

**Fifth Annual Community Air Protection
Program Recommendations
Staff Report
January 2023**



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Introduction

The California Air Resources Board (CARB or Board) established the Community Air Protection Program (Program) in July 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 of communities affected by a high cumulative exposure burden for development of Community Emissions Reduction Programs (CERPs) and/or Community Air Monitoring Plans (CAMPs) that will be implemented by the local air district. Once approved, the air district CERPs are reviewed for approval by CARB as required by AB 617.

AB 617 also requires that CARB adopt a statewide strategy to reduce emissions of toxic air contaminants and criteria air pollutants in communities affected by a high cumulative exposure burden (HSC 44391.2(b)). This statewide strategy was initially adopted by the Board in September 2018 and is known as the Community Air Protection Program Blueprint (Program Blueprint). The Program Blueprint contains guidance on the community recommendation and selection process, criteria for the development of CERPs, and other information about the Program.

This year, CARB will be *updating the Program Blueprint* to meet AB 617's requirement to update the strategy every five years. The update to the Program Blueprint is planned to go to the CARB Board in September of 2023. This staff report details the fifth annual community recommendations process leading up to the February 2023 CARB Board meeting, where the CARB Board will consider staff's recommendation of two additional communities for selection.

Overview of AB 617 Communities

There are currently 17 communities working on CERPs and/or CAMPs. Figure 1 shows their locations throughout the state². These communities have been selected over the last four years to develop and implement CERPs and/or CAMPs that include

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.

² The South Sacramento community has been selected only for CAMP development. West Oakland and East Oakland have been selected only for CERP development. The remaining communities are working on both CAMPs and CERPs.

community-prioritized actions to monitor and/or reduce emissions and exposure to air pollution.

As a companion to Figure 1, Table 1 gives a high-level summary of the top air pollution concerns identified by members of the community steering committees (CSCs) of each location. Each community has unique air quality challenges. To support communities and other relevant stakeholder engagement with the air districts developing a CAMP or CERP, each air district convenes a CSC of stakeholders to provide feedback on community concerns and guide strategy development. The CSCs formed for each community include community members; people who live, work or own businesses within the community. These members work in partnership with air districts to develop CERPs or CAMPs. These 17 communities include areas with differing characteristics, including, proximity to seaport activity, dense urban neighborhoods, agricultural communities, and transportation corridors. As such, the selected communities to date vary not only in location and geography, but by emissions sources of concern. The diverse and complex air pollution concerns of these communities allow them to serve as models for other communities experiencing similar air pollution burdens. Many strategies developed in the current 17 communities and documented in draft or adopted CAMPs or CERPs could be implemented in other locations throughout the state.

Figure 1 Map of AB 617 Communities



Table 1 AB 617 Community Profiles

Air District	Community	Population Density (people per square mile)	Top Community Steering Committee Concerns
Bay Area	East Oakland ¹	11,762	Industry, airport, distribution centers, freeways, heavy-duty trucks, freight, rail
	Richmond, N. Richmond, San Pablo ¹	6,393	Freeways, industry, port, rail, refinery
	West Oakland	9,500	Freeways, permitted stationary sources, heavy-duty trucks, port,

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Air District	Community	Population Density (people per square mile)	Top Community Steering Committee Concerns
			construction, backyard burning, commercial cooking
Imperial County	Calexico, El Centro, Heber	2,000	Mobile sources, wood burning, fugitive dust, agricultural burning, schools
Sacramento Metropolitan	South Sacramento – Florin ²	9,455	Wood burning, freeways
San Diego	International Border Community- San Ysidro, Otay Mesa ¹	2,742	Two international ports of entry- at San Ysidro and Otay Mesa; truck traffic, freeways
	Portside Environmental Justice Neighborhoods	14,625	Port, freight, rail, small industry
San Joaquin Valley	Arvin, Lamont	4,083	Agriculture, rural, warehouses, oil and gas
	Shafter	1,600	Agriculture, oil, and gas, rural
	South Central Fresno	4,857	Community measures, heavy-duty measures, land use measures, outreach, stationary sources, passenger vehicles
	Stockton	8,688	Heavy duty measures, stationary sources, community measures, outreach, mobile sources, passenger vehicles, land use
South Coast	East Los Angeles Neighborhoods, Boyle Heights	15,526	Neighborhood/freeway traffic, railyards, metal processing facilities, rendering facilities, auto body shops, Schools/childcare

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Air District	Community	Population Density (people per square mile)	Top Community Steering Committee Concerns
			centers/community centers/libraries/public housing projects, industrial facilities
	Eastern Coachella Valley	476	Salton Sea, pesticides, fugitive dust, open burning and illegal dumping, diesel mobile sources, Greenleaf Desert View Power Plant
	Muscoy, San Bernardino	8,588	Neighborhood truck traffic, warehouses, Omnitrans, railyards, concrete/asphalt batch/rock/aggregate plants, exposure reduction at schools/childcare centers/community centers/homes
	Southeast Los Angeles	21,625	Truck traffic and freeways, rendering facilities, green spaces, metals, railyards, locomotives, industrial facilities
	South Los Angeles	17,864	Mobile sources, auto body shops, oil and gas, toxins, and other industrial facilities
	Wilmington, West Long Beach, Carson	6,514	Refineries, ports, neighborhood truck traffic, oil drilling and production, railyards, schools/childcare centers/homes
<p>¹ CERPs currently being developed, have not been approved by CARB.</p> <p>² Sacramento Metropolitan South Sacramento-Florin Community- implementing CAMP only.</p>			

As an example, Figure 2 below is a high-level snapshot of two communities selected in 2021. South Los Angeles is a very population-dense community, with heavy-duty truck traffic, oil extraction and refining, and small neighborhood industrial sources topping the CSC’s list of community concerns. In contrast, Arvin-Lamont is a rural community in the southern portion of the Central Valley, and their CSC is focused on agricultural air pollution sources and warehouses and shares South Los Angeles’ prioritization of oil and gas operations.

Figure 2 Comparison of Two Year 3 Communities; South Los Angeles and Arvin-Lamont

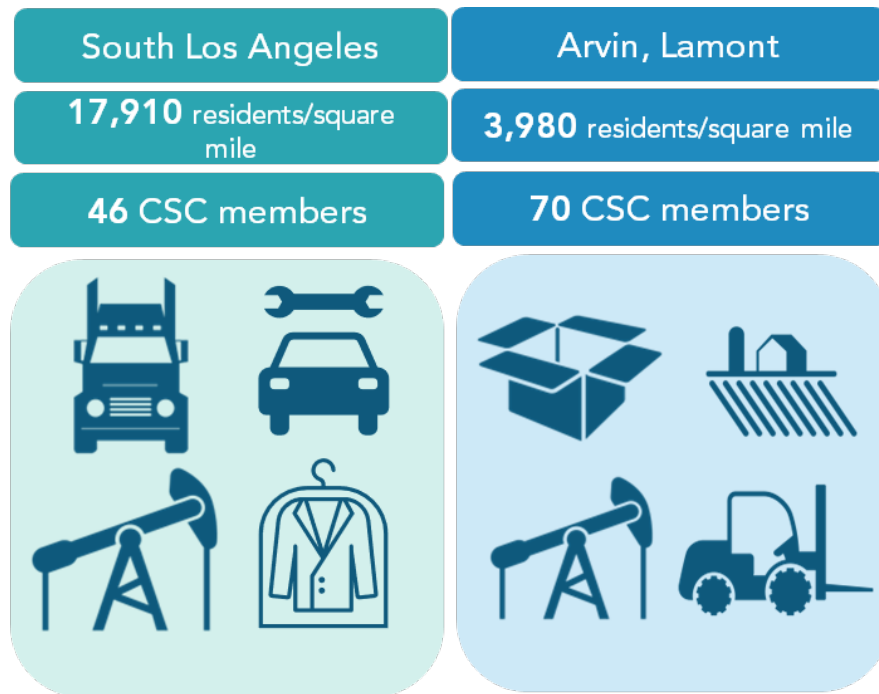
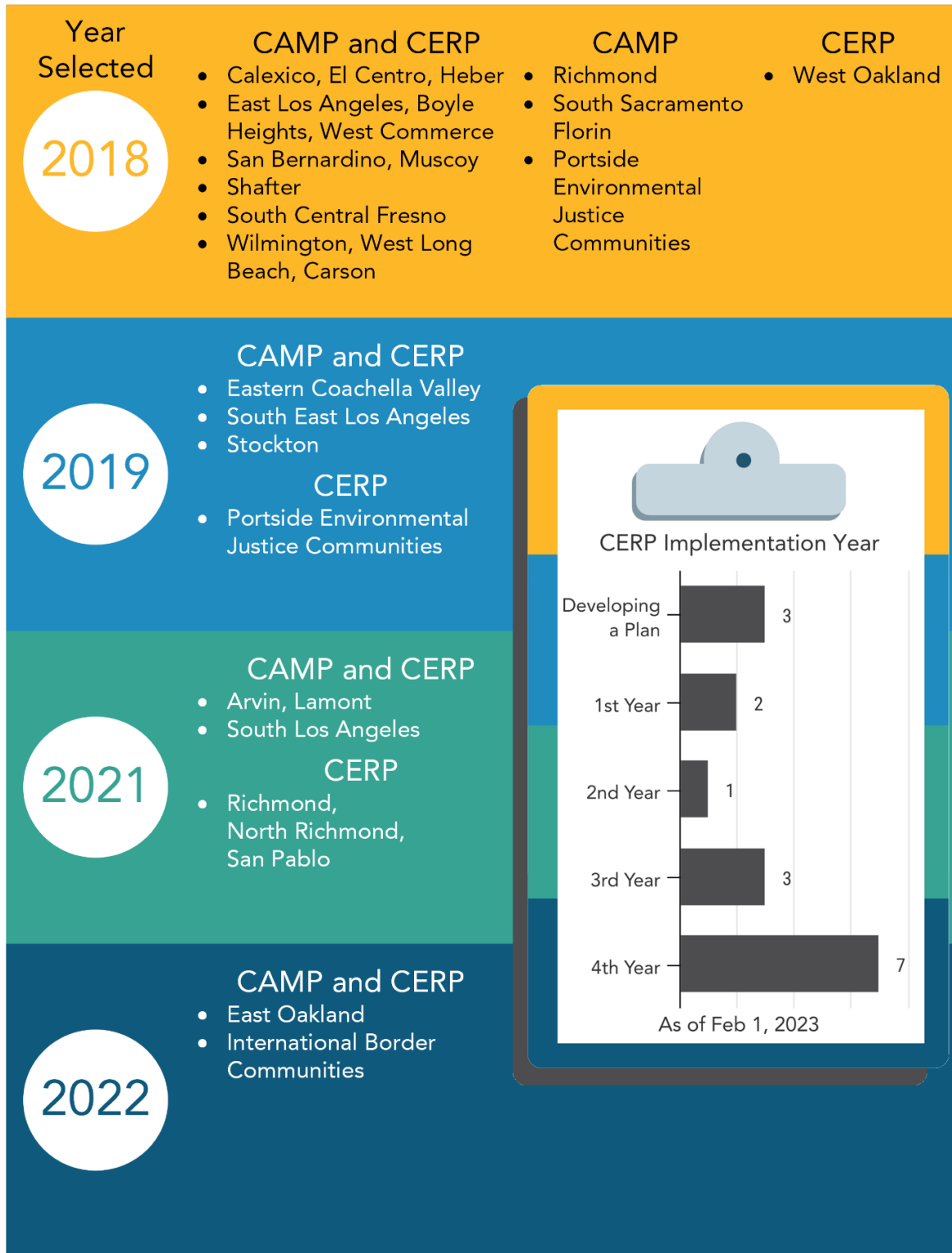


Figure 3 shows a community selection year and provides the CERP development and implementation status of the 17 current communities. Program Year 1 aligns with 2018, when the first communities were selected. In 2020, the CARB board meeting to consider communities was delayed from late 2020 to early 2021, so the Program has moved from identifying communities by the selection year to Program Year. The inset in Figure 3 shows as of February 2023 there are three communities currently developing CERPs, one community in their first year of implementation, two communities in their second year of implementation, three communities in their third year of implementation, and seven communities in their fourth year of implementation.

When recommending new communities to the Board for selection, CARB staff need to consider whether there is sufficient program funding to support new communities based on the number and status of communities already in the Program. Funding is needed to support plan development. Once plans are developed, communities need continued funding and support to implement, update, and adjust their CERP strategies to ensure long-term success.

Figure 3 AB 617 Communities Status as of Feb 1, 2023



Recommendations for the Fifth Annual Community Considerations

CARB staff is recommending two new communities for Program Year Five:

1. The Bayview Hunters Point/Southeast San Francisco Community in the Bay Area Air Quality Management District (Bay Area AQMD) be selected to develop a CERP.
2. The Westmorland, Brawley, and Calipatria Community, also referred to as the North Imperial Phase 1 Community, in the Imperial County Air Pollution Control District (Imperial County APCD) be selected to develop both a CAMP and CERP.

Staff worked with community members, air districts, community-based organizations, and other stakeholders to develop the fifth annual recommendation of new communities and will continue to work with these groups leading up to the Board meeting in February 2023. Staff [posted a web-based presentation in August 2022](#) to describe the recommendation process. Staff also held a virtual public meeting on December 6, 2022, to discuss the fifth annual community recommendations.

Community Assessment Criteria

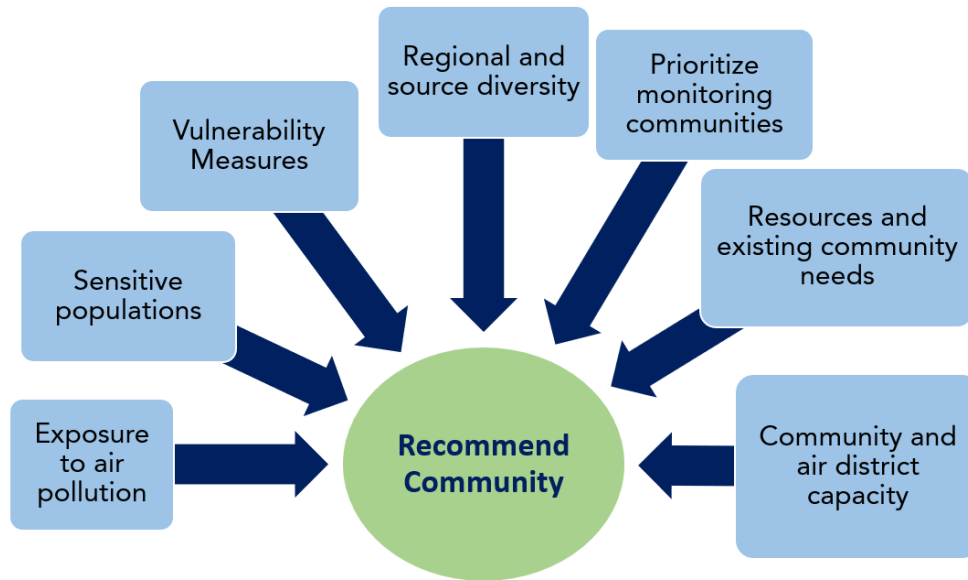
CARB staff recommendations are based on several factors and build upon the prior years' process for community selection. CARB annually considers high-priority communities through the process outlined in the Program Blueprint (October 2018).³ The Program Blueprint lists the criteria to assess and identify locations with high exposure burdens to toxic air contaminants and criteria air pollutants and to prioritize sensitive receptor locations in disadvantaged communities. Residents in these communities also experience high levels of poverty and unemployment on top of the health-related effects of air pollution.

As depicted in Figure 4, there are many factors to consider when selecting new communities for CAMPs or CERPs. These factors include the AB 617 statute and Program Blueprint criteria, CARB Board's direction, nominations received since Program inception, the Table of Metrics (version 2.1),⁴ lessons learned from selected communities, available resources, and community and agency capacity.

³ Program Blueprint available at <https://ww2.arb.ca.gov/capp-blueprint>

⁴ Table of metric available at <https://ww2.arb.ca.gov/resources/documents/table-metrics-update-november-2021>

Figure 4 Community Recommendations Considerations



CARB Board Direction

In the CARB Board meeting considering community selection in 2018⁵, the Board guided community selection for subsequent years. The Board discussion included requests that CARB staff prioritize communities that were recommended by air districts and community-based organizations in previous years but were not selected. In response, CARB staff created a list to track nominated communities that had not yet been selected. In addition to any new communities, the Board also prioritized transitioning those communities that were selected for air monitoring only to develop CERPs, if the recommendation is supported by data and by the community steering committee. This direction from the Board is intended to ensure a pathway for CAMPs to transition to CERPs.

In the 2019 Board meeting,⁶ in which the Board considered the second annual community selection recommendations, the Board discussion included a request for a way to recognize communities repeatedly recommended by the community and/or air districts. CARB staff has tracked these community recommendations in air districts to help guide discussions of potential new communities.

⁵ CARB Board Meeting for September 27, 2018, is available at <https://ww2.arb.ca.gov/2018-board-meetings>

⁶ CARB Board Meeting information for December 13, 2019, is available at: <https://ww2.arb.ca.gov/2019-board-meetings>

In July 2022, for Year 5, CARB staff provided the air districts with a current list of communities that have been considered multiple years or by multiple entities for nomination. This allowed the air districts to confirm or adjust the community list to ensure that it was current. The *Consistently Nominated Communities* list has 67 community names and is a subset of all the nominations received from the air district with their near-term communities and self-nominations. As in prior years, if a community self-nomination is submitted to CARB, staff provides the information to the air district for their consideration in their air district's community nominations. CARB encourages communities to share their community nomination with their local air districts. As part of reimagining the program, CARB is working to develop other pathways to support communities, such as encouraging the use of Community Air Grants for communities to develop local CERPs and leveraging federal grant opportunities to bring resources to communities.

Statewide Assessment and Nominations

Since the beginning of the Program, CARB has received hundreds of community nominations, most of which meet the statutory requirements for selection. CARB staff considers these nominations as part of the statewide assessment⁷. The *2021 Statewide Assessment*, consistent with statute 44391.2(b)(1), is a method to describe the cumulative air pollution burden of a community. This information complements the more detailed local community-level assessments that are documented in this report. To date, the public has nominated over 120 unique communities⁸. The list of *community self-nominations* is updated annually. In addition to public nominations, in 2022, CARB staff received air district recommendations for five communities via submissions by local air districts.

Bay Area AQMD recommended Bayview Hunters Point/Southeast San Francisco for a CERP. This community also has support for selection from community partners- Bayview Hunters Point Community Advocates (BVHP Community Advocates) and the Marie Harrison Community Foundation (MHC Foundation).

Imperial County APCD, in partnership with Comite Civico del Valle, Inc. (CCV), submitted a modified community recommendation compared to their prior year's proposals. Their nomination includes the three cities of Westmorland, Brawley, and Calipatria, which are located in the northern portion of Imperial County and is

⁷ For information on Table of Metrics Update November 2021, see <http://ww2.arb.ca.gov/resources/documents/table-metrics-update-november-2021>

⁸ For community nominations since 2018, see <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/community-selection/community-nominations>.

submitted as one community that is designated as the “North End Phase 1 Community.”

Sacramento Metro AQMD, as in prior years, recommended three separate communities for a CAMP only: the North Sacramento, Oak Park/ Fruitridge, and Meadowview communities. These communities were recommended contingent on the availability of additional resources. CARB staff recently became aware that Sacramento Metro AQMD is considering nominating the current South Sacramento – Florin air monitoring community for CERP development. The Board recognizes the priority of moving air monitoring communities to CERP communities. CARB staff will evaluate any nomination once received for possible recommendation to the Board.

Four self-nominations were submitted to CARB: one community in South Coast Air Quality Management District- Paramount, two communities in the San Joaquin Valley - La Vina and Lost Hills, and one community in Imperial County - Salton City.

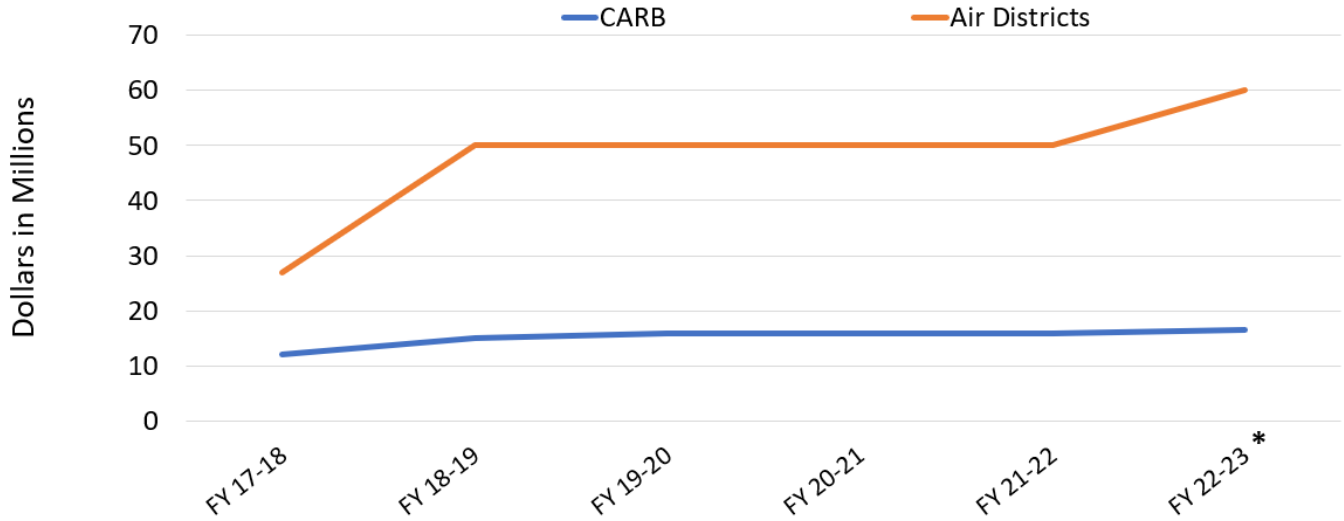
Program Funding

As in prior years, CARB staff must consider the financial support necessary for newly selected communities while recognizing the continued need to support the existing communities with resources. Available resources are a limiting factor in the consideration for selection of new communities. With each selection, air districts must consider how best to implement CERPs in existing communities, work with newly selected communities on an annual basis, and engage with other emissions-burdened communities. This requires air districts and CARB to continue to stretch resources among competing efforts.

