



October 21, 2016

Carolyn Flowers  
Office of Environmental Health Hazard Assessment  
P.O. Box 4010  
Sacramento, CA 95812-4010

**RE: CalEnviroScreen 3.0 Comments**

Dear Ms. Flowers:

The San Francisco Public Utilities Commission (SFPUC) thanks the California Environmental Protection Agency (CalEPA) and the Office of Environmental Health Hazard Assessment (OEHHA) for the development of the California Communities Environmental Health Screening Tool: CalEnviroScreen (CES). Since its development, CES has come a long way in producing a relative measure of pollution impacts and vulnerabilities in California communities.

The SFPUC is a Department of the City and County of San Francisco and is comprised of three essential 24/7 service utilities: Water, Power and Sewer. We are the third largest public utility in California, working in seven counties with a combined annual operating budget of nearly \$1 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 of its activities on communities in all SFPUC service areas and to insure that public benefits are shared across all communities.

We have used CES 2.0 in an analysis of Environmental Justice conditions for the community of Bayview-Hunters Point (BVHP) in San Francisco. The analysis is intended to serve as a baseline evaluation to inform implementation of the SFPUC's Sewer System Improvement Program. Additionally, the analysis will guide the ongoing implementation of the SFPUC's innovative Environmental Justice & Community Benefits Program.<sup>1</sup> To better understand the existing environmental justice challenges in BVHP, we used CES 2.0, as well as a variety of additional indicators and data sources identified by the community. For example, we included measures of neighborhood infrastructure, the availability of services and community support, demographics, pollution and environmental degradation. For further information on how the SFPUC has utilized the CES tool, please refer to the attached Executive Summary.

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General Manager



<sup>1</sup> For more information, please visit <https://sfwater.org/index.aspx?page=644>

While we understand that the primary purpose of the CES tool is to assist CalEPA in its environmental justice mission, including the disbursement of Greenhouse Gas Reduction Funds, we recognize the value of the tool in assessing communities and wish to provide the following recommendations for your consideration:

1. We appreciate the addition of Rent-Adjusted Income in CES 3.0 but encourage OEHHA to keep refining the indicator and methodology.
2. OEHHA should modify the scoring process so that smaller communities are not overlooked due to inconclusive data.
3. OEHHA should equally weight Environmental Effects and Exposure Indicators to more accurately assess the Pollution Burden faced by California communities.
4. OEHHA and CalEPA should commit to regular updates to CalEnviroScreen.

***Recommendation 1: We appreciate the addition of Rent-Adjusted Income in CalEnviroScreen 3.0 but encourage OEHHA to keep refining the indicator and methodology.***

Lower-income households in California, one of the nation's most expensive states, often struggle to afford essential non-housing goods after paying for shelter. The SFPUC appreciates the inclusion of Rent-Adjusted Income as an indicator in CES 3.0, as it identifies communities throughout the state where rent prices can significantly stress populations and lead to housing-induced poverty.

The methodology used for Rent-Adjusted Income is a good start; the residual-income approach offers an estimate of how much money is left over after paying for housing. A rent-adjusted income measure helps account for differences in housing costs across different areas of California, which can vary significantly by region and year. This indicator addresses a very important aspect of poverty but we encourage OEHHA to go further in order to approach the reality of lower-income households by taking into account other necessary expenses and the increasing cost of housing in future updates of the CES tool.

Future updates should attempt to track gentrification as it is an ever-growing concern in the San Francisco Bay Area and across the state. OEHHA should consider analyzing the change in rent-adjusted income over time as a financial stressor for vulnerable populations.

Further, we urge OEHHA to continue refining this tool in future updates by incorporating other cost-of-living expenses. Establishing regional thresholds, such as the Supplemental Poverty Measure, could prove useful. If the data is unavailable or not applicable, then CalEPA should consider pushing for new data acquisitions.

***Recommendation 2: OEHHA should modify the scoring process so that smaller communities are not overlooked due to inconclusive data.***

From CES 2.0 to the latest 3.0 draft, the Bay Area lost over a third of census tracts within the top 25 percent most disadvantaged communities' threshold, 14 of which are in the SFPUC's regional service territory in Alameda, San Mateo and Santa Clara Counties. This is due to a number of factors including the use of new data, the removal and addition of indicators and shifting demographics. These changes reflect the importance of regular updates and reliable data.

We understand the difficulty in obtaining reliable data, especially at such a large scale. However, we noticed a statewide increase of tracts that were not given a CES Score; from 62 tracts in CES 2.0 to 106 tracts in the 3.0 draft. In other words, over 98,000 people are not counted due to these changes, many of whom live within high pollution burden tracts but lack reliable data due to low populations. We believe these tracts should not be overlooked.

For example, CES 3.0 results place census tract 6075980900, which contains San Francisco's primary wastewater treatment facility, with a missing CES Score. The pollution burden for this tract is in the 77th percentile, and the population characteristics percentile is null. The census tract in question shows a population of 350 people and missing values for the socioeconomic factors of educational attainment, linguistic isolation, rent-adjusted income, poverty and low birthweight. Because of this, the tract is not given an overall score nor is it designated as a "High Pollution, Low Population" tract, which is defined at the threshold of 80th percentile and above.

At such a high percentile for pollution (77th) and asthma (80th), we believe that census tracts such as 6075980900 should be counted as either a "High Pollution, Low Population" tract by reducing the threshold from 80th percentile pollution burden to 75th percentile, or be given a Population Characteristics score proportionally averaged to the number of validated characteristics. This will add CES scores for four tracts statewide, all in urban areas (San Francisco, Ventura, Los Angeles and San Diego).

OEHHA should either reduce the threshold for "High Pollution, Low Population" or reassess the missing or unreliable data and, if a tract is high scoring in a pollution burden, calculate the average percentile based on the population characteristics that are available and reliable. This way, CES can incorporate communities that might be vulnerable but lack the population to provide reliable data.

***Recommendation 3: OEHHA should equally weight Environmental Effects and Exposure Indicators to more accurately assess the Pollution Burden faced by California communities.***

The SFPUC's regional service territory includes many industrial areas in the San Francisco Bay Area and beyond. While we understand that pollution impacts are difficult to measure, we see no scientific justification for OEHHA's current approach to half-weight Environmental Effects Indicators compared to Exposure Indicators.

The undercounting of Environmental Effects is detrimental to people living in communities impacted by industry and environmental threats. For instance, according to CES 3.0, a residential neighborhood with over 4,000 people (census tract 6075061200) is adjacent to the oldest and largest wastewater facility in San Francisco and ranks among the top 10 percent of tracts statewide for the presence of hazardous waste generators and facilities. This community falls in the 16<sup>th</sup> percentile for Groundwater Threats, yet it is nestled between two tracts (6075980900 and 6075023102) which are in the 74<sup>th</sup> and 76<sup>th</sup> percentile for this indicator, respectively. These variances in data affect the overall Pollution Burden score and, due to a half-weighting of Environmental Effects, the tract falls in the 36<sup>th</sup> percentile for Pollution Burden, 93<sup>rd</sup> percentile for Population Characteristics, and within the CES 3.0 71-75<sup>th</sup> percentile range overall.

***Recommendation 4: OEHHA and CalEPA should commit to regular updates to CalEnviroScreen.***

Although OEHHA and CalEPA have made periodic updates to CES to date, we would like to see more predictable, regularly-scheduled updates to the tool. Updated data and new data sources can drastically change CES results. In addition, with regularly-scheduled updates, stakeholders can better anticipate and prepare for the public comment period and participate in a more meaningful way as partners to improve the tool.

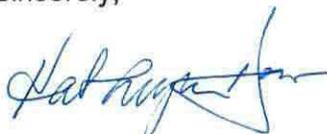
OEHHA and CalEPA should commit to regular updates to CalEnviroScreen. For example, updates could happen every two to three years to coincide with timelines for revising the Triennial Investment Plan for Cap-and-Trade Auction Proceeds.

***Conclusion***

SFPUC thanks OEHHA and CalEPA staff for their ongoing efforts to refine CES and looks forward to continued efforts to improve the tool's relative measures of pollution impacts and vulnerabilities in California communities. We appreciate the opportunity to provide comments on CES Draft 3.0.

If we can provide you with additional information or answer questions, please do not hesitate to contact Yolanda Manzone, Environmental Justice and Land Use Manager at [ymanzone@sfgwater.org](mailto:ymanzone@sfgwater.org) or (415) 554-3474.

Sincerely,



*HLK* Harlan L. Kelly, Jr.

General Manager, San Francisco Public Utilities Commission

CC: The Honorable Edwin M. Lee, Mayor, City and County of San Francisco

# EXECUTIVE SUMMARY

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## San Francisco Public Utilities Commission Bayview-Hunters Point Environmental Justice Existing Conditions

The U.S. Environmental Protection Agency's (USEPA) