82	0.69	6.63	9.91	0.01	0.26		0.26	0.24		0.24			1511	1511	0.06	0.01		1516
Paving	0.58																		
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																			
Off-Road E	0.11	0.09	0.89	1.33 < 0.005	0.03			0.03	0.03		0.03			201	201	0.01 < 0.005			204
Paving	0.08																		
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																			
Off-Road E	0.02	0.02	0.16	0.24 < 0.005	0.01			0.01	0.01		0.01			33.6	33.6 < 0.005	< 0.005			33.7
Paving	0.01																		
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																			
Daily, Summer (Max)																			
Worker	0.06	0.05	0.03	0.75	0	0	0.15	0.15	0	0.04	0.04			161	161 < 0.005	< 0.005	0.49		161
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																			
Worker	0.05	0.04	0.55	0	0	0.15	0.15	0	0.04	0.04				143	143 < 0.005	0.01	0.01		145
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																			
Worker	0.01	0.01	0.01	0.08	0	0	0.02	0.02	0	< 0.005	< 0.005			19.7	19.7 < 0.005	< 0.005	0.03		19.9
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																			
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005			3.25	3.25 < 0.005	< 0.005	< 0.005		3.3
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.1.7 Architectural Coating (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BC _{2.5}	NBC _{2.5}	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e	
Onsite																			
Daily, Summer (Max)																			
Off-Road E	0.11	0.81	1.12 < 0.005	0.02		0.02		0.01		0.01				134	134	0.01 < 0.005			134
Architectural Coatings	52																		
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																			
Average Daily																			
Off-Road E	0.03	0.01	0.15 < 0.005	< 0.005		< 0.005	< 0.005		< 0.005		< 0.005			17.9	17.9 < 0.005	< 0.005			18
Architectural Coatings	6.98																		
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																			
Off-Road E	< 0.005	< 0.005	< 0.005	0.02	0.03 < 0.005	< 0.005		< 0.005	< 0.005		< 0.005			2.97	2.97 < 0.005	< 0.005			2.98
Architectural Coatings	1.27																		
Onsite Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																			
Daily, Summer (Max)																			
Worker	0.05	0.02	0.02	0.36	0	0	0.07	0.07	0	0.02	0.02			76.3	76.3 < 0.005	< 0.005	0.29		76.7
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																			
Average Daily																			
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005			9.94	9.94 < 0.005	< 0.005	0.01		9.97
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																			
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005			1.55	1.55 < 0.005	< 0.005	< 0.005		1.57

5.18.2.1. Unmitigated
Tree Type Number Electricity % Natural Gas Saved (lbs/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary
Cal-Adapt Midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100

Climate Hazard for Event
Temperature 21.2 annual days of extreme heat
Extreme Pt 4.1 annual days with precipitation above 20 mm
Sea level ft 0 meters of inundation depth
Wildfire 0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about 0.8 inch of rain, which would be light to moderate rainfall if received over a 60 day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m
Wildfire data are for the grid cell in which your project are located. The projections are from Beale et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different treatments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/Wet (HwBEM2-E5), Cooler/Wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or about 3.7 miles (mi) by 3.7

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/Wet (HwBEM2-E5), Cooler/Wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7

6.2. Initial Climate Risk Scores

Climate H4 Exposure 5 Sensitivity 5 Adaptive Capa Vulnerability Score

Temperature	1	0	0	N/A
Extreme Pt	1	0	0	N/A
Sea Level (N/A)	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack (N/A)	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate H4 Exposure 5 Sensitivity 5 Adaptive Capa Vulnerability Score

Temperature	1	1	1	2
Extreme Pt	1	1	1	2
Sea Level (N/A)	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack (N/A)	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. California's 45 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state

Indicator Result for Project Census Tract

Exposure Indicators

AQ-Climate	45.1
AQ-PM	37.5
AQ-DPM	24.8
Drinking W	60.9
Lead Risk %	5.63
Pesticides	76.5
Toxic Metals	31.1
Traffic	58.7

Effect Indicators

CleanUp \$	61.8
Groundwater	82.1
HW Waste	67.4
Impaired W	94.6
Solid Waste	64.4
Sensitive Population	24.7
Asthma	24.7
Cardio-vasc	32
Low Birth	77.8

Socioeconomic Factor Indicators

Education	41.6
Housing	42.8
Linguistic	26.4
Poverty	13
Unemploy	7.77

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic

Jobless Pct	60.34003
Employed	0.526113
Median HI	67.31882
Education	
Bachelor's	51.50776
High School	19.24804
PreSchool	95.7141

Transportation

Auto Access	41.3081
Active com	34.86462
Senior	
2-parent h	66.67522
Voting	99.95482

Neighborhood

Alcohol use	90.56846
Park scores	6.301854
Retail dens	9.152369
Supermarket	36.23499
Tree canopy	25.22777

Housing

Homeless	70.21886
Housing NA	88.97729
Low-inc ht	31.58218
Low-inc mt	88.61799
Unrented	66.91901

Health Outcomes

Injured ad	87.8609
Asthma	9.2
Asthma ER	54
High Blood	2.1
Cancer (see	2.7
Asthma	28
Coronary ht	1.9
Chronic Ob	3.4
Diagnosed	9.5
Life Expect	46
Cognitively	16
Physically	31
Heart Attack	39
Mental Hse	52
Chronic Kid	2.1
Obesity	52
Pedestrian	71
Physical NA	28
Stroke	4.4

Health Risk Behaviors

Binge Drink	98
Current Sm	42
No leisure	36

Climate Change Exposures

Wildfire Ris	0
L&I Hazards	0
Children	60
Elderly	20
English Spa	78
Fanshield	43
Outdoor W	43