Figure 5 shows implementation funding over the last six years. Funding for air district development and implementation of CERPs and CAMPs has been stagnant at \$50 million for the prior five years, even with the addition of new communities annually. In 2022, the passage of AB 179⁹ included a one-time additional \$10 million for the development of new CERPs. For Fiscal Year 2022-2023, there is a total of \$60 million for implementation. CARB will direct the AB 179 funds to air districts to support CERP development.

⁹ [Bill Text - AB-179 Budget Act of 2022. \(ca.gov\)](#)

Figure 5 Implementation Funds



* Up to \$10 million for new CERP development (AB179) to be allocated by CARB to air districts over FY 22-23 and FY23-24

Staff Recommendations

Table 2 includes the community actions, key sources and rationale for recommendation.

Table 2 Community Recommendations- in alphabetical order by the air district

Community (Air District)	Action	Key Emission Sources	Rationale
Bayview Hunters Point/Southeast San Francisco (Bay Area)	Develop a CERP	Industrial facilities include organic recovery and waste, concrete batch plants, animal rendering plant, large diesel generators, toxic wastes, federally designated Superfund site, major freeways, and nearby Port of San Francisco.	<p>Consistent with CARB Board support to prioritize communities recommended by community-based organizations in previous years but not yet selected.</p> <p>Bayview Hunters Point/Southeast San Francisco is a priority community for the Bay Area AQMD.</p> <p>Self-nomination supported by the BVHP Advocates and the MHC Foundation</p>

Community (Air District)	Action	Key Emission Sources	Rationale
Westmorland, Brawley, and Calipatria Community - North End Phase 1 Community (Imperial County in partnership with CCV)	Develop a CAMP and CERP	Heavy-duty vehicles, agriculture equipment, and practices- which include truck idling and harvest transportation, utility fleet vehicles and residential vehicles traveling on unpaved roads, the Salton Sea, and fugitive emissions from south of the U.S.-Mexico border	Consistent with CARB Board support to prioritize communities recommended by community-based organizations in previous years but not yet selected. The North End of Imperial was nominated in 2019, 2020, and 2021 by Imperial in partnership with CCV. In 2021 the nomination was withdrawn due to limited resources. This year’s nomination was modified to only include the cities of Westmorland, Brawley, and Calipatria. These are cities in the north end of Imperial County and are known as the North End Phase 1 Community.

Bayview Hunters Point/Southeast San Francisco Community

Staff Recommendation – Community Emissions Reduction Program

The proposed Bayview Hunters Point/Southeast San Francisco Community (BVHP Community) is within the Bay Area AQMD’s area of jurisdiction. On October 27, 2022, Bay Area AQMD held a public workshop on AB 617 and the “Bayview Hunters Point Nomination.”¹⁰ During the November 2, 2022, Bay Area AQMD Board of Directors meeting, the Board unanimously approved the recommendation to support the BVHP Community nomination to CARB.¹¹ On November 8, 2022, Bay Area AQMD submitted

¹⁰ Bay Area AQMD Public Workshop Presentation for October 27, 2022, is available at [102722_air-district-bvhp-ab617-workshop-slides-pdf.pdf \(baaqmd.gov\)](https://www.baaqmd.gov/~media/files/102722_air-district-bvhp-ab617-workshop-slides-pdf.pdf)

¹¹ Bay Area AQMD Board of Directors Meeting Presentation for November 2, 2022 is available at https://www.baaqmd.gov/~media/files/board-of-directors/2022/bod_presentation_110222_op-pdf.pdf?la=en&rev=30408f4569cb4d4a906a214b2a95cc78

letter to CARB to recommend the community for the AB 617 Community Air Protection Program for 2023.¹²

Residents and community advocates of the BVHP community have been advocating for Bay Area AQMD to nominate their community since the inception of the AB 617 program. Bay Area AQMD recognizes the community area as a priority in their Community and Public Health Committee. CARB staff supports this nomination and recommends the Board select the BVHP Community for the development and implementation of a CERP.

Community Description

Figure 6 is a photograph within the proposed BVHP Community. While the community boundary is not finalized, it would likely span 60 square miles and has an approximate population of 115,000. There are 5 private schools, 53 public schools, 6 daycare facilities, 6 healthcare facilities, and 2 nursing homes in this area, all of which are sensitive receptors¹³ to air pollution.

¹² For more information on Fifth Year (2022) Community Selection and Identification, see <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/community-selection/fifth-year-2022-community>

¹³ More information about sensitive receptors available at [Sensitive Receptor Assessment | California Air Resources Board](#)

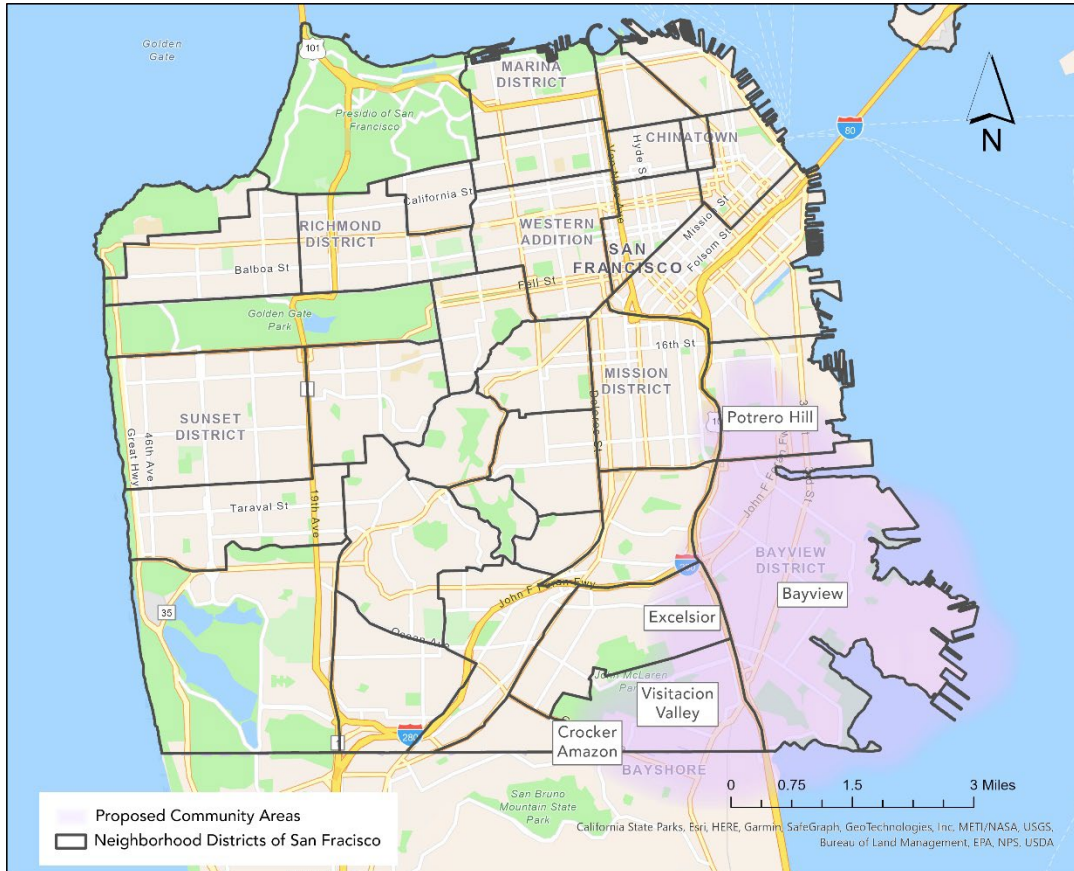
Figure 6 CARB Staff Photograph of Proposed BVHP Community



The BVHP Community is in the southeastern part of San Francisco with neighborhoods along the main artery of Third Street. Neighborhoods that will likely be included in this community are depicted in Figure 7 which include Bayview-Hunters Point, and portions of Potrero Hill to the north, Excelsior to the west, Visitacion Valley to the southwest, and Little Hollywood. Little Hollywood is a small neighborhood adjacent to Visitacion Valley which is within the Crocker Amazon neighborhood. The sensitive receptors in BVHP Community can be seen in Figure 8.¹⁴

¹⁴ Data Source: public school - <https://gis.data.ca.gov/datasets/CDEGIS::california-schools-2019-20/about>, private school - <https://gis.data.ca.gov/datasets/CDEGIS::california-private-schools/explore>, childcare facilities - <https://gis.data.ca.gov/datasets/CDEGIS::california-early-learning-and-care-sites/about>, healthcare facilities - <https://gis.data.ca.gov/datasets/CDPHDATA::cdph-licensing-and-certification-healthcare-facilities/about>, elderly care facilities - <https://data.ca.gov/dataset/community-care-licensing-residential-elder-care-facility-locations>

Figure 7 San Francisco Neighborhoods within Proposed Community Area



According to supporting materials within Bay Area AQMD’s nomination letter, the BVHPC Advocates and MHC Foundation have been especially concerned about legacy pollution from the Naval Shipyard, dust and asbestos from on-going large-scale redevelopment, odors and emissions from a wastewater treatment facility, diesel truck idling, and from industrial rendering plants. The community is bisected by the commercial-oriented Third Street corridor and straddles two busy freeways (Interstate-280 and Interstate-101) which bring freight trucks and high-volume commuter traffic adding to the mobile source pollution burdens.

Residents of this community have lower life expectancies and higher mortality rates from lung diseases, which can be partially attributed to constant exposure to air pollution. This community has a higher rate of asthma-related emergency room visits and cardiovascular disease than most of California. It also has some of the highest unemployment and housing cost burdens and some of the lowest educational

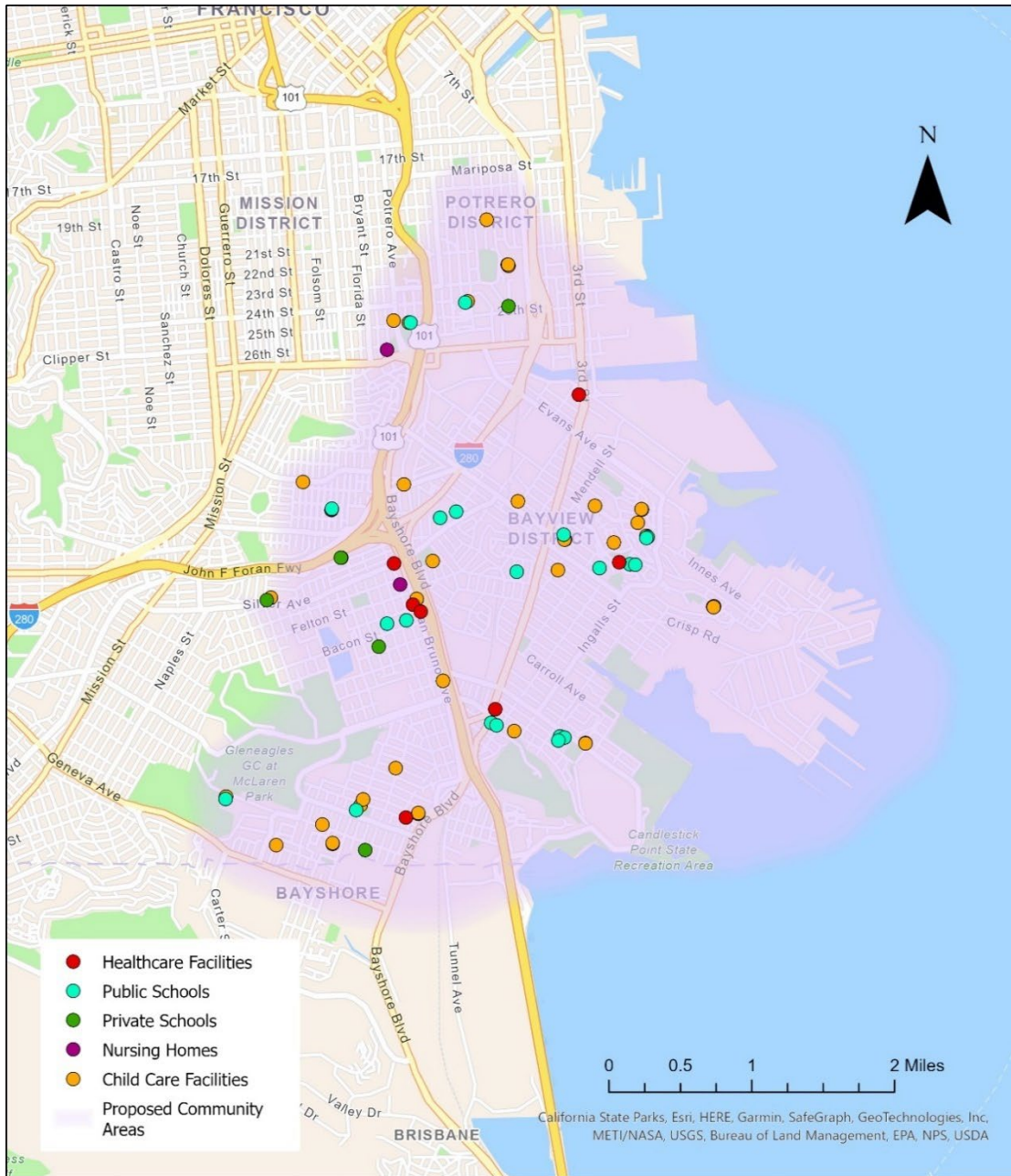
attainment.^{15 16} This is supported by the Community Health Needs Assessment (SF CHNA) developed by San Francisco Health Improvement Partnership as referenced in the attached self-nomination letter submitted as a part of the Bay Area AQMD's nomination letter in support of the Bayview Hunters Point/Southeast San Francisco.¹⁷ CalEnviroScreen 4.0, and Table 3 Key Table of Metrics Indicators (percentile) for Bayview Hunters Point/ Southeast San Francisco Community.

¹⁵ CalEnviroScreen 4.0. The CES 4.0 Score is the highest overall percentiles of a census tract found within the boundary. For more information on CalEnviroScreen 4.0, see <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

¹⁶ The Bay Area AQMD Recommendation letter for Bayview Hunters Point/ Southeast San Francisco submitted to CARB on November 9, 2022 available at <https://ww2.arb.ca.gov/sites/default/files/2022-11/22%2011%2009%20BAAQMD%20Bayview%20Hunters%20Point%20Southeast%20SF.pdf>

¹⁷ The most recent San Francisco Community Health Needs Assessment is available online at <http://www.sfhip.org/chna/sf-chna/>

Figure 8 Proposed BVHP Community Area Detail



Community Exposure

Table 3 shows that this community has an overall CalEnviroScreen 4.0 (CES) score in the 94th percentile. This community has the worst diesel particulate matter (DPM) and asthma scores in the State: 99th and 96th percentile, respectively. The BVHP Community also ranks at the 90th percentile statewide in terms of cancer risk and at the 92nd percentile for cancer burden and has a Healthy Places Index at the 98th

percentile. Residents also face significant economic challenges as indicated by high poverty and unemployment CES scores of 96th and 98th percentiles, respectively.

Table 3 Key Table of Metrics Indicators (percentile) for Bayview Hunters Point/Southeast San Francisco Community^{18 19,4}

Overall CES 4.0 Score	PM _{2.5}	DPM	Asthma	Cardiovascular Disease	Poverty	Unemployment	Cancer Risk	Cancer Burden	CA Healthy Places Index
94	34	99	96	46	96	98	90	92	98

Community Advocacy and District Partnership

There are decades of leadership and community capacity building, inter-neighborhood coalitions, and collaborations among the Bayview Hunters Point/Southeast San Francisco community members. The Bayview Hunters Point Community Advocates (BVHP Community Advocates) is governed and operated by long-term members of the Bayview Hunters Point neighborhood in San Francisco combining community organizing with education, advocacy, and direct services. The BVHP Community Advocates connects residents with environmental justice issues at a neighborhood level. Their projects provide capacity building initiatives for organizations and the neighborhood to model practices that increase collaboration while lessening the extractive nature of partnership and relationships with the community.

The Marie Harrison Community Foundation (MHC Foundation) for environmental and social justice serves as a platform in part to mobilize grassroots community power and develop campaigns to advance community-designed solutions and policies to long-standing health, economic, and environmental issues in the Bayview Hunters Point community. The MHC Foundation was founded in 2019 to honor the legacy, advocacy, and dedication of Marie Harrison, “Mother of the Environmental Justice movement” shortly after, the foundation launched the #CanWeLive campaign, a youth-driven effort to amplify the community’s call for full clean-up of the numerous Brownfield and Superfund Sites in the district as well advocate for medical services for the community.

The MHC Foundation has experience developing programs and conducting outreach in the BVHP Community and has gained deep leadership and expertise around engaging the Air District with regulatory rulemaking, enforcement, programs, and in planning processes.

¹⁸ Key table of metrics indicators show the highest value found within the community area for each indicator in percentile

¹⁹ For more information on California Healthy Places Index, see <https://healthyplacesindex.org/>.

The BVHPC Advocates and the Marie Harrison Community Foundation intend to serve as co-leads in development of the CERP with the Bay Area AQMD.

Air Quality Burden Assessment

The discussion presented here summarizes the air quality burden in and around the Bayview Hunters Point Community and highlights the current air quality issues the community is experiencing and supports CARB staff’s rationale for recommending this community for board consideration as a Year 5 community.²⁰

Ambient Air Quality Data

The San Francisco-Arkansas St site is a regulatory monitoring site and is the closest monitoring location to the Bayview Hunters Point community. The site is located approximately 2 miles north of the community (Appendix C reference). The site conducts monitoring for toxics and a range of criteria pollutants. Concentrations of particulate matter (PM_{2.5}) typically peak during the 4th quarter (October to December) months, and except for impacts from fires in fall of 2020, this trend can generally be observed in Figure 9 spanning from 2018 to 2021, the annual average concentration of PM_{2.5} did not exceed the federal standards of 12 µg/m³.

Figure 9 Average PM_{2.5} Concentrations for San Francisco-Arkansas St.(ARB: 90306)

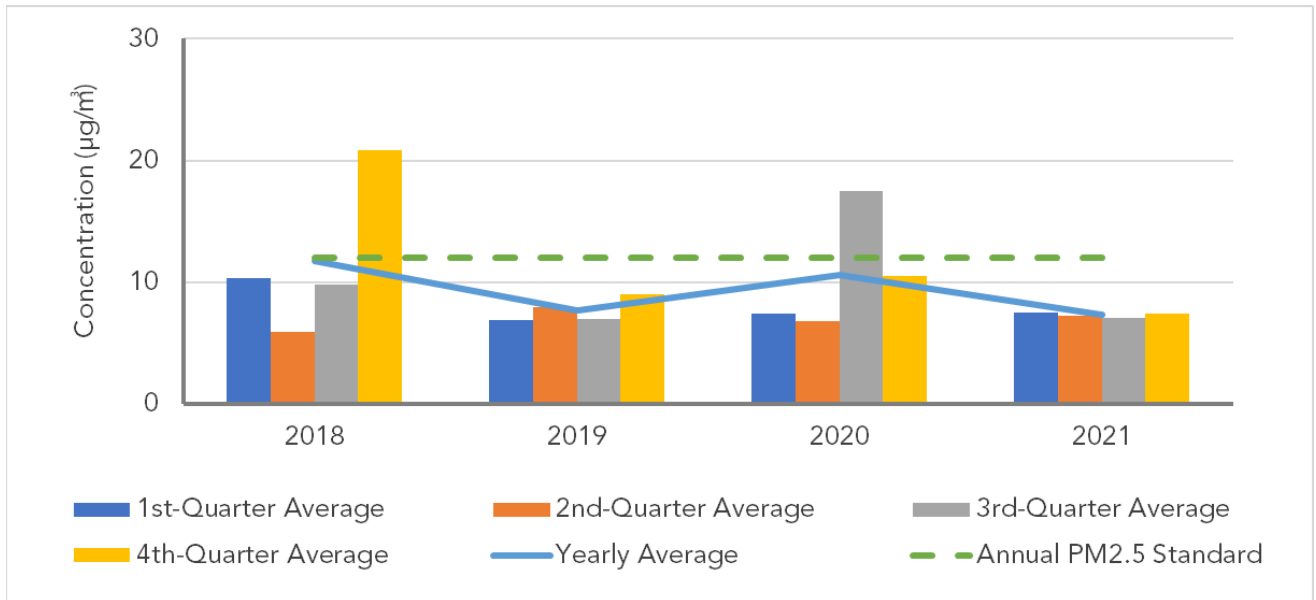
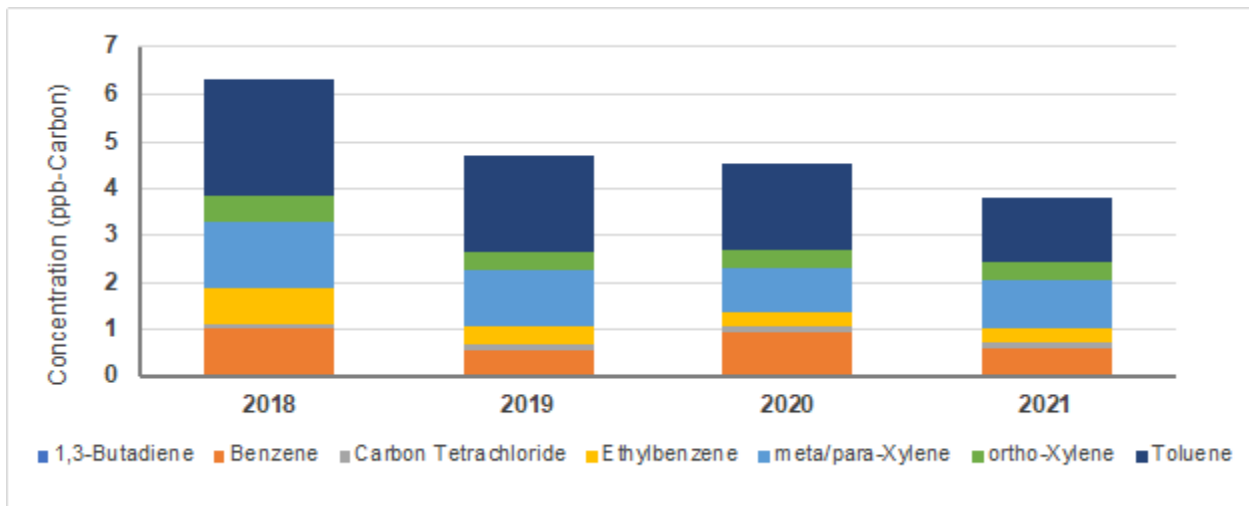


Figure 10 below shows the yearly concentration of volatile organic compounds (VOCs) from 2018 to 2021 and includes 1,3-butadiene, benzene, carbon tetrachloride,

²⁰ The CARB Board will consider the selection of new communities in their February 2023 Board Meeting. For more information, see [February 2023 Board Meeting | California Air Resources Board](#).

ethylbenzene, m/p -xylene, o-xylene, and toluene. People exposed to these VOCs species at elevated concentrations and for a prolonged period have an increased chance of suffering from carcinogenic and non-carcinogenic health issues²¹. Exposure to these species above acute or chronic Reference Exposure Levels (REL) can damage the alimentary, hematologic, reproductive, and respiratory systems. Concentrations of VOCs observed at the location have decreased by over the period, and none of the seven VOCs species exceeded their chronic REL threshold, which are 3.6 parts per billion of carbon (ppb-C) for 1,3-butadiene, 5.6 ppb- C for benzene, 6.4 ppb-C for carbon tetrachloride, 3,686 ppb-C for ethylbenzene, 1,290 ppb-C for the xylenes, and 780 ppb-C for toluene.

