

OFFICE OF THE MAYOR
SAN FRANCISCO



DANIEL LURIE
MAYOR

March 26th, 2026

Director Kristina Thayer, Ph.D.
Office of Environmental Health Hazard Assessment
P. O. Box 4010
Sacramento, California 95812-4010

Re: City and County of San Francisco Comments on CalEnviroScreen 5.0 Draft

Dear Director Thayer,

On behalf of the City and County of San Francisco, I want to thank the Office of Environmental Health Hazard Assessment (OEHHA) for their continued work to strengthen the CalEnviroScreen tool. Since its inception, this tool has played a critical role in identifying communities most impacted by pollution and directing resources to those who need them most. That work is essential to advancing environmental justice across California.

At the same time, we have a responsibility to ensure that this tool fully reflects the realities facing our communities today. While CalEnviroScreen 5.0 makes important improvements, it still does not capture the full extent of vulnerability in San Francisco and other dense urban areas. As a result, some of our most impacted communities remain overlooked, and our city risks losing access to critical funding.

To that end, I write in support of OEHHA refining its methodology to better account for the realities of urban environments. This includes addressing structural biases in the framework, improving how indicators relying on modeled data are applied, and more fully recognizing the needs of extremely vulnerable populations, including people experiencing homelessness. I support the detailed recommendations submitted by San Francisco departments, which further provide specific pathways to strengthen the tool and improve its accuracy. These changes are necessary to ensure CalEnviroScreen delivers on the promise of equity.

Thank you again for your leadership and your commitment to this important work. We look forward to continued partnership to ensure that CalEnviroScreen serves all Californians.

All my best,

A handwritten signature in black ink, appearing to read "Daniel Lurie".

Daniel Lurie
Mayor of San Francisco



April 1, 2026

Kristina Thayer, Ph.D. Director
Office of Environmental Health Hazard Assessment
P.O. Box 4010
Sacramento, California 95812-4010

Re: Comments on CalEnviroScreen 5.0 Draft

Dear Director Thayer,

On behalf of the City and County of San Francisco's Environment Department and Planning Department, we appreciate the opportunity to submit comments on the updated CalEnviroScreen (CES) 5.0 Draft. We are grateful for the Office of Environmental Health Hazard Assessment (OEHHA) and the California Environmental Protection Agency's (CalEPA) continued effort to track health and environmental impacts faced by Californians, measure environmental justice, and improve this important tool.

We are pleased to see that the update to CES 5.0 identifies at least one census tract in Chinatown and additional tracts in the Tenderloin in the top quartile. However, census tracts in the SoMa community have fallen below the top quartile, and our other Environmental Justice Communities, like the Mission and Excelsior, are left out entirely. These communities continue to face similar pollution burdens and significant barriers to achieving environmental justice, yet CES's data does not highlight their need.

Many Environmental Justice Communities in San Francisco are not in the top quartile

Two census tracts in the Bayview community fall below the top quartile but remain surrounded by other census tracts in the top 20th percentile. **(Figure 1)** Census tract 6075023003 fell from being in the top quartile in CES 4.0 to now below the 30th percentile. Upon closer inspection of the data, it seems this drop is caused by lower pollution scores in the Ozone, PM 2.5, Diesel, Drinking Water, Pesticide Use, Toxic Release, Traffic Density, and Hazardous Waste indicators. Looking at Diesel Particulate Matter (PM), this tract dropped from CES 4.0 98th percentile in Diesel PM to CES 5.0's 26th percentile.

Additionally, census tract 6075980600 was in the 83rd percentile in CES 4.0, but only the 43rd percentile in CES 5.0. This census tract contains the Hunters Point Naval Shipyard, an EPA superfund site with petroleum fuels, pesticides, heavy metals, polychlorinated biphenyls, volatile organic compounds, and radionuclides. In CES 5.0, this census tract is in the 99th percentile for groundwater threats, 98th percentile for cleanup sites, and 98th percentile for solid waste sites and facilities, and 92nd percentile for asthma. This site was in the 99th percentile for Diesel PM in CES 4.0 but only 11th percentile in CES 5.0.

