Appendix B
Air Quality and Greenhouse Gas Emissions Modeling

Laguna Niguel General Plan Update Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Laguna Niguel General Plan Update
Operational Year	2045
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	13.6
Location	33.52217037354508, -117.70613737631564
County	Orange
City	Laguna Niguel
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	6013
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	13,962	Dwelling Unit	4,533	27,225,900	163,534,910	—	41,607	—

Apartments Low Rise	16,888	Dwelling Unit	1,056	17,901,280	2,298,879	—	50,326	—
High Turnover (Sit Down Restaurant)	623	1000sqft	14.3	622,929	31,146	—	—	—
Strip Mall	4,247	1000sqft	97.5	4,247,257	212,363	—	—	—
Office Park	1,796	1000sqft	41.2	1,796,045	89,802	—	—	—
Hotel	590	Room	19.7	856,680	42,834	—	—	—
Place of Worship	182	1000sqft	4.17	181,795	9,090	—	—	—
Elementary School	7,387	Student	14.2	617,578	30,879	30,879	—	—
City Park	492	Acre	492	0.00	1,072,534	20,378,152	—	—
Research & Development	300	1000sqft	6.89	300,000	15,000	—	—	—
Hospital	498	Bed	8.18	356,447	17,822	—	—	—
Government (Civic Center)	221	1000sqft	5.07	220,866	0.25	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10,577	1,407	25,414	62.0	2,229	2,399	4,628	2,188	609	2,797	316,225	3,066,691	3,382,917	3,729	105	3,185	3,510,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	10,361	1,435	22,823	61.1	2,227	2,399	4,626	2,187	609	2,795	316,225	2,978,87	3,295,10	3,732	108	2,692	3,423,37
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,873	772	8,749	20.8	176	1,977	2,153	172	502	674	47,048	2,153,193	2,200,241	2,918	86.3	2,861	2,301,776
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	524	141	1,597	3.80	32.1	361	393	31.5	91.5	123	7,789	356,486	364,275	483	14.3	474	381,085

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1,024	525	7,445	20.5	7.34	2,399	2,406	6.85	609	615	—	2,090,438	2,090,438	80.3	79.7	506	2,116,714
Area	9,540	660	17,848	40.1	2,204	—	2,204	2,163	—	2,163	288,969	558,463	847,432	862	10.5	—	872,113
Energy	12.8	223	122	1.40	17.7	—	17.7	17.7	—	17.7	—	403,331	403,331	48.9	3.47	—	405,588
Water	—	—	—	—	—	—	—	—	—	—	4,322	14,460	18,781	446	10.9	—	33,169
Waste	—	—	—	—	—	—	—	—	—	—	22,934	0.00	22,934	2,292	0.00	—	80,239
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,679	2,679
Total	10,577	1,407	25,414	62.0	2,229	2,399	4,628	2,188	609	2,797	316,225	3,066,691	3,382,917	3,729	105	3,185	3,510,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1,026	572	7,012	19.7	7.34	2,399	2,406	6.86	609	615	—	2,008,951	2,008,951	83.6	83.5	13.1	2,035,935
Area	9,322	640	15,689	40.0	2,202	—	2,202	2,162	—	2,162	288,969	552,138	841,107	862	10.5	—	865,766
Energy	12.8	223	122	1.40	17.7	—	17.7	17.7	—	17.7	—	403,331	403,331	48.9	3.47	—	405,588

Water	—	—	—	—	—	—	—	—	—	—	4,322	14,460	18,781	446	10.9	—	33,169
Waste	—	—	—	—	—	—	—	—	—	—	22,934	0.00	22,934	2,292	0.00	—	80,239
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,679	2,679
Total	10,361	1,435	22,823	61.1	2,227	2,399	4,626	2,187	609	2,795	316,225	2,978,879	3,295,105	3,732	108	2,692	3,423,376
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	895	492	6,074	16.6	6.16	1,977	1,983	5.76	502	507	—	1,693,252	1,693,252	71.7	71.2	182	1,716,455
Area	1,965	57.2	2,553	2.81	152	—	152	149	—	149	19,792	42,150	61,942	59.2	0.75	—	63,646
Energy	12.8	223	122	1.40	17.7	—	17.7	17.7	—	17.7	—	403,331	403,331	48.9	3.47	—	405,588
Water	—	—	—	—	—	—	—	—	—	—	4,322	14,460	18,781	446	10.9	—	33,169
Waste	—	—	—	—	—	—	—	—	—	—	22,934	0.00	22,934	2,292	0.00	—	80,239
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,679	2,679
Total	2,873	772	8,749	20.8	176	1,977	2,153	172	502	674	47,048	2,153,193	2,200,241	2,918	86.3	2,861	2,301,776
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	163	89.7	1,108	3.03	1.13	361	362	1.05	91.5	92.6	—	280,337	280,337	11.9	11.8	30.1	284,179
Area	359	10.4	466	0.51	27.7	—	27.7	27.2	—	27.2	3,277	6,978	10,255	9.80	0.12	—	10,537
Energy	2.34	40.7	22.2	0.26	3.24	—	3.24	3.24	—	3.24	—	66,776	66,776	8.10	0.57	—	67,150
Water	—	—	—	—	—	—	—	—	—	—	715	2,394	3,109	73.8	1.80	—	5,492
Waste	—	—	—	—	—	—	—	—	—	—	3,797	0.00	3,797	379	0.00	—	13,284
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	444	444
Total	524	141	1,597	3.80	32.1	361	393	31.5	91.5	123	7,789	356,486	364,275	483	14.3	474	381,085

