Community Air Protection Program Recommendation to Select the South Sacramento-Florin Community to Transition to Develop a Community Emissions Reduction Program

> Staff Report July 2024



Table of Contents

Introduction	4
Recommendation to Transition South Sacramento-Florin Community to Develop a CERP	6
South Sacramento-Florin Community	7
Community Description	7
Community Exposure	9
Community Advocacy and District Partnership	9
Air Quality Burden Assessment	10
Preliminary Emissions Inventory Estimates	11
Community Grant Funding	17
Enhanced Enforcement Efforts	19
Appendix A Profiles of Current Program Communities	20
Appendix B South Sacramento-Florin CAMP Boundary Evolution	22
Appendix C California Environmental Quality Act	23
Appendix D South Sacramento-Florin CAMP Monitoring	24
Appendix E Preliminary Community Emissions Inventories	25

List of Figures

Figure 1. Community Air Protection Communities5
Figure 2. Photograph from the South Sacramento-Florin Community Phase 3 Portable Monitoring Laboratory
Figure 3. Sensitive Receptors within the Proposed Boundary Area of South Sacramento- Florin CERP Community
Figure 4. Daily PM2.5 and ozone levels were measured by the Phase 3 monitoring site11
Figure 5. Preliminary Source Contributions in the South Sacramento-Florin Community (2022 emissions in tons per year, tpy)12
Figure 6. Projected Emissions Trends for Major Source Categories in Sacramento County (Emissions in Ton/Day)14
Figure 7. Projected Emissions Trends for On-road Vehicle Diesel PM in Sacramento County (Emissinos in Tons/Day)16

Figure 8. Projected Emissions Trends for Off-road Vehicle Diesel PM in Sacramento County	
(Emissions in Tons/Day)17	'

List of Tables

Table 1. Exposure burden for South Sacramento-Florin community (percentile)9
Table 2. Source Categories by Stationary, Areawide, and Mobile for the South Sacramento-
Florin Community. (Preliminary Emissions Inventory for 2022)12
Table 3. Community Air Protection Incentives in South Sacramento-Florin Community19

Introduction

This Staff Report describes the California Air Resources Board (CARB or Board) staff evaluation and recommendation to the Board for the selection of the South Sacramento-Florin Community to transition to develop a Community Emissions Reduction Program (CERP) within the Community Air Protection Program (Program). CARB established the Program in 2017 to implement Assembly Bill 617 (AB 617)¹. The purpose of the Program is to reduce exposure to, and emissions of, criteria air pollutants and air toxic air contaminants and maximize health benefits and environmental equity goals in communities affected by a high cumulative exposure burden. AB 617 requires CARB to annually consider the selection, if appropriate, of communities affected by a high cumulative exposure burden for development by the local air district with community involvement of a CERPs and/or Community Air Monitoring Plan (CAMPs) that will be implemented by the local air district. Once approved by the air district, a CERP is reviewed for approval by CARB, and if approved, implemented by the air district. The Program is implemented consistent with the CARB guidance document known as *Blueprint 2.0*.

There are currently 19 communities working on developing or implementing CERPs and/or CAMPs. Figure 1 shows their locations throughout the state. *Appendix A* provides a brief description of each community. These communities have been selected by the Board since 2018 to develop and implement CERPs and/or CAMPs that include community-prioritized actions to monitor and/or reduce emissions and exposure to air pollution.

As specified in Blueprint 2.0, the Program is continuing to move into a model that uses additional pathways to support many more impacted communities across the State. CARB anticipates that, over the next few years of the Program, few, if any, additional communities will be selected through the formal process as these other pathway activities are implemented.

¹ Assembly Bill 617, Garcia, C., Chapter 136, Statutes of 2017, modified the California Health and Safety Code, amending § 40920.6, § 42400, and § 42402, and adding § 39607.1, § 40920.8, § 42411, § 42705.5, and § 44391.2.





Recommendation to Transition South Sacramento-Florin Community to Develop a CERP

In September 2018, the South Sacramento-Florin Community within Sacramento Metropolitan Air Quality Management District (Sacramento Metro AQMD or air district) jurisdiction was selected by the Board to develop a CAMP. In collaboration with the Community Steering Committee (CSC), Sacramento Metro AQMD has developed and is implementing a *CAMP*. Figure 2 shows the Phase 3 portable air monitoring laboratory within the South Sacramento-Florin Community.

Figure 2. Photograph from the South Sacramento-Florin Community Phase 3 Portable Monitoring Laboratory



At the *March 25, 2024 meeting*, the South Sacramento-Florin CSC voted and overwhelmingly approved a recommendation for the air district to nominate the community to CARB to transition to develop a CERP, following its adoption of its CAMP. On April 25, 2024, CARB staff received a nomination from the Sacramento Metro AQMD to transition South Sacramento-Florin to a CERP community.

CARB staff is recommending that the Board approve this transition and select the South Sacramento-Florin to develop a CERP. This staff report contains a description of the community, community advocacy and air district partnership, assessment of the community air quality burden and inventory, community grant funding available, and community enforcement enhancement. Further detail on community data and other background is provided in the Appendices.

South Sacramento-Florin Community

Community Description

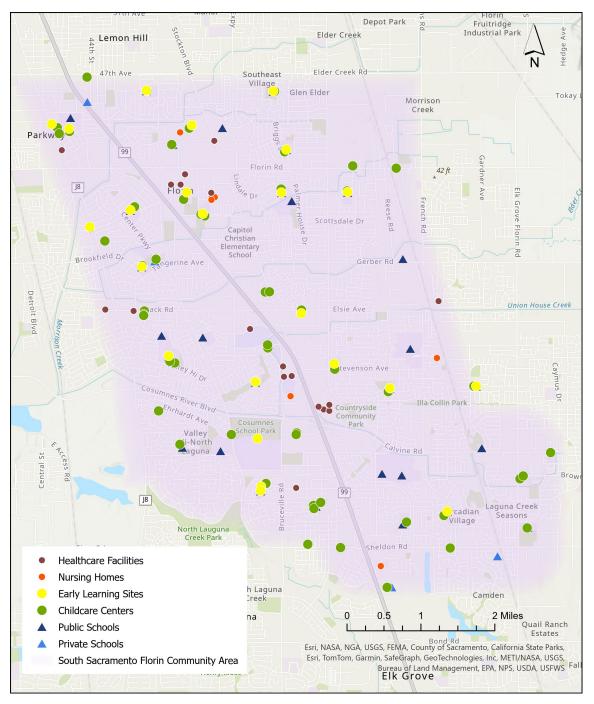
Located south of downtown Sacramento along Highway 99, the community is primarily a residential area with a population of 153,000² and spans approximately 22 square miles. The community members and residents have been concerned about mobile, area-wide, and stationary sources of air pollution - especially emissions from Highway 99 and businesses. The CSC has been discussing how to address reducing these emissions as it developed and implemented the CAMP. The implementation of CAMP over last five years has forged the partnership between the air district and the South Sacramento-Florin CSC. The community identified as a priority air quality concern emissions from Highway 99 and associated traffic as well as emissions from commercial corridors and small businesses, increasing rates of asthma and respiratory problems within the community, and the desire for enhanced education and community outreach around air quality. The CSC has been particularly concerned about emissions impact on sensitive receptors, for example children walking to school and crossing intersections located in high traffic areas or along the Highway 99 corridor. There are 20 healthcare facilities, 7 nursing homes, 35 early learning sites, 66 childcare centers, 31 public schools, and 6 private schools in this community area, all of which are sensitive receptors to air pollution. Figure 3 shows where sensitive receptors are located in the proposed community area. Other priority air quality concerns are identified in the South Sacramento-Florin CAMP.