While the data suggests notable improvements in environmental exposures in Bayview Hunters Point, these changes appear significant relative to the short timeframe and are not reflected in residents' lived experiences. Community members continue to face pollution burdens comparable to surrounding areas. Notably, these same census tracts were designated as an AB617 community by the California Air Resources Board in 2023 due to persistent disproportionate environmental exposures.



CalEnviroScreen’s methodology needs further refinement

Over time, CES has become a vital tool used to map environmental impacts and direct funding for the most impacted communities statewide. As such, it is critical that CES accurately and holistically captures both environmental hazards and community vulnerability. While CES 5.0 includes improvements, it still falls short of fully measuring environmental injustice in California. Many historically marginalized communities—including those in San Francisco—continue to be left out of the top quartile in CES yet face some of the highest levels of pollution across the state. This is a symptom of the methodology used to develop CES.

1. Pesticide Use and PM 2.5 Indicators need refinement

CES currently uses Pesticide Use and PM 2.5 as pollution indicators, but the data itself contains some biases. The Pesticide Use indicator has a specific bias for rural communities since it only considers agricultural pesticides. At least 50% of all pesticides used in California are used in urban areas. We suggest adding the use of urban pesticides as a data point to overcome this bias by simply including commercial and industrial uses already databased by California’s Department of Pesticide Regulation.

One of San Francisco’s biggest pollution burdens is from PM 2.5. The CES 5.0 update shows that the mean annual concentration of all the census tracts in San Francisco is approximately 8.06 $\mu\text{g}/\text{m}^3$. However, this data is primarily based on one CARB station and is not representative of air quality in heavily trafficked parts of the City. In fact, a recent study of PM 2.5 found the mean overall levels in San Francisco at 11.601 $\mu\text{g}/\text{m}^3$.¹ (**Figure 2**)

We know PM 2.5 in San Francisco is closely correlated with proximity to traffic volumes and proximity to freeways, but census values do not change based on proximity to heavily trafficked roadways. More refinement is needed to continue using PM 2.5 as an indicator.

2. Methodology should weigh indicators by health impacts and population density

We request that OEHHA and CalEPA strongly consider weighing indicators by health impacts. For example, exposure to Diesel Particulate Matter has more severe impacts to one’s health than when compared to Ozone, yet both are weighed equally when considering pollution burden.

Similarly, the state should account for how many Californians are exposed to pollution across the state. With smaller census tracts in urban communities, they are being underrepresented in CES’s

¹ Gardner, D.D. & Patel, M.. (2025). A Spatial Analysis of Wildfire Smoke, Air Pollution, and Asthma Disparities in San Francisco, California Using the Asthma Equity Explorer Tool. American Journal of Respiratory and Critical Care Medicine. 211. A5411-A5411. 10.1164/ajrccm.2025.211.Abstracts.A5411.



pollution burden rankings. Using population density or weighing indicators by population density could help eliminate this bias.

3. Unhoused Californians are not accounted for, yet they are the most vulnerable to pollution

CES's current methodology does little to account for the vulnerability faced by people experiencing homelessness, yet they are the hardest hit by the environmental pollution faced across the state. We ask OEHHA and CalEPA to strongly consider how best to capture this vulnerable demographic and include their data into the CES methodology. One such solution could be to use point-in-time count data collected by counties as a new population characteristic.

Flexibility is needed to ensure funding goes to the areas of greatest need

CES has become a powerful tool used to direct funding for some of the state's most underserved communities. According to the California Climate Investments 2025 Annual Report, \$9.2 billion or 73% of cap-and-trade dollars have been invested in Priority Populations, as defined by Senate Bill 535 (De León, Chapter 830, Statutes of 2012) and Assembly Bill 1550 (Gomez, Chapter 369, Statutes of 2016) since 2014. It is a great feat, but it highlights the importance of ensuring we are accurately identifying our priority populations.

In 2023, the City adopted the Environmental Justice Framework (EJ Framework) into the City's General Plan, representing the first citywide policy focused on advancing environmental justice across all City agencies. The EJ Framework fulfills the City's obligations under Senate Bill 1000 to adopt policies in the General Plan to address unique or compounded health risks and analyze data on Environmental Justice Communities, using CES as the foundation for analysis.

Per SB 1000's guidance, the San Francisco Planning Department chose to conduct additional analysis beyond CES to better understand environmental justice in San Francisco. Municipalities are encouraged to define additional areas facing environmental and health challenges in their jurisdiction that should be considered as part of General Plan policies to address environmental justice. The Environmental Justice Communities Map (EJ Communities Map) uses CES 4.0 as the base, then adds layers of local data into a raster analysis.

The EJ Communities Map identified the top one-third of locations in San Francisco that were high in cumulative environmental and social vulnerability as "Environmental Justice (EJ) Communities." With EJ Communities identified, the City is enabled to prioritize specific policies and resources to these communities to help redress historic injustices and meaningfully improve economic, health, and other outcomes. **(Figure 3)**

San Francisco's EJ Communities Map differs from CES 4.0, and little changes with CES 5.0. As environmental justice is defined by remedying past harm and enabling community-led solutions, it is important to focus policies and resources to these communities, which are often overlooked in local decision-making processes.



We recognize the complex task of measuring environmental justice on a statewide scale and recognize the various limitations of depending on census tract level data to compile a general picture of pollution and social indicators statewide. Given these numerous challenges and limitations, we urge state agencies to build flexibility into their definitions of priority populations or targeted communities by giving deference to local and regional municipalities that have mapped their own priority populations, like those who have implemented Senate Bill 1000 (Leyva, Chapter 587, Statutes of 2016). Local governments often have access to more detailed data and a deeper understanding of community needs and should be eligible to direct funding accordingly.

We thank you for your time and attention and hope that these improvements can be made in the future.