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	215	103	1,390	3.66	1.34	425	426	1.25	108	109	—	373,281	373,281	15.8	15.2	89.7	378,304
Apartments Low Rise	222	106	1,434	3.78	1.38	439	440	1.29	111	113	—	385,250	385,250	16.3	15.7	92.6	390,434
High Turnover (Sit Down Restaurant)	152	81.6	1,194	3.38	1.19	397	398	1.11	101	102	—	344,060	344,060	12.5	12.6	83.7	348,211
Strip Mall	321	173	2,529	7.16	2.53	840	843	2.36	213	216	—	728,892	728,892	26.4	26.7	177	737,686
Office Park	33.9	18.3	267	0.76	0.27	88.8	89.0	0.25	22.5	22.8	—	76,987	76,987	2.79	2.82	18.7	77,916
Hotel	8.42	4.53	66.3	0.19	0.07	22.0	22.1	0.06	5.59	5.65	—	19,099	19,099	0.69	0.70	4.65	19,330
Place of Worship	8.57	4.61	67.5	0.19	0.07	22.4	22.5	0.06	5.69	5.75	—	19,450	19,450	0.70	0.71	4.73	19,685
Elementary School	23.8	12.8	188	0.53	0.19	62.3	62.5	0.17	15.8	16.0	—	54,061	54,061	1.96	1.98	13.2	54,713
City Park	1.84	0.99	14.5	0.04	0.01	4.81	4.83	0.01	1.22	1.23	—	4,176	4,176	0.15	0.15	1.02	4,226
Research & Development	5.77	3.10	45.4	0.13	0.05	15.1	15.1	0.04	3.82	3.87	—	13,080	13,080	0.47	0.48	3.18	13,238
Hospital	19.0	10.2	149	0.42	0.15	49.6	49.8	0.14	12.6	12.7	—	43,041	43,041	1.56	1.58	10.5	43,560
Government (Civic Center)	12.8	6.90	101	0.29	0.10	33.5	33.6	0.09	8.50	8.59	—	29,061	29,061	1.05	1.06	7.07	29,411

Total	1,024	525	7,445	20.5	7.34	2,399	2,406	6.85	609	615	—	2,090,43	2,090,43	80.3	79.7	506	2,116,71
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	216	112	1,325	3.52	1.34	425	426	1.25	108	109	—	358,879	358,879	16.5	16.0	2.33	364,050
Apartments Low Rise	222	115	1,368	3.63	1.38	439	440	1.29	111	113	—	370,386	370,386	17.1	16.5	2.40	375,723
High Turnover (Sit Down Restaurant)	152	89.0	1,116	3.24	1.19	397	398	1.11	101	102	—	330,570	330,570	12.9	13.2	2.17	334,827
Strip Mall	322	188	2,364	6.87	2.53	840	843	2.36	213	216	—	700,313	700,313	27.4	27.9	4.60	709,331
Office Park	34.0	19.9	250	0.73	0.27	88.8	89.0	0.25	22.5	22.8	—	73,969	73,969	2.89	2.95	0.49	74,921
Hotel	8.44	4.94	61.9	0.18	0.07	22.0	22.1	0.06	5.59	5.65	—	18,350	18,350	0.72	0.73	0.12	18,587
Place of Worship	8.59	5.03	63.1	0.18	0.07	22.4	22.5	0.06	5.69	5.75	—	18,687	18,687	0.73	0.75	0.12	18,928
Elementary School	23.9	14.0	175	0.51	0.19	62.3	62.5	0.18	15.8	16.0	—	51,941	51,941	2.03	2.07	0.34	52,610
City Park	1.84	1.08	13.5	0.04	0.01	4.81	4.83	0.01	1.22	1.23	—	4,012	4,012	0.16	0.16	0.03	4,064
Research & Development	5.78	3.38	42.4	0.12	0.05	15.1	15.1	0.04	3.82	3.87	—	12,567	12,567	0.49	0.50	0.08	12,729
Hospital	19.0	11.1	140	0.41	0.15	49.6	49.8	0.14	12.6	12.7	—	41,353	41,353	1.62	1.65	0.27	41,886
Government (Civic Center)	12.8	7.52	94.2	0.27	0.10	33.5	33.6	0.09	8.50	8.59	—	27,921	27,921	1.09	1.11	0.18	28,281
Total	1,026	572	7,012	19.7	7.34	2,399	2,406	6.86	609	615	—	2,008,951	2,008,951	83.6	83.5	13.1	2,035,935

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	38.0	19.9	241	0.64	0.24	75.2	75.4	0.22	19.1	19.3	—	58,718	58,718	2.66	2.58	6.27	59,560
Apartments Low Rise	35.9	18.8	227	0.60	0.23	71.0	71.3	0.21	18.0	18.2	—	55,500	55,500	2.51	2.44	5.93	56,296
High Turnover (Sit Down Restaurant)	20.9	10.3	121	0.30	0.12	35.4	35.5	0.11	8.98	9.09	—	27,912	27,912	1.39	1.31	2.95	28,341
Strip Mall	53.2	31.6	404	1.16	0.42	139	140	0.39	35.3	35.7	—	107,330	107,330	4.13	4.24	11.6	108,709
Office Park	4.58	2.71	34.7	0.10	0.04	12.0	12.0	0.03	3.04	3.07	—	9,227	9,227	0.35	0.36	1.00	9,345
Hotel	1.46	0.86	11.0	0.03	0.01	3.81	3.82	0.01	0.97	0.98	—	2,936	2,936	0.11	0.12	0.32	2,974
Place of Worship	0.55	0.33	4.16	0.01	< 0.005	1.43	1.44	< 0.005	0.36	0.37	—	1,106	1,106	0.04	0.04	0.12	1,120
Elementary School	3.08	1.83	23.4	0.07	0.02	8.05	8.08	0.02	2.04	2.07	—	6,210	6,210	0.24	0.25	0.67	6,290
City Park	0.17	0.10	1.33	< 0.005	< 0.005	0.46	0.46	< 0.005	0.12	0.12	—	353	353	0.01	0.01	0.04	357
Research & Development	0.78	0.47	5.95	0.02	0.01	2.05	2.06	0.01	0.52	0.53	—	1,583	1,583	0.06	0.06	0.17	1,603
Hospital	3.04	1.80	23.0	0.07	0.02	7.94	7.97	0.02	2.01	2.04	—	6,124	6,124	0.24	0.24	0.66	6,203
Government (Civic Center)	1.66	0.98	12.6	0.04	0.01	4.33	4.34	0.01	1.10	1.11	—	3,338	3,338	0.13	0.13	0.36	3,381
Total	163	89.7	1,108	3.03	1.13	361	362	1.05	91.5	92.6	—	280,337	280,337	11.9	11.8	30.1	284,179

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	39,850	39,850	7.75	0.94	—	40,324
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	27,418	27,418	5.33	0.65	—	27,744
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	10,313	10,313	2.01	0.24	—	10,436
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	17,399	17,399	3.38	0.41	—	17,606
Office Park	—	—	—	—	—	—	—	—	—	—	—	13,852	13,852	2.69	0.33	—	14,017
Hotel	—	—	—	—	—	—	—	—	—	—	—	4,678	4,678	0.91	0.11	—	4,733
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	758	758	0.15	0.02	—	767
Elementary School	—	—	—	—	—	—	—	—	—	—	—	1,936	1,936	0.38	0.05	—	1,959
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Research & Development	—	—	—	—	—	—	—	—	—	—	—	2,314	2,314	0.45	0.05	—	2,341
Hospital	—	—	—	—	—	—	—	—	—	—	—	4,680	4,680	0.91	0.11	—	4,736

Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	1,703	1,703	0.33	0.04	—	1,724
Total	—	—	—	—	—	—	—	—	—	—	—	124,902	124,902	24.3	2.95	—	126,387
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	39,850	39,850	7.75	0.94	—	40,324
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	27,418	27,418	5.33	0.65	—	27,744
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	10,313	10,313	2.01	0.24	—	10,436
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	17,399	17,399	3.38	0.41	—	17,606
Office Park	—	—	—	—	—	—	—	—	—	—	—	13,852	13,852	2.69	0.33	—	14,017
Hotel	—	—	—	—	—	—	—	—	—	—	—	4,678	4,678	0.91	0.11	—	4,733
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	758	758	0.15	0.02	—	767
Elementary School	—	—	—	—	—	—	—	—	—	—	—	1,936	1,936	0.38	0.05	—	1,959
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Research & Development	—	—	—	—	—	—	—	—	—	—	—	2,314	2,314	0.45	0.05	—	2,341
Hospital	—	—	—	—	—	—	—	—	—	—	—	4,680	4,680	0.91	0.11	—	4,736

Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	1,703	1,703	0.33	0.04	—	1,724
Total	—	—	—	—	—	—	—	—	—	—	—	124,902	124,902	24.3	2.95	—	126,387
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	6,598	6,598	1.28	0.16	—	6,676
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	4,539	4,539	0.88	0.11	—	4,593
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1,707	1,707	0.33	0.04	—	1,728
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2,881	2,881	0.56	0.07	—	2,915
Office Park	—	—	—	—	—	—	—	—	—	—	—	2,293	2,293	0.45	0.05	—	2,321
Hotel	—	—	—	—	—	—	—	—	—	—	—	774	774	0.15	0.02	—	784
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	126	126	0.02	< 0.005	—	127
Elementary School	—	—	—	—	—	—	—	—	—	—	—	321	321	0.06	0.01	—	324
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Research & Development	—	—	—	—	—	—	—	—	—	—	—	383	383	0.07	0.01	—	388
Hospital	—	—	—	—	—	—	—	—	—	—	—	775	775	0.15	0.02	—	784
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	282	282	0.05	0.01	—	285

Total	—	—	—	—	—	—	—	—	—	—	—	20,679	20,679	4.02	0.49	—	20,925

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	5.88	101	42.8	0.64	8.13	—	8.13	8.13	—	8.13	—	127,602	127,602	11.3	0.24	—	127,956
Apartments Low Rise	3.38	57.8	24.6	0.37	4.68	—	4.68	4.68	—	4.68	—	73,421	73,421	6.50	0.14	—	73,624
High Turnover (Sit Down Restaurant)	1.03	18.8	15.8	0.11	1.43	—	1.43	1.43	—	1.43	—	22,441	22,441	1.99	0.04	—	22,503
Strip Mall	0.27	4.94	4.15	0.03	0.38	—	0.38	0.38	—	0.38	—	5,890	5,890	0.52	0.01	—	5,907
Office Park	0.85	15.4	13.0	0.09	1.17	—	1.17	1.17	—	1.17	—	18,433	18,433	1.63	0.03	—	18,484
Hotel	0.56	10.2	8.56	0.06	0.77	—	0.77	0.77	—	0.77	—	12,156	12,156	1.08	0.02	—	12,189
Place of Worship	0.11	1.97	1.66	0.01	0.15	—	0.15	0.15	—	0.15	—	2,352	2,352	0.21	< 0.005	—	2,358
Elementary School	0.14	2.61	2.19	0.02	0.20	—	0.20	0.20	—	0.20	—	3,117	3,117	0.28	0.01	—	3,126
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Research & Development	0.14	2.58	2.17	0.02	0.20	—	0.20	0.20	—	0.20	—	3,079	3,079	0.27	0.01	—	3,087
Hospital	0.35	6.43	5.40	0.04	0.49	—	0.49	0.49	—	0.49	—	7,672	7,672	0.68	0.01	—	7,693