Appendix B provides details on the changes to the South Sacramento-Florin community boundary since their selection in 2018 as a CAMP community. Figure 3 provides preliminary community area of South Sacramento-Florin CERP community. If the CARB Board approves

² 2020 Census data through the ArcGIS Living Atlas - <u>https://livingatlas.arcgis.com/en/home/</u> assuming population evenly distributed across census blocks.

transition of the community to develop a CERP, the air district convened CSC will deliberate and help the air district to decide on the final CERP community boundary.

Figure 3. Sensitive Receptors within the Proposed Boundary Area of South Sacramento-Florin CERP Community



Community Exposure

Table 1 shows key metrics of the South Sacramento-Florin community which include a CalEnviroScreen 4.0 (CES) score in the 93rd percentile. All values shown are percentile scores for each indicator listed. This community has the worst diesel particulate matter cardiovascular disease, poverty and unemployment scores in the State. The diesel particulate matter (DPM) and asthma are also high: 96th and 98th percentile, respectively.

Table 1. Exposure burden for South Sacramento-Florin community (percentile)³

Overall CES 4.0 Scores	Ozone	PM2.5	DPM	Asthma	Cardiovascular disease	Poverty	Poverty Unem- ployment		Cancer Burden	
93	49	37	96	98	99	99	99	92	94	

Community Advocacy and District Partnership

CARB selected the South Sacramento-Florin community in 2018 to develop a CAMP. In December 2018, the Sacramento Metro AQMD convened the South Sacramento-Florin CSC.

Since the adoption and approval of the CAMP by the air district in July 2020, the air district and the CSC have continued to engage with the South Sacramento-Florin community to build partnerships with community organizations and local agencies, to review and discuss air monitoring data results, and to better understand the air guality concerns and build meaningful engagement with community members in the area. Community partners represented in the CSC include residents, community-based organizations, faith-based organizations, business organizations, public health organizations, environmental justice organizations, and local government agencies. The CSC decided to use some outreach funds identified by the air district towards the creation and maintenance of a website to provide an accessible way for community members to learn more about the CSC and their work while increasing air quality education and engagement in Sacramento. The air district and the CSC collaborated to produce the Sac Clean Air Celebration community event on April 2023. The community event featured public tours of the community air monitoring portable laboratory located at Fern Bacon Middle School. The principal at the Fern Bacon Middle School expressed interest and support to build on this effort and opportunities to educate the students about air quality. As a result, the air district in partnership with the City

³ Table of Metrics - Update November 2021. https://ww2.arb.ca.gov/resources/documents/table-metricsupdate-november-2021

of Sacramento is working to develop an air quality curriculum that could be used in a classroom setting. The next phase for this community is to transition to develop a CERP.

Air Quality Burden Assessment

The South Sacramento-Florin CAMP comprises three phases of air monitoring (*Appendix B*). Phase 1 monitoring consists of a monitoring network of 21 Clarity Node-S monitors measuring Particulate Matter 2.5 microns or smaller (PM_{2.5}) levels, which were first deployed in 2019 and are still collecting air quality data⁴. Phase 2 monitoring consisted of six standalone monitoring units that measured black carbon (BC), speciated PM_{2.5} and PM₁₀, and volatile organic compounds (VOCs). Phase 2 monitoring was completed from August 2020 to December 2021. Phase 3 monitoring is a portable laboratory that measures PM_{2.5}, BC, total carbon, nitrogen dioxide (NO₂), ozone, speciated PM_{2.5} and PM₁₀, VOCs, and meteorological conditions. Some Phase 3 monitoring began April 2023 with full monitoring in place by August 2023. Air monitoring in Phase 3 will continue at its current location at least until July 30, 2024.

The purpose behind the multi-phase approach was to use the data from Phase 1 and Phase 2 monitoring as a screening tool for placing the Phase 3 portable laboratory. The data from Phase 1 and Phase 2 showed that greater levels of PM_{2.5}, PM₁₀, BC, and benzene were measured in the northwest area of the South Sacramento-Florin community boundaries. As a result, the Phase 3 portable laboratory was placed in the northwest area of the community.

The PM_{2.5} and ozone levels measured by Phase 3 monitoring from April through December 2023 are shown in Figure 4. On September 20, 2023, the PM_{2.5} level was recorded to be 37 μ g/m³ which was above U.S. Environmental Protection Agency (EPA) 24-hour National Ambient Air Quality Standard (NAAQS) of 35 μ g/m³ required under the U.S Clean Air Act⁵. This data may have likely been the result of wildfire smoke in the region⁶. The ozone levels exceeded the U.S. EPA 8-hour NAAQS of 0.070 ppm on seven days from June through August 2023.

⁴ Clarity sensor data - *https://www.airquality.org/air-quality-health/community-air-protection/community-air-monitoring* . AQView for the portable lab data *https://aqview.arb.gov/map*

⁵ 42 U.S.C. 7401 et seq.