Sincerely,

Tyrone Jue, Director
San Francisco Environment Department

Sarah Dennis Phillips, Director
San Francisco Planning Department

TJ/rct

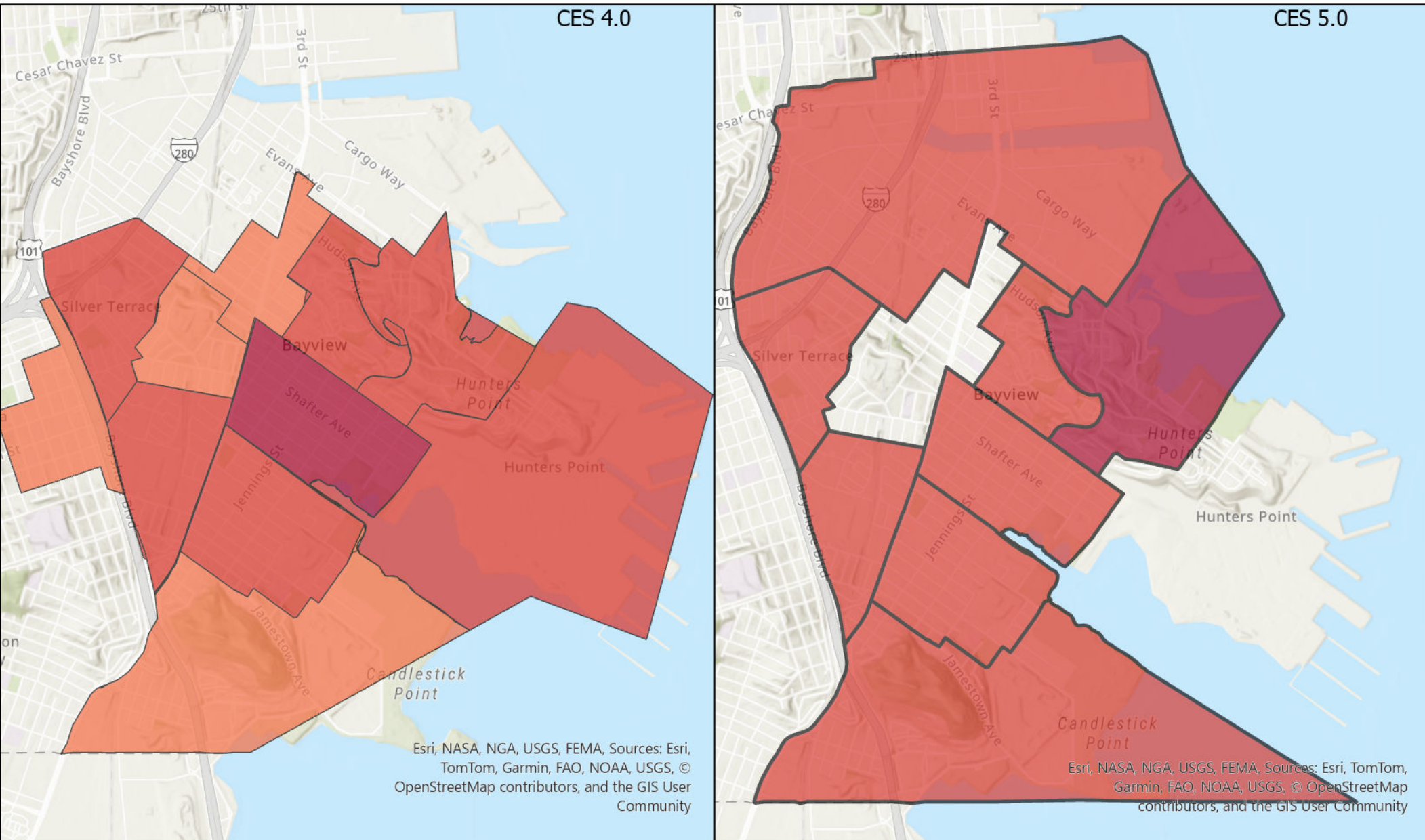
Attachments -

- Figure 1 – Map of CES 4.0 and 5.0 change to Bayview in Top Quartile
- Figure 2 – Map of CES 5.0 PM 2.5 amounts versus SF data of PM 2.5
- Figure 3 – Map of San Francisco Environmental Justice Communities Map

CC –

Secretary Yana Garcia, Cal EPA
Cyndy Comerford, SFE
Roberto Carlos Torres, SFE
Danielle Ngo, Planning

Updated CES 5.0 Excludes Bayview Community Tracts From Top Quartile (Figure 1)