Climate Change Adaptive Capacity

Impervious	95
Traffic Den	45
Traffic Acc	23
Other Indices	
Healthcare	13
Other Decision Support	
2016 Vote	77

7.3. Overall Health & Equity Scores

Metric Result for Project Census Tract

CalEnviro 45

Healthy Pla 45

Project LocNo

Project LocNo

a. The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b. The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T Co-Benefit Achieved

7.5. Evaluation Scorecard

Category Number of Total Points Max Possible / Weighted Score

7.6. Health & Equity Custom Measures

Measure T Sponsor

8. User Changes to Default Data

Screen Justification

Land Use project description

6 days per

week, 36

month

buildout

Constructs

Operations 1,554,820 Gallons/year for the exhibits

Operations 1,554,820 Gallons/year for the exhibits

1. Basic Project Information

1.1. Basic Project Information
Data Field Value
Project Name: Phase 1C
Construct: 1/1/2019
Lead Agency: Land Use Projects/IdE
City: Elk Grove
County: Sacramento
Air District: Sacramento Metropolitan AQMD
Air Basin: Sacramento Valley
TAQ: 712
OFZ: 13
Electric Use: Sacramento Municipal Utility District
Gas Utility: Pacific Gas & Electric
App Ver: 2022.1.1.14

1.2. Land Use Types

Table with columns: Land Use, Size, Units, Lot Acreage, Building Area, Land Use, Population, Description. Rows include City Park, Medical Office, Hotel, etc.

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector # Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Table with columns: Unit/Meas, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for Unmitg, Daily Summer, Average Daily, Annual, etc.

Table with columns: TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for 2009 max, 2010 max, 2011 max, 2012 max.

2.2. Construction Emissions by Year - Unmitigated

Table with columns: Year, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for 2009, 2010, 2011, 2012, Unmitg, Average Daily, Annual.

Table with columns: TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for 2009, 2010, 2011, 2012.

3. Construction Emissions Details

3.1. Site Preparation (2020) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for Onsite, Off-Road E, Dust from Material Movement, Average Daily, Annual.

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for Onsite, Off-Road E, Dust from Material Movement, Average Daily, Annual.

3.3. Grading (2020) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for Onsite, Off-Road E, Dust from Material Movement, Average Daily, Annual.

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for Onsite, Off-Road E, Dust from Material Movement, Average Daily, Annual.

3.5. Building Construction (2020) - Unmitigated

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for Onsite, Average Daily, Annual.

Table with columns: Location, TOG, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BCO2, NBCO2, CO2T, CH4, N2O, R, CO2e. Rows for Onsite, Average Daily, Annual.

Annual Worker Vendor Hauling 3.15 Architectural Coating (2023) - Unmitigated Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC0x NBCOx CO2T CH4 N2O R CO2e

3.15 Architectural Coating (2023) - Unmitigated Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC0x NBCOx CO2T CH4 N2O R CO2e

4. Operations Emissions Details 4.10.1 Soil Carbon Accumulation by Vegetation Type - Unmitigated

4.10.1 Soil Carbon Accumulation by Vegetation Type - Unmitigated Vegetation TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC0x NBCOx CO2T CH4 N2O R CO2e

4.10.2 Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.2 Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated Land Use TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC0x NBCOx CO2T CH4 N2O R CO2e

4.10.3 Avoided and Sequestered Emissions by Species - Unmitigated

4.10.3 Avoided and Sequestered Emissions by Species - Unmitigated Species TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC0x NBCOx CO2T CH4 N2O R CO2e

5. Activity Data

5.1. Construction Schedule

5.1. Construction Schedule Phase Name/Phase Type Start Date End Date Days Per W/Work Days Phase Description

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.1. Unmitigated Phase Name/Equipment Fuel Type Engine Tier Number per/Hours Per 1/Hours/eq/Load Factor

5.2.2. Construction Vehicles

5.2.2. Unmitigated

5.2.2. Unmitigated Phase Name/Trip Type One-Way Trip Miles per Tri Vehicle Mtx

5.4. VEHICLES

5.4.1. Construction Vehicle Control Strategies

Control for PM10 Red.PM2.5 Reduction

5.5. Architectural Coatings

Phase Non-Residential/Residential E-Non-Resident-Non-Resid Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Non-Material In-Material Edge Acres Graded/Material D-Acres Paved (acres)

Site Preparation	36	0
Grading	36	0
Paving	0	0
	0	0

5.6.2. Construction Earthmoving Control Strategies

Control for Frequency PM10 Reduct.PM2.5 Reduction

5.7. Construction Paving

Land Use Area Pavement Asphalt

City Park	0	0
City Park	0	0
City Park	0	0
City Park	0	0
Medical Of	0	0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per kWCO2	CH4	N2O
2029	0	375	0.05 < 0.005
2030	0	375	0.05 < 0.005
2031	0	375	0.05 < 0.005
2032	0	375	0.05 < 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation:Vegetation/Initial Acres Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Critical Area Final Acres

5.18.1. Sequestration

5.18.2.1. Unmitigated

Tree Type Number Electricity Gas Natural Gas Saved (Btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100

Climate Hazard for Unit:

Temperature 39.8 annual days of extreme heat

Extreme Pt 5 annual days with precipitation above 20 mm

Sea Level Rise 0 meters of inundation depth

Wildfire 0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (2) climate model ensemble from Cal-Adapt_2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Reifel et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depths for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (IMROC2). Each grid cell is 6 kilometers (km) by 6 km, or about 3.7 miles (mi) by 3.7 m

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 kg) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (IMROC2). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m