Figure 10 Average VOC concentrations for San Francisco-Arkansas St.(ARB: 90306)



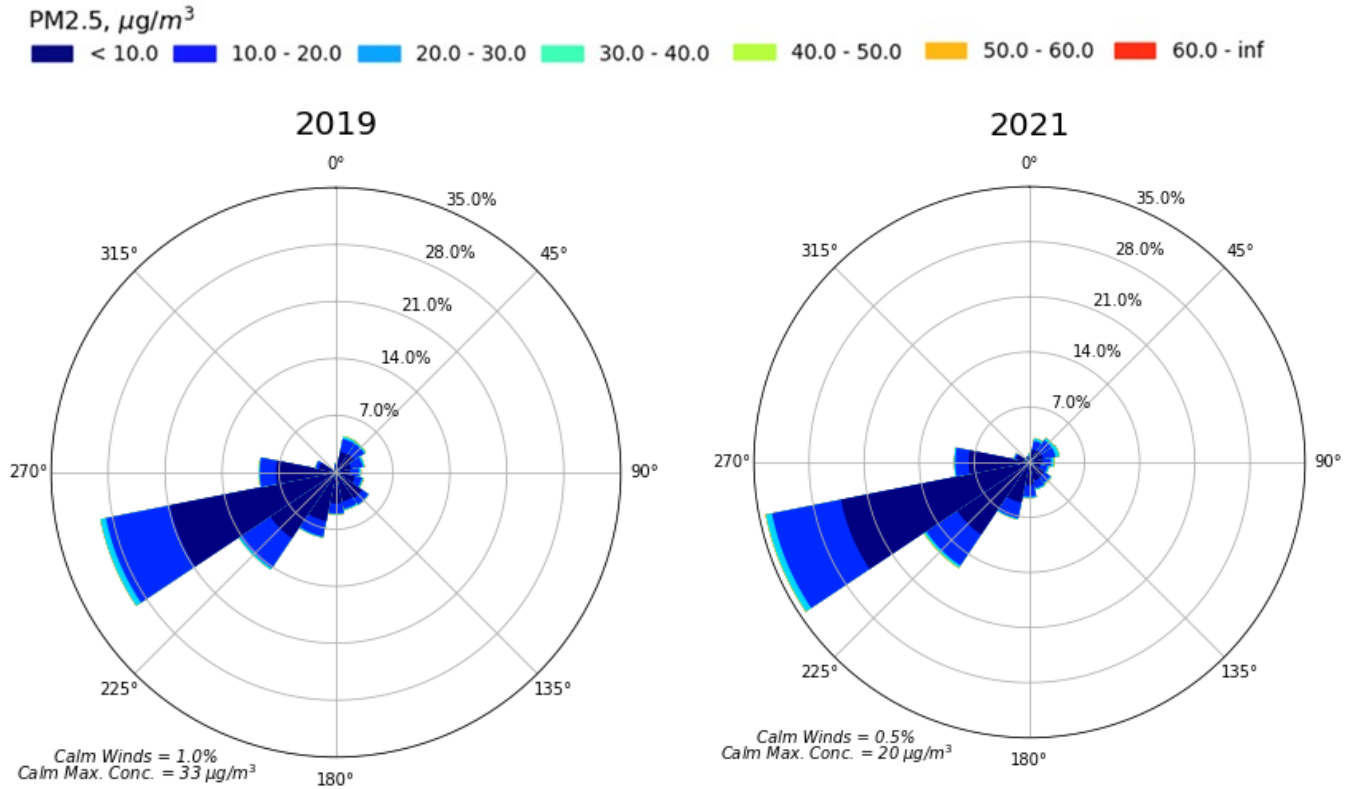
The closest meteorological station to the community, with hourly metrological data, is located at the San Francisco International Airport, which is approximately 10 miles south of the community and 14 miles south of the monitoring location at Arkansas St. It should be noted that the wind data collected at the airport may not be representative of the community due to this distance. Only two years of complete data are available from the site (2019 and 2021). Figure 11 is a pollution rose analysis – the analysis relies on metrological data from the San Francisco Airport station and PM_{2.5} data from the Arkansas St. Station. Figure 11 shows the predominate wind direction

²¹ OEHHA Acute, 8-hour and Chronic Reference Exposure Level (REL) Summary: <https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary>

The Chronic non-Cancer REL are provided in micrograms per cubic meter (ug/m3). For ease of comparison with monitoring data, RELs were converted to ppb-C based on the carbon content of each species.

from the west southwest at San Francisco International Airport, and generally very low hourly concentrations of PM_{2.5}.

Figure 11 PM_{2.5} Pollution Rose of San Francisco-Arkansas St and SF International Airport ²²

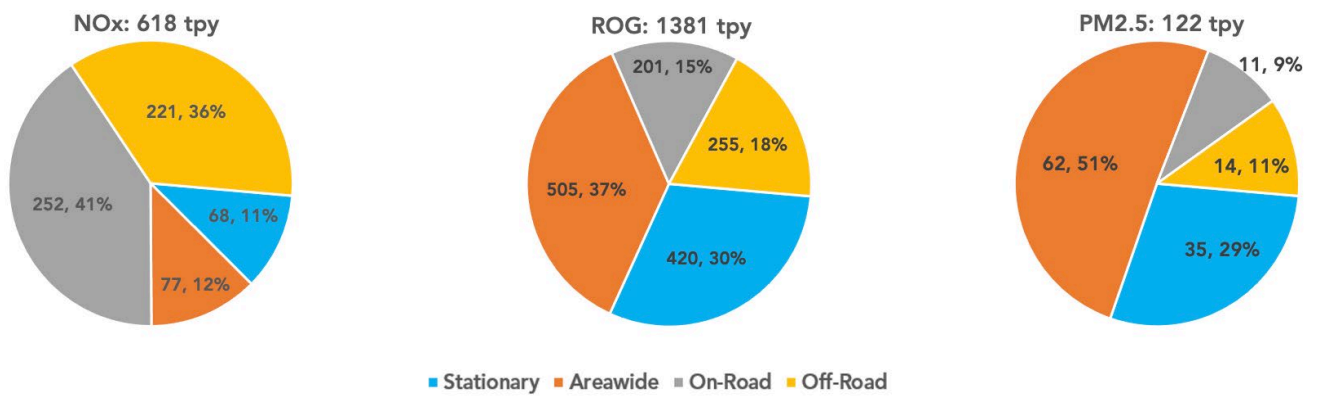


²² Wind data retrieved from http://erddap.cencoos.org/erddap/tabledap/gov_noaa_awc_ksfo.html on October 26, 2022. PM_{2.5} data retrieved from <https://www.arb.ca.gov/aqmis2/aqmis2.php> on October 26, 2022.

Preliminary Emissions Inventory Estimates

A preliminary emissions inventory²³ 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 D in this document. Figure 12 summarizes the draft estimated emissions for key air pollutants, such as nitrogen oxides (NOx), reactive organic gases (ROG), and particulate matter 2.5 microns or smaller (PM_{2.5}) for this community.

Figure 12 Preliminary Source Contributions in the Bayview Hunters Point/ Eastern San Francisco Community. (2022 Preliminary Emissions in Tons/Year, tpy)



The activities that contribute to these emissions are listed Table 4 and detailed in Table D.a.2 in Appendix D, along with an initial spatial distribution based on a preliminary planning emissions inventory.

²³ An emission inventory estimates the amount of air pollutants released into the atmosphere by emission sources in a specific geographical area and over a certain time period. Emission inventories are developed with the best data available and are updated over time to reflect sound science and robust new data.

Table 4 Top Source Categories by Stationary, Areawide, and Mobile for the Bayview Hunters Point/ Eastern San Francisco Community. (Preliminary Emission Inventory for 2022)²⁴

Stationary Sources			
PM_{2.5}	Percent	ROG	Percent
Mineral Processes	48%	Adhesives and Sealants	47%
Other Industrial Processes	30%	Coatings and Related Process Solvents	16%
Manufacturing and Industrial	9%	Petroleum Marketing	10%
Service and Commercial	4%	Degreasing	7%
Wood and Paper	4%	Printing	5%
Areawide Sources²⁵			
PM_{2.5}	Percent	ROG	Percent
Paved Road Dust	29%	Consumer Products	63%
Residential Fuel Combustion	25%	Architectural Coatings and Related Process Solvents	25%
Cooking	23%	Asphalt Paving/Roofing	5%
Construction and Demolition	14%	Other (Miscellaneous Processes)	4%
Other (Miscellaneous Processes)	4%	Residential Fuel Combustion	2%
Mobile Sources²⁶			
PM_{2.5}	Percent	ROG	Percent

²⁴ See Appendix D 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>

²⁵ District and CARB methodologies for estimating area source emissions: <https://ww2.arb.ca.gov/index-methodologies-major-category>

²⁶ Documentation on mobile sources: 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>

Off-road Equipment	41%	Off-road Equipment	45%
Light Duty Vehicles	27%	Light Duty Vehicles	37%
Ocean Going Vessels	6%	Recreational Boats	6%
Commercial Harbor Craft	6%	Medium Duty Vehicles	4%
Light Heavy Duty Vehicles	6%	Fuel Storage and Handling	3%

Figure 13 presents the emissions trends for NO_x, PM_{2.5}, and ROG in the San Francisco Bay Area Air Basin from 2010 through 2030 using the latest State Implementation Plan (SIP) emission inventory.²⁷ The forecasted emissions provide an initial assessment of future emission trends and air quality benefits in the air basin from existing emission reduction programs and reflects the effects of the regional growth assumptions and adopted CARB and District rules received by September 2021. A community-scale forecasted inventory will be developed to evaluate the air quality benefits of adopted rules as well as ongoing and potential future rulemaking activities if the community is selected by the CARB Board.

Figure 13 Projected Emissions Trends for Major Source Categories in the San Francisco Bay Area Air Basin (Emissions in Tons/Day)

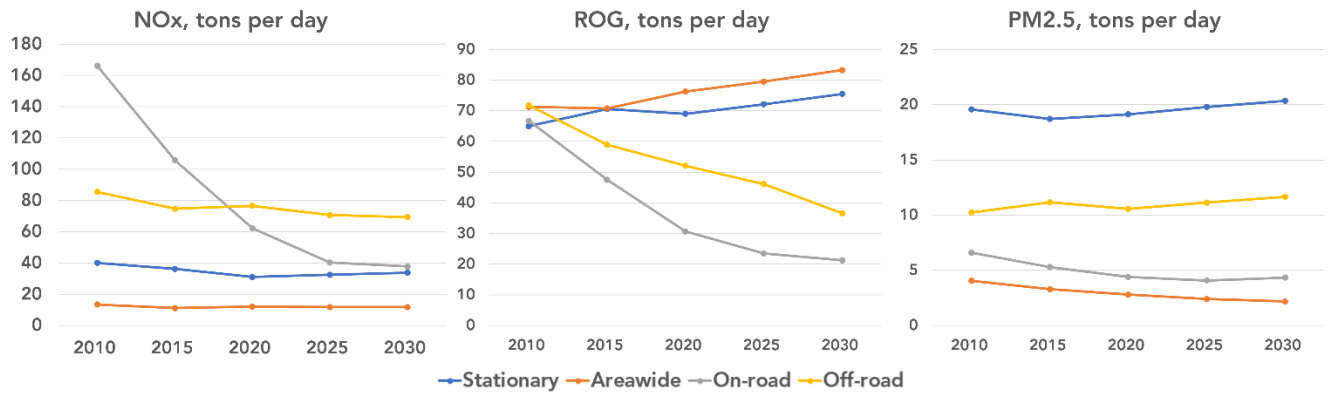
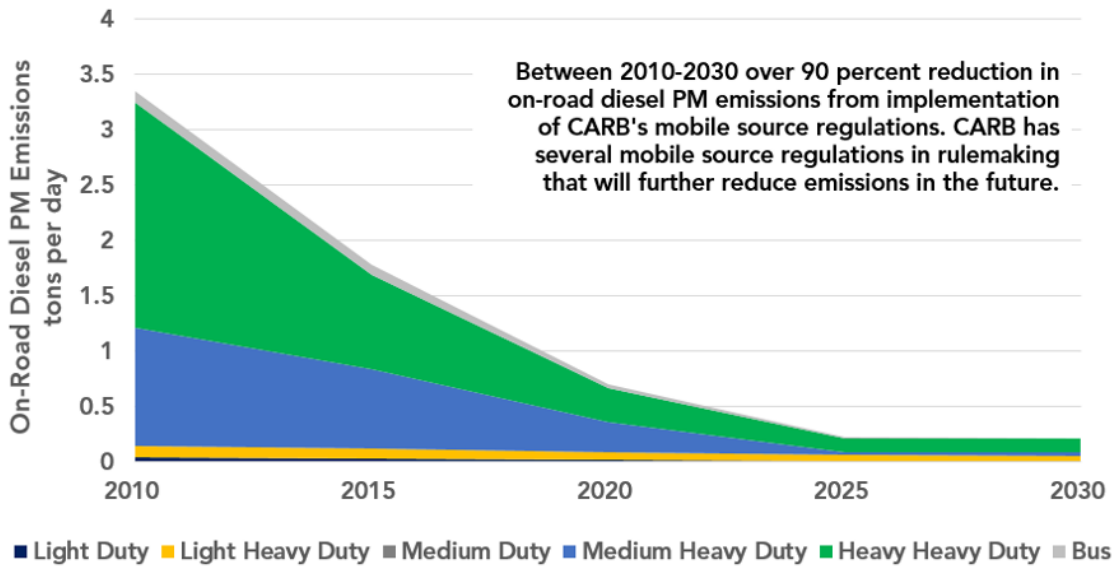


Figure 14 shows the trend of diesel particulate matter (diesel PM or DPM) emissions from on-road vehicles in San Francisco Bay Area Air Basin⁵. The emissions are projected to decrease significantly in future years from the implementation of adopted mobile source regulations, including the Regulation to Reduce Emissions of DPM, NO_x, and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles

²⁷ Based on the latest SIP inventory with a 2017 base year (CEPAM 2019SIP v1.03).

(also known as the Truck and Bus Regulation).²⁸ CARB has recently adopted several mobile source regulations (e.g., Advanced Clean Truck,²⁹ Air Toxics Control Measure for Transport Refrigeration Units),³⁰ and many others are in rulemaking development that when adopted will provide for additional reductions in DPM emissions in the community.

Figure 14 Projected Emission Trends for On-road Vehicle Diesel PM in the San Francisco Bay Area Air Basin (Emissions in Tons/Day)



Proximity-Based Exposure

The proposed BVHP Community spans approximately 60 square miles. Figure 15 illustrates the land use categories within the proposed community area. Residential land use within this community area is about 50 percent and 20 percent for industrial purposes. Figure 15 shows how the residential areas of the BVHP Community are bisected by I-101 and I-280 and wraps around industrial activities. Residences are also found at the edge of the Naval Shipyard.³¹ According to Bay Area AQMD “Permitted

²⁸ For more information on the Truck and Bus Regulation, visit: <https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation>

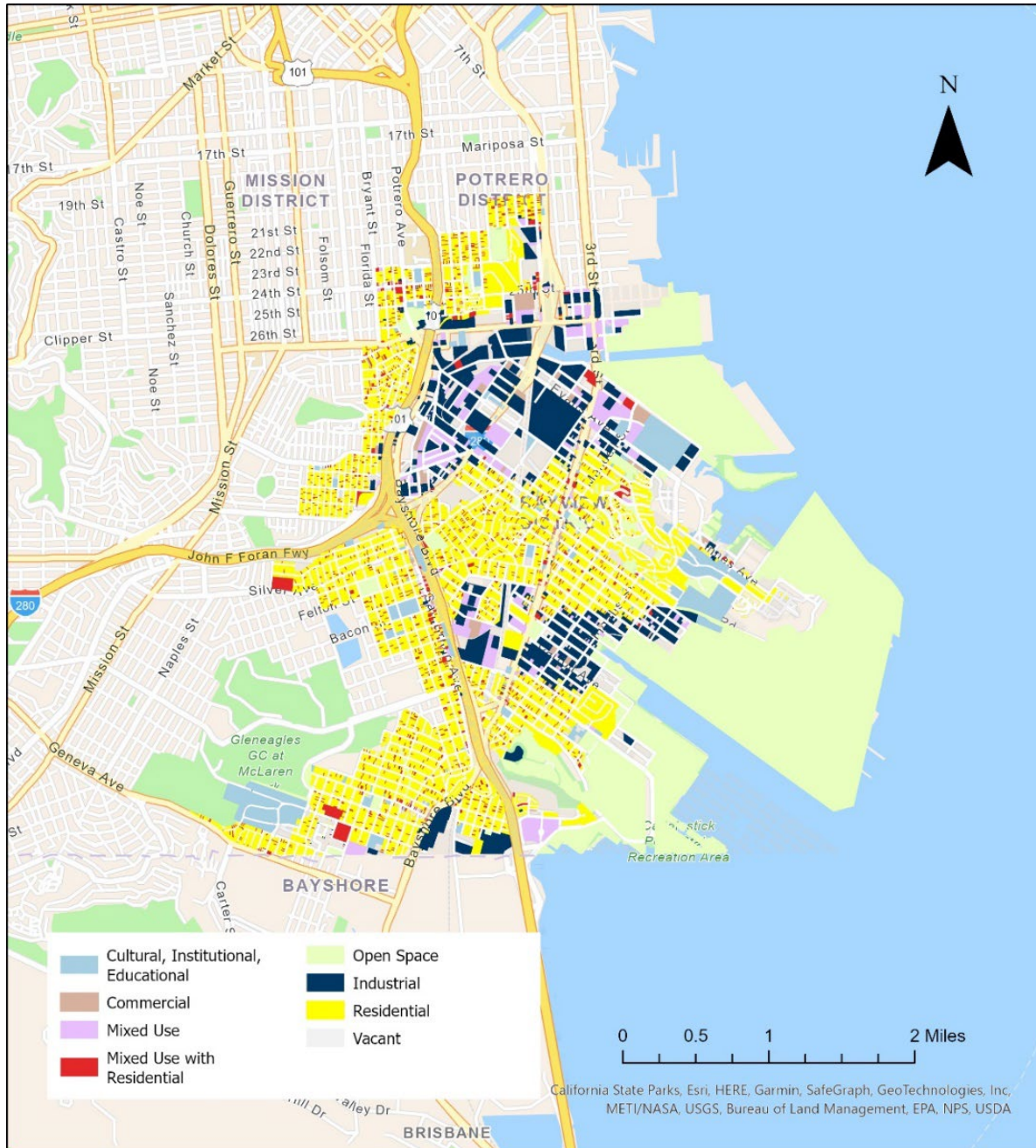
²⁹ For more information on the Advanced Clean Trucks Regulation, visit: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>

³⁰ For more information on the [Air Borne Toxics Control Measure](#) for the In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate, visit: <https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit>

³¹ Data source: <https://data.sfgov.org/>; the online version of the San Francisco Municipal Code is available at: [San Francisco, CA Laws \(amlegal.com\)](#)

Stationary Source Risk and Hazards Map,”³² there are over 81 permitted stationary source facilities in the BVHP Community area.

Figure 15 Land Use Map for the Proposed Community Area



³² For more information, see [2020 BAAQMD Permitted Stationary Sources | Tyler Data & Insights \(bayareametro.gov\)](https://www.bayareametro.gov)

According to zoning maps and data from the San Francisco Planning Department, the BVHP Community area is zoned for around 110,000 square feet of light and heavy industrial and general production, distribution, and repair operations. Production, distribution, and repair – general industrial uses account for 54 percent of industrial land use, while light industrial and heavy industrial account for 34 percent and 12 percent of industrial land use respectively. Around 89,000 square feet is zoned for residential (including mixed use with residential) purposes. Over 40 percent of residential land use in the community area is accounted for by mixed use, low density land use designations. Figure 16 illustrates how residential areas are zoned directly adjacent to industrial zones and the I-101; when comparing Figure 16 and Figure 17, there are several industrial zones in the southwest corner (where Bayshore Boulevard and 3rd St intersect with I-101) adjacent to some of the most densely populated areas in the community area consistent with Figure 15 and current land use.³³ According to zoning district data from the SF Planning department, the naval shipyard has been zoned as the Hunters Point Redevelopment Project Area shown in dark purple.