Governm (Civic Center)	0.10	1.90	1.60	0.01	0.14	—	0.14	0.14	—	0.14	—	2,267	2,267	0.20	< 0.005	—	2,273
Total	12.8	223	122	1.40	17.7	—	17.7	17.7	—	17.7	—	278,429	278,429	24.6	0.52	—	279,201
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	5.88	101	42.8	0.64	8.13	—	8.13	8.13	—	8.13	—	127,602	127,602	11.3	0.24	—	127,956
Apartments Low Rise	3.38	57.8	24.6	0.37	4.68	—	4.68	4.68	—	4.68	—	73,421	73,421	6.50	0.14	—	73,624
High Turnover (Sit Down Restaurant)	1.03	18.8	15.8	0.11	1.43	—	1.43	1.43	—	1.43	—	22,441	22,441	1.99	0.04	—	22,503
Strip Mall	0.27	4.94	4.15	0.03	0.38	—	0.38	0.38	—	0.38	—	5,890	5,890	0.52	0.01	—	5,907
Office Park	0.85	15.4	13.0	0.09	1.17	—	1.17	1.17	—	1.17	—	18,433	18,433	1.63	0.03	—	18,484
Hotel	0.56	10.2	8.56	0.06	0.77	—	0.77	0.77	—	0.77	—	12,156	12,156	1.08	0.02	—	12,189
Place of Worship	0.11	1.97	1.66	0.01	0.15	—	0.15	0.15	—	0.15	—	2,352	2,352	0.21	< 0.005	—	2,358
Elementary School	0.14	2.61	2.19	0.02	0.20	—	0.20	0.20	—	0.20	—	3,117	3,117	0.28	0.01	—	3,126
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Research & Development	0.14	2.58	2.17	0.02	0.20	—	0.20	0.20	—	0.20	—	3,079	3,079	0.27	0.01	—	3,087
Hospital	0.35	6.43	5.40	0.04	0.49	—	0.49	0.49	—	0.49	—	7,672	7,672	0.68	0.01	—	7,693
Government (Civic Center)	0.10	1.90	1.60	0.01	0.14	—	0.14	0.14	—	0.14	—	2,267	2,267	0.20	< 0.005	—	2,273

Total	12.8	223	122	1.40	17.7	—	17.7	17.7	—	17.7	—	278,429	278,429	24.6	0.52	—	279,201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.07	18.3	7.81	0.12	1.48	—	1.48	1.48	—	1.48	—	21,126	21,126	1.87	0.04	—	21,185
Apartments Low Rise	0.62	10.6	4.49	0.07	0.85	—	0.85	0.85	—	0.85	—	12,156	12,156	1.08	0.02	—	12,189
High Turnover (Sit Down Restaurant)	0.19	3.43	2.88	0.02	0.26	—	0.26	0.26	—	0.26	—	3,715	3,715	0.33	0.01	—	3,726
Strip Mall	0.05	0.90	0.76	0.01	0.07	—	0.07	0.07	—	0.07	—	975	975	0.09	< 0.005	—	978
Office Park	0.16	2.82	2.37	0.02	0.21	—	0.21	0.21	—	0.21	—	3,052	3,052	0.27	0.01	—	3,060
Hotel	0.10	1.86	1.56	0.01	0.14	—	0.14	0.14	—	0.14	—	2,013	2,013	0.18	< 0.005	—	2,018
Place of Worship	0.02	0.36	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	389	389	0.03	< 0.005	—	390
Elementary School	0.03	0.48	0.40	< 0.005	0.04	—	0.04	0.04	—	0.04	—	516	516	0.05	< 0.005	—	518
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Research & Development	0.03	0.47	0.40	< 0.005	0.04	—	0.04	0.04	—	0.04	—	510	510	0.05	< 0.005	—	511
Hospital	0.06	1.17	0.99	0.01	0.09	—	0.09	0.09	—	0.09	—	1,270	1,270	0.11	< 0.005	—	1,274
Government (Civic Center)	0.02	0.35	0.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	375	375	0.03	< 0.005	—	376
Total	2.34	40.7	22.2	0.26	3.24	—	3.24	3.24	—	3.24	—	46,097	46,097	4.08	0.09	—	46,225

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	8,058	640	15,689	40.0	2,202	—	2,202	2,162	—	2,162	288,969	552,138	841,107	862	10.5	—	865,766
Consumer Products	1,163	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	101	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	218	19.5	2,159	0.10	1.49	—	1.49	1.13	—	1.13	—	6,325	6,325	0.26	0.05	—	6,347
Total	9,540	660	17,848	40.1	2,204	—	2,204	2,163	—	2,163	288,969	558,463	847,432	862	10.5	—	872,113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	8,058	640	15,689	40.0	2,202	—	2,202	2,162	—	2,162	288,969	552,138	841,107	862	10.5	—	865,766
Consumer Products	1,163	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	101	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9,322	640	15,689	40.0	2,202	—	2,202	2,162	—	2,162	288,969	552,138	841,107	862	10.5	—	865,766
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	101	8.00	196	0.50	27.5	—	27.5	27.0	—	27.0	3,277	6,261	9,538	9.77	0.12	—	9,818
Consumer Products	212	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	18.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	27.2	2.44	270	0.01	0.19	—	0.19	0.14	—	0.14	—	717	717	0.03	0.01	—	720
Total	359	10.4	466	0.51	27.7	—	27.7	27.2	—	27.2	3,277	6,978	10,255	9.80	0.12	—	10,537

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	1,004	8,047	9,051	105	2.64	—	12,449
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	1,214	2,095	3,309	125	3.01	—	7,329
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	362	599	962	37.3	0.90	—	2,160
Strip Mall	—	—	—	—	—	—	—	—	—	—	603	1,002	1,605	62.0	1.49	—	3,600
Office Park	—	—	—	—	—	—	—	—	—	—	612	1,013	1,624	62.9	1.51	—	3,649
Hotel	—	—	—	—	—	—	—	—	—	—	28.7	48.7	77.4	2.95	0.07	—	172
Place of Worship	—	—	—	—	—	—	—	—	—	—	10.9	18.3	29.2	1.12	0.03	—	65.3