6.2. Initial Climate Risk Scores

Climate Hazard Exposure Sensitivity So Adaptive Cap/Vulnerability Score

Temperature	1	0	0	N/A
Extreme Pt	2	0	0	N/A
Sea Level R/N/A	N/A	N/A	N/A	N/A

Wildfire 1 N/A 0 0 N/A

Flooding 0 0 0 0 N/A

Drought 0 0 0 0 N/A

Snowpack N/A N/A N/A N/A

Air Quality 0 0 0 0 N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard Exposure Sensitivity So Adaptive Cap/Vulnerability Score

Temperature	1	1	1	2
Extreme Pt	2	1	1	3
Sea Level R/N/A	N/A	N/A	N/A	N/A

Wildfire 1 1 1 2

Flooding 1 1 1 2

Drought 1 1 1 2

Snowpack N/A N/A N/A N/A

Air Quality 1 1 1 2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state

Indicator Result for Project Census Tract

Exposure Indicators

AQ-Direct 45.1

AQ-PM 37.5

AQ-CO2M 24.8

Drinking W 69.9

Lead Risk W 5.0

Pesticides 76.5

Toxic Release 18.2

Traffic 38.7

Effect Indicators

Chronic Ill 61.8

Groundswell 82.1

Haz Waste 67.6

Impaired W 94.6

Solid Waste 64.4

Sensitive Population

Asthma 24.7

Cardiovascular 32

Low Birth W 77.8

Socioeconomic Factor Indicators

Education 41.6

Housing 42.8

Linguistic 26.4

Poverty 13

Unemployment 7.77

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic

Above Pov 60.14903

Employed 63.56113

Median HH 67.1682

Education

Bachelor's 51.50776

High School 19.24804

Post-high 75.7141

Transportation

Auto Access 43.2011

Active com 34.86462

Social

2-parent W 66.67322

Voting 91.95432

Neighborhood

Alcohol use 90.56846

Park access 63.31654

Retail dens 3.26260

Supermarket 36.13499

Tree canopy 25.22771

Housing

Homeless 70.22686

Housing W 88.87729

Low-inc hh 91.58229

Low-inc-wr 88-61399
 Unconform 66-61363
 Health Outcomes
 Injured ad 873609

Arthritis	1.2
Asthma ER	54
High Blood	2.1
Cancer (ex)	2.7
Asthma	28
Coronary H	1.9
Chronic Di	1.4
Diagnosed	9.5
Life Expect	46
Cognitive	16
Physically	31
Heart Atta	39
Mental Hea	52
Chronic Kit	2.1
Obesity	52
Pedestrian	71
Physical He	28
Stroke	4.4

Health-Risk-Behaviors
 Binge Drink 99
 Current Sm 42
 No Leisure 36

Climate Change Exposures
 Inactive In 0
 SLR Inunda 0
 Children 65
 Elderly 20
 English Spa 78
 Foreign-bor 43
 Outdoor W 43

Climate Change Adaptive Capacity
 Impairment 95
 Traffic Den 45
 Traffic Acc 71

Other Indices
 Handicap 53
 Other Decision Support
 2016 Vote 77

7.3. Overall Health & Equity Scores
 Metric Result for Project Census Tract
 California 46
 Healthy Pla 46
 Project LocNo
 Project LocNo

a. The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
 b. The maximum Health Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures
 Measure T Co-Benefit Achieved

7.5. Evaluation Scorecard
 Category Number of Total Points / Max Possible Weighted Score

7.6. Health & Equity Custom Measures
 Measure T Sponsor

8. User Changes to Default Data
 Screen justification
 Construct/Project description and 6 days a week

6.1. Climate Risk Summary
 Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100

Climate Hazard Result for Unit
 Temperature 20.8 annual days of extreme heat
 Extreme Pt 5 annual days with precipitation above 20 mm
 Sea Level R 0 meters of inundation depth
 Wildfire 0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th percentile of daily maximum/minimum temperatures from observed historical data (2 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m
 Extreme precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about 0.8 in. of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m

Sea level rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (PdsEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC3). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 feet (ft) by 164 feet (ft)
 Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (PdsEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC3). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m

6.2. Initial Climate Risk Scores
 Climate Hazard Exposure Sensitivity S Adaptive Cap Vulnerability Score

Temperature	1	0	0	N/A
Extreme Pt	2	0	0	N/A
Sea Level R/N/A	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Sea Level R/N/A	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
 The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
 The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores
 Climate Hazard Exposure Sensitivity S Adaptive Cap Vulnerability Score

Temperature	1	1	1	2
Extreme Pt	2	1	1	3
Sea Level R/N/A	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Sea Level R/N/A	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
 The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
 The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Data

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state

Exposure Indicators

Indicator	Result for Project Census Tract
AQ-Diense	46.3
AQ-PM	37.5
AQ-PM	24.8
Drinking W	69.9
Lead Risk r	5.55
Pesticides	76.5
Toxic Risk	13.1
Traffic	58.7
Effect Indicators	
Cleanups S	63.8
Groundwater	82.1
Haz Waste	67.6
Impaired W	94.6
Solid Waste	64.4
Sensitive Populations	
Asthma	24.7
Cardio-vas	32
Low Birth r	77.8
Socioeconomic Factor Indicators	
Education	41.6
Housing	42.8
Linguistic	26.4
Poverty	11
Unemploy	7.77