⁶ Northen California wildfires are pushing smoke into Sacramento. How bad is the air quality? *https://www.sacbee.com/news/california/fires/article279557469.html*

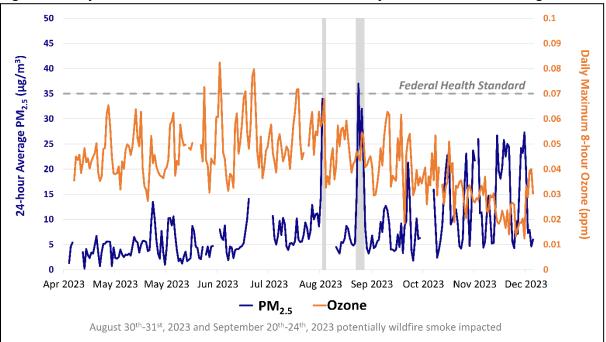
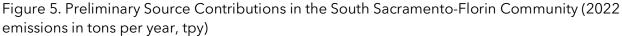


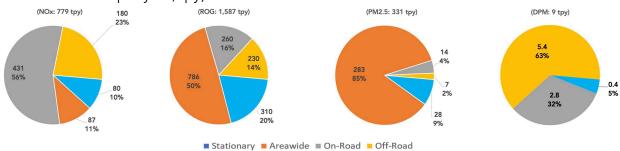
Figure 4. Daily PM2.5 and ozone levels were measured by the Phase 3 monitoring site

Preliminary Emissions Inventory Estimates

A preliminary emissions inventory⁷ based on the proposed community boundary was developed by CARB to quantify emissions of mobile (on-road and off-road), stationary, and areawide sources in the community. Details on the methodology used are provided in *Appendix E* in this document. Figure 5 summarizes the draft estimated emissions for key air pollutants, such as nitrogen oxides (NOx), reactive organic gases (ROG), particulate matter smaller than 2.5 micron (PM_{2.5}), and diesel particulate matter (diesel PM) for this community. The total emissions in the community are approximately 9% of the total Sacramento County emissions for NOx and PM_{2.5}, and 10% of the total County emissions for ROG. Areawide sources contribute to 85% of the total PM2.5 emissions in the community with approximately 60% of the emissions attributed to residential fuel combustion. Emissions from consumer products (28%), residential fuel combustion (16%), and on-road mobile sources (16%) are the significant sources of ROG emissions in the community. Mobile sources, both on-road and off-road, account for 79% of the total NOx emissions, 31% of total ROG emissions, 6% of PM_{2.5} emissions, and 95% total DPM emissions in the community.

⁷ See Appendix E in this document for methodology and additional information on the emissions inventory. For more details on source categories and associated activities (emission inventory codes), see documentation at *https://ww3.arb.ca.gov/ei/documentation.htm.*





The activities that contribute to these emissions are listed in Table 2 and are detailed in Table E.2 in *Appendix E*, along with an initial spatial distribution based on a preliminary planning emissions inventory.

Table 2. Source Categories by Stationary, Areawide, and Mobile for the South Sacramento-Florin Community. (Preliminary Emissions Inventory for 2022)

			Stationar	y Sources			
NOx	%	ROG	%	PM _{2.5}	%	DPM	%
Electric Utilities	45%	Coatings and Related Process Solvents	27%	27% Wood and A0% Paper 40%		Manufacturing and Industrial	100%
Manufacturing and Industrial	21%	Petroleum Marketing	23%	Electric Utilities	38%		
Other (Fuel Combustion)	15%	Degreasing	13%	Mineral Processes	10%		
Service and Commercial	14%	Landfills	8%	Service and Commercial	4%		
Incinerators	2%	Adhesive and Sealants	7%	Other (Industrial Processes)	3%		
			Area So	ources ⁸			
NOx	%	ROG	%	PM _{2.5}	%	DPM	%
Residential Fuel Combustion	99%	Consumer Products	57%	Residential Fuel Combustion	69%		
Fires	0.5%	Residential Fuel Combustion	33%	Construction and Demolition			
Managed Burning and Disposal	0.3%	Architectural Coatings And	8%	Paved Road Dust	10%		

⁸ District and CARB methodologies for estimating area source emissions: *https://ww2.arb.ca.gov/index-methodologies-major-category*

		Related Process Solvents					
		Cooking	0.5%	Cooking	9%		
		Asphalt Paving / Roofing	0.4%	Unpaved Road Dust	1%		
			Mobile S	Sources ⁹			
NOx	%	ROG	%	PM _{2.5}	%	DPM	%
Heavy-Heavy Duty Vehicles	20%	Light Duty Vehicles	40%	Light Duty Vehicles	48%	Off-Road Equipment	42%
Light Duty Vehicles	19%	Off-Road Equipment	36%	Off-Road Equipment	21%	Light Heavy Duty Vehicles	15%
Off-Road Equipment	18%	Medium Duty Vehicles	9%	Light-Heavy Duty Vehicles	17%	Trains	12%
Light-Heavy Duty Vehicles	12%	Fuel Storage and Handling	4%	Heavy-Heavy Duty Vehicles	4%	Off-Road Equipment (PERP)	12%
Medium-Heavy Duty Vehicles	11%	Recreational Boats	4%	Medium Duty Vehicles	4%	Heavy-Heavy Duty Vehicles	11%

Additionally, Figure 6 presents the emissions trends for NOx, PM_{2.5}, and ROG in Sacramento County from 2010 through 2030 using the State Implementation Plan (SIP) emissions inventory¹⁰. The future emissions in the community are forecasted using best available information representing projected future activity data, population and economic growth, and emissions control related data from the implementation of existing District and CARB regulations. Stationary source emissions are relatively small and remain unchanged due to existing District regulations. ROG and PM emissions trends are slightly increasing, specifically from areawide sources, likely due to future growth assumptions (e.g., increasing population that increase the use of personal products and other consumer products for ROG). CARB's implementation of several adopted mobile source regulations for both onroad and off-road sources continue to reduce air pollutant emissions in community.¹¹ Even while the PM emissions from mobile sources continue to decrease, total PM10 and PM_{2.5} emissions show a slight increase during this period, primarily due to other sources of these emissions such as construction and demolition activities which are not regulated. The forecasted emissions provide an initial assessment of future emission trends and air quality

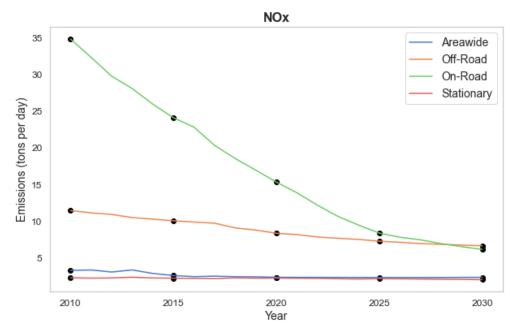
⁹ CARB, EMFAC2021 Volume III Technical Document, April 2021: https://ww2.arb.ca.gov/sites/default/files/2021-08/emfac2021_technical_documentation_april2021.pdf. https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-road-documentation-0