³³ Data source: <https://sfplanninggis.org/pim> for land use and zoning data made available by the San Francisco Planning Department. Zoning use district map is available at: [Zoning Use Districts | SF Planning](#)

Figure 16 Residential, Industrial, and the Hunters Point Redevelopment Project Area Zones

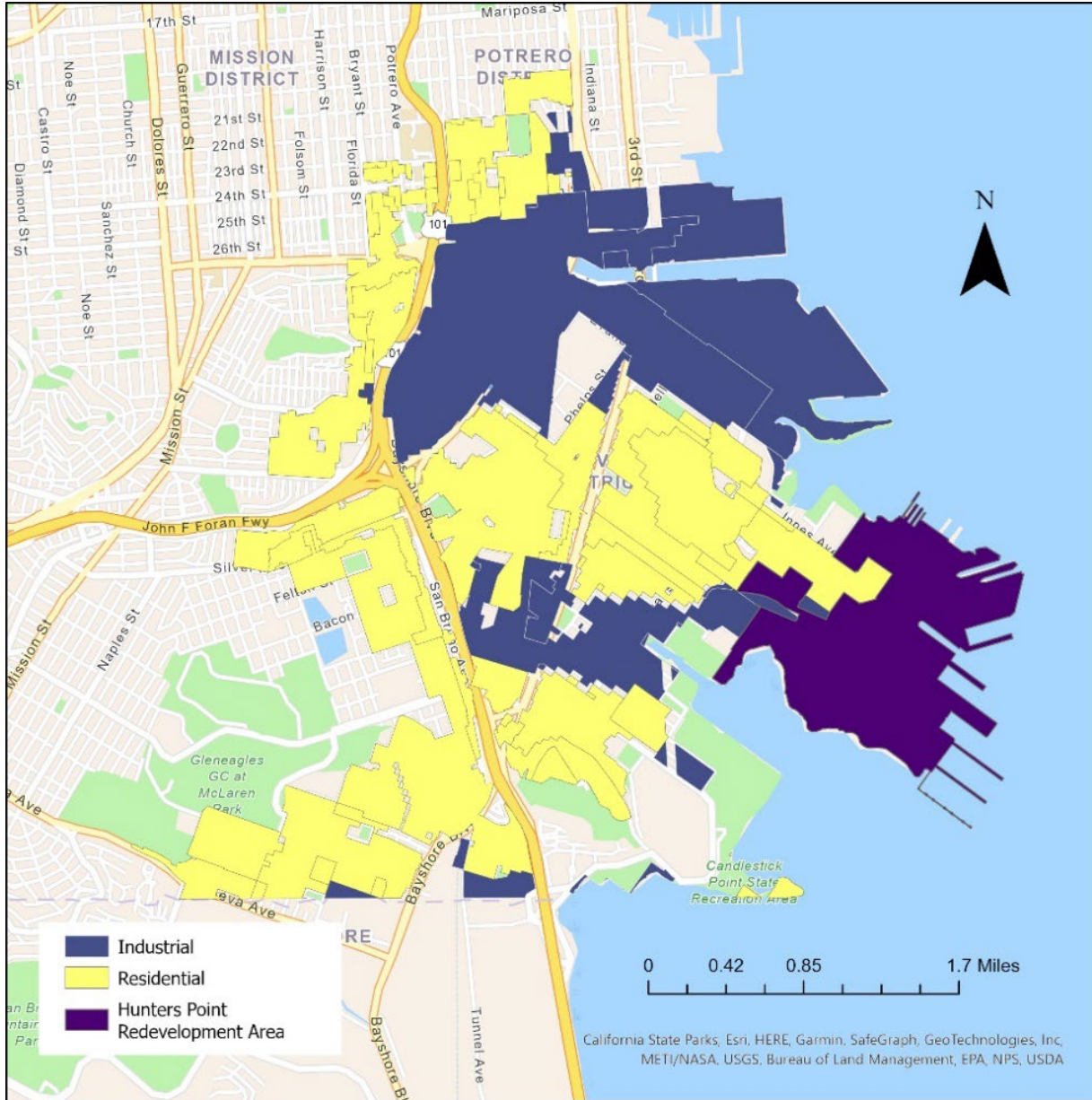
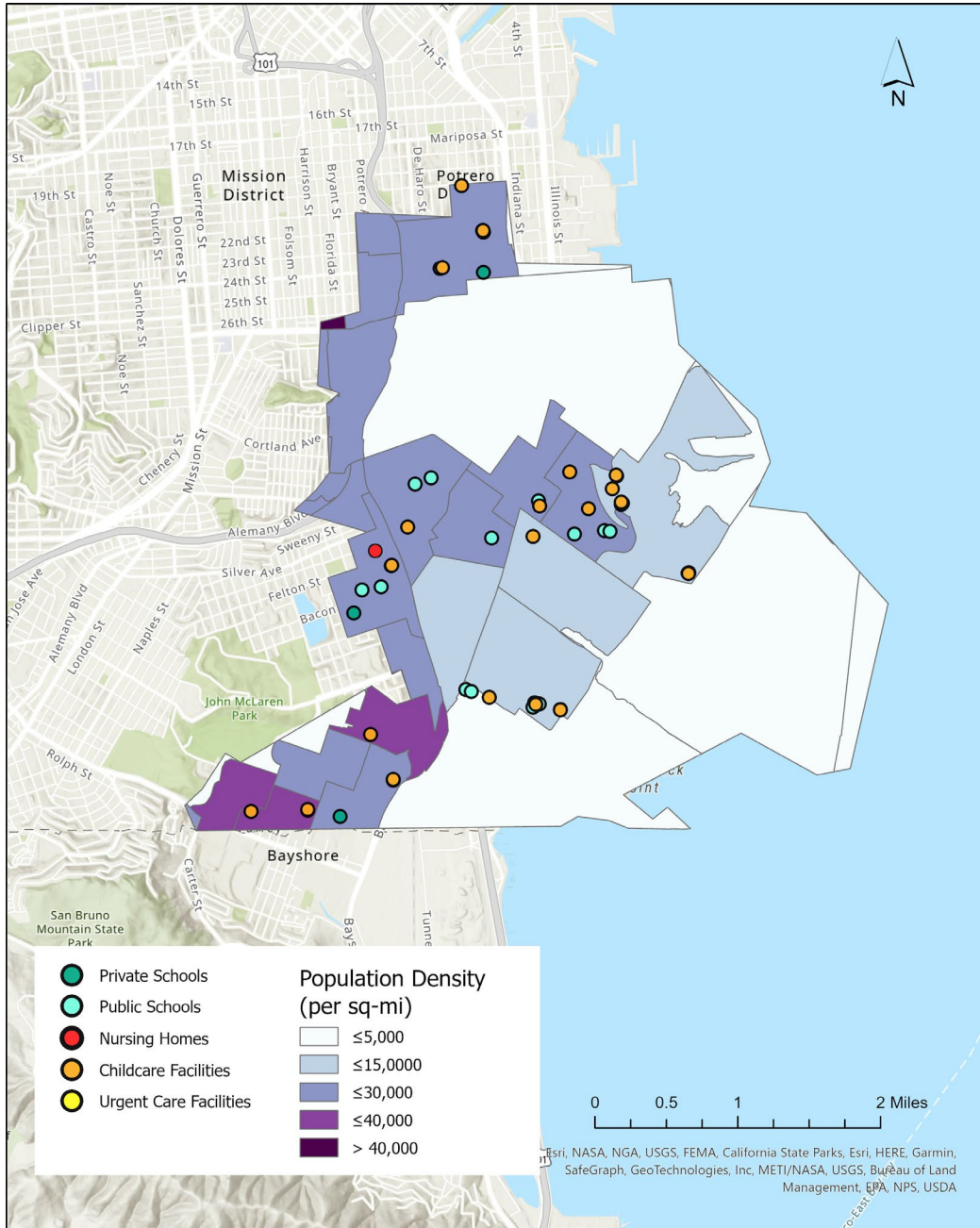


Figure 17 Population Density Map for Proposed Area



Bayview Hunters Point, Southeast San Francisco Community Grant Funding Community Air Grants

Greenaction for Health and Environmental Justice (2017)

Award Amount: \$300,000

Air District(s): Bay Area AQMD and San Joaquin Valley Air Pollution Control District

Greenaction for Health and Environmental Justice was awarded \$300,000 for their project which will continue to build the effectiveness of and community and stakeholder involvement in the Bayview Hunters Point and Kings County Identifying Violations Affecting Neighborhoods (IVAN) Task Forces;³⁴ expand Community Air Monitoring in Bayview Hunters Point through the use of stationary and mobile PM air monitors; and build community capacity and outreach in collaboration with CARB and other regulatory agencies to protect health and reduce pollution that harms the health of some of the most at risk communities in the entire state.

Rose Foundation for Communities and the Environment (2019)

Award Amount: \$100,000

Air District(s): Bay Area AQMD

The Rose Foundation for Communities and the Environment was awarded \$100,000 to build community capacity to engage with agencies on pollution and climate change, while increasing collaboration among youth across low-income Bay Area communities of color. The project will recruit, train and support young emerging leaders from the Bay Area region, including Bayview Hunters Point, who will work together to understand and address the threats their communities face, reaching out to educate and engage other community members to advance solutions that help their communities survive and thrive.

Bayview Hunters Point Community Advocates (2020)

Award Amount: \$262,027

Air District(s): Bay Area AQMD

BVHPC Advocates was awarded \$262,027 to advocate for health improvements, empower community members and reduce pollution. This project will enable BVHPC Advocates to connect their Council in Bayview-Hunters Point with resonant, but

³⁴ [IVAN BVHP \(bvhp-ivan.org\)](http://bvhp-ivan.org) Greenaction for Health and Environmental Justice utilized a small grant in 2015 to launch the Bayview Hunters Point Environmental Justice Response Task Force, a community-led, multi-stakeholder collaborative effort and is part of IVAN (Identifying Violations Affecting Neighborhoods) Network.

separately funded, efforts across eastern San Francisco into a larger, cohesive program of pollution reduction, health advocacy, and neighborhood empowerment. BVHPC Advocates will hold public meetings and trainings in principles and strategies of air pollution reduction and provide opportunities to share information regarding legacy pollution in eastern San Francisco.

Brightline Defense Project (2019)

Award Amount: \$299,920

Air District(s): Bay Area AQMD

Brightline Defense Project was awarded \$299,920 to support the expansion and transformation of the Brightline Air Quality Monitoring Program into the Brightline Air Quality Monitoring Enhancement Initiative, which will include additional Clarity Node-S monitor deployment in San Francisco Priority Populations, regional air quality analysis, and additional monitoring technologies. This project is a collaboration with community-based nonprofits Community Youth Center and Central City SRO Collaborative, and the University of California, Berkeley.

Supplemental Environmental Project

Project Title: PM Sensor Network

Funding amount: \$52,500

Funding recipient: Manylabs

Year: 2018

In 2018, supplemental environmental project funds of \$52,500 were awarded to Manylabs to install approximately 30 air monitoring sensors to measure particulate matter, wind speed, temperature, and relative humidity. The air quality data gathered from the sensor network would then be available to community members via an online platform.

Westmorland, Brawley, and Calipatria-North End Phase 1 Communities

Staff Recommendation – Community Emissions Reduction Program and Community Air Monitoring Plan

The proposed North End Phase 1 Community, which includes the cities of Westmorland, Brawley, and Calipatria, is within the jurisdiction of the Imperial County APCD and is located in the north end of Imperial County.

On August 3, 2022, the Imperial County APCD in partnership with CCV submitted the 2022 nomination of the North End Phase 1 Community (Westmoreland, Brawley, and Calipatria) to be selected and designated an AB 617 community under the Community Air Protection Program.

CARB staff supports the nomination of the proposed North End Phase 1 Community and recommends the CARB Board select this community to develop and implement a CAMP and CERP.

Community Description

The areas likely to be included in the proposed North End Phase 1 Community of Imperial County span approximately 580 square miles. A majority of the community area is agricultural land use, accounting for over 90 percent of the proposed community area. Figure 18 is a photo of the proposed North End Phase 1 Community and Figure 19 shows a preliminary area for the proposed community.

This community has an approximate population of 38,000 and includes about 18 schools, 14 childcare facilities, and 11 hospitals or clinics which are sensitive receptors to air pollution.^{13 35} The proposed community area covers Westmorland, Calipatria, and Brawley and is located southeast of the Salton Sea. The City of Brawley is located in the Colorado Desert and Lower Colorado River Valley Region 26 miles north from the US-Mexico border and about 15 miles southeast from the Salton Sea. Westmorland is bisected by Highway 86, a four-lane expressway connecting Coachella Valley and Interstate 10. Westmorland is 31 miles north of the US-Mexico border and 6 miles

³⁵ Data Source: public school - <https://gis.data.ca.gov/datasets/CDEGIS::california-schools-2019-20/about>, private school - <https://gis.data.ca.gov/datasets/CDEGIS::california-private-schools/explore>, childcare facilities - <https://gis.data.ca.gov/datasets/CDEGIS::california-early-learning-and-care-sites/about>, healthcare facilities - <https://gis.data.ca.gov/datasets/CDPHDATA::cdph-licensing-and-certification-healthcare-facilities/about>, elderly care facilities - <https://data.ca.gov/dataset/community-care-licensing-residential-elder-care-facility-locations>

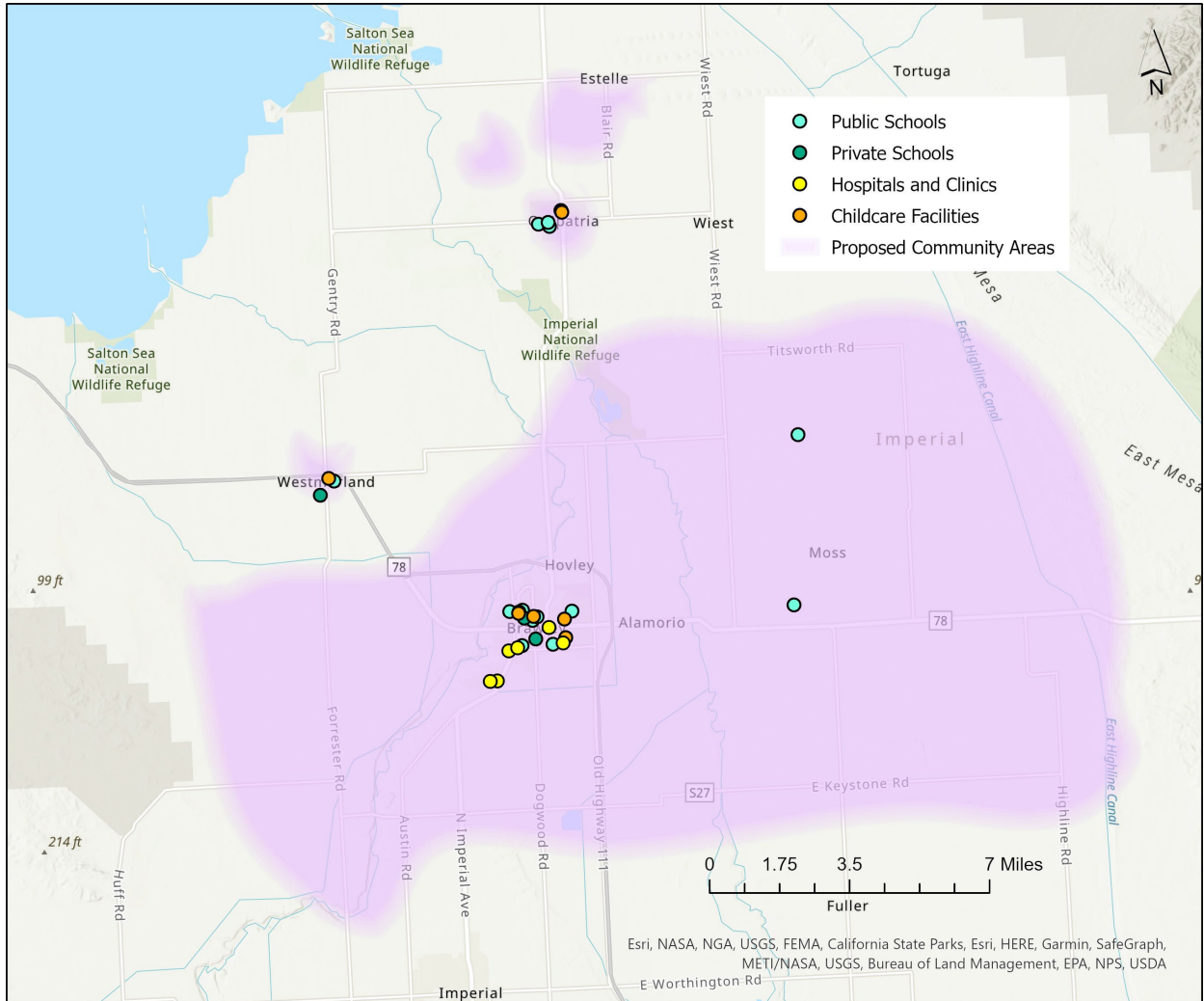
south of the Salton Sea. Calipatria is 8 miles southeast of the Salton Sea and 30 miles from the US-Mexico Border.

Figure 18 District Photograph of the Proposed North End Phase 1 Community



The Imperial County APCD nomination letter outlines priority air quality concerns associated with transportation corridors, major goods movements, industry, and the Salton Sea. Agricultural burning and equipment use, off roading, fugitive dust from unpaved roads and heavy-duty truck traffic and idling are some issues highlighted in the nomination.

Figure 19 Proposed North End Phase 1 Community



Most of the census tracts that make up this proposed community are considered disadvantaged per SB 535³⁶ and low-income per AB 1550, the overall CES score of the census tracts that make up the North Phase 1 Community is at the 91st percentile. Table 5 also shows exceedingly high CES scores at the 99th and 92nd percentiles, for asthma and cardiovascular disease respectively. Residents also face significant health challenges for asthma, cardiovascular disease. Residents also face significant economic

³⁶ Disadvantaged community designations per Senate Bill (SB) 535 (De León, Chapter 830, Statutes of 2012). SB 535 designation was updated in May 2022, for more information see [SB 535 Disadvantaged Communities | OEHHA \(ca.gov\)](https://oehha.ca.gov). The May 2022 SB 535 Designation is not currently reflected in the Table of Metrics 2.0 which was last updated November 2021.

challenges as reflected by the poverty and unemployment scores of 98th and 100th percentile, respectively.

Table 5 Key Table of Metrics Indicators (percentile) for Westmoreland, Brawley, and Calipatria North End Phase 1 Community ^{37,38}

Overall CES 4.0 Score	PM _{2.5}	DPM	Asthma	Cardiovascular Disease	Poverty	Unemployment	Cancer Risk	Cancer Burden	CA Healthy Places Index
91	39	43	99	92	98	100	21	34	99

Community Advocacy and District Partnership

CCV³⁹ has served the communities of Imperial Valley for over three decades and is also engaged in various other California communities through collaborative efforts with environmental justice organizations and in partnership with researchers, academia, and government agencies. CCV endeavors to improve the lives of disadvantaged communities; informing, educating, and engaging the community’s civic participation and was founded on the principle that “Informed People Build Health Communities.”

The Imperial County APCD partners with CCV in serving the Imperial Valley through the AB 617 program. They have successfully worked together to develop and implement a CAMP and CERP for the Calexico, El Centro, Heber Community also located in the Imperial County APCD jurisdiction.

Air Quality Burden Assessment

The discussion presented here summarizes the air quality burden in and around the North End Phase 1 Community and highlights the current air quality issues the community is experiencing and supports CARB staff’s rationale for recommending this community to be selected in 2023.

Ambient Air Quality Data

There are two regulatory monitoring locations within the community: the Brawley-Main St monitoring site is located on the west of the proposed the community while the Westmorland-Cook St monitoring site is located towards the south. As shown in Figure 20, no specific trend was observed in PM_{2.5} seasonal concentrations from 2018

³⁷ Data Source: <https://oehha.ca.gov/calenviroscreen/report/draft-calenviroscreen-40>. More information on California Healthy Places Index available at: <https://healthyplacesindex.org/>.

³⁸ The CES 4.0 Score and CA Healthy Places Index are the highest overall percentiles of a census tract found within the boundary

³⁹ More information on Comite Civico Del Valle, Inc. available at <https://www.ccvhealth.org/>

to 2021 at the Brawley-Main St monitoring station, and the annual average concentration of PM_{2.5} did not exceed the federal standards of 12 µg/m³.

Figure 20 Average PM_{2.5} Concentrations for Brawley-Main St. (ARB: 13701)

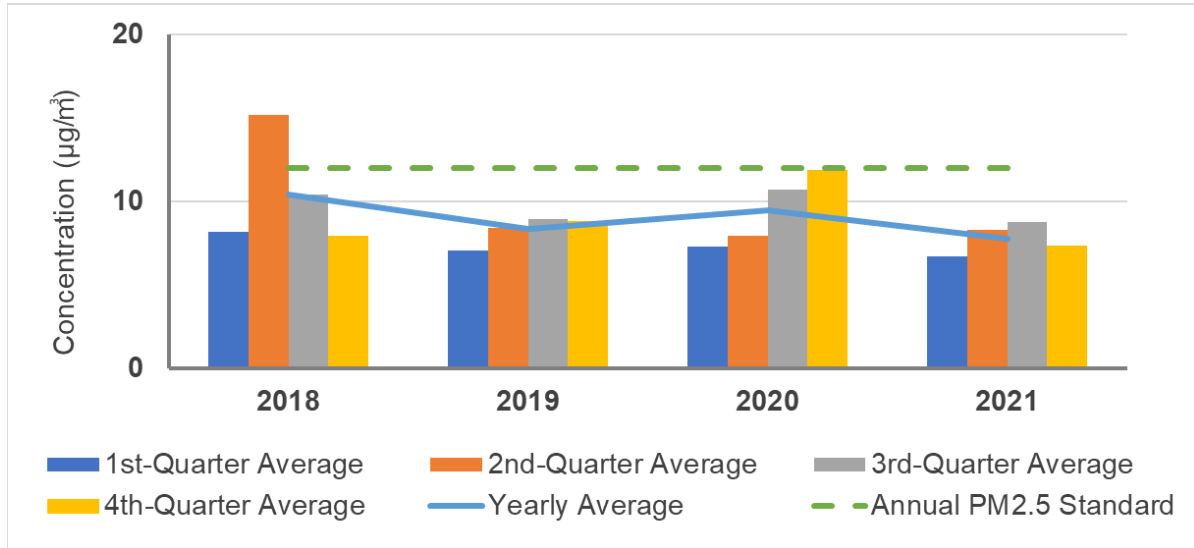


Figure 21 and Figure 22 shows seasonal PM₁₀ averages at the Brawley-Main St and the Westmoreland Cook St monitoring stations respectively. There is no federal annual standard for PM₁₀. The seasonal PM₁₀ averages at both sites are almost identical and, in general, follow PM_{2.5} seasonal trends indicating the same source (likely windblown dust) may likely contribute to observed concentrations of PM_{2.5} and PM₁₀.