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator

Indicator	Result for Project Census Tract
Economic	
Above Pov	60.34903
Employed	0.526113
Median H	67.21082
Education	
Bachelor's	51.50776
High school	19.24404
Preschool r	95.7141
Transportation	
Auto Acces	43.3081
Active com	34.85642
Social	
2 parent H	66.67322
Voting	91.61432
Neighborhood	
Alcohol use	95.56846
Park access	6.311854
Retail dem	5.152209
Supermark	36.21499
Tree canopy	25.22777
Housing	
Homeowns	70.21586
Housing by	88.87729
Low inc ho	91.58219
Low inc re	88.61799
Unemployed	66.1903
Health Outcomes	
Injured ad	87.8609
Arthritis	1.2
Asthma ER	54
High Blood	2.1
Cancer (ex	2.7
Asthma	78
Coronary H	1.9
Chronic Ob	3.4
Diagnosed	9.5
Life Expect	46
Cognitive	16
Physically	31
Heart Atck	39
Mental Hlt	52
Chronic Ed	2.1
Obesity	52
Pedestrian	71
Physical Ht	28
Stroke	4.4
Health Risk Behaviors	
Binge Drink	98
Current Sm	42
No Leisure	36
Climate Change Exposures	
Wildfire R	0
SLR Inunda	0
Chilren	60
Elderly	20
English-Spe	78
Foreign-bn	41
Outdoor W	43
Climate Change Adaptive Capacity	
Impervious	95
Traffic Den	45
Traffic Acc	23
Other Indices	
Headship	53
Other Decision Support	
2016 vote	71

7.3. Overall Health & Equity Score

Metric: Result for Project Census Tract
 CalEnviro 46

Healthy PE 46

Project Loc No

Project Loc No

Project Loc No

a. The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b. The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T: Co-benefits Achieved

7.5. Evaluation Scorecard

Category Number of Total Points Max Possible Weighted Score

7.6. Health & Equity Custom Measures

Measure T: Sponsor

8. User Changes to Default Data

Screen Justification

Land Use Project description

Constructs 6 days a week, schedule timing from PD

Operations/eng of at least

2. Basic Project Information

2.1. Basic Project Information

Data Field Value
Project Name/ID Phase 3
Construction 12/2025
Lead Agency
Land Use SP-Project/Use
Address Location
Windspeed 3
Precipitation 36.5
Location 38.380789527189176, -121.3894929244461
County Sacramento
City Elk Grove
Air District Sacramento Metropolitan AQMD
Air Basin Sacramento Valley
TAJ 712
EDEC 13
Electric Use Sacramento Municipal Utility District
Gas Utility Pacific Gas & Electric
App Version 2022.1.1.14

Table with 4 columns: Land Use Type, Land Use Code, Lot Area, Building Anticorrosion Optical Land Population Description. Row 1: General Office, 10.6 1000sqft, 0.34 10500, 105000

Table with 4 columns: Sector, Measure Title, Measure Value. Row 1: 1, 100% Reduction of PM2.5, 100%

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Table with 20 columns: Daily Summer (Max), Daily Winter (Max), Average Daily (Max), Annual (Max). Rows for 2025, 2026, 2027, 2028, 2029.

2.2. Construction Emissions by Year - Unmitigated

Table with 20 columns: Daily Summer (Max), Daily Winter (Max), Average Daily (Max), Annual (Max). Rows for 2025, 2026, 2027, 2028, 2029.

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Table with 20 columns: Daily Summer (Max), Daily Winter (Max), Average Daily (Max), Annual (Max). Rows for Off-Road E, On-Road E, Off-Road F, On-Road F, Annual.

3.2. Site Preparation (2025) - Unmitigated

Table with 20 columns: Daily Summer (Max), Daily Winter (Max), Average Daily (Max), Annual (Max). Rows for Off-Road E, On-Road E, Off-Road F, On-Road F, Annual.

3.3. Grading (2025) - Unmitigated

Table with 20 columns: Daily Summer (Max), Daily Winter (Max), Average Daily (Max), Annual (Max). Rows for Off-Road E, On-Road E, Off-Road F, On-Road F, Annual.

3.4. Building Construction (2025) - Unmitigated

Table with 20 columns: Daily Summer (Max), Daily Winter (Max), Average Daily (Max), Annual (Max). Rows for Off-Road E, On-Road E, Off-Road F, On-Road F, Annual.

1. Basic Project Information

1.1. Basic Project Information

Data Field Value
Project Name: E2 Phase 4
Construct: 1/1/2040
Lead Agency:
Land Use Project/Use:
Analysis for County:
Wetland: 3
Precipitate: 36.6
Location: 36.5802334653811, -121.3902127359454
County: Sacramento
City: Elk Grove
Air District: Sacramento Metropolitan AQMD
Air Basin: Sacramento Valley
TAD: 712
DFZ: 13
Electric Use: Sacramento Municipal Utility District
Gas Utility: Pacific Gas & Electric
App Ver 2022.1.1.14

1.2. Land Use Types

Table with 5 columns: Land Use, Size, Unit, Lot Area, Building, A, Landscape, Special, Population, Description. Includes rows like General OF, Fast Food F, Health Ctl, etc.

1.3. User Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Table with 15 columns: Unit/Metric, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBC0, CO2T, CH4, N2O, R, CO2e. Includes rows for Daily, Summer, Winter, Annual, and Unmit.

Table with 15 columns: ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBC0, CO2T, CH4, N2O, R, CO2e. Includes rows for Gas and Diesel emissions.

2.2. Construction Emissions by Year, Unmitigated

Table with 15 columns: Year, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBC0, CO2T, CH4, N2O, R, CO2e. Includes rows for Daily, Summer, Winter, Annual, and Unmit for years 2040, 2041, 2042.

3. Construction Emissions Details

3.1. Site Preparation (DAG) - Unmitigated

Table with 15 columns: Location, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBC0, CO2T, CH4, N2O, R, CO2e. Includes rows for Onsite, Off-Road, Dust From Material Movement, and Office emissions.

3.2. Grading (DAG) - Unmitigated

Table with 15 columns: Location, ROG, NOx, CO, SO2, PM10E, PM10D, PM10T, PM2.5E, PM2.5D, PM2.5T, BC0, NBC0, CO2T, CH4, N2O, R, CO2e. Includes rows for Onsite, Off-Road, Dust From Material Movement, and Office emissions.

3.5. Building Construction (2040) - Unmitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC01
Daily_Summer (Max)
Off-Road E 0.96 0.8 6.71 12.4 0.02 0.14 0 0 0.14 0.13 0 0.13
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Daily_Winter (Max)
Off-Road E 0.96 0.8 6.71 12.4 0.02 0.14 0 0 0.14 0.13 0 0.13
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Off-Road E 0.57 0.48 4.03 7.45 0.01 0.09 0 0 0.09 0.08 0 0.08
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E 0.1 0.09 0.74 1.36 <0.005 0.02 0 0 0.02 0.01 0 0.01
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Office
Daily_Summer (Max)
Worker 0.05 0.04 0.02 0.7 0 0 0 0 0.23 0.23 0 0.05 0.05
Vendor 0.01 0.01 0.25 0.13 <0.005 <0.005 0.08 0.09 <0.005 0.02 0.03
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Daily_Winter (Max)
Worker 0.05 0.04 0.03 0.5 0 0 0 0 0.23 0.23 0 0.05 0.05
Vendor 0.01 0.01 0.27 0.14 <0.005 <0.005 0.08 0.09 <0.005 0.02 0.03
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Worker 0.03 0.02 0.01 0.31 0 0 0 0 0.14 0.14 0 0.03 0.03
Vendor 0.02 <0.005 0.16 0.08 <0.005 <0.005 0.05 0.05 <0.005 0.02 0.02
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Annual
Worker 0.01 <0.005 <0.005 0.06 0 0 0 0 0.03 0.03 0 0.01 0.01
Vendor <0.005 <0.005 0.03 0.01 <0.005 <0.005 0.01 0.01 <0.005 <0.005 <0.005 0.01
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0

3.7. Building Construction (2041) - Unmitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC01
Daily_Summer (Max)
Off-Road E 0.96 0.8 6.65 12.3 0.02 0.14 0 0 0.14 0.13 0 0.13
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Daily_Winter (Max)
Off-Road E 0.96 0.8 6.65 12.3 0.02 0.14 0 0 0.14 0.13 0 0.13
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Off-Road E 0.81 0.68 5.7 10.6 0.02 0.12 0 0 0.12 0.11 0 0.11
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E 0.15 0.12 1.04 1.93 <0.005 0.02 0 0 0.02 0.02 0 0.02
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Office
Daily_Summer (Max)
Worker 0.05 0.04 0.02 0.69 0 0 0 0 0.23 0.23 0 0.05 0.05
Vendor 0.01 0.01 0.24 0.13 <0.005 <0.005 0.08 0.09 <0.005 0.02 0.03
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Daily_Winter (Max)
Worker 0.05 0.04 0.03 0.49 0 0 0 0 0.23 0.23 0 0.05 0.05
Vendor 0.01 0.01 0.26 0.13 <0.005 <0.005 0.08 0.09 <0.005 0.02 0.03
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Worker 0.04 0.03 0.02 0.43 0 0 0 0 0.2 0.2 0 0.05 0.05
Vendor 0.01 0.01 0.22 0.11 <0.005 <0.005 0.07 0.07 <0.005 0.02 0.02
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Annual
Worker 0.01 0.01 <0.005 0.08 0 0 0 0 0.04 0.04 0 0.01 0.01
Vendor <0.005 <0.005 0.04 0.02 <0.005 <0.005 0.01 0.01 <0.005 <0.005 <0.005 0.01
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0

3.9. Building Construction (2042) - Unmitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC01
Daily_Summer (Max)
Off-Road E 0.95 0.79 6.6 12.3 0.02 0.13 0 0 0.13 0.12 0 0.12
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Daily_Winter (Max)
Off-Road E 0.95 0.79 6.6 12.3 0.02 0.13 0 0 0.13 0.12 0 0.12
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Off-Road E 0.49 0.41 3.4 6.34 0.01 0.07 0 0 0.07 0.06 0 0.06
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E 0.09 0.07 0.62 1.16 <0.005 0.01 0 0 0.01 0.01 0 0.01
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0 0
Office
Daily_Summer (Max)
Worker 0.05 0.04 0.02 0.67 0 0 0 0 0.23 0.23 0 0.05 0.05
Vendor 0.01 0.01 0.23 0.13 <0.005 <0.005 0.08 0.09 <0.005 0.02 0.03
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Daily_Winter (Max)
Worker 0.04 0.04 0.03 0.47 0 0 0 0 0.23 0.23 0 0.05 0.05
Vendor 0.01 0.01 0.25 0.13 <0.005 <0.005 0.08 0.09 <0.005 0.02 0.03
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Worker 0.02 0.02 0.01 0.25 0 0 0 0 0.12 0.12 0 0.03 0.03
Vendor 0.01 <0.005 0.13 0.07 <0.005 <0.005 0.04 0.04 <0.005 0.01 0.01
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Annual
Worker <0.005 <0.005 <0.005 0.05 0 0 0 0 0.02 0.02 0 0.01 0.01
Vendor <0.005 <0.005 0.02 0.01 <0.005 <0.005 0.01 0.01 <0.005 <0.005 <0.005 0.01
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0