Legend

CalEnviroScreen Scores

90 - 100
80 - 90

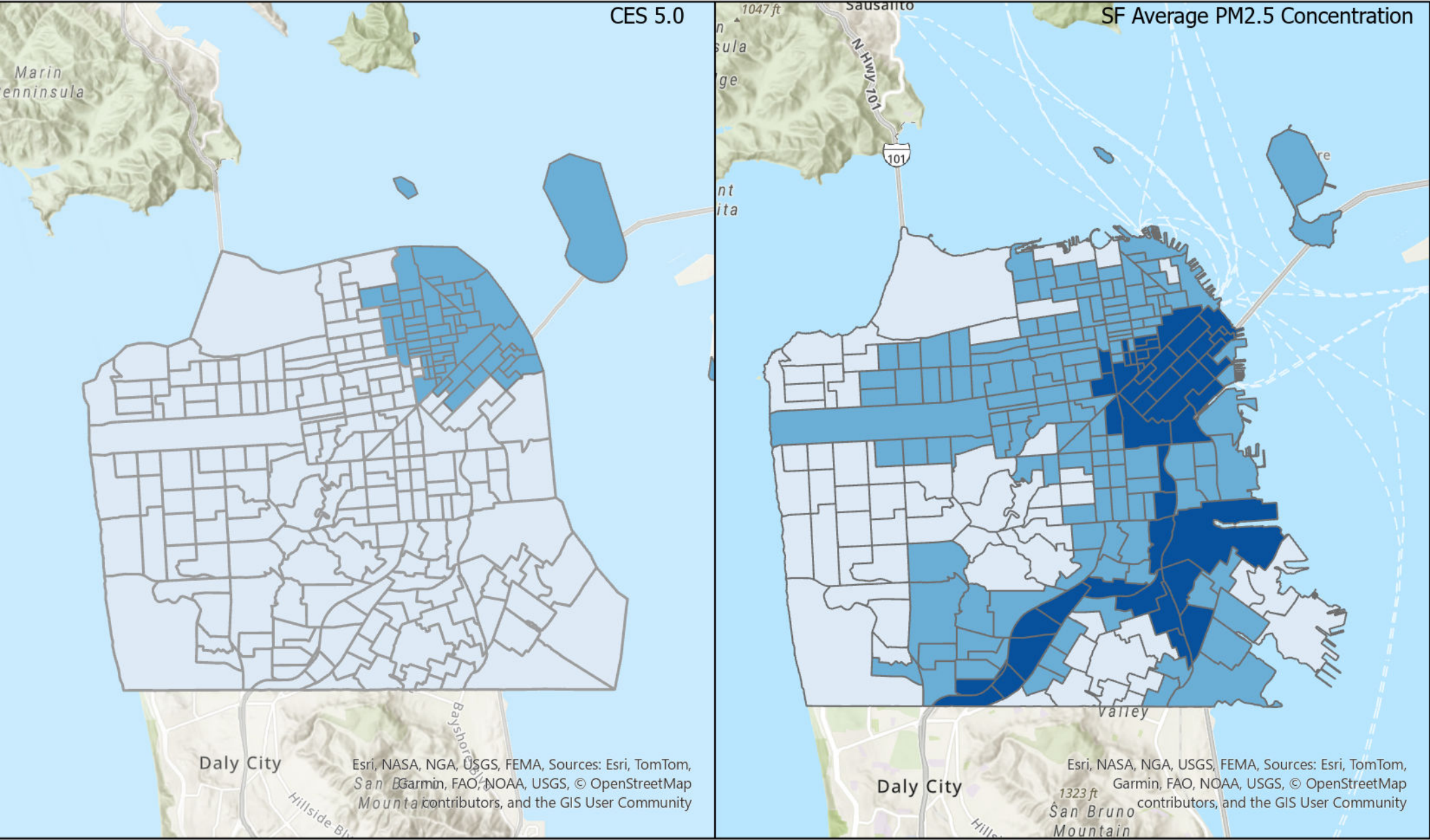
70 - 80
60 - 70
50 - 60
40 - 50

30 - 40
20 - 30
10 - 20
0 - 10



0 0.3 0.5 1 Miles

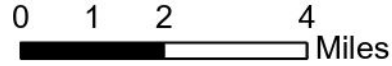
PM 2.5 Modeling CES 5 vs. SF Data (Figure 2)



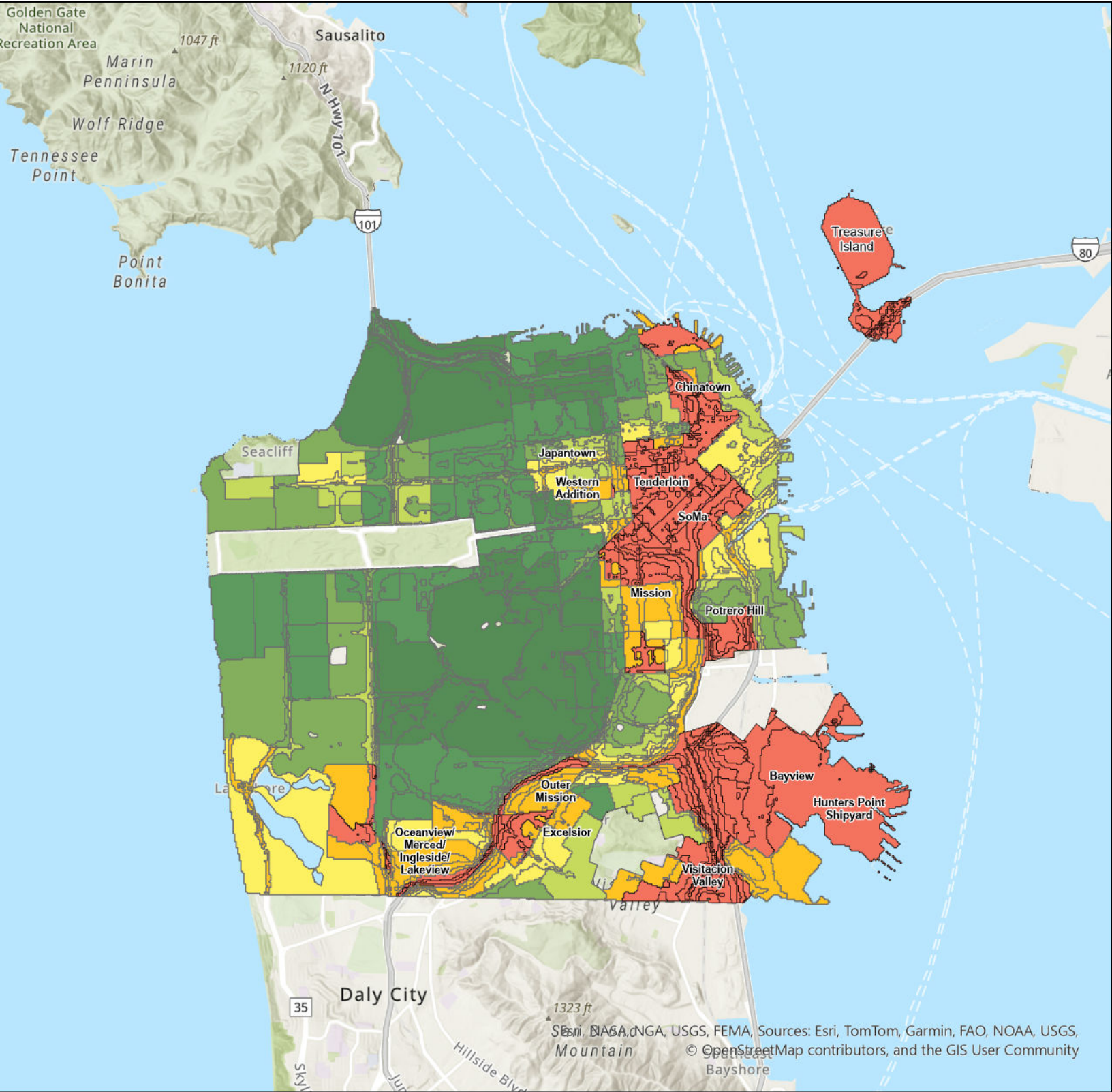
Legend

Average PM 2.5

- 5.49 - 8.38 µg/m³
- 8.39 - 10.20 µg/m³
- 10.20 - 12.88 µg/m³



San Francisco Environmental Justice Communities Map (Figure 3)



Legend

Environmental Justice Burden



Least

Top one third
of burdened
areas



0 0.5 1 2 Miles



April 1, 2026

CalEnviroScreen
 Office of Environmental Health Hazard Assessment
 1001 I St., fl. 12
 Sacramento, CA 95814

Dear Dr. Kristina Thayer,

The San Francisco Public Utilities Commission (SFPUC) appreciates the efforts of the California Office of Environmental Health Hazard Assessment (OEHHA) in the development of the California Communities Environmental Health Screening Tool: CalEnviroScreen (CES) 5.0.

The SFPUC is a Department of the City and County of San Francisco and provides three essential utility services: water, power, and sewer. We are the third largest public utility in California, working in eight counties with a combined annual operating budget of \$2 billion. We are proud to be the first public utility in the nation to adopt an [Environmental Justice Policy](#) and a [Community Benefits Policy](#). The SFPUC affirms and commits to the goals of environmental justice to prevent, mitigate, and lessen disproportionate environmental impacts from its activities on communities in all SFPUC service areas and to ensure that public benefits are shared across all communities.

We value OEHHA's efforts to improve its community engagement and its use of a co-design process involving community-based organizations to develop CES 5.0. We acknowledge OEHHA for its regular updates seeking to improve CES as a tool.

We appreciate OEHHA for ensuring that additional communities in the SFPUC service area are more accurately reflected as communities with a cumulative environmental burden. However, CalEnviroScreen 5.0 still does not accurately capture San Francisco communities facing significant environmental burdens. As such, we respectfully provide the following considerations for refining CalEnviroScreen methodologies:

1. The census tract that contains the Hunters Point Naval Shipyard (6075980600) had a CES Score that decreased from 83 percent

Daniel Lurie
 Mayor

Joshua Arce
 President

Stephen E. Leveroni
 Vice President

Avni Jamdar
 Commissioner

Kate H. Stacy
 Commissioner

Meghan Thurlow
 Commissioner

Dennis J. Herrera
 General Manager



to 43 percent since the last CalEnviroScreen. The Hunters Point Naval Shipyard is an EPA Superfund site and its respective community is a historic environmental justice community. It is identified by the Bay Area Air District as an [Overburdened Community](#) and by the California Air Resources Board Community Air Protection Program (AB 617) as a high priority community. We recommend that OEHHA more accurately reflects Hunters Point as an environmental justice community.