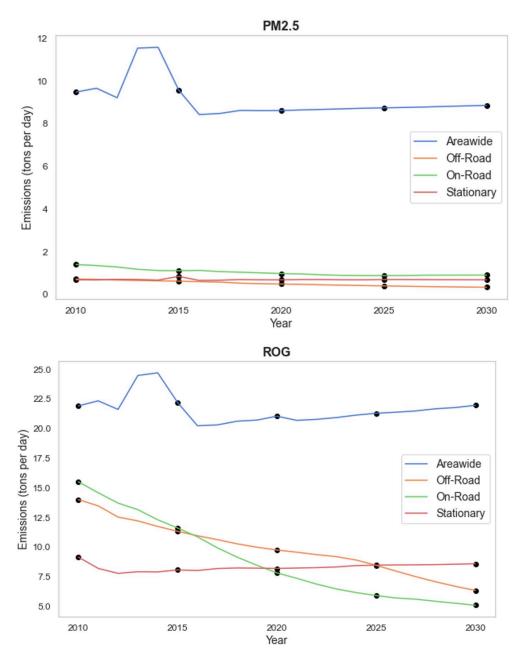
¹⁰ Based on SIP inventory version (CEPAM 2019 Ozone SIP Ver 1.04).

¹¹ E.g., CARB, Advanced Clean Cars II Regulation, Cal. Code Regs., tit. 13, section 1961.2 et seq. Advanced Clean Cars II / California Air Resources Board; CARB, Advanced Clean Trucks, Cal. Code Regs., tit. 13, section 1963 et seq. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks

benefits in the air basin from existing emission reduction programs and reflects the effects of regional growth assumptions and adopted CARB and air district rules. A community-scale forecasted inventory will be developed by CARB and the air district to evaluate the air quality benefits of adopted rules, as well as ongoing and potential future rulemaking activities once the community is approved to transition to develop a CERP by the CARB Board.







Figures 7 and 8 show the trend of diesel particulate matter (diesel PM or DPM) emissions from on-road and off-road vehicles in Sacramento County from 2010 through 2030 using the State Implementation Plan (SIP) emissions inventory⁶. The emissions are projected to decrease significantly in future years from the implementation of adopted mobile source regulations, including the Regulation to Reduce Emissions of DPM, NOx, and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles (also known as the Truck and Bus

Regulation¹²). CARB has recently adopted several mobile source regulations¹³ (e.g., Advanced Clean Truck¹⁴, Advanced Clean Fleets¹⁵, Air Toxics Control Measure for Transport Refrigeration Units¹⁶), and many others are under rulemaking that when adopted will provide for additional reductions in DPM emissions in the community.

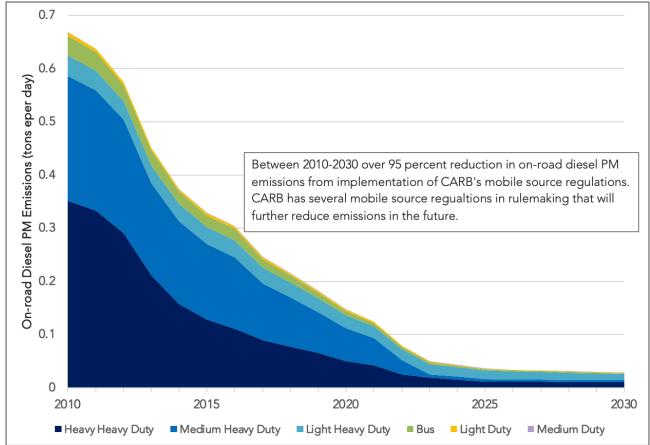


Figure 7. Projected Emissions Trends for On-road Vehicle Diesel PM in Sacramento County (Emissinos in Tons/Day)

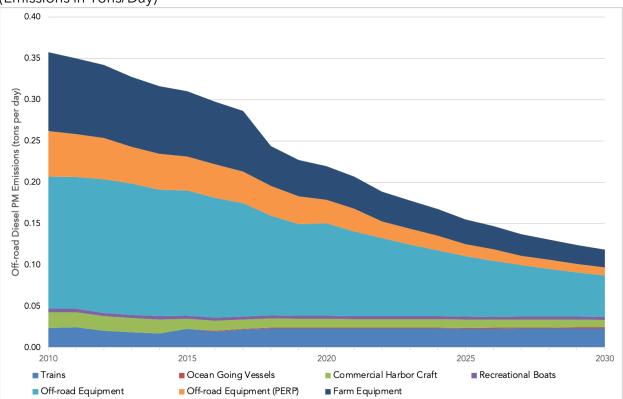
¹² CARB, Truck and Bus Regulation, Cal. Code Regs., tit. 13, section 2022 et seq. *Truck and Bus Regulation | California Air Resources Board*

¹³ CARB Statewide Regulations, CommunityHub 2.0. *https://ww2.arb.ca.gov/capp-communities*

¹⁴ CARB, Advanced Clean Trucks Regulation, Cal. Code Regs., tit. 13, section 1963 et seq. *https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks*

¹⁵ CARB, Advanced Clean Fleets II Regulation, Cal. Code Regs., tit. 13, section 1961.2 et seq. *https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets*

¹⁶ CARB, Transport Refrigeration Unit Regulation, Cal. Code Regs., tit. 13, section 2477 et seq. *https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit*





Community Grant Funding

The South Sacramento-Florin Community has received community grant funding to develop emissions projects.

Supplemental Environmental Projects

Project Title: Urban Wood Resource Program

The Sacramento Tree Foundation was awarded \$166,800 through SEP22-016 to expand its Urban Wood Rescue program, which ensures that logs are diverted from the landfill when trees are removed from the urban forest. Rather than decomposing, the trees are offered a new life as milled lumber, thereby reducing the urban waste stream, sequestering and storing carbon, and mitigating the effects of our changing climate.

Project Title: Midtown Association Carbon Footprint Reduction Project

The Midtown Association was awarded \$85,600 through a Sacramento Metro AQMD administered SEP. The funds were used to implement multiple projects to help reduce their local carbon footprint. The Midtown Association added electric vehicles to their fleet and a

solar-powered generator to be used at events. They also implemented a neighborhood revitalization project to increase walking and biking opportunities in their community by adding bike racks and various beautification efforts.



Project Title: DIY Indoor Air Filter Program

The nonprofit organization 350 Sacramento was awarded \$56,900 through a Sacramento Metro AQMD administered SEP to develop educational materials and implement a series of workshops for seniors and low-income residents on how to build an indoor air filter to reduce their exposure to wildfire smoke. The program provided filters for approximately 600 residents and gave them important information that can help them take healthprotective actions during wildfire smoke events.



Community Air Protection Incentives

Since 2018, and as of November 2023, the Sacramento Metro AQMD has received \$35.7 million in project funds for Community Air Protection Incentives. The air district has invested \$23.8 million so far of which, \$8.1 M has been invested in South Sacramento-Florin community to fund a total of over 60 projects. Table 3 illustrates the amount of CAP

Incentives funds benefiting the community across the three project categories upon which the air district has focused, as well as their associated emissions reductions.

Project Category	Funded Engines and Projects	FundingEstimated Lifetime(dollars)Reductions (total tons)			
			NOx	РМ	ROG
Infrastructure	15	\$2,107,382	N/A	N/A	N/A
Lawn and Garden	20	\$36,569	0.28	0.001	0.21
On-Road	29	\$6,036,624	27.65	0.224	2.73
Total	64	\$8,180,575	27.93	0.225	2.94

Table 3. Community Air Protection Incentives in South Sacramento-Florin Community

Enhanced Enforcement Efforts

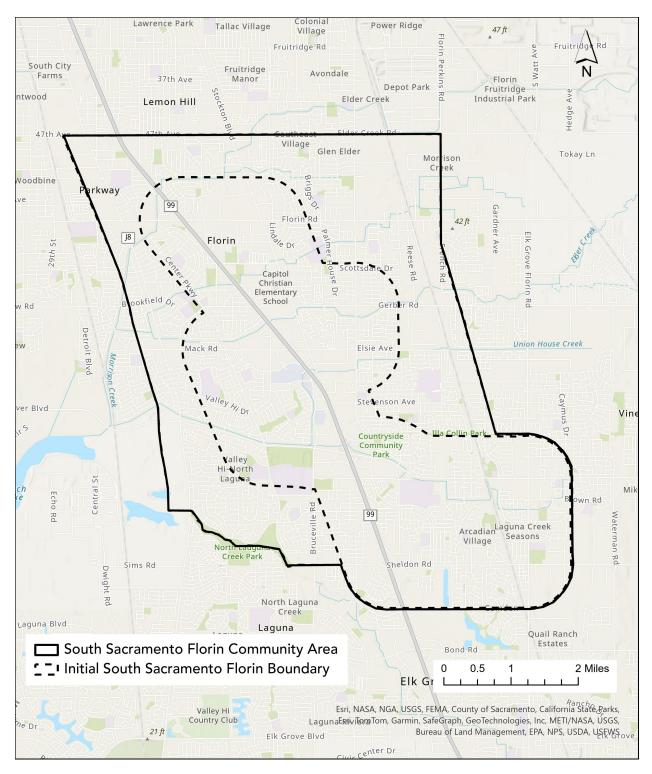
The Sac Metro Air District took additional enforcement actions by doing an assessment of potential unpermitted sources within the South Sacramento-Florin community. The multiyear project was meant to assure businesses operating within the community boundaries were doing so in compliance with air quality permit requirements and other air quality regulations. The project showed overall good compliance rates and found less than one percent of screened businesses were operating without a permit. The Sac Metro Air District will continue to work on additional enforcement measures through the CERP development process to help reduce air pollution impacts from stationary sources.

Appendix A Profiles of Current Program Communities

Air District	Community	CAMP or CERP or Both	Population density (people per square mile)	Top Community Steering Committee Concerns
	Bayview Hunters Point/ Southeast San Francisco	CERP	1,920	Industrial facilities, concrete batch plants, animal rendering plant, large diesel generators, toxic wastes, Superfund site, freeways, and nearby port
	East Oakland	CERP	11,762	Industry, airport, distribution centers, freeways, heavy duty trucks, freight, rail
Bay Area	Richmond, N. Richmond, San Pablo	CAMP to CERP	6,393	Freeways, industry, port, rail, refinery
	West Oakland	CERP	9,500	Freeways, permitted stationary sources, heavy duty trucks, port, construction, backyard burning, commercial cooking
	Calexico, El Centro, Heber	Both	2,000	Mobile sources, wood burning, fugitive dust, agricultural burning, schools
Imperial County	Westmorland, Brawley, and Calipatria- North End Phase 1	Both	66	Heavy-duty vehicles, agriculture, unpaved roads, the Salton Sea, and fugitive emissions from the U.SMexico border
Sacramento Metropolitan	South Sacramento - Florin	CAMP	9,455	Freeways, high traffic areas, businesses, education, outreach
	International Border Community- San Ysidro, Otay Mesa	Both	2,742	Two international port of entries- at San Ysidro and Otay Mesa; truck traffic, freeways
San Diego	Portside Environmental Justice Neighborhoods	CAMP to Both	14,625	Port, freight, rail, small industry
	Arvin, Lamont	Both	4,083	Agriculture, rural, warehouses, oil and gas
	Shafter	Both	1,600	Agriculture, oil and gas, rural
San Joaquin Valley	South Central Fresno	Both	4,857	Community measures, heavy duty measures, land use measures, outreach, stationary sources, passenger vehicles
	Stockton	Both	8,688	Heavy duty measures, stationary sources, community measures, outreach, mobile sources, passenger vehicles, land use measures

Air District	Community		Population density (people per square mile)	Top Community Steering Committee Concerns
	East Los Angeles Neighborhoods, Boyle Heights	Both	15,526	Neighborhood/freeway traffic, railyards, metal processing facilities, rendering facilities, auto body shops, Schools/childcare centers/community centers/libraries/public housing projects, industrial facilities
	Eastern Coachella Valley	Both	476	Salton Sea, pesticides, fugitive dust, open burning and illegal dumping, diesel mobile sources, Greenleaf Desert View Power Plant
South Coast	Muscoy, San Bernardino	Both	8,588	Neighborhood truck traffic, warehouses, Omnitrans, railyards, concrete/asphalt batch/rock/aggregate plants, exposure reduction at schools/childcare centers/community centers/homes
	South East Los Angeles	Both	21,625	Truck traffic and freeways, rendering facilities, green spaces, metals, railyards and locomotives, industrial facilities
	South Los Angeles	Both	17,864	Mobile sources, auto body shops, oil and gas, toxics, other industrial facilities
	Wilmington, West Long Beach, Carson	Both	6,514	Refineries, ports, neighborhood truck traffic, oil drilling and production, railyards, schools/childcare centers/homes