3.11. Paving (2042) - Unmitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC01
Daily_Summer (Max)
Off-Road E 0.56 0.47 5.16 9.73 0.01 0.1 0 0 0.1 0.09 0 0.09
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Daily_Winter (Max)
Off-Road E 0.56 0.47 5.16 9.73 0.01 0.1 0 0 0.1 0.09 0 0.09
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Off-Road E 0.1 0.08 0.88 1.65 <0.005 0.02 0 0 0.02 0.02 0 0.02
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0
Annual
Off-Road E 0.02 0.01 0.16 0.3 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 0.01 0.01
Onsite-truc 0 0 0 0 0 0 0 0 0 0 0 0 0
Office
Daily_Summer (Max)
Worker 0.03 0.02 0.02 0.43 0 0 0 0 0.15 0.15 0 0.04 0.04
Vendor 0 0 0 0 0 0 0 0 0 0 0 0 0
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Daily_Winter (Max)
Worker 0.03 0.02 0.02 0.31 0 0 0 0 0.15 0.15 0 0.04 0.04
Vendor 0 0 0 0 0 0 0 0 0 0 0 0 0
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Average Daily
Worker <0.005 <0.005 <0.005 0.05 0 0 0 0 0.03 0.03 0 0.01 0.01
Vendor 0 0 0 0 0 0 0 0 0 0 0 0 0
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0
Annual
Worker <0.005 <0.005 <0.005 0.01 0 0 <0.005 <0.005 0 <0.005 <0.005 0.01 0.01
Vendor 0 0 0 0 0 0 0 0 0 0 0 0 0
Hauling 0 0 0 0 0 0 0 0 0 0 0 0 0

3.13. Architectural Coatings (2042) - Unmitigated
Location TOG ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BC01
Daily_Summer (Max)
Off-Road E 0.11 0.09 0.74 1.09 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 0.01 0.01
Architectural Coatings 7.66

Control Str Frequency PM10 Reduc. PM2.5 Reduction

5.7. Construction Paving

Land Use	Area/Ft ² % Asphalt
General Of	0 0
Fast Food	0 0
Health Care	0 0
Racquet Cl	0 0
Automobile	0 0
City Park	0 0
City Park	0 0
City Park	0 0
City Park	0 0
General Of	0 0
City Park	0 0
City Park	0 0
City Park	0 0
City Park	0 0
City Park	0 0
City Park	0 0
City Park	0 0
City Park	0 0
Medical Of	0 0

5.8. Construction Electricity Consumption and Emissions Factors

Year	Wh per kWCO2	CO ₂	R ₂₀
2040	0	375	0.01 < 0.005
2041	0	375	0.01 < 0.005
2042	0	375	0.01 < 0.005

5.18. Vegetation

5.18.1. Land Use Change
 5.18.1.1. Unmitigated
 Vegetation Vegetation/Initial Acres Final Acres

5.18.1.1. Unmitigated

Biomass Cerebral Acv Final Acres

5.18.2. Sequestration

Tree Type	Number	Electricity Sa Natural Gas Saved (Btu/year)
Unmitigated		

6. Climate Risk Detailed Report

6.1. Climate Risk Summary
 Cal-Adapt midcentury 2040-2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100

Climate Hazard	2018 annual days of extreme heat
Temperature	218 annual days with precipitation above 20 mm
Extreme Pt	5 annual days with precipitation above 20 mm
Sea Level R	0 meters of inundation depth
Wildfire	0 annual hectares burned

Temperatures and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (2 climate model ensemble from Cal-Adapt, 2040-2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m. Sea level rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (HAdEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 feet (ft) for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) the history. Users may select from four model simulations to view the range in potential wildfire possibilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (HAdEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m.

Sea level rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (HAdEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 feet (ft) for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040-2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (>400 ha) the history. Users may select from four model simulations to view the range in potential wildfire possibilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warm/drier (HAdEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 m.

6.2. Initial Climate Risk Scores

Climate Hazard Exposure Sensitivity Sc: Adaptive Ctg Vulnerability Score

Temperature	1	0	0	N/A
Extreme Pt	2	0	0	N/A
Sea Level R/N/A	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Sea Level R/N/A	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt. The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard Exposure Sensitivity Sc: Adaptive Ctg Vulnerability Score

Temperature	1	1	1	2
Extreme Pt	2	1	1	3
Sea Level R/N/A	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Sea Level R/N/A	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt. The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state

Indicator Result for Project Census Tract

Exposure Indicators	
Air Toxics	
AQPM	
AQI-PM2.5	
Drinking Water	
Lead Risk Housing	
Pesticides	
Toxic Releases	
Traffic	
Effect Indicators	
Cleanup Sites	
Groundwater	
Haz Waste Facilities/Generators	
Impaired Water Bodies	
Solid Waste	
Sensitive Population	
Asthma	
Cardio-vascular	
Low Birth Weights	
Socioeconomic Factor Indicators	
Education	
Housing	
Linguistic	
Poverty	
Unemployment	

7.2. Health Places Index Score

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic	
Above Poverty	
Employed	
Medicaid	
Education	
Bachelor's or higher	
High school enrollment	
Preschool enrollment	
Transportation	
Auto Access	
Active commuting	
Social	
2 parent households	
Volunteering	
Neighborhood	
Alcohol availability	
Park access	
Retail density	
Supermarket access	
Tree canopy	
Housing	
Homeownership	
Housing habitability	
Low-inc. homeowner severe housing cost burden	
Low-inc. renter severe housing cost burden	
Unrented housing	
Health Outcomes	

Insured adults
Asthma
Asthma ER Admissions
High Blood Pressure
Cancer (excluding skin)
Asthma
Coronary Heart Disease
Chronic Obstructive Pulmonary Disease
Diagnosed Diabetes
Life Expectancy at Birth
Cognitively Disabled
Physically Disabled
Heart Attack ER Admissions
Mental Health Not Good
Chronic Kidney Disease
Obesity
Pedestrian Injuries
Physical Health Not Good
Stroke
Health Risk Behaviors
Binge Drinking
Current Smoker
No Leisure Time for Physical Activity
Climate Change Exposures
Wildfire Risk
S&B Hazardous Area
Children
Elderly
English Speaking
Foreign-Born
Outdoor Workers
Climate Change Adaptive Capacity
Impervious Surface Cover
Traffic Density
Traffic Access
Other Indices
Handicap
Other Decision Support
2016 Voting