2. Other census tracts within San Francisco have decreased CES Scores which results in them no longer being in the top 25th percentile of CES Scores. These include census tracts in the South of Market (6075017803 and 6075017804), Bayview (6075061200 and 6075023003), and Portola (6075025702) neighborhoods. Additionally, while some census tracts are more accurately reflected as communities with a cumulative environmental burden (e.g. areas of Downtown San Francisco, Chinatown, Tenderloin, Mission, and Civic Center), they may still be excluded from needed funding.
3. SFPUC participated in San Francisco Planning's process which culminated in the adoption of the [General Plan Environmental Justice Framework](#) in May 2023. This included development of an [Environmental Justice Communities Map](#) ("EJ Communities Map") defining areas facing the top one-third of cumulative environmental and socioeconomic burdens across San Francisco. San Francisco Planning developed the EJ Communities Map based on CalEnviroScreen. Then they included additional local data on pollution and demographics refined during a public engagement process. We recommend that San Francisco Planning's EJ Communities Map development process be considered as an example of an effort to more accurately reflect community environmental and socioeconomic burdens within San Francisco.
4. In the CalEnviroScreen methodology, the Environmental Effects score is weighted half as much as the Exposure score in determining pollution burden, which is a key component of determining overall CES Score. We are concerned that this weighting may not account for community health impacts in census tracts with hazardous sites and other sources of pollution. For example, census tract 6075980600 has several Environmental Effects factors, including toxic Cleanup Sites, Groundwater Threats, and Solid Waste Sites and Facilities that contribute to a high Environmental Effects score of above 98. However, its CES Score of 42.9 does not reflect these significant

environmental burdens. We acknowledge the complex nature of scoring cumulative pollution burden, however there is a risk of significantly undercounting the potential impact of Environmental Effects. We recommend that OEHHA continues to reassess the Environmental Effects and Exposures scoring methodologies.

5. The Housing Burden indicator accounts for differences in rent or homeowner costs across different areas of California by assessing census tracts relative to county-wide costs, however the influx of higher income residents may be lowering overall CES Scores in historically lower income communities. CalEnviroScreen may not be accurately accounting for low-income households that continue to experience rent burden, or may move, as housing costs rise. We recommend that population trends over time be factored into how Housing Burden is calculated.
6. Uses of CalEnviroScreen should continue to be flexible in meeting funding eligibility requirements beyond being within the top 25th percentile CES Score. For example, in the 2022 update of Disadvantaged Communities designations, CalEPA made census tracts designated in the top 25th percentile of CalEnviroScreen 3.0 eligible, even if they were not in the top 25th percentile of CalEnviroScreen 4.0. We recommend continued consideration of how to ensure that environmental justice communities throughout California can access needed funding.
7. The SFPUC's CleanPowerSF program relies on CalEnviroScreen to identify eligible census tracts for the Disadvantaged Communities Green Tariff (DAC-GT) bill discount program, in accordance with the California Public Utilities Commission's rules. As current inputs to the tool do not take into account factors like bill delinquencies or utility cost burden, the use of CalEnviroScreen has led to the exclusion of communities that would have benefited from participation in programs like DAC-GT. CleanPowerSF has found that, out of San Francisco's 234 census tracts, just 10 contributed to almost 20 percent of customer delinquencies over the past two years. Of those, many are not currently identified as Disadvantaged Communities. Expanding the criteria to include data like delinquencies or other cost metrics would enhance our ability to serve low-income customers. We recommend that, in various uses of the tool, customer bill delinquencies be considered as a factor in identifying cost-burdened census tracts.

Conclusion

The SFPUC appreciates OEHHA staff for their ongoing efforts to refine the CES tool and the opportunity to provide comments on CES Draft 5.0. We look forward to continued efforts to improve the tool's measures of environmental burden and vulnerabilities in California communities.

If we can provide you with additional information or answer questions, please do not hesitate to contact Jennifer Ly, Environmental Justice and Land Use Manager, at jly@sfgwater.org or (415) 314-7113.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dennis Herrera". The signature is stylized and cursive.

Dennis Herrera
General Manager