Elementary	—	—	—	—	—	—	—	—	—	—	34.3	58.8	93.2	3.53	0.08	—	207
City Park	—	—	—	—	—	—	—	—	—	—	0.00	830	830	0.16	0.02	—	840
Research & Development	—	—	—	—	—	—	—	—	—	—	283	467	750	29.1	0.70	—	1,685
Hospital	—	—	—	—	—	—	—	—	—	—	85.7	142	228	8.82	0.21	—	511
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	84.1	139	223	8.65	0.21	—	501
Total	—	—	—	—	—	—	—	—	—	—	4,322	14,460	18,781	446	10.9	—	33,169
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	1,004	8,047	9,051	105	2.64	—	12,449
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	1,214	2,095	3,309	125	3.01	—	7,329
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	362	599	962	37.3	0.90	—	2,160
Strip Mall	—	—	—	—	—	—	—	—	—	—	603	1,002	1,605	62.0	1.49	—	3,600
Office Park	—	—	—	—	—	—	—	—	—	—	612	1,013	1,624	62.9	1.51	—	3,649
Hotel	—	—	—	—	—	—	—	—	—	—	28.7	48.7	77.4	2.95	0.07	—	172
Place of Worship	—	—	—	—	—	—	—	—	—	—	10.9	18.3	29.2	1.12	0.03	—	65.3
Elementary School	—	—	—	—	—	—	—	—	—	—	34.3	58.8	93.2	3.53	0.08	—	207

City Park	—	—	—	—	—	—	—	—	—	—	0.00	830	830	0.16	0.02	—	840
Research & Development	—	—	—	—	—	—	—	—	—	—	283	467	750	29.1	0.70	—	1,685
Hospital	—	—	—	—	—	—	—	—	—	—	85.7	142	228	8.82	0.21	—	511
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	84.1	139	223	8.65	0.21	—	501
Total	—	—	—	—	—	—	—	—	—	—	4,322	14,460	18,781	446	10.9	—	33,169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	166	1,332	1,498	17.3	0.44	—	2,061
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	201	347	548	20.7	0.50	—	1,213
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	60.0	99.2	159	6.17	0.15	—	358
Strip Mall	—	—	—	—	—	—	—	—	—	—	99.8	166	266	10.3	0.25	—	596
Office Park	—	—	—	—	—	—	—	—	—	—	101	168	269	10.4	0.25	—	604
Hotel	—	—	—	—	—	—	—	—	—	—	4.75	8.07	12.8	0.49	0.01	—	28.5
Place of Worship	—	—	—	—	—	—	—	—	—	—	1.80	3.03	4.83	0.19	< 0.005	—	10.8
Elementary School	—	—	—	—	—	—	—	—	—	—	5.68	9.74	15.4	0.58	0.01	—	34.2
City Park	—	—	—	—	—	—	—	—	—	—	0.00	137	137	0.03	< 0.005	—	139

Research & Development	—	—	—	—	—	—	—	—	—	—	46.8	77.3	124	4.81	0.12	—	279
Hospital	—	—	—	—	—	—	—	—	—	—	14.2	23.5	37.7	1.46	0.04	—	84.7
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	13.9	23.0	36.9	1.43	0.03	—	83.0
Total	—	—	—	—	—	—	—	—	—	—	715	2,394	3,109	73.8	1.80	—	5,492

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	5,949	0.00	5,949	595	0.00	—	20,812
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	6,730	0.00	6,730	673	0.00	—	23,547
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	3,995	0.00	3,995	399	0.00	—	13,977
Strip Mall	—	—	—	—	—	—	—	—	—	—	2,403	0.00	2,403	240	0.00	—	8,409
Office Park	—	—	—	—	—	—	—	—	—	—	900	0.00	900	90.0	0.00	—	3,149
Hotel	—	—	—	—	—	—	—	—	—	—	174	0.00	174	17.4	0.00	—	609

Place of Worship	—	—	—	—	—	—	—	—	—	—	558	0.00	558	55.8	0.00	—	1,954
Elementary School	—	—	—	—	—	—	—	—	—	—	727	0.00	727	72.6	0.00	—	2,542
City Park	—	—	—	—	—	—	—	—	—	—	22.8	0.00	22.8	2.28	0.00	—	79.9
Research & Development	—	—	—	—	—	—	—	—	—	—	12.3	0.00	12.3	1.23	0.00	—	43.0
Hospital	—	—	—	—	—	—	—	—	—	—	784	0.00	784	78.3	0.00	—	2,742
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	678	0.00	678	67.8	0.00	—	2,374
Total	—	—	—	—	—	—	—	—	—	—	22,934	0.00	22,934	2,292	0.00	—	80,239
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	5,949	0.00	5,949	595	0.00	—	20,812
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	6,730	0.00	6,730	673	0.00	—	23,547
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	3,995	0.00	3,995	399	0.00	—	13,977
Strip Mall	—	—	—	—	—	—	—	—	—	—	2,403	0.00	2,403	240	0.00	—	8,409
Office Park	—	—	—	—	—	—	—	—	—	—	900	0.00	900	90.0	0.00	—	3,149
Hotel	—	—	—	—	—	—	—	—	—	—	174	0.00	174	17.4	0.00	—	609
Place of Worship	—	—	—	—	—	—	—	—	—	—	558	0.00	558	55.8	0.00	—	1,954

Element School	—	—	—	—	—	—	—	—	—	—	727	0.00	727	72.6	0.00	—	2,542
City Park	—	—	—	—	—	—	—	—	—	—	22.8	0.00	22.8	2.28	0.00	—	79.9
Research & Development	—	—	—	—	—	—	—	—	—	—	12.3	0.00	12.3	1.23	0.00	—	43.0
Hospital	—	—	—	—	—	—	—	—	—	—	784	0.00	784	78.3	0.00	—	2,742
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	678	0.00	678	67.8	0.00	—	2,374
Total	—	—	—	—	—	—	—	—	—	—	22,934	0.00	22,934	2,292	0.00	—	80,239
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	985	0.00	985	98.4	0.00	—	3,446
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	1,114	0.00	1,114	111	0.00	—	3,898
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	661	0.00	661	66.1	0.00	—	2,314
Strip Mall	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,392
Office Park	—	—	—	—	—	—	—	—	—	—	149	0.00	149	14.9	0.00	—	521
Hotel	—	—	—	—	—	—	—	—	—	—	28.8	0.00	28.8	2.88	0.00	—	101
Place of Worship	—	—	—	—	—	—	—	—	—	—	92.5	0.00	92.5	9.24	0.00	—	323
Elementary School	—	—	—	—	—	—	—	—	—	—	120	0.00	120	12.0	0.00	—	421
City Park	—	—	—	—	—	—	—	—	—	—	3.78	0.00	3.78	0.38	0.00	—	13.2

Research & Development	—	—	—	—	—	—	—	—	—	—	2.03	0.00	2.03	0.20	0.00	—	7.12
Hospital	—	—	—	—	—	—	—	—	—	—	130	0.00	130	13.0	0.00	—	454
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	112	0.00	112	11.2	0.00	—	393
Total	—	—	—	—	—	—	—	—	—	—	3,797	0.00	3,797	379	0.00	—	13,284

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	195	195
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	128	128
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	974	974
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.5	26.5
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.37	4.37
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,339	1,339

Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.70	0.70
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.39	2.39
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.67	7.67
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.56	0.56
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.54	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,679	2,679
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	195	195
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	128	128
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	974	974
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.5	26.5
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.37	4.37
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,339	1,339
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.70	0.70

Element School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.39	2.39
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.67	7.67
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.56	0.56
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.54	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,679	2,679
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32.3	32.3
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.2	21.2
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	161	161
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.38	4.38
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.72	0.72
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	222	222
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.27	1.27
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	444	444

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	116,723	117,960	105,719	42,094,633	595,124	601,429	539,016	214,623,490
Apartments Low Rise	109,478	121,742	93,924	39,787,910	558,184	620,713	478,879	202,862,442
High Turnover (Sit Down Restaurant)	61,886	67,524	78,690	23,758,525	179,182	481,752	561,414	101,109,024
Strip Mall	166,704	158,128	76,845	55,714,258	1,189,355	1,128,170	548,252	397,495,268
Office Park	17,608	2,609	1,209	4,789,626	125,623	18,611	8,625	34,171,752
Hotel	4,368	4,279	3,109	1,524,077	31,165	30,531	22,181	10,873,579
Place of Worship	1,119	964	4,448	573,958	7,983	6,880	31,737	4,094,921
Elementary School	12,364	0.00	0.00	3,223,535	88,213	0.00	0.00	22,998,418
City Park	340	855	955	183,055	2,427	6,098	6,814	1,306,012
Research & Development	2,992	505	295	821,640	21,343	3,601	2,104	5,862,019
Hospital	9,844	6,069	5,680	3,179,036	70,231	43,296	40,527	22,680,943
Government (Civic Center)	6,646	0.00	0.00	1,732,825	47,419	0.00	0.00	12,362,898

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	698
Gas Fireplaces	11868
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	1396
Conventional Wood Stoves	0
Catalytic Wood Stoves	698
Non-Catalytic Wood Stoves	698
Pellet Wood Stoves	0
Apartments Low Rise	—
Wood Fireplaces	844
Gas Fireplaces	14355
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	1689
Conventional Wood Stoves	0
Catalytic Wood Stoves	844
Non-Catalytic Wood Stoves	844
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

91382539.5	30,460,847	13,799,396	4,599,799	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	85,744,517	170	0.0330	0.0040	398,153,422
Apartments Low Rise	58,993,870	170	0.0330	0.0040	229,092,665
High Turnover (Sit Down Restaurant)	22,190,458	170	0.0330	0.0040	70,020,836
Strip Mall	37,437,696	170	0.0330	0.0040	18,379,650
Office Park	29,804,589	170	0.0330	0.0040	57,514,796
Hotel	10,064,566	170	0.0330	0.0040	37,929,104
Place of Worship	1,631,323	170	0.0330	0.0040	7,338,020
Elementary School	4,166,142	170	0.0330	0.0040	9,726,422
City Park	0.00	170	0.0330	0.0040	0.00
Research & Development	4,978,370	170	0.0330	0.0040	9,606,908
Hospital	10,070,377	170	0.0330	0.0040	23,939,052
Government (Civic Center)	3,665,176	170	0.0330	0.0040	7,072,798

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	523,933,125	2,590,467,419
Apartments Low Rise	633,733,177	36,415,290
High Turnover (Sit Down Restaurant)	189,079,952	403,670
Strip Mall	314,605,035	2,752,302
Office Park	319,217,809	1,163,871
Hotel	14,966,394	555,145
Place of Worship	5,688,167	117,807
Elementary School	17,907,861	889,338
City Park	0.00	336,699,650
Research & Development	147,508,184	194,406
Hospital	44,727,195	230,984
Government (Civic Center)	43,877,170	3.29

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	11,038	—
Apartments Low Rise	12,488	—
High Turnover (Sit Down Restaurant)	7,413	—
Strip Mall	4,460	—
Office Park	1,670	—
Hotel	323	—
Place of Worship	1,036	—
Elementary School	1,348	—
City Park	42.3	—

Research & Development	22.8	—
Hospital	1,454	—
Government (Civic Center)	1,259	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Place of Worship	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Place of Worship	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Place of Worship	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Place of Worship	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Research & Development	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Research & Development	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Hospital	Chillers	R-134a	1,430	< 0.005	2.00	2.00	23.0
Hospital	Household refrigerators and/or freezers	R-134a	1,430	< 0.005	0.60	0.00	1.00
Hospital	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Hospital	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Government (Civic Center)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government (Civic Center)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	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 Project Location	Unit
Temperature and Extreme Heat	8.07	annual days of extreme heat
Extreme Precipitation	4.10	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	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 Radke et al. (2017), as reported in Cal-Adapt (Radke 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 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 Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 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	65.4
AQ-PM	41.8
AQ-DPM	38.8
Drinking Water	5.91
Lead Risk Housing	20.9
Pesticides	0.00
Toxic Releases	37.4
Traffic	58.8
Effect Indicators	—

CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	24.7
Impaired Water Bodies	58.7
Solid Waste	9.67
Sensitive Population	—
Asthma	8.40
Cardio-vascular	22.0
Low Birth Weights	8.79
Socioeconomic Factor Indicators	—
Education	18.8
Housing	58.8
Linguistic	7.38
Poverty	29.5
Unemployment	26.9

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	—
Above Poverty	88.46400616
Employed	84.92236623
Median HI	92.69857564
Education	—
Bachelor's or higher	79.13512126
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—

Auto Access	86.34672142
Active commuting	26.85743616
Social	—
2-parent households	83.33119466
Voting	65.09688182
Neighborhood	—
Alcohol availability	84.48607725
Park access	58.29590658
Retail density	28.14063904
Supermarket access	36.37880149
Tree canopy	86.00025664
Housing	—
Homeownership	92.99371231
Housing habitability	85.19183883
Low-inc homeowner severe housing cost burden	56.64057487
Low-inc renter severe housing cost burden	54.20248941
Uncrowded housing	93.44283331
Health Outcomes	—
Insured adults	71.16643141
Arthritis	0.0
Asthma ER Admissions	88.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	75.2

Cognitively Disabled	70.6
Physically Disabled	93.4
Heart Attack ER Admissions	76.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	95.0
Elderly	18.5
English Speaking	64.2
Foreign-born	24.8
Outdoor Workers	80.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.2
Traffic Density	23.4
Traffic Access	23.0
Other Indices	—
Hardship	10.4
Other Decision Support	—

2016 Voting	80.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	8.00
Healthy Places Index Score for Project Location (b)	93.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	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

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Based on traffic data provided by LLG.
Land Use	Assumed 5% of area is landscaped.
Operations: Hearths	Assumes new developments would not burn wood.

Laguna Niguel Government Building Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Laguna Niguel Government Building
Construction Start Date	1/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	13.6
Location	33.56070243436561, -117.71351251473956
County	Orange
City	Laguna Niguel
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	6034
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Government (Civic Center)	1,000	1000sqft	23.0	1,000,000	100,000	—	—	—
Parking Lot	2,526	1000sqft	58.0	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.39	12.2	66.5	0.13	0.27	7.76	8.03	0.27	1.16	1.43	—	15,499	15,499	0.69	0.50	6.57	15,673
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.39	12.3	66.3	0.13	0.27	7.76	8.03	0.27	1.16	1.43	—	15,477	15,477	0.69	0.50	0.17	15,645
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.99	8.81	47.3	0.09	0.19	5.45	5.65	0.19	0.82	1.01	—	11,029	11,029	0.49	0.36	2.02	11,150
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18	1.61	8.63	0.02	0.04	1.00	1.03	0.04	0.15	0.19	—	1,826	1,826	0.08	0.06	0.33	1,846

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.39	12.2	66.5	0.13	0.27	7.76	8.03	0.27	1.16	1.43	—	15,499	15,499	0.69	0.50	6.57	15,673

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.39	12.3	66.3	0.13	0.27	7.76	8.03	0.27	1.16	1.43	—	15,477	15,477	0.69	0.50	0.17	15,645
2027	1.37	12.2	66.2	0.13	0.27	7.76	8.03	0.27	1.16	1.43	—	15,421	15,421	0.69	0.50	0.16	15,588
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.99	8.81	47.3	0.09	0.19	5.45	5.65	0.19	0.82	1.01	—	11,029	11,029	0.49	0.36	2.02	11,150
2027	0.04	0.34	1.81	< 0.005	0.01	0.21	0.22	0.01	0.03	0.04	—	423	423	0.02	0.01	0.07	427
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.18	1.61	8.63	0.02	0.04	1.00	1.03	0.04	0.15	0.19	—	1,826	1,826	0.08	0.06	0.33	1,846
2027	0.01	0.06	0.33	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	< 0.005	0.01	70.7

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.25	9.47	63.6	0.12	0.24	—	0.24	0.24	—	0.24	—	12,616	12,616	0.51	0.10	—	12,660
Demolition	—	—	—	—	—	4.08	4.08	—	0.62	0.62	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.10	0.07	< 0.005	< 0.005	2.58	2.58	< 0.005	0.26	0.26	—	17.0	17.0	0.01	< 0.005	0.01	18.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.25	9.47	63.6	0.12	0.24	—	0.24	0.24	—	0.24	—	12,616	12,616	0.51	0.10	—	12,660
Demolition	—	—	—	—	—	4.08	4.08	—	0.62	0.62	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.11	0.08	< 0.005	< 0.005	2.58	2.58	< 0.005	0.26	0.26	—	17.2	17.2	0.01	< 0.005	< 0.005	18.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	6.75	45.3	0.08	0.17	—	0.17	0.17	—	0.17	—	8,987	8,987	0.36	0.07	—	9,018
Demolition	—	—	—	—	—	2.91	2.91	—	0.44	0.44	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.07	0.05	< 0.005	< 0.005	1.77	1.77	< 0.005	0.18	0.18	—	12.2	12.2	< 0.005	< 0.005	< 0.005	12.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.23	8.27	0.02	0.03	—	0.03	0.03	—	0.03	—	1,488	1,488	0.06	0.01	—	1,493
Demolition	—	—	—	—	—	0.53	0.53	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	0.01	< 0.005	< 0.005	0.32	0.32	< 0.005	0.03	0.03	—	2.01	2.01	< 0.005	< 0.005	< 0.005	2.13
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	1.84	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	456	456	0.01	0.02	1.58	462
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	2.54	1.00	0.02	0.03	0.65	0.68	0.03	0.18	0.21	—	2,410	2,410	0.16	0.38	4.97	2,533
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	1.59	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	434	434	0.01	0.02	0.04	439
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	2.63	1.01	0.02	0.03	0.65	0.68	0.03	0.18	0.21	—	2,410	2,410	0.16	0.38	0.13	2,528