7.3. Overall Health & Equity Scores

Metric: Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)
Healthy Places Index Score for Project Location (b)

Project Loc No

Project Loc No

a. The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b. The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T Co-Benefits Achieved

7.5. Evaluation Scorecard

Category Number of Total Points (Max Possible Weighted Score)

7.6. Health & Equity Custom Measures

Measure T Sponsor

8. User Changes to Default Data

Screen justification

Constructs 6 days a week

Year	Gasoline (workers)	Diesel (offroad eq, hauling, vendors)	Phases
2025	24.84	951	1A, 1B
2026	54.4	802	1A, 1B
2027	53.45	797	1A, 1B
2028	14.58	413	1A, 1B
2029	13.22	393	1C
2030	10.9	356	1C
2031	10.7	355	1C
2032	12.4	227	1C
2033	19.1	382	2
2034	17.61	297	2
2035	5	193	3
2036	4.21	191	3
2037	4.15	191	3
2038	4.12	191	3
2039	7.11	137	3
2040	25.1	420	4
2041	27.5	371	4
2042	21.02	269	4
Total	329.41	6937	

VMTCALCS

Source: Kimley Horn Elk Grove Zoo Traffic Study

Existing Daily VMT	14171
Final Buildout VMT	15339
Days per Year	365

Existing Yearly VMT	5172415
Final Buildout Yearly VMT	5598735

Daily Difference	1168
Yearly Difference	426320

Existing Daily Trips	1222
Final Buildout Daily Trips	1223
Existing Annual Trips	446030
Final Buildout Annual Trips	446395

Daily Difference in Trips	1
Annual Difference in Trips	365

Existing Average Trip Length	11.59656
Final Buildout Average Trip Length	12.54211

Average Trip Length	1168
Net Annual VMT	426320
Annual Trips	1

	Size	Daily VMT	Actual Dail	Multiplier	Daily Trips	daily VMT	yearly VMT	VMT/year
General office building	57.5	455954	166.8571		115	1.450932	1694.688	618561.2
Free Standing discount store	18.1	66713	166.8571		36.2	4.609313	5383.678	1965042
day-care center	2.7	31852	166.8571		5.4	30.89947	36090.58	13173062
fast food	19.65	134053	166.8571		39.3	4.245729	4959.011	1810039
city park	5.72	37620	166.8571		11.44	14.58541	17035.76	6218054
hotel	0	0	0		0	0	0	0
other asphalt	8.6	21569	166.8571		17.2	9.700997	11330.76	4135729
parking lot	1200	3009600	166.8571		2400	0.069524	81.20381	29639.39
								1168
		needed ye: daily vmt	Factor	Trip length	daily trips	daily trips	per unit	
General office building	53290	146	115		1168	0.125	0.001087	
Free Standing discount store	53290	146	36.2		1168	0.125	0.003453	
day-care center	53290	146	5.4		1168	0.125	0.023148	
fast food	53290	146	39.3		1168	0.125	0.003181	
city park	53290	146	11.44		1168	0.125	0.010927	
hotel	0	0	0		1168	0	#DIV/0!	
other asphalt	53290	146	17.2		1168	0.125	0.007267	
parking lot	53290	146	2400		1168	0.125	5.21E-05	

WATER CALCS

Phase 1A and 1B

	gpd	AFY	gpy
Potable water demand no LSS recovery	45852	51	16735980
Potable water demand LSS recovery	45852	51	16735980
Reclaimed water	91040	102	33229600
Total (AFY)		153	

	Estimation	gpd	conver	gpy
Potable water demand no LSS recovery	51	45822	16724904	
Potable water demand LSS recovery	51	45822	16724904	
Reclaimed water	102	90980	33207608	

	AFY	GPD	GPY
WSA Demand (AFY)			
2030 (Phase 1)	170	151666	53580009
2035	240	214116	78152484
2040	240	214116	78152484
2045 (full build)	240	214116	78152484

Note: 1 gpd = 0.00112088568 AFY (google.com)

EV SPACES INFO

	total	%
EV ready	87	7%
EV Capable	240	20%
Total EV	327	27%
Total Spaces	1200	100%

Tier 2 EV Charging Spaces

	45%	540
EV Capable	45%	540
EVSE of EV Cape	33%	178.2
Total Spaces	1200	1200

2021 California Natural Gas Consumption

	million	cu	% of total
Total	2092612		100.00%
Lease Fuel	35254		1.68%
Plant Fuel	2,128		0.10%
Pipeline &	21,449		1.02%
Residentia	2,033,781		97.19%
Commerci	449,311		21.47%

	240,019	11.47%
Industrial	240,019	11.47%
Vehicle Fuel	681,620	32.57%
Electric Po	25,449	1.22%

Retail building = 20kW array, office buildings = 14 kW array, total solar output = 54,174 kWh/year (in mitigation section) applied retail output to free standing discount and office building to general office building

VMT CALCS

Source: Kimley Horn Elk Grove Zoo Traffic Study

Existing Daily VMT	14171
Final Buildout VMT	44211
Days per Year	365

Existing Yearly VMT	5172415
Final Buildout Yearly VMT	16137015

Daily Difference	30040
Yearly Difference	10964600

Existing Daily Trips	1222
Final Buildout Daily Trips	3513
Existing Annual Trips	446030
Final Buildout Annual Trips	1282245

Daily Difference in Trips	2291
Annual Difference in Trips	836215

Existing Average Trip Length	11.59656
Final Buildout Average Trip Length	12.58497

Average Trip Length	13.11218
Net Annual VMT	10964600
Annual Trips	2291

WATER CALCS

Phase 1A and 1B	gpd	AFY	gpy
Potable water demand no LSS recovery	45852	51	16735980
Potable water demand LSS recovery	45852	51	16735980
Reclaimed water	91040	102	33229600
Total (AFY)		153	