The Westmorland site also collects hourly metrological data which provides information on the prevailing winds in the area. Figure 23 is a pollution rose analysis showing the predominate wind direction west and southeast and high PM₁₀ concentrations can be observed in winds from blowing from either direction indicating the windblown dust, which is prevalent in the Imperial Valley area, could be contributing to such elevated PM₁₀ concentrations during windy days.

Figure 21 Average PM₁₀ Concentrations for Brawley-Main St. (ARB: 13701)

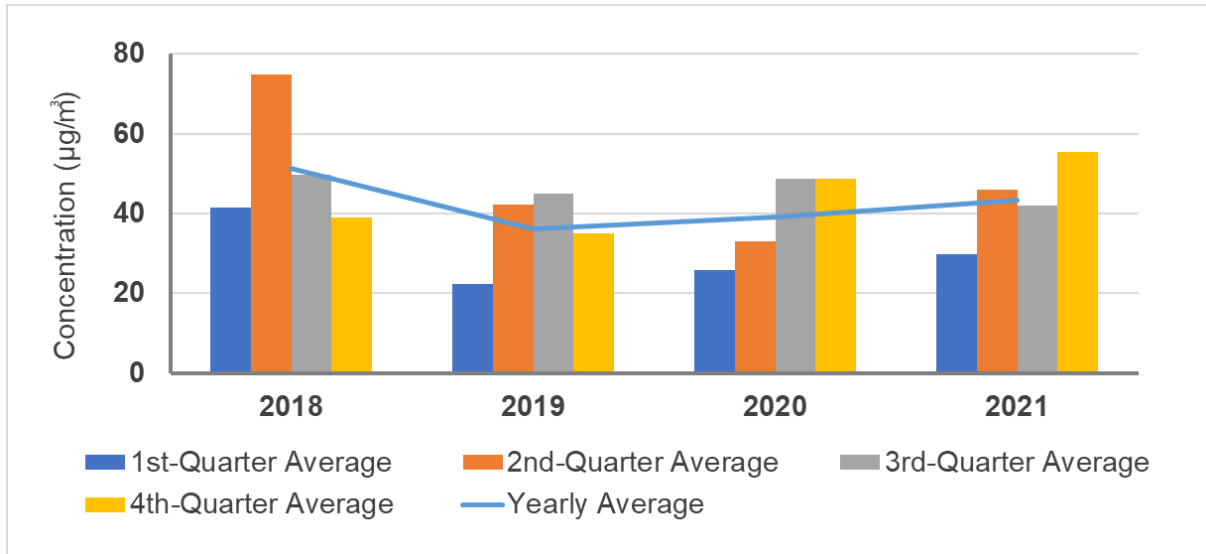


Figure 22 Average PM₁₀ Concentrations for Westmorland-Cook St. (ARB: 13697)

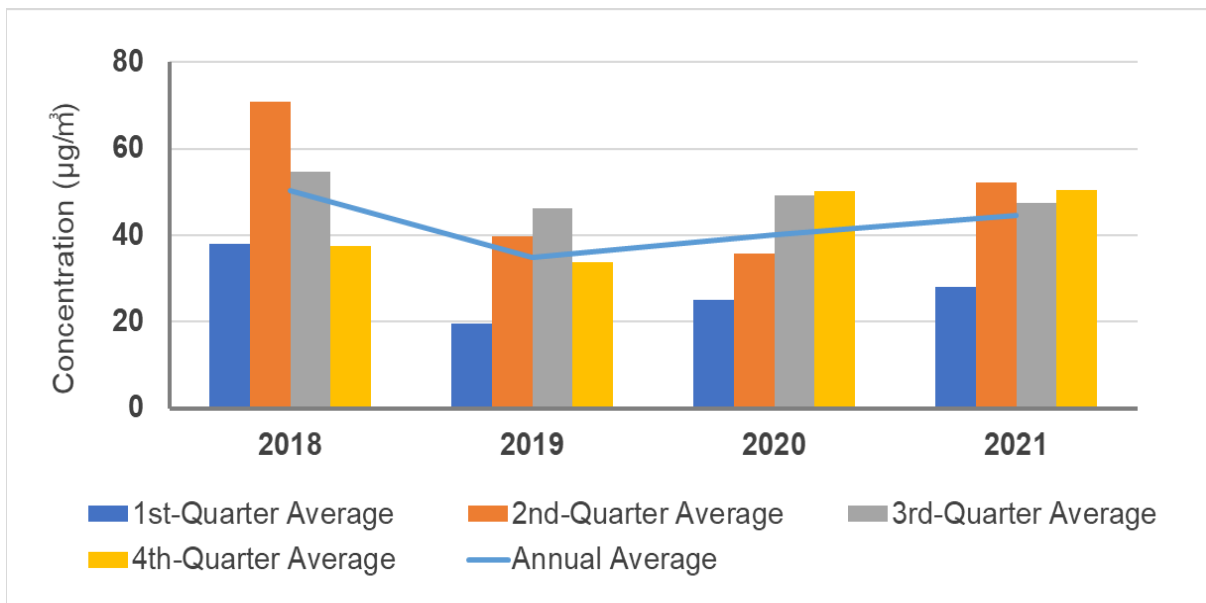
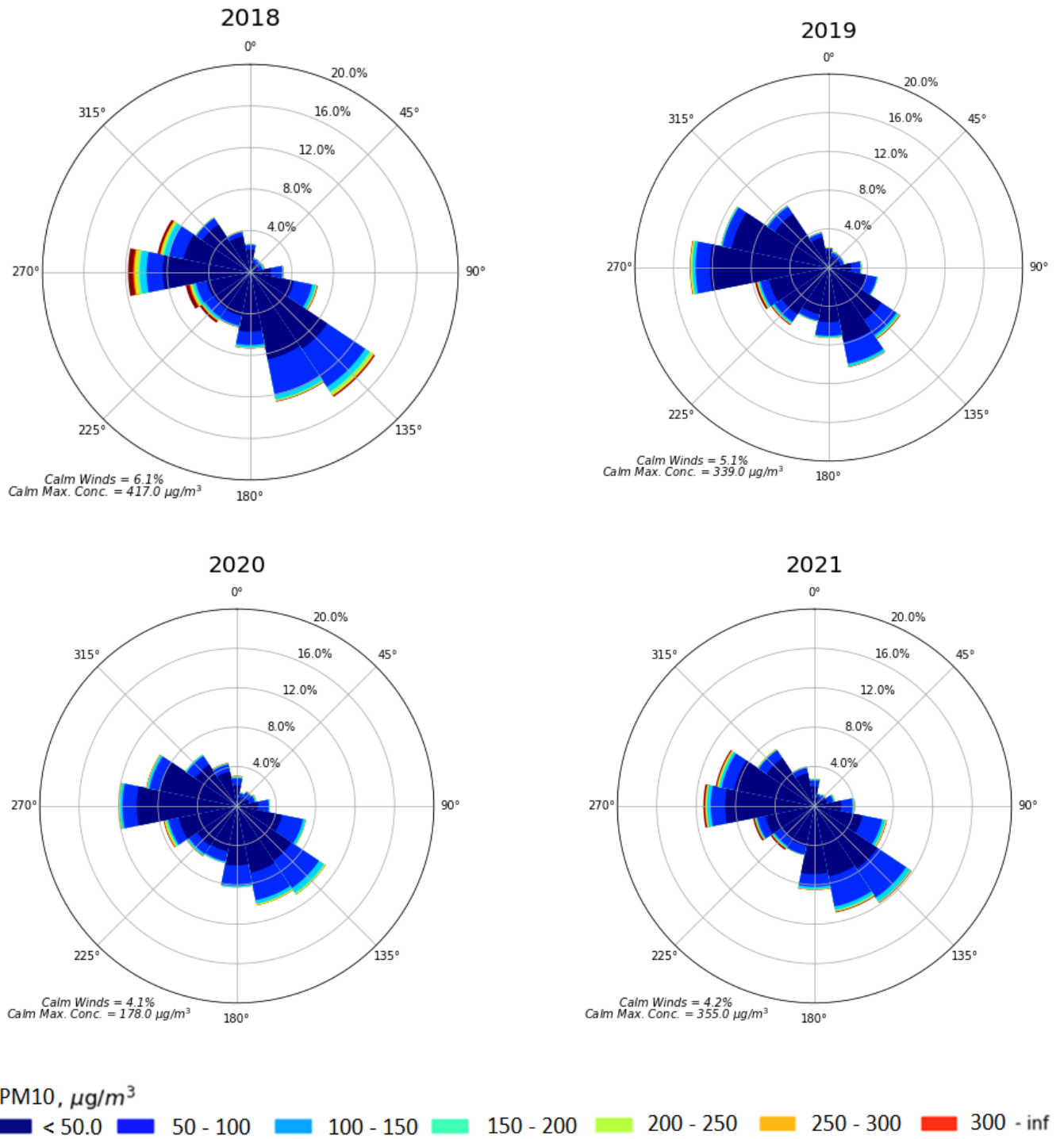


Figure 23 PM₁₀ Pollution Rose of Westmorland Site (ARB: 13697)⁴⁰

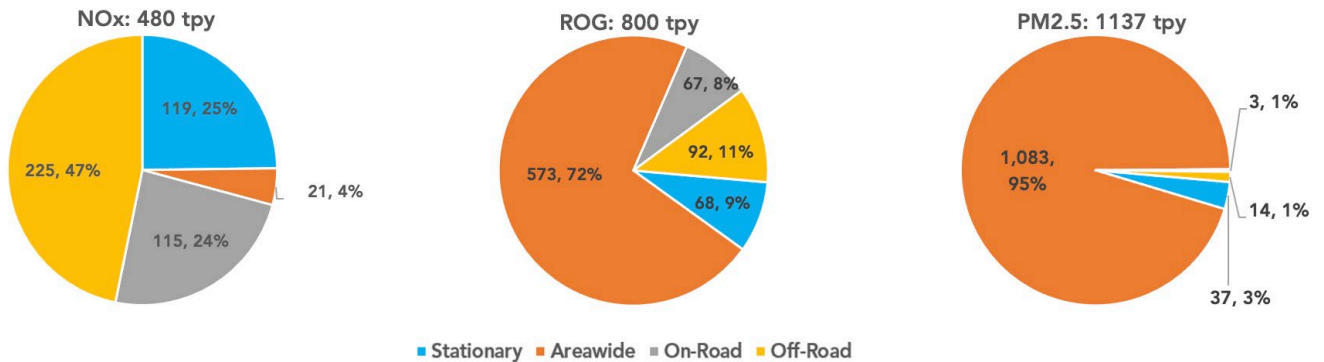


⁴⁰ Wind speed and PM₁₀ data obtained from <https://www.arb.ca.gov/aqmis2/aqmis2.php> on October 28, 2022.

Preliminary Emissions Inventory Estimates

A preliminary emissions inventory⁴¹ 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 D in this document. Figure 24 summarizes the draft estimated emissions for key air pollutants, such as nitrogen oxides (NOx), reactive organic gases (ROG), and particulate matter 2.5 microns or smaller (PM_{2.5}) for this community.

Figure 24 Preliminary Source Contributions in the Westmorland, Brawley, and Calipatria-North End Phase 1 Communities. (2022 Preliminary Emissions in Tons/Year, tpy)



The activities that contribute to these emissions are listed in Table 6 and are detailed in Table D.b.2 in Appendix D, along with an initial spatial distribution based on a preliminary planning emissions inventory.

⁴¹ An emission inventory estimates the amount of air pollutants released into the atmosphere by emission sources in a specific geographical area and over a certain time period. Emission inventories are developed with the best data available and are updated over time to reflect sound science and robust new data.

Table 6 Top Source Categories by Stationary, Areawide, and Mobile for the Westmorland, Brawley and Calipatria North End Phase 1 Communities (Preliminary Emission Inventory for 2022)⁴²

Stationary Sources			
PM_{2.5}	Percent	ROG	Percent
Other Industrial Processes	36%	Degreasing	51%
Food and Agriculture	32%	Adhesives and Sealants	13%
Service and Commercial	10%	Coatings and Related Process Solvents	12%
Food and Agricultural Processing	7%	Electric Utilities	11%
Cogeneration	6%	Petroleum Marketing	7%
Areawide Sources⁴³			
PM_{2.5}	Percent	ROG	Percent
Fugitive Windblown Dust	69%	Farming Operations	46%
Farming Operations	12%	Pesticides/Fertilizers	25%
Unpaved Road Dust	11%	Consumer Products	15%
Managed Burning and Disposal	4%	Architectural Coatings and Related Process Solvents	6%
Paved Road Dust	2%	Managed Burning and Disposal	5%
Mobile Sources⁴⁴			

⁴² See Appendix D 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>.

⁴³ District and CARB methodologies for estimating area source emissions: <https://ww2.arb.ca.gov/index-methodologies-major-category>

⁴⁴ Documentation on mobile sources: 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>

PM _{2.5}	Percent	ROG	Percent
Farm Equipment	43%	Light Duty Vehicles	30%
Aircraft	19%	Off-road Equipment	23%
Off-road Equipment	13%	Farm Equipment	15%
Light Duty Vehicles	8%	Aircraft	10%
Heavy Heavy Duty Vehicles	6%	Medium Duty Vehicles	8%

Figure 25 presents the emissions trends for NO_x, PM_{2.5}, and ROG in Imperial County, located within the Salton Sea Air Basin, from 2010 through 2030 using the latest State Implementation Plan (SIP) emission inventory.⁴⁵ The forecasted emissions provide an initial assessment of future emission trends and air quality benefits in the region from existing emission reduction programs and reflects the effects of the regional growth assumptions and adopted CARB and District rules received by September 2021. A community-scale forecasted inventory will be developed to evaluate the air quality benefits of adopted rules as well as ongoing and potential future rulemaking activities if the community is selected by the CARB Board.

Figure 25 Projected Emissions Trends for Major Source Categories in Imperial County within the Salton Sea Air Basin (Emissions in Tons/Day)

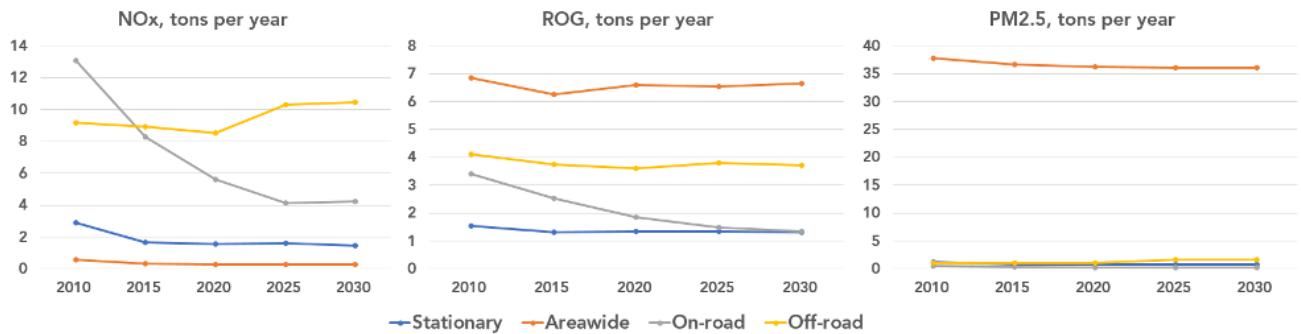
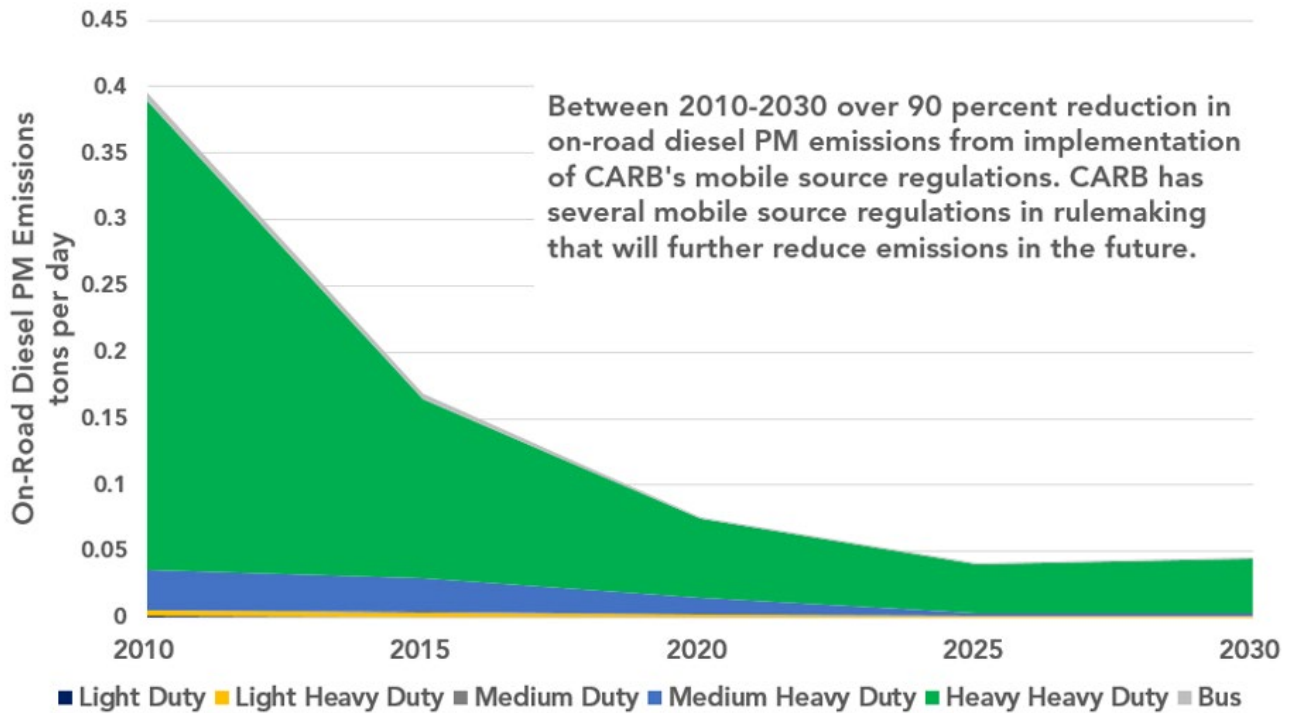


Figure 26 shows the trend of diesel particulate matter (diesel PM or DPM) emissions from on-road vehicles in Imperial County, located within the Salton Sea Air Basin. The emissions are projected to decrease significantly in future years from the implementation of adopted mobile source regulations, including the Regulation to Reduce Emissions of DPM, NO_x, and Other Criteria Pollutants from In-Use Heavy-Duty

⁴⁵ Based on the latest SIP inventory with a 2017 base year (CEPAM 2019SIP v1.03).

Diesel-Fueled Vehicles (also known as the Truck and Bus Regulation).⁴⁶ CARB has recently adopted several mobile source regulations (e.g., Advanced Clean Truck,⁴⁷ Air Toxics Control Measure for Transport Refrigeration Units),⁴⁸ and many others are in rulemaking development that, when adopted, will provide for additional reductions in DPM emissions in the community.

Figure 26 Projected Emission Trends for On-road Vehicle Diesel PM in the Imperial County, within the Salton Sea Air Basin (Emissions in Tons/Day)



Proximity-Based Exposure

The proposed North End Phase 1 Community covers approximately 590 square miles with an estimated population of 38,000. 90 percent of the proposed community area is designated as agricultural land use, with a further 3 percent designated as open

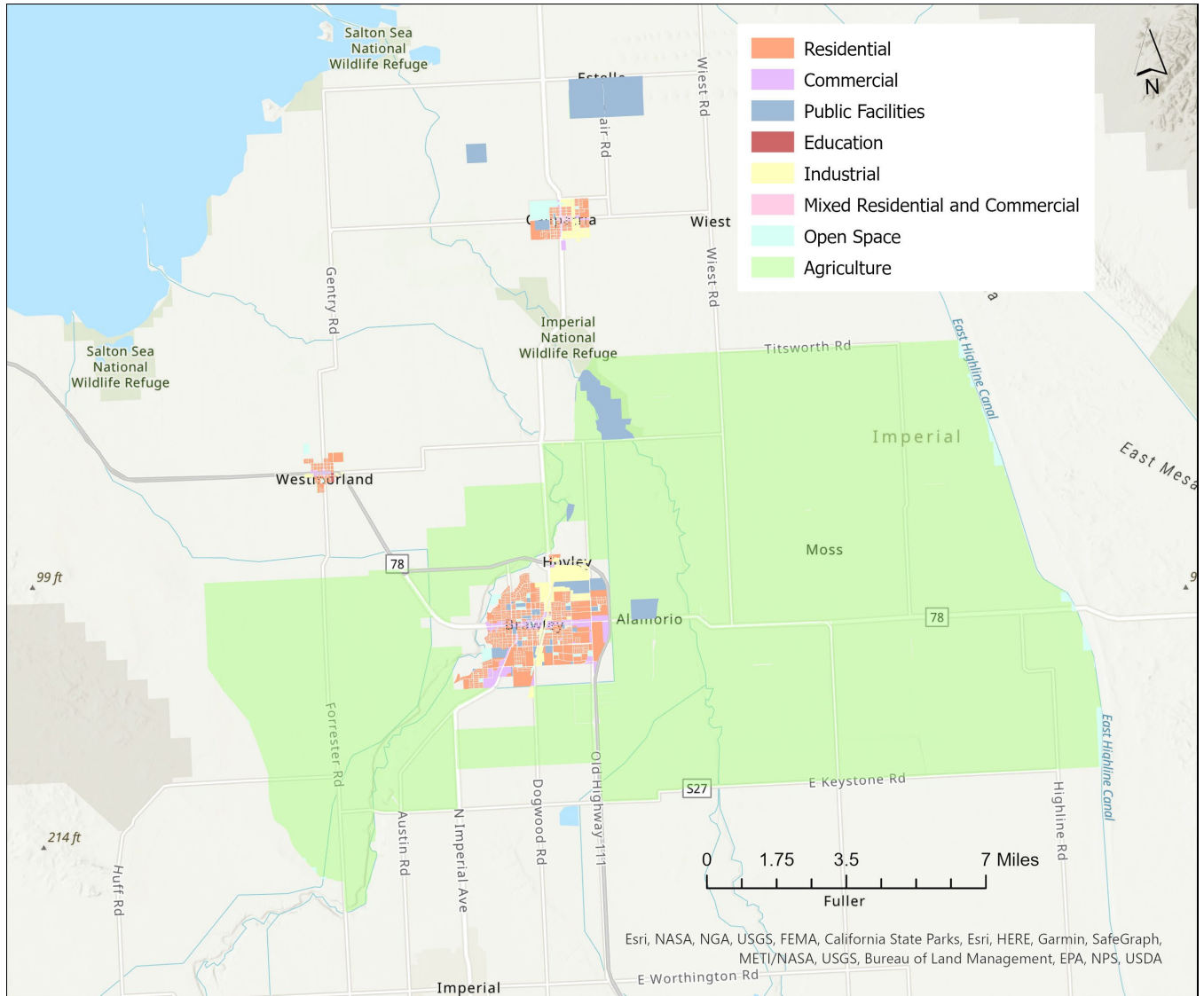
⁴⁶ For more information on the Truck and Bus Regulation, visit: <https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation>