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.18	0.00	0.00	0.32	0.32	0.00	0.08	0.08	—	313	313	< 0.005	0.01	0.49	317
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	1.90	0.72	0.01	0.02	0.46	0.48	0.02	0.13	0.15	—	1,717	1,717	0.12	0.27	1.53	1,802
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	51.9	51.9	< 0.005	< 0.005	0.08	52.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.35	0.13	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	284	284	0.02	0.04	0.25	298

3.3. Demolition (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.25	9.47	63.6	0.12	0.24	—	0.24	0.24	—	0.24	—	12,615	12,615	0.51	0.10	—	12,658
Demolition	—	—	—	—	—	4.08	4.08	—	0.62	0.62	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.10	0.08	< 0.005	< 0.005	2.58	2.58	< 0.005	0.26	0.26	—	16.9	16.9	0.01	< 0.005	< 0.005	17.9
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	1.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	346	346	0.01	< 0.005	—	347
Demolition	—	—	—	—	—	0.11	0.11	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.46	0.46	< 0.005	< 0.005	< 0.005	0.49
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	57.2	57.2	< 0.005	< 0.005	—	57.4
Demolition	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.11	1.49	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	426	426	0.01	0.02	0.04	432
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	2.55	0.97	0.02	0.03	0.65	0.68	0.03	0.18	0.21	—	2,363	2,363	0.16	0.38	0.12	2,481
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.8	11.8	< 0.005	< 0.005	0.02	12.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.7	64.7	< 0.005	0.01	0.05	68.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	1.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.01	11.3

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/2/2026	1/14/2027	5.00	270	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	0.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	1.00	8.00	381	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	0.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	1.00	8.00	381	0.38
Demolition	Excavators	Diesel	Tier 4 Final	2.00	8.00	373	0.38
Demolition	Excavators	Diesel	Tier 4 Final	2.00	8.00	303	0.38
Demolition	Excavators	Diesel	Tier 4 Final	1.00	8.00	225	0.38
Demolition	Rubber Tired Loaders	Diesel	Tier 4 Final	1.00	8.00	300	0.36
Demolition	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	8.00	469	0.38
Demolition	Skid Steer Loaders	Diesel	Tier 4 Final	3.00	8.00	67.0	0.37

Demolition	Cranes	Diesel	Tier 4 Final	1.00	8.00	367	0.29
Demolition	Crushing/Proc. Equipment	Diesel	Tier 4 Final	1.00	8.00	335	0.85

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	35.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	7.00	102	HHDT
Demolition	Onsite truck	7.00	0.25	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	79,686	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Government (Civic Center)	0.00	0%
Parking Lot	58.0	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	589	0.03	< 0.005
2027	0.00	589	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	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 Project Location	Unit
Temperature and Extreme Heat	8.07	annual days of extreme heat
Extreme Precipitation	4.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	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 Radke et al. (2017), as reported in Cal-Adapt (Radke 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 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 Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	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 Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	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	66.8
AQ-PM	42.8
AQ-DPM	30.6
Drinking Water	5.91
Lead Risk Housing	17.9
Pesticides	0.00
Toxic Releases	42.8
Traffic	62.5
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	79.4
Impaired Water Bodies	66.7
Solid Waste	9.67
Sensitive Population	—
Asthma	8.74
Cardio-vascular	18.5
Low Birth Weights	46.3
Socioeconomic Factor Indicators	—
Education	20.3
Housing	51.8
Linguistic	4.59
Poverty	25.7
Unemployment	41.8

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	—
Above Poverty	71.25625561
Employed	94.37957141
Median HI	58.29590658
Education	—
Bachelor's or higher	70.67881432
High school enrollment	100
Preschool enrollment	37.11022713
Transportation	—
Auto Access	51.48209932
Active commuting	53.04760683
Social	—
2-parent households	24.62466316
Voting	29.87296292
Neighborhood	—
Alcohol availability	42.28153471
Park access	50.86616194
Retail density	86.98832285
Supermarket access	70.60182215
Tree canopy	69.1518029
Housing	—
Homeownership	47.28602592
Housing habitability	30.37341204
Low-inc homeowner severe housing cost burden	6.390350314
Low-inc renter severe housing cost burden	46.54176825

Uncrowded housing	47.26036186
Health Outcomes	—
Insured adults	50.3143847
Arthritis	0.0
Asthma ER Admissions	96.4
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	65.7
Cognitively Disabled	90.0
Physically Disabled	78.7
Heart Attack ER Admissions	96.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	6.0
Elderly	81.9
English Speaking	85.3
Foreign-born	53.8
Outdoor Workers	79.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	66.8
Traffic Density	35.2
Traffic Access	23.0
Other Indices	—
Hardship	26.9
Other Decision Support	—
2016 Voting	63.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	16.0
Healthy Places Index Score for Project Location (b)	64.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	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

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Only the demolition phase of the Project is evaluated.
Construction: Off-Road Equipment	Based on equipment estimates from a demolition contractor.
Construction: Trips and VMT	Based on data request
Construction: Off-Road Equipment EF	Based on equipment with 300-599 bhp