Phase 1C, 2-4	gpd	AFY	gpy
Potable water demand no LSS recovery	127921	143	46691165
Potable water demand LSS recovery	40167	45	14660955
Reclaimed water	58193	65	21240445
Total (AFY)		208	

Total (AFY)	Estimation: gpd	conver	gpy
Potable water demand no LSS recovery	195	173658	63385168
Potable water demand LSS recovery	96	85962	31376156
Reclaimed water	167	149134	54433996

WSA Demand (AFY)	AFY	GPD	GPY
2030 (Phase 1)	170	151666	55358009
2035	240	214116	78152484
2040	240	214116	78152484
2045 (full build)	240	214116	78152484

Note: 1 gpd = 0.00112088568 AFY (google.com)

EV SPACES INFO

	total	%
EV ready	87	7%
EV Capable	240	20%
Total EV	327	27%
Total Spaces	1200	100%

Tier 2 EV Charging Spaces		
EV Capable	45%	540
EVSE of EV Cape	33%	178.2
Total Spaces	1200	1200

2021 California Natural Gas Consumption

	million cub	% of total
Total	2092612	100.00%
Lease Fuel	35254	1.68%
Plant Fuel	2,128	0.10%
Pipeline &	21,449	1.02%
Residential	2,033,781	97.19%
Commercial	449,311	21.47%

Industrial	240,019	11.47%
Vehicle Fuel	681,620	32.57%
Electric Power	25,449	1.22%

Size	Daily VMT	Actual Daily	Multiplier	Daily Trips	daily VMT	yearly VMT	VMT/year
General office building	181.8	455954	3755	363.6	10.32728	135.4132	49425.81
Free Standing discount store	26.6	66713	3755	53.2	70.58271	925.493	337805
day-care center	12.7	31852	3755	25.4	147.8346	1938.434	707528.5
fast food	53.45	134053	3755	106.9	35.12629	460.5821	168112.5
city park	15	37620	3755	30	125.1667	1641.208	599040.8
hotel	10	25080	3755	20	187.75	2461.811	898561.2
other asphalt	8.6	21569	3755	17.2	218.314	2862.571	1044839
parking lot	1200	3009600	3755	2400	1.564583	20.5151	7488.01
			30040				
needed year	daily vmt	Factor	Trip length	daily trips	daily trips per unit		
General office building	1370575	3755	363.6	13.11217809	286.375	0.78761	
Free Standing discount store	1370575	3755	53.2	13.11217809	286.375	5.382989	
day-care center	1370575	3755	25.4	13.11217809	286.375	11.27461	
fast food	1370575	3755	106.9	13.11217809	286.375	2.678906	
city park	1370575	3755	30	13.11217809	286.375	9.545833	
hotel	1370575	3755	20	13.11217809	286.375	14.31875	
other asphalt	1370575	3755	17.2	13.11217809	286.375	16.64971	
parking lot	1370575	3755	2400	13.11217809	286.375	0.119323	



RESULTS

31,869 kWh/Year*

System output may range from 31,129 to 32,519 kWh per year near this location.

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at //sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

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The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

Month	Solar Radiation (kWh / m ² / day)	AC Energy (kWh)
January	2.87	1,442
February	4.28	1,918
March	5.07	2,464
April	6.57	3,040
May	7.09	3,323
June	8.02	3,589
July	8.08	3,690
August	7.85	3,590
September	6.99	3,126
October	5.62	2,677
November	3.74	1,772
December	2.49	1,238
Annual	5.72	31,869

Location and Station Identification

Requested Location	8655 kammerer
Weather Data Source	Lat, Lng: 38.37, -121.38 0.2 mi
Latitude	38.37° N
Longitude	121.38° W

PV System Specifications

DC System Size	20 kW
Module Type	Standard
Array Type	Fixed (open rack)
System Losses	14.08%
Array Tilt	20°
Array Azimuth	180°
DC to AC Size Ratio	1.2
Inverter Efficiency	96%
Ground Coverage Ratio	0.4
Albedo	From weather file
Bifacial	No (0)

Monthly Irradiance Loss	Jan	Feb	Mar	Apr	May	June
	0%	0%	0%	0%	0%	0%
Monthly Irradiance Loss	July	Aug	Sept	Oct	Nov	Dec
	0%	0%	0%	0%	0%	0%

Performance Metrics

DC Capacity Factor	18.2%
---------------------------	--------------



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The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS

22,309 kWh/Year*

System output may range from 21,792 to 22,764 kWh per year near this location.

Month	Solar Radiation (kWh / m ² / day)	AC Energy (kWh)
January	2.87	1,009
February	4.28	1,342
March	5.07	1,725
April	6.57	2,128
May	7.09	2,326
June	8.02	2,512
July	8.09	2,583
August	7.85	2,513
September	6.99	2,188
October	5.62	1,874
November	3.74	1,241
December	2.49	866
Annual	5.72	22,307

Location and Station Identification

Requested Location	8655 kammerer
Weather Data Source	Lat, Lng: 38.37, -121.38 0.2 mi
Latitude	38.37° N
Longitude	121.38° W

PV System Specifications

DC System Size	14 kW
Module Type	Standard
Array Type	Fixed (open rack)
System Losses	14.08%
Array Tilt	20°
Array Azimuth	180°
DC to AC Size Ratio	1.2
Inverter Efficiency	96%
Ground Coverage Ratio	0.4
Albedo	From weather file
Bifacial	No (0)

Monthly Irradiance Loss	Jan	Feb	Mar	Apr	May	June
	0%	0%	0%	0%	0%	0%
Monthly Irradiance Loss	July	Aug	Sept	Oct	Nov	Dec
	0%	0%	0%	0%	0%	0%

Performance Metrics

DC Capacity Factor	18.2%
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