Appendix B South Sacramento-Florin CAMP Boundary Evolution

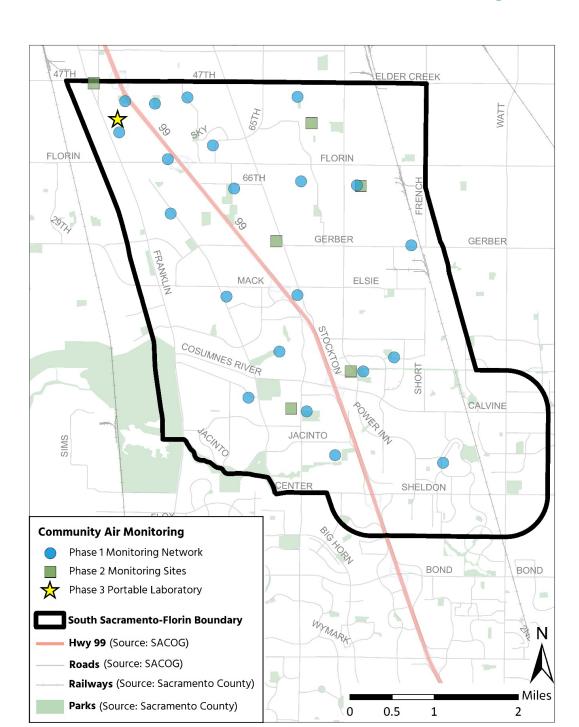


Appendix C California Environmental Quality Act

CARB has determined that the selection of the South Sacramento-Florin Community to transition to develop a Community Emissions Reduction Program (CERP) within the Community Air Protection Program (Program) is exempt from the California Environmental Quality Act (CEQA) under the "general rule" or "common sense" exemption (California Code of Regulations, title 14, section 15061(b)(3)). The commonsense exemption states a project is exempt from CEQA if "the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA."

CARB's selection of the South Sacramento-Florin Community to transition to develop a CERP within the Programis administrative in nature in that it merely provides CARB's identification of the South Sacramento-Florin Community as a community affected by a high cumulative exposure burden and approval for development a CERP by the air district with community involvement. The selection of South Sacramento-Florin Community to transition and develop a CERP will have no potential for material impact on the environment. After selection to develop a CERP, individual strategies will be developed in the CERP by the air district that will involve extensive decision-making processes, including the involvement of community steering committees, and cannot be forecasted with reasonable specificity. The specific strategies adopted by the air district in the CERP will vary based on the local air quality needs, topography, and meteorology, existing emissions reducing measures and community engagement. The strategies developed for the CERP will be evaluated as part of the determination to approve a CERP, and the air district (as the CEQA lead agency responsible for approving the CERP) is required to conduct CEQA compliance, as applicable.

Based on CARB's review it can be seen with certainty that there is no possibility that the selection of the South Sacramento-Florin Community to transition to develop a CERP within the Program may result in a significant adverse impact on the environment; therefore, this activity is exempt from CEQA.



Appendix D South Sacramento-Florin CAMP Monitoring

Appendix E Preliminary Community Emissions Inventories

An emissions inventory estimates the amount of air pollutants released into the atmosphere by emission sources in a specific geographical area and within a certain time period. Emissions inventories are developed with the best data available and are updated over time to reflect sound science and robust new data. This data can be used to help develop community priorities and strategies for developing emissions reduction plans.

A preliminary screening-level emissions inventory was developed for proposed communities using best available data for stationary, areawide, and mobile sources. A brief description of these source categories and types of sources that are available at CARB's emissions inventory data website.¹⁷

A preliminary stationary source emissions inventory for this community was developed using the 2022 facility specific emissions reported to CARB by the local air district into CARB's California Emission Inventory Development and Reporting System (CEIDARS).¹⁸ For areawide source and off-road mobile source (also referred as other mobile) inventories, the 2022 projected emissions from the State Implementation Plan emissions inventory was gridded at a 1 kilometer (km) by 1 km resolution, and total emissions for the community was developed by summing the emissions from the individual grids (see Figure E.1, for example). Gridded on-road mobile source emissions inventory was developed using 2022 vehicle miles traveled data from regional Sacramento Area Council of Governments in their adopted Regional Transportation Plan/ Sustainable Communities Strategy, and county-level aggregated emissions factors and vehicle distribution from CARB's on-road mobile source model (EMFAC2021).¹⁹

The results presented in Appendix E are preliminary estimations of the air emissions in the community. Note that this preliminary emissions inventory presents aggregated emissions for the 1-km grids covering the proposed community. This includes emissions for grids fully within the community boundary and partially intersecting the community boundary. Emissions were not area-weighted for grids that are only partially within the community area. If the community is selected by the CARB Board, a refined and more comprehensive community-level emissions inventory will be developed for the approved community

¹⁷ https://ww3.arb.ca.gov/ei/emissiondata.htm. The emissions used to develop the preliminary inventory are based on the 1x1km gridded SIP inventory with a 2018 base year (CEPAM 2022 Ozone SIP v1.01).

¹⁸ The facility locations were mapped, and all facilities that are located within the 1-km grids are included in the preliminary emissions inventory.

¹⁹ Data Source: https://arb.ca.gov/emfac/

boundary during the community emissions reduction program development process in 2024.

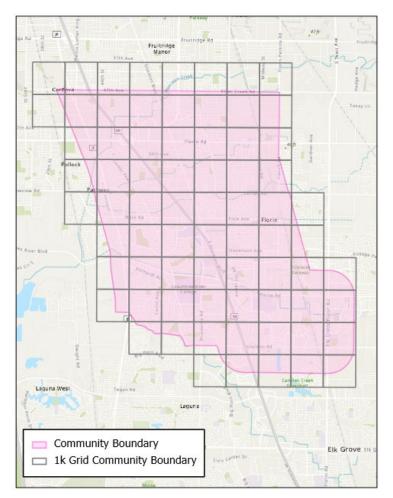


Figure.E.1. 1 km x 1 km Grids Used to Develop the Preliminary Community Emissions Inventory