⁴⁷ For more information on the Advanced Clean Trucks regulation, visit: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>

⁴⁸ For more information on the [Air Borne Toxics Control Measure](#) for the In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate, visit: <https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit>

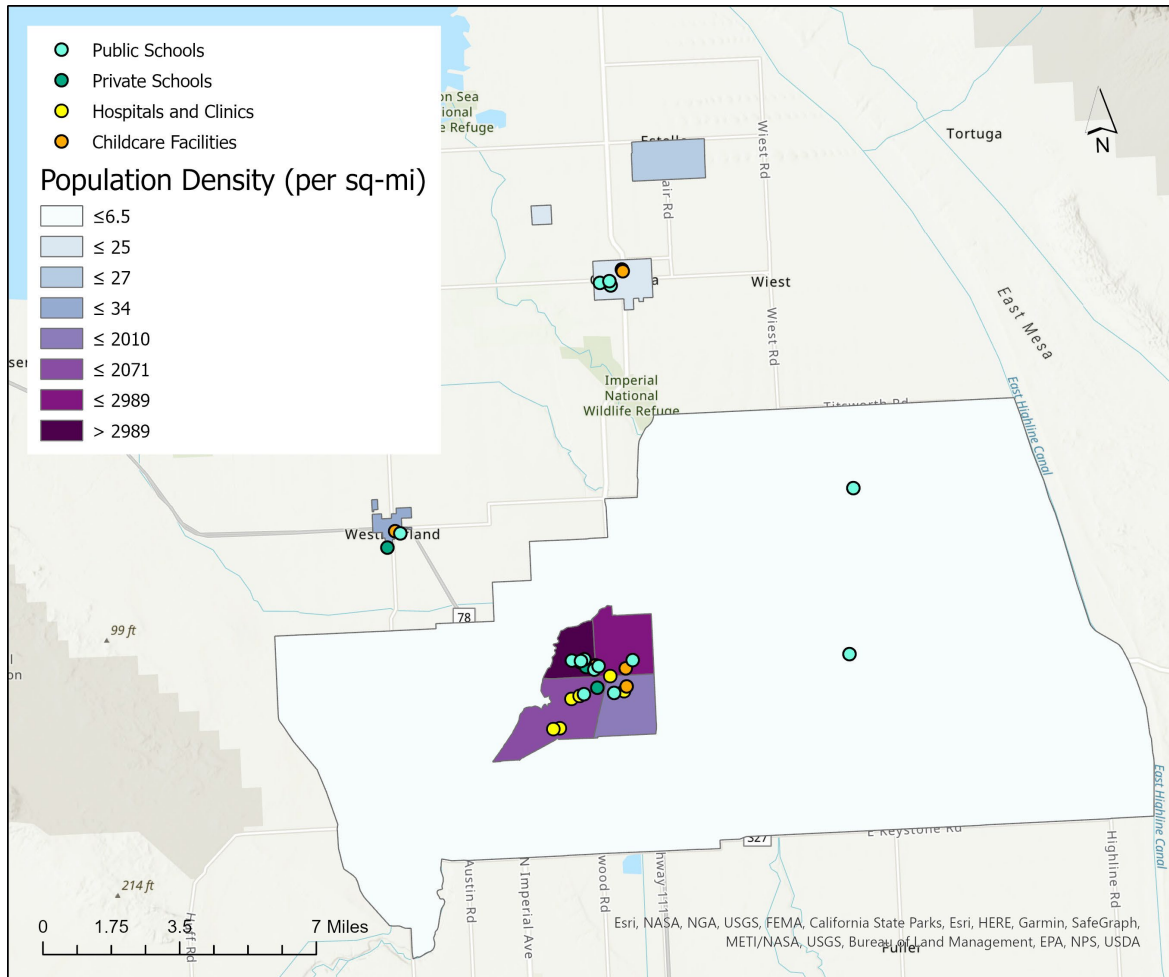
space and recreational land use. Single family residential is the most common residential land use within the proposed community area. The map in Figure 27 illustrates the land use categories within the proposed community area. The map in Figure 28 shows the population density of the proposed community area.

Figure 27 Land Use Map for the Proposed Community Area⁴⁹



⁴⁹ Data source: [Parcel Locator | Southern California Association of Governments](#); [Imperial County GIS Data Portal \(arcgis.com\)](#); [Land Use Documents | Imperial County Planning & Development Services \(icpds.com\)](#)

Figure 28 Population Density for Proposed Community Area



Westmorland, Brawley, and Calipatria-North End Phase 1 Community Grant Funding

Supplemental Environmental Project

Project Title: Brawley Health Action Environmental Study SEP

Funding amount: \$1,076,482

Funding Recipient: Public Health Institute

Year: 2020

Tracking California and partners propose a four-phase project that will address Brawley community concerns, starting with acknowledgement of historical contamination issues, and concluding with activities which will empower the community for public health action. Phase 1 will focus on public engagement, defining

the domain of interest, compiling and analyzing existing environmental and health data, conducting an oral history assessment, educational and training activities, and determining the scope of the following phases. Phase 2 will focus on conducting health surveys and report back to the community. Phase 3 will entail environmental monitoring and report-backs, and Phase 4 will include final project community report back and mobilization for public health action.

Community Air Grants

CCV

Award Amount: \$300,000

Air District(s): Imperial County Air Pollution Control District

CCV was awarded \$300,000 to continue the community monitoring efforts in the Salton Sea Air Basin, a region that encompasses the Imperial and Eastern Coachella Valleys. Current and previous efforts for community air monitoring have relied on the work of the Imperial Project, which established a community air monitoring network of 40 stationary sites using low-cost monitors. As technology improves, CCV aims to provide the community those same improvements in the community services that IVAN Air Monitoring provides (IVAN is Identifying Violations Affecting Neighborhoods). Their project aims to incorporate two new advances into the network including: 1) mobile monitoring to collect field data specific to each of the monitoring sites to improve regional calibrations, and 2) incorporating PM_{2.5} specific sensors to the IVAN Air monitoring network to improve the quality of the Community Air-quality Levels (CALs) provided.

Appendix A

California Environmental Quality Act

CARB has determined that the statewide assessment completed in 2018 and the 2021 community recommendations are 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 statewide assessment completed in 2018, updated in November 2021, and the Fifth Year (2022) community recommendations is administrative in nature in that it merely provides CARB’s assessment to identify communities with high cumulative pollution exposure burdens and to identify the communities CARB staff is recommending the CARB Board select for deployment of air monitoring or development of an emissions reduction program. The assessment and selection of communities will have no potential for material impact on the environment. After the communities are selected, individual strategies will be developed by the air districts 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 districts will vary based on the local air quality needs, topography, and meteorology, existing emissions reducing measures and community engagement. Moreover, the air districts (as CEQA lead agencies) are required to conduct CEQA compliance, as applicable.

Based on CARB’s review it can be seen with certainty that there is no possibility that CARB’s statewide assessment completed in 2018, updated in November 2021, and the Fifth Year (2022) community recommendations may result in a significant adverse impact on the environment; therefore, this activity is exempt from CEQA. If the proposal is finalized, a Notice of Exemption will be filed with the Office of the Secretary for the Natural Resources Agency

Appendix

Appendix B

Regulatory Air Quality Monitoring Sites

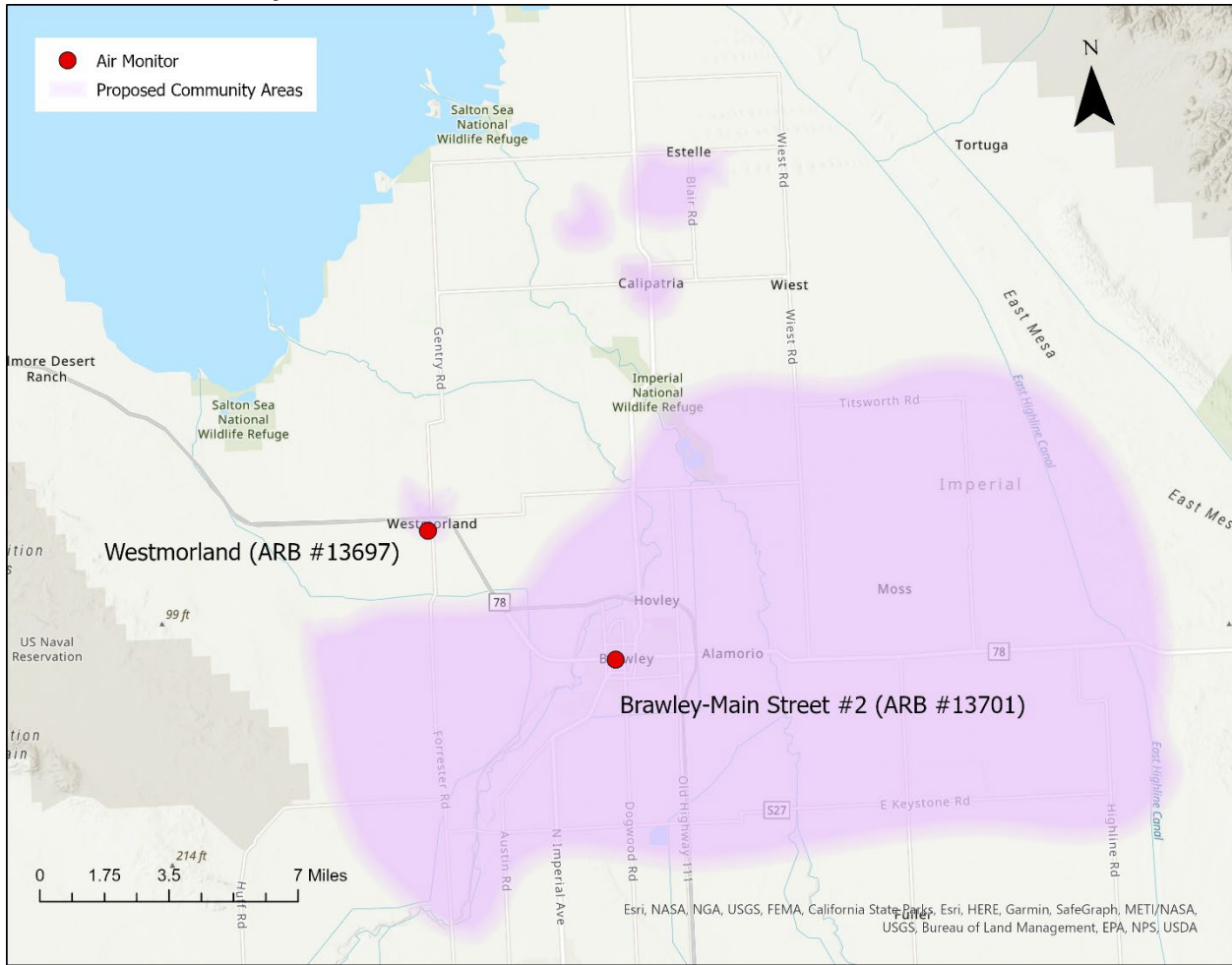
Appendix

Figure B-1. Location of Air Quality Monitoring Site Within the Proposed Bayview Hunters Point /Southeast San Francisco Community Area (ARB #90306)



Appendix

Figure B-2. Location of Air Quality Monitoring Site Within the Proposed North Imperial Phase 1 Community Areas (ARB #13697) (ARB #13701)



Appendix C Wind or Pollution Rose Description

The wind rose in each section of this staff report shows the general direction the wind is coming from, how frequently the wind came from that direction, and the wind speed related to that wind direction and frequency. The vector originating out from the center of the circular format of the wind rose shows the direction the winds blew from and the length of vector from the center of the circle shows how often the wind blew from that direction. The color of the vector relates to the wind speed for wind roses. For example, the wind rose in Figure C-1 below shows that during this sampling period, the wind blew from the south-southeast approximately 16 percent of the time. The color scale shows that during the period when the wind was blowing from this direction, the wind speed was predominantly between 2 – 3 m/s and 3 – 4 m/s. The bottom left corner of the wind rose shows the percentage of calm winds within the data set. Calm winds defined as wind speed equals to zero and are excluded from the wind rose plots because direction vectors are not present in calm winds.

Figure C- 1. Wind Rose Diagram

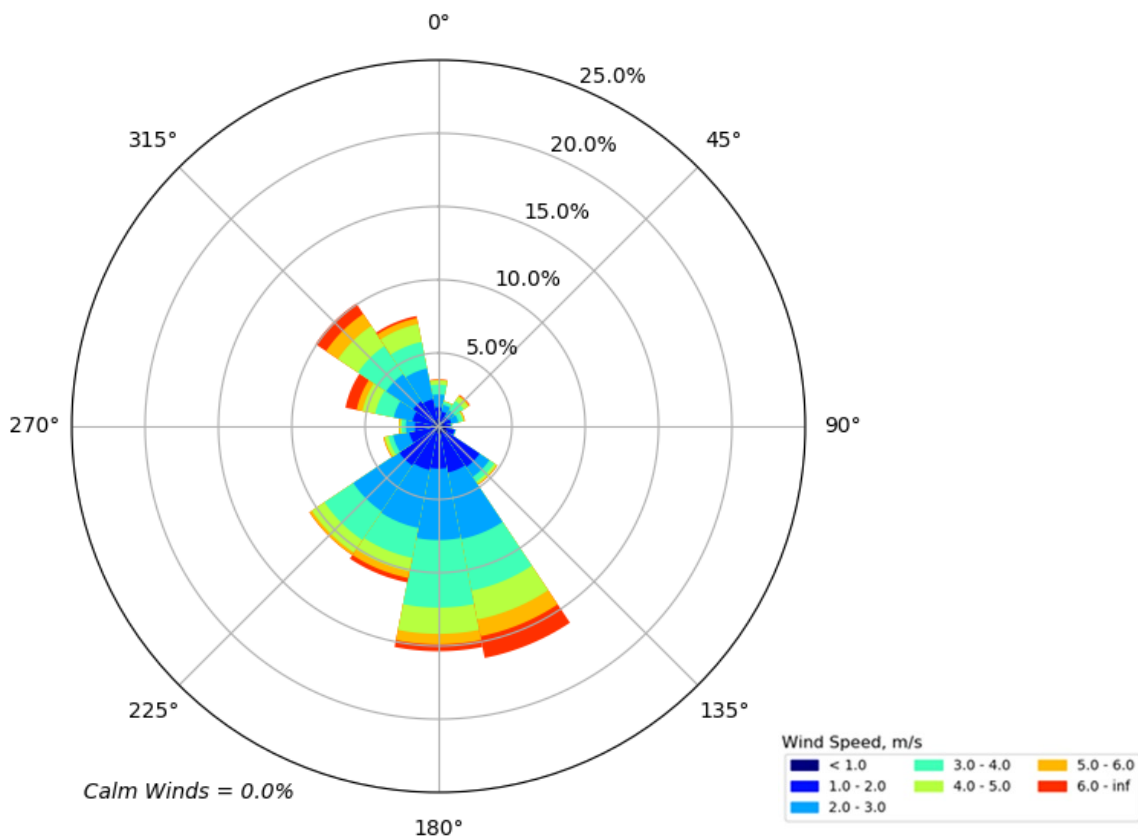
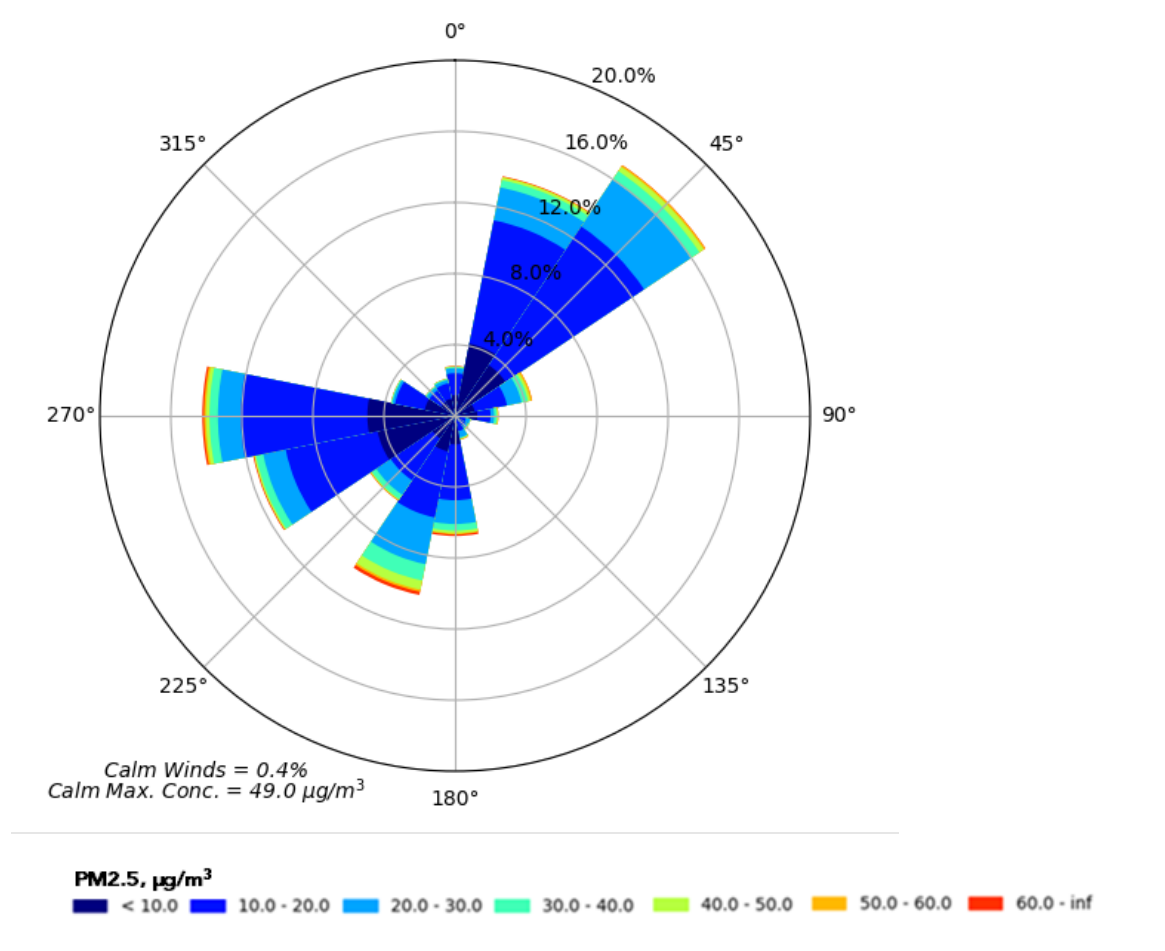


Figure C-2 shows a pollution rose diagram, the pollution rose located in each section of this staff report show the general direction the wind is coming from, how frequently the wind

Appendix

came from that direction, and the pollution levels related to that wind direction and frequency. The vector originating out from the center of the circular format of the pollution rose shows the direction the winds blew from and the length of vector from the center of the circle shows how often the wind blew from that direction. The color of the vector relates to the pollution levels for pollution roses. For example, the wind rose below shows that during this sampling period, the wind blew from the northeast approximately 17 percent of the time. The color scale shows that during the period when the wind was blowing from this direction, the pollutant level was predominantly between $10 \mu\text{g}/\text{m}^3$ to $20 \mu\text{g}/\text{m}^3$. The bottom left corner of the pollution rose shows the percentage of calm winds within the data set. Calm winds defined as wind speed equals to zero and are excluded from the pollution rose plots because direction vectors are not present in calm winds. The pollution rose also shows the maximum concentration of the measured pollutant during calm winds.

Figure C- 2. Pollution Rose Diagram



Appendix D: Preliminary Community Emissions Inventories

An emission 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. Emission 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.⁵⁰

Preliminary stationary source emissions inventory for this community was developed using the 2020 facility specific emissions reported to CARB by the local air district into CARB's California Emission Inventory Development and Reporting System (CEIDARS).⁵¹ For areawide source and off-road mobile source (also referred as other mobile) inventories, the 2022 projected emissions from the latest State Implementation Plan emissions inventory (2017 base year) 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 D.a.1, for example). Gridded on-road mobile source inventory was developed using 2022 vehicle miles traveled data from regional Metropolitan Planning Organization(s)⁵² 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).⁵³

The results presented in Appendix D 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 boundary during the community emissions reduction program development process in 2023.

a. Bayview Hunters Point/ Eastern San Francisco Community Preliminary Emissions Inventory

⁵⁰ <https://ww3.arb.ca.gov/ei/emissiondata.htm>. The emissions used to develop the preliminary inventory are based on the latest SIP inventory with a 2017 base year (CEPAM 2019SIP v1.03).

⁵¹ The facility locations were mapped, and all facilities that are located within the 1-km grids are included in the preliminary emission inventory.

⁵² Metropolitan Transportation Commission for the Bayview Hunters Point/ Eastern San Francisco Community and the Southern California Association of Governments for the Westmorland, Brawley, and Calipatria-North End Phase 1 Communities.

⁵³ Data Source: <https://arb.ca.gov/emfac/>

Appendix

Figure D.a.1. 1 km x 1 km Grids Used to Develop the Bayview Hunters Point/ Eastern San Francisco Community Preliminary Emissions Inventory

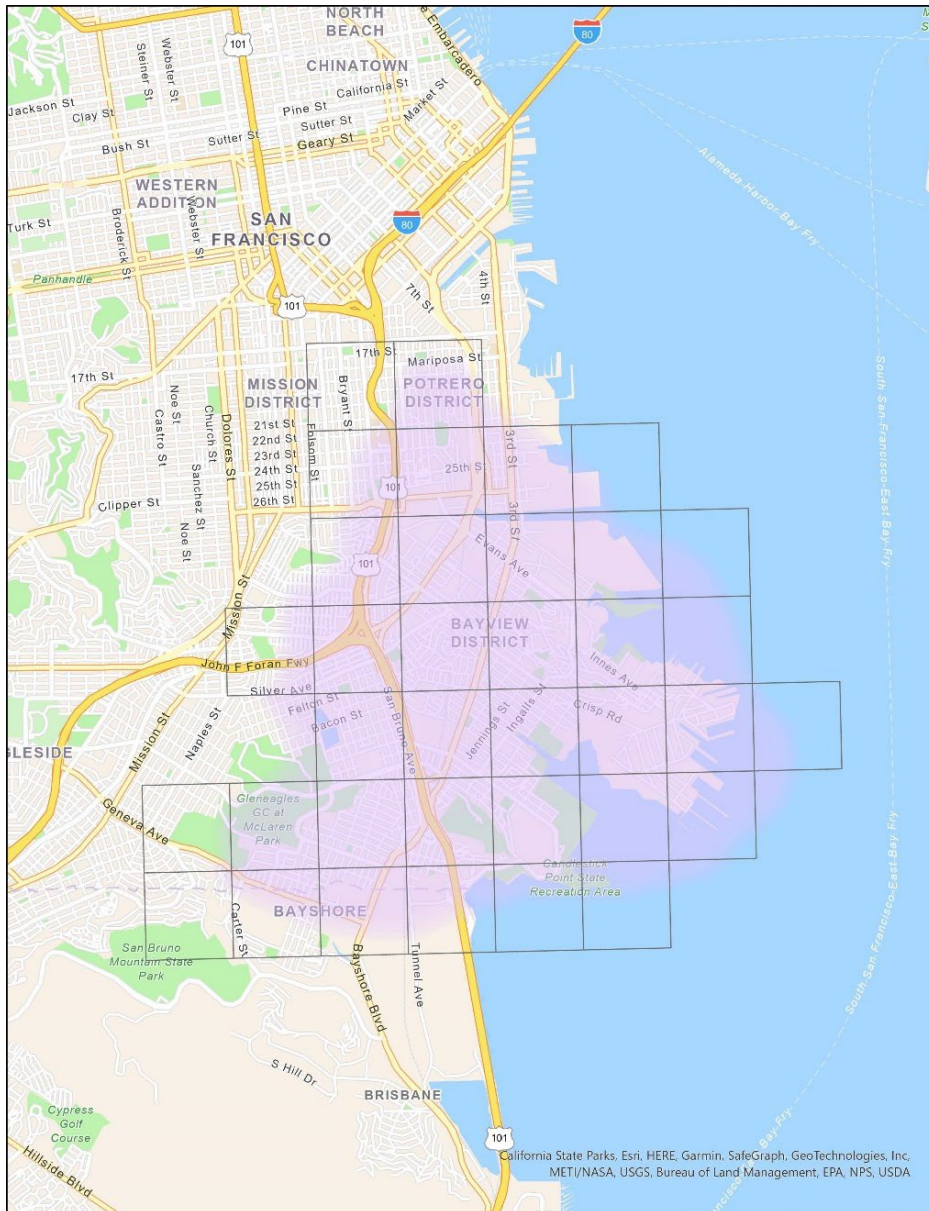
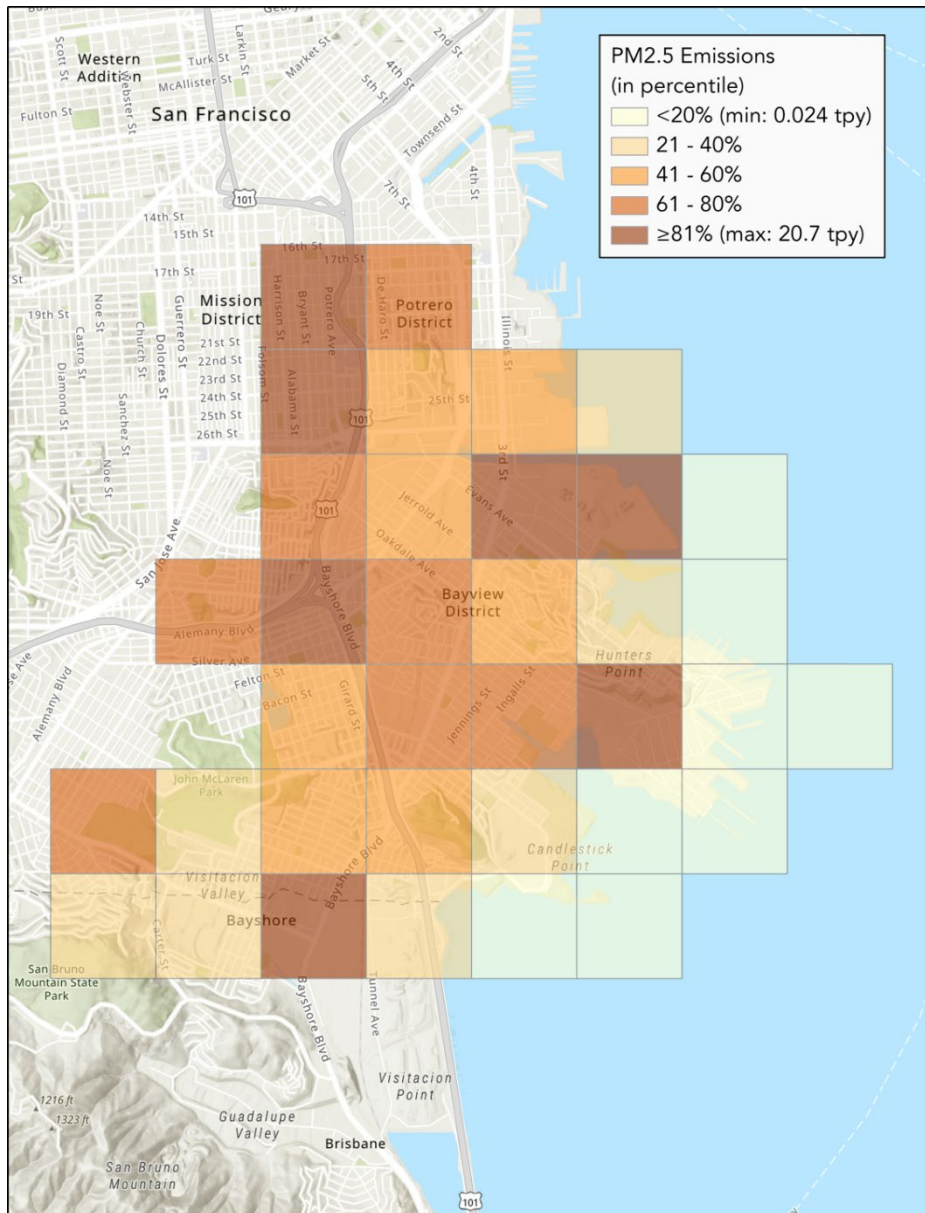


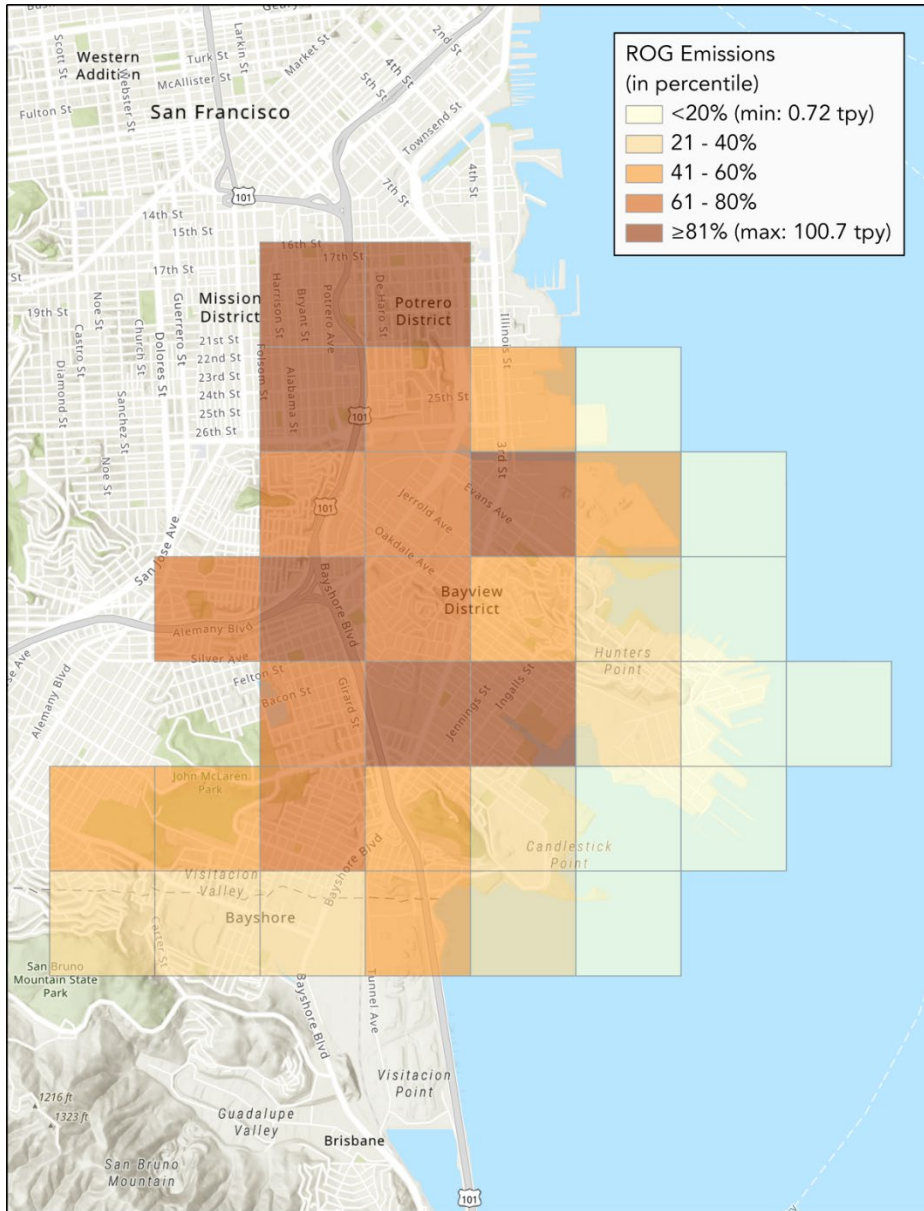
Figure D.a.2. Proposed Bayview Hunters Point/ Eastern San Francisco Community PM_{2.5} Emissions (2022 Preliminary Emissions Inventory)

Appendix



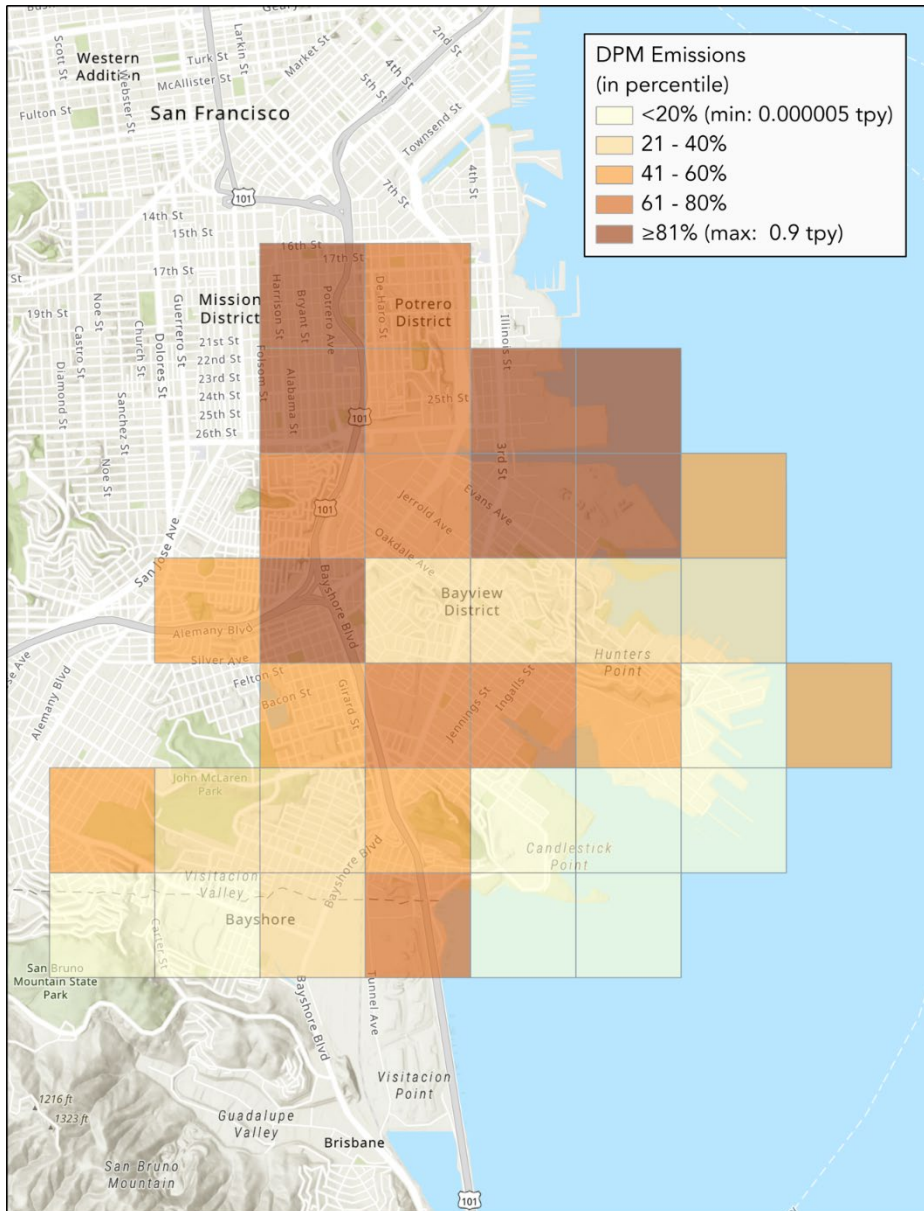
Appendix

Figure D.a.3. Proposed Bayview Hunters Point/ Eastern San Francisco Community ROG Emissions (2022 Preliminary Emissions Inventory)



Appendix

Figure D.a.4. Proposed Bayview Hunters Point/ Eastern San Francisco Community Diesel PM Emissions (2022 Preliminary Emissions Inventory)



Appendix

Table D.a.1. Preliminary Emissions Estimate for the Bayview Hunters Point/ Eastern San Francisco Community (2022 Preliminary Emissions Inventory)

Stationary (tons/year)			Areawide (tons/year)			Mobile (tons/year)		
PM _{2.5}	ROG	DPM	PM _{2.5}	ROG	DPM	PM _{2.5}	ROG	DPM
35.2	420.5	0.4	61.5	505.4	0.0	24.9	455.4	5.6
% of Community Total								
29 %	30 %	6 %	51 %	37 %	0 %	20 %	33 %	94 %

Appendix

Table D.a.2. Detailed Preliminary Emissions Inventory for the Bayview Hunters Point/ Eastern San Francisco Community (2022 Emissions in tons per year) ⁵⁴

Source Category	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
STATIONARY SOURCES							
Fuel Combustion	53.7	21.0	9.0	0.7	5.1	5.1	0.4
<i>Electric Utilities</i>	2.2	0.2	0.1	0.0	0.0	0.0	0.0
<i>Cogeneration</i>	0.3	0.1	0.0	0.0	0.0	0.0	0.0
<i>Oil and Gas Production (Combustion)</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Manufacturing and Industrial</i>	23.4	4.8	2.3	0.2	3.1	3.1	0.0
<i>Food and Agricultural Processing</i>	3.0	0.3	0.1	0.0	0.2	0.2	0.0
<i>Service and Commercial</i>	13.4	14.7	5.7	0.5	1.5	1.5	0.0
<i>Other (Fuel Combustion)</i>	11.3	0.8	0.7	0.0	0.3	0.3	0.3
Waste Disposal	13.9	99.9	20.6	4.9	0.1	0.1	0.0
<i>Sewage Treatment</i>	10.8	29.3	16.2	4.9	0.0	0.0	0.0
<i>Landfills</i>	0.0	16.5	0.1	0.0	0.0	0.0	0.0
<i>Incinerators</i>	3.1	0.2	0.0	0.0	0.1	0.1	0.0
<i>Soil Remediation</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Other (Waste Disposal)</i>	0.0	53.9	4.3	0.0	0.0	0.0	0.0
Cleaning and Surface Coatings	0.0	409.9	316.2	0.0	0.0	0.0	0.0
<i>Laundering</i>	0.0	2.6	2.6	0.0	0.0	0.0	0.0
<i>Degreasing</i>	0.0	97.8	29.2	0.0	0.0	0.0	0.0
<i>Coatings and Related Process Solvents</i>	0.0	69.4	65.3	0.0	0.0	0.0	0.0
<i>Printing</i>	0.0	20.0	20.0	0.0	0.0	0.0	0.0
<i>Adhesives and Sealants</i>	0.0	220.1	199.0	0.0	0.0	0.0	0.0
<i>Other (Cleaning and Surface Coatings)</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum Production and Marketing	0.0	1,374.3	47.7	0.0	0.0	0.0	0.0
<i>Oil and Gas Production</i>	0.0	8.0	4.1	0.0	0.0	0.0	0.0
<i>Petroleum Marketing</i>	0.0	1,366.2	43.6	0.0	0.0	0.0	0.0

⁵⁴ 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

Appendix

Table D.a.2. Detailed Preliminary Emissions Inventory for the Bayview Hunters Point/ Eastern San Francisco Community (2022 Emissions in tons per year) (continued)

Source Category	NOx	TOG	ROG	SOx	PM₁₀	PM_{2.5}	DPM
Industrial Processes	0.8	32.1	27.0	1.2	42.8	30.0	0.0
<i>Chemical</i>	0.0	2.0	1.7	0.0	0.5	0.3	0.0
<i>Food and Agriculture</i>	0.7	3.2	3.1	1.2	1.9	1.1	0.0
<i>Mineral Processes</i>	0.0	3.7	2.9	0.0	27.3	16.8	0.0
<i>Metal Processes</i>	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Wood and Paper</i>	0.0	0.0	0.0	0.0	2.2	1.3	0.0
<i>Other (Industrial Processes)</i>	0.0	23.3	19.3	0.0	11.0	10.6	0.0
Total Stationary Sources	68.4	1,937.1	420.5	6.9	48.0	35.2	0.4
AREAWIDE SOURCES							
Solvent Evaporation	0.0	577.2	473.4	0.0	0.0	0.0	0.0
<i>Consumer Products</i>	0.0	403.4	317.0	0.0	0.0	0.0	0.0
<i>Architectural Coatings and Related Process Solvents</i>	0.0	135.9	127.6	0.0	0.0	0.0	0.0
<i>Pesticides/Fertilizers</i>	0.0	1.2	1.2	0.0	0.0	0.0	0.0
<i>Asphalt Paving / Roofing</i>	0.0	36.6	27.7	0.0	0.0	0.0	0.0
Miscellaneous Processes	77.1	56.0	31.9	1.1	246.6	61.5	0.0
<i>Residential Fuel Combustion</i>	75.6	19.3	8.7	0.9	15.9	15.6	0.0
<i>Construction and Demolition</i>	0.0	0.0	0.0	0.0	88.4	8.8	0.0
<i>Paved Road Dust</i>	0.0	0.0	0.0	0.0	119.8	18.0	0.0
<i>Unpaved Road Dust</i>	0.0	0.0	0.0	0.0	1.6	0.2	0.0
<i>Fires</i>	0.7	2.5	2.1	0.0	2.0	1.9	0.0
<i>Managed Burning and Disposal</i>	0.5	1.6	0.3	0.2	0.5	0.4	0.0
<i>Cooking</i>	0.0	6.5	2.6	0.0	14.0	14.0	0.0
<i>Other (Miscellaneous Processes)</i>	0.3	26.1	18.2	0.0	4.4	2.6	0.0
Total Areawide Sources	77.1	633.1	505.4	1.1	246.6	61.5	0.0
ON-ROAD MOBILE SOURCES							
Light Duty Vehicles	94.3	182.9	170.3	2.9	18.1	6.7	0.1
Light Heavy Duty Vehicles	23.0	9.0	8.0	0.3	3.4	1.4	0.3
Medium Duty Vehicles	16.2	18.6	17.0	0.5	2.3	0.9	0.0
Medium Heavy Duty Vehicles	43.1	3.0	2.4	0.2	1.3	0.6	0.3
Heavy Heavy Duty Vehicles	61.5	7.6	1.1	0.2	2.2	0.9	0.3
Bus	13.4	4.7	1.8	0.2	1.8	0.7	0.2
Total On-road Mobile Sources	251.6	225.8	200.7	4.3	29.1	11.2	1.3

Appendix

Table D.a.2. Detailed Preliminary Emissions Inventory for the Bayview Hunters Point/ Eastern San Francisco Community (2022 Emissions in tons per year) (continued)

Source Category	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
OTHER MOBILE SOURCES							
Trains	8.6	0.1	0.1	0.0	0.2	0.2	0.2
Ocean Going Vessels	85.0	5.3	4.7	5.8	1.7	1.6	1.2
Commercial Harbor Craft	39.9	3.9	3.5	0.0	1.5	1.4	1.5
Recreational Boats	1.6	29.4	27.0	0.0	0.4	0.3	0.0
Off-road Recreational Vehicles	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Off-Road Equipment	85.2	219.5	205.4	0.2	10.6	10.1	1.4
Off-Road Equipment (PERP)	1.0	0.1	0.1	0.0	0.0	0.0	0.0
Farm Equipment	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Storage and Handling	0.0	13.6	13.6	0.0	0.0	0.0	0.0
Total Other Mobile Sources	221.4	272.4	254.7	6.0	14.3	13.7	4.3
Total Community Emissions	618	3,068	1,381	18	338	122	6

Appendix

b. Westmorland, Brawley, and Calipatria-North End Phase 1 Communities Preliminary Emissions Inventory

Figure D.b.1. 1 km x 1 km Grids Used to Develop the Westmorland, Brawley, and Calipatria-North End Phase 1 Communities Preliminary Emissions Inventory

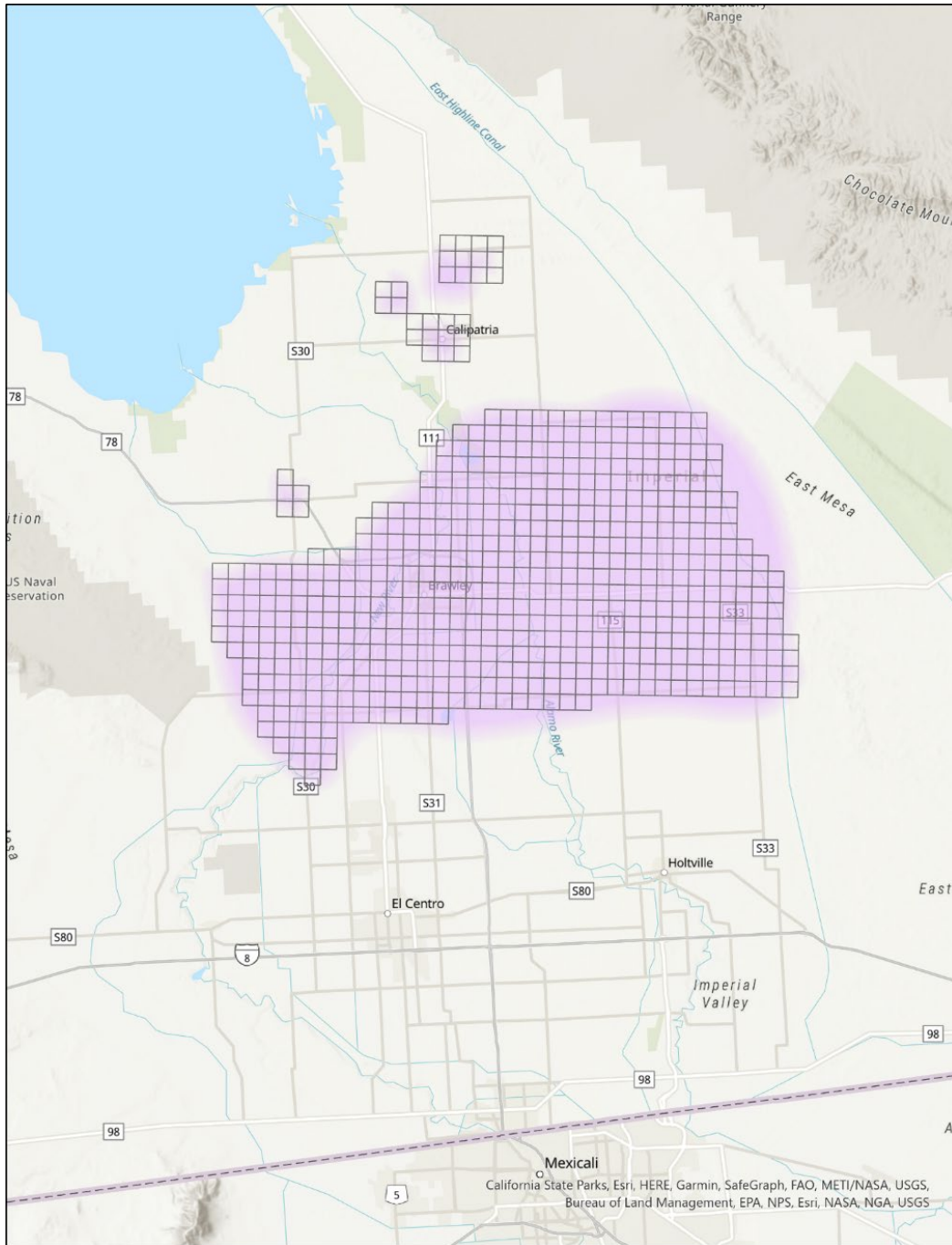


Figure D.b.2. Proposed Westmorland, Brawley, and Calipatria-North End Phase 1 Communities PM_{2.5} Emissions (2022 Preliminary Emissions Inventory)

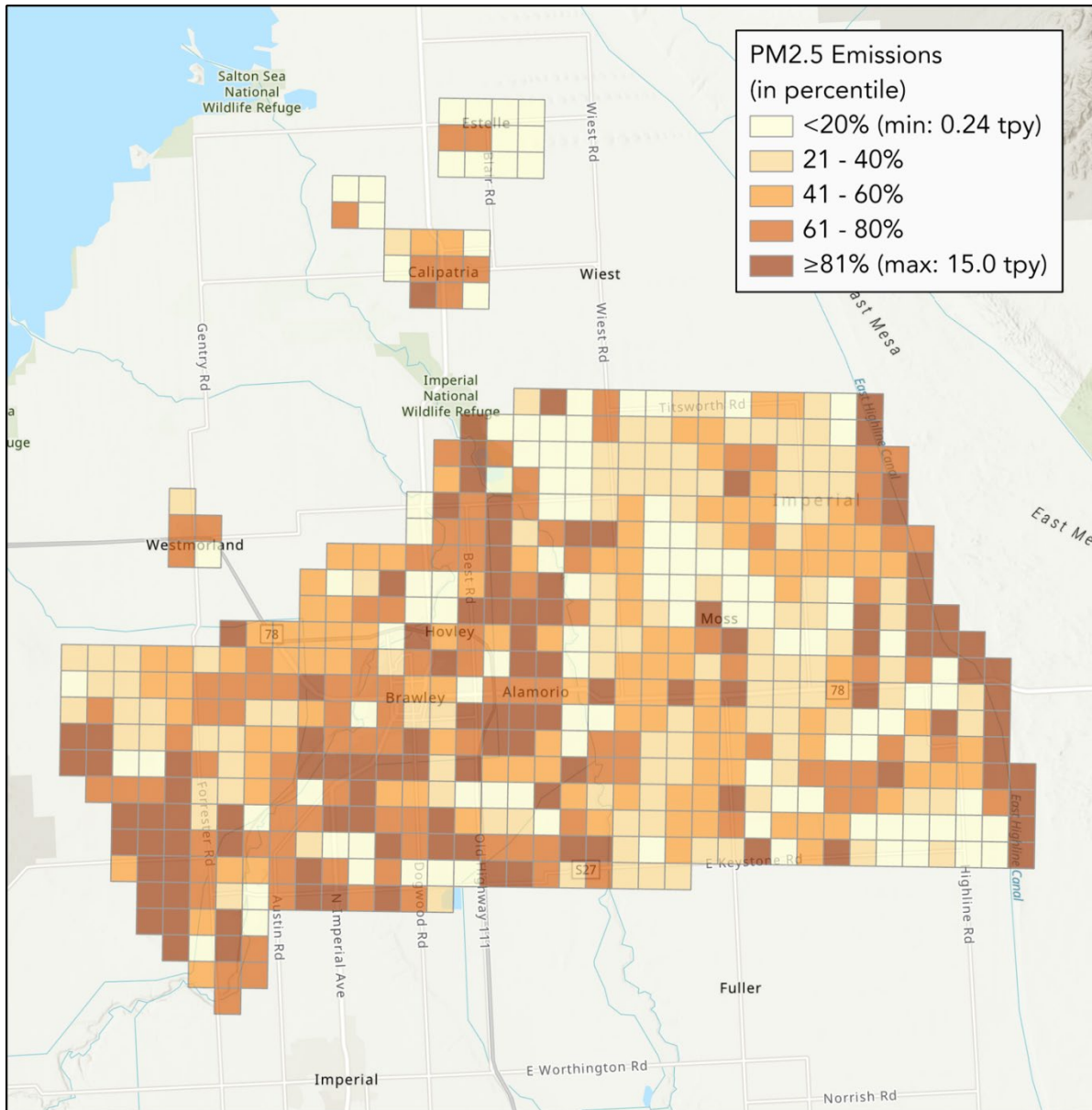


Figure D.b.3. Proposed Westmorland, Brawley, and Calipatria-North End Phase 1 Communities ROG Emissions (2022 Preliminary Emissions Inventory)

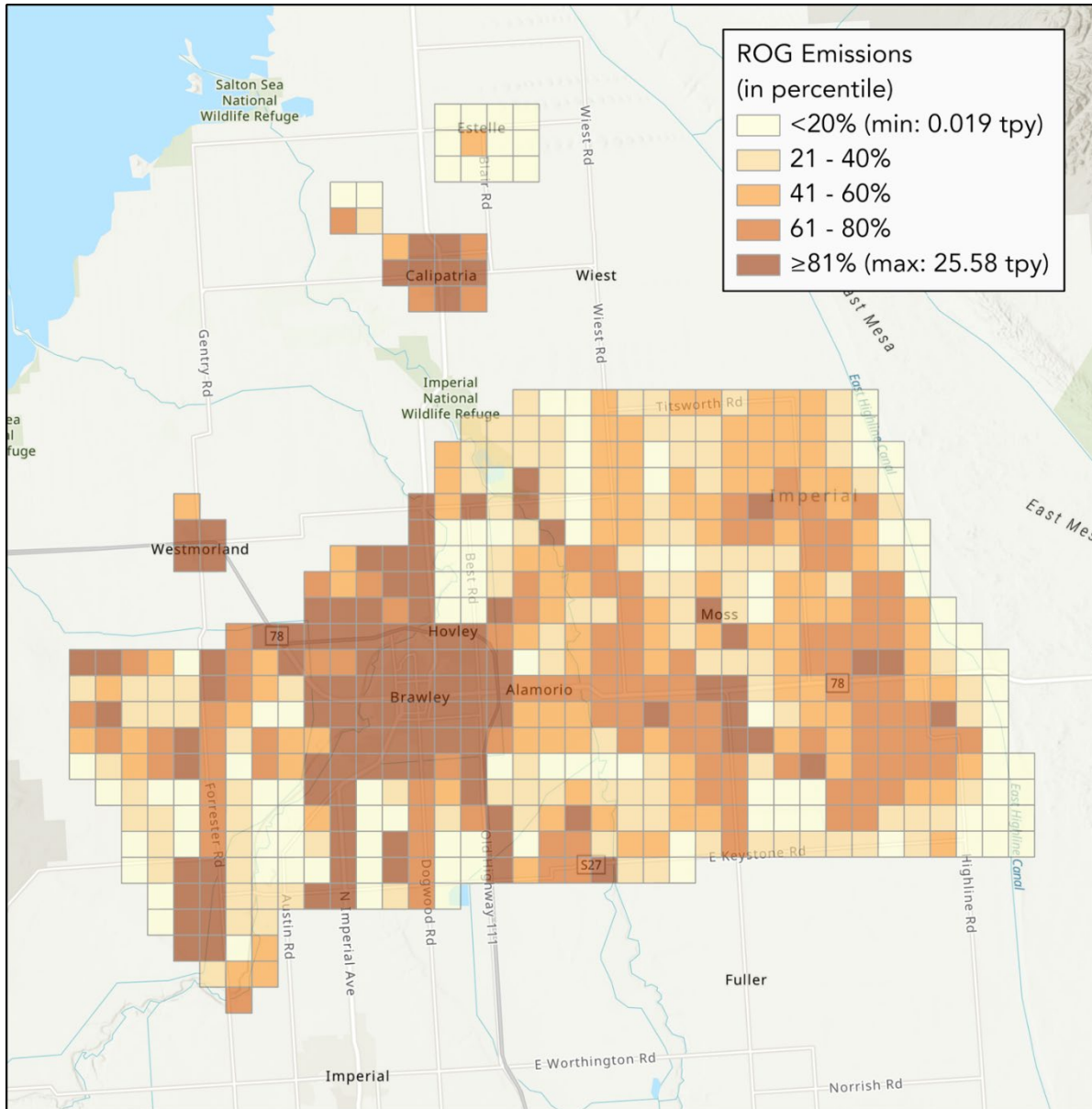
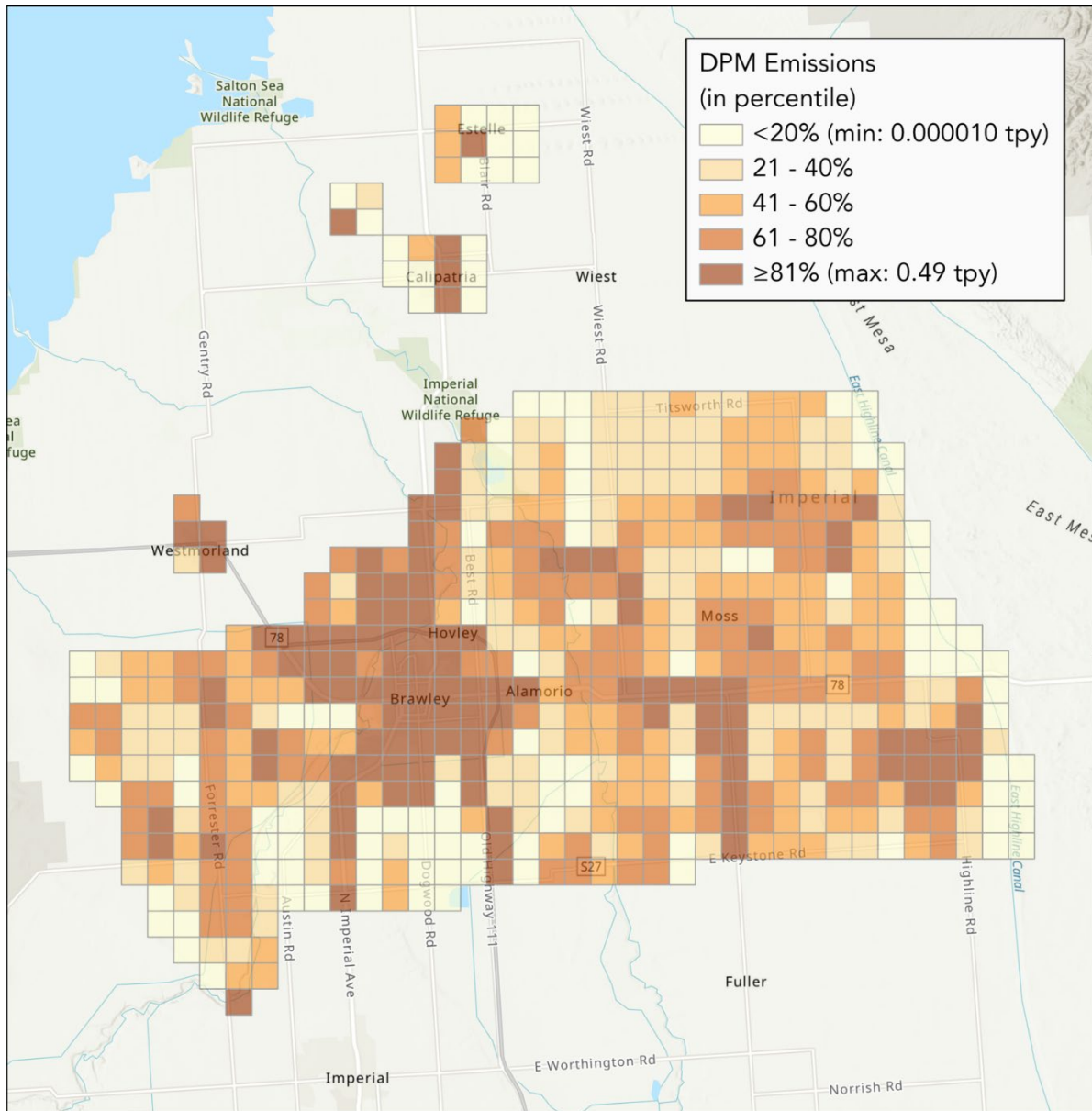


Figure D.b.4. Proposed Westmorland, Brawley, and Calipatria-North End Phase 1 Communities Diesel PM Emissions (2022 Preliminary Emissions Inventory)



Appendix

Table D.b.1. Preliminary Emissions Estimate for the Westmorland, Brawley, and Calipatria-North End Phase 1 Communities (2022 Preliminary Emissions Inventory)

Stationary (tons/year)			Areawide (tons/year)			Mobile (tons/year)		
PM _{2.5}	ROG	DPM	PM _{2.5}	ROG	DPM	PM _{2.5}	ROG	DPM
36.9	68.3	0.3	1082.9	572.7	0.0	17.1	159.1	11.1
% of Community Total								
3 %	9 %	3 %	95 %	72 %	0 %	2 %	20 %	97 %

Appendix

Table D.b.2. Detailed Preliminary Emissions Inventory for the Westmorland, Brawley, and Calipatria-North End Phase 1 Communities (2022 Emissions in tons per year) ⁵⁵

Source Category	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
STATIONARY SOURCES							
Fuel Combustion	115.8	70.8	10.7	0.6	12.0	11.5	0.3
<i>Electric Utilities</i>	2.3	64.9	7.7	0.0	1.2	1.2	0.0
<i>Cogeneration</i>	9.3	0.0	0.0	0.0	2.3	2.3	0.0
<i>Manufacturing and Industrial</i>	52.3	1.7	0.7	0.3	2.2	1.7	0.0
<i>Food and Agricultural Processing</i>	14.1	1.2	0.9	0.1	2.6	2.6	0.3
<i>Service and Commercial</i>	37.8	3.0	1.3	0.2	3.7	3.7	0.0
Waste Disposal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Sewage Treatment</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Other (Waste Disposal)</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cleaning and Surface Coatings	0.0	61.3	52.6	0.0	0.0	0.0	0.0
<i>Laundering</i>	0.0	2.6	0.5	0.0	0.0	0.0	0.0
<i>Degreasing</i>	0.0	40.0	34.8	0.0	0.0	0.0	0.0
<i>Coatings and Related Process Solvents</i>	0.0	8.4	8.1	0.0	0.0	0.0	0.0
<i>Adhesives and Sealants</i>	0.0	10.2	9.1	0.0	0.0	0.0	0.0
Petroleum Production and Marketing	0.0	5.0	5.0	0.0	0.0	0.0	0.0
<i>Petroleum Marketing</i>	0.0	5.0	5.0	0.0	0.0	0.0	0.0
Industrial Processes	3.2	0.0	0.0	0.0	59.2	25.5	0.0
<i>Food and Agriculture</i>	3.2	0.0	0.0	0.0	36.3	12.0	0.0
<i>Mineral Processes</i>	0.0	0.0	0.0	0.0	0.9	0.3	0.0
<i>Other (Industrial Processes)</i>	0.0	0.0	0.0	0.0	22.0	13.2	0.0
Total Stationary Sources	119.0	137.1	68.3	0.6	71.2	36.9	0.3

⁵⁵ 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

Table D.b.2. Detailed Preliminary Emissions Inventory for the Westmorland, Brawley, and Calipatria-North End Phase 1 Communities (2022 Emissions in tons per year) (continued)

Source Category	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
AREAWIDE SOURCES							
Solvent Evaporation	0.0	300.4	275.9	0.0	0.0	0.0	0.0
<i>Consumer Products</i>	0.0	110.3	88.2	0.0	0.0	0.0	0.0
<i>Architectural Coatings and Related Process Solvents</i>	0.0	38.4	36.1	0.0	0.0	0.0	0.0
<i>Pesticides/Fertilizers</i>	0.0	140.7	140.7	0.0	0.0	0.0	0.0
<i>Asphalt Paving / Roofing</i>	0.0	10.9	10.9	0.0	0.0	0.0	0.0
Miscellaneous Processes	21.1	3,345.3	296.8	2.0	7,852.3	1,082.9	0.0
<i>Residential Fuel Combustion</i>	8.7	9.3	4.2	0.1	4.7	4.6	0.0
<i>Farming Operations</i>	0.0	3,302.6	264.2	0.0	927.3	131.5	0.0
<i>Construction and Demolition</i>	0.0	0.0	0.0	0.0	136.8	13.7	0.0
<i>Paved Road Dust</i>	0.0	0.0	0.0	0.0	151.8	22.8	0.0
<i>Unpaved Road Dust</i>	0.0	0.0	0.0	0.0	1,242.3	124.2	0.0
<i>Fugitive Windblown Dust</i>	0.0	0.0	0.0	0.0	5,345.1	743.8	0.0
<i>Fires</i>	0.0	0.2	0.2	0.0	0.2	0.2	0.0
<i>Managed Burning and Disposal</i>	12.3	31.7	27.7	1.9	40.7	38.8	0.0
<i>Cooking</i>	0.0	1.6	0.6	0.0	3.3	3.3	0.0
<i>Other (Miscellaneous Processes)</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Areawide Sources	21.1	3,645.7	572.7	2.0	7,852.3	1,082.9	0.0
ON-ROAD MOBILE SOURCES							
Light Duty Vehicles	31.0	51.4	48.2	0.8	3.6	1.3	0.0
Light Heavy Duty Vehicles	15.5	3.3	3.1	0.1	1.1	0.5	0.2
Medium Duty Vehicles	13.1	14.3	13.1	0.3	0.9	0.3	0.0
Medium Heavy Duty Vehicles	6.4	0.7	0.6	0.0	0.2	0.1	0.0
Heavy Heavy Duty Vehicles	43.2	1.4	1.0	0.2	2.2	1.0	0.5
Bus	6.1	1.3	1.1	0.0	0.2	0.1	0.1
Total On-road Mobile Sources	115.3	72.4	67.1	1.4	8.3	3.4	0.8

Appendix

Table D.b.2. Detailed Preliminary Emissions Inventory for the Westmorland, Brawley, and Calipatria-North End Phase 1 Communities (2022 Emissions in tons per year) (continued)

Source Category	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
OTHER MOBILE SOURCES							
Aircraft	22.0	16.8	16.6	2.6	3.2	3.2	0.0
Trains	11.0	0.6	0.5	0.0	0.3	0.2	0.3
Recreational Boats	0.0	2.8	2.6	0.0	0.0	0.0	0.0
Off-Road Recreational Vehicles	0.4	6.4	6.3	0.0	0.0	0.0	0.0
Off-Road Equipment	46.4	39.3	36.8	0.1	2.4	2.3	1.8
Off-Road Equipment (PERP)	18.0	2.1	1.9	0.0	0.6	0.6	0.6
Farm Equipment	126.8	26.4	23.5	0.0	7.7	7.4	7.6
Fuel Storage and Handling	0.0	3.8	3.8	0.0	0.0	0.0	0.0
Total Other Mobile Sources	224.6	98.2	92.0	2.8	14.3	13.7	10.2
Total Community Emissions	480	3,953	800	7	7,946	1,137	11