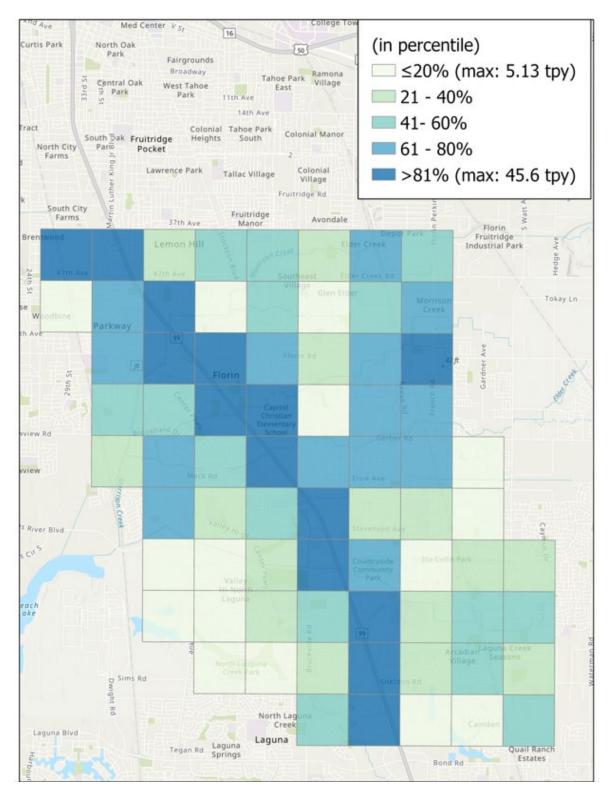


Figure.E.2. Proposed Community NOx Emissions (2022 Preliminary Emissions Inventory)

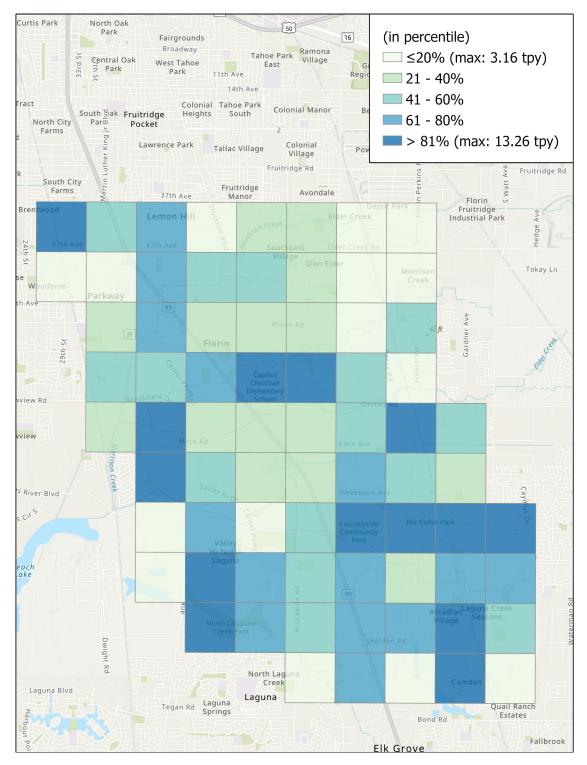


Figure.E.3. Proposed Community PM_{2.5} Emissions (2022 Preliminary Emissions Inventory)

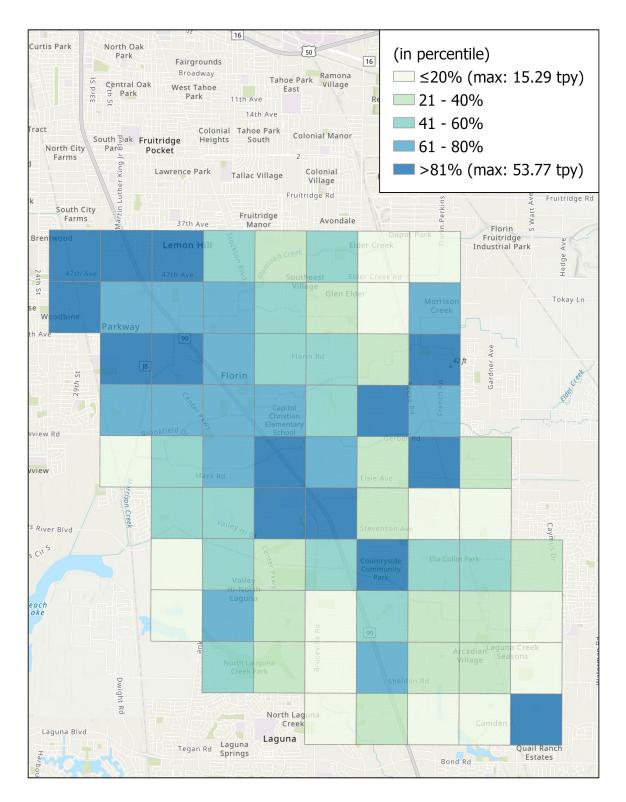


Figure.E.4. Proposed Community ROG Emissions (2022 Preliminary Emissions Inventory)

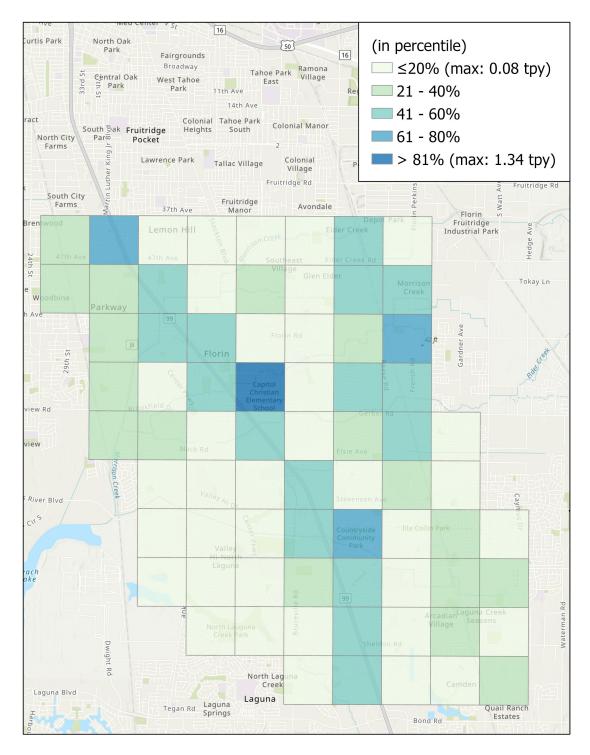


Figure.E.5. Proposed Community Diesel PM Emissions (2022 Preliminary Emissions Inventory)

Table E.1. Preliminary Emissions Estimate for the Community(2022 Preliminary Emissions Inventory)

Sta	tionary (tons/yea	ar)	Areawide (tons/year)				Mobile (tons/year)			<i>-</i>)
NOx	PM2.5	ROG	DPM	NOx	PM2.5	ROG	DPM	NOx	PM2.5	ROG	DPM
79.8	28.2	310.3	0.4	87.4	282.6	786.0	0.0	611.5	20.6	490.3	8.2
% of Community Total											
10%	9 %	20%	5%	11%	85%	50%	0%	79%	6%	31%	95%

Source Category	NOx	TOG	ROG	SOx	PM10	PM2.5	DPM
STATIONARY SOURCES							
Fuel Combustion	76.1	46.8	7.3	1.0	12.9	12.9	0.4
Cogeneration	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Electric Utilities	35.7	30.1	2.8	0.5	10.7	10.7	0.0
Food And Agricultural Processing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing And Industrial	17.1	13.5	2.7	0.4	0.7	0.7	0.2
Other (Fuel Combustion)	11.9	0.6	0.5	0.0	0.2	0.2	0.2
Service and Commercial	11.4	2.5	1.1	0.1	1.2	1.2	0.0
Cleaning and Surface Coatings	0.0	263.7	162.9	0.0	0.0	0.0	0.0
Adhesives And Sealants	0.0	25.1	23.2	0.0	0.0	0.0	0.0
Coatings And Related Process Solvents	0.0	132.2	85.2	0.0	0.0	0.0	0.0
Degreasing	0.0	83.6	39.5	0.0	0.0	0.0	0.0
Laundering	0.0	8.3	0.6	0.0	0.0	0.0	0.0
Other (Cleaning and Surface Coatings)	0.0	11.5	11.5	0.0	0.0	0.0	0.0
Printing	0.0	2.9	2.9	0.0	0.0	0.0	0.0
Industrial Processes	2.0	47.7	45.3	1.2	19.3	15.3	0.0
Chemical	0.0	9.6	8.9	0.0	0.0	0.0	0.0
Food and Agriculture	0.0	11.0	11.0	0.0	0.0	0.0	0.0
Metal Processes	0.2	0.8	0.7	0.0	0.2	0.1	0.0
Mineral Processes	0.3	0.0	0.0	0.0	3.2	2.9	0.0
Other (Industrial Processes)	1.0	19.5	18.0	0.3	1.0	1.0	0.0
Wood and Paper	0.5	6.8	6.7	0.9	14.9	11.3	0.0
Petroleum Production and Marketing	0.0	401.5	70.0	0.0	0.0	0.0	0.0
Petroleum Marketing	0.0	401.5	70.0	0.0	0.0	0.0	0.0
Waste Disposal	1.7	3759.7	24.8	0.0	0.0	0.0	0.0
Incinerators	1.7	0.0	0.0	0.0	0.0	0.0	0.0
Landfills	0.0	3759.6	24.8	0.0	0.0	0.0	0.0
Total Stationary Sources	80	4,519	310	2	32	28	0.4

Table E.2. Detailed Preliminary Emissions Inventory for the Community (2022Emissions in tons per year) 20

²⁰ For more details on source categories and associated activities (emission inventory codes), see documentation at *https://ww3.arb.ca.gov/ei/documentation.htm*

NOx: nitrogen oxides; TOG: total organic gases; ROG: reactive organic gases; SOx: sulfur oxides; PM₁₀: particulate matter 10 microns or smaller; PM_{2.5}: particulate matter 2.5 microns or smaller; DPM: diesel particulate matter

Source Category	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
AREAWIDE SOURCES							
Solvent Evaporation	0.0	652.2	520.7	0.0	0.1	0.1	0.0
Architectural Coating/ Related Process Solvent	0.0	78.1	66.4	0.0	0.0	0.0	0.0
Asphalt Paving / Roofing	0.0	3.5	3.1	0.0	0.1	0.1	0.0
Consumer Products	0.0	569.0	449.5	0.0	0.0	0.0	0.0
Pesticides/Fertilizers	0.0	1.6	1.6	0.0	0.0	0.0	0.0
Miscellaneous Processes	77.1	56.0	31.9	1.1	246.6	61.5	0.0
Cooking	0.0	9.8	3.7	0.0	25.7	25.7	0.0
Construction and Demolition	0.0	0.0	0.0	0.0	294.1	29.4	0.0
Farming Operations	0.0	2.3	0.2	0.0	0.0	0.0	0.0
Fires	0.4	1.6	1.4	0.0	1.3	1.2	0.0
Fugitive Windblown Dust	0.0	0.0	0.0	0.0	2.6	0.4	0.0
Managed Burning and Disposal	0.2	0.7	0.3	0.0	1.0	1.0	0.0
Other (Miscellaneous Processes)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paved Road Dust	0.0	0.0	0.0	0.0	189.2	28.4	0.0
Residential Fuel Combustion	86.7	572.1	259.8	4.7	202.3	195.0	0.0
Unpaved Road Dust	0.0	0.0	0.0	0.0	14.8	1.5	0.0
Total Areawide Sources	87	1,239	786	5	731	283	0
ON-ROAD MOBILE SOURCES							
Light Duty Vehicles	113.5	207.3	194.3	3.1	17.9	6.5	0.0
Light Heavy Duty Vehicles	72.1	18.1	16.3	0.4	6.0	2.8	1.2
Medium Duty Vehicles	39.4	46.1	42.6	0.8	3.5	1.3	0.0
Medium Heavy Duty Vehicles	70.0	3.8	2.9	0.3	1.7	0.8	0.4
Heavy Heavy Duty Vehicles	124.5	7.8	2.4	0.5	4.4	2.0	0.9
Bus	11.5	3.2	1.4	0.1	0.6	0.3	0.1
Total On-road Mobile Sources	431	286	260	5	34	14	3
OTHER MOBILE SOURCES							
Fuel Storage and Handling	0.0	21.7	21.7	0.0	0.0	0.0	0.0
Off-Road Equipment	111.4	193.4	178.3	0.3	5.3	5.1	3.4
Off-Road Equipment (PERP)	27.3	3.2	2.8	0.1	0.9	0.9	1.0
Off-road Recreational Vehicles	0.3	5.1	5.0	0.0	0.0	0.0	0.0
Recreational Boats	0.0	22.4	20.6	0.0	0.0	0.0	0.0
Trains	41.5	2.2	1.9	0.0	1.0	0.9	1.0
Total Other Mobile Sources	180	248	230	0.4	7	7	5
Total Community Emissions	779	6,292	1,587	13	805	331	9

Table E.2. Detailed Preliminary Emissions Inventory for the Community (2022Emissions in tons per year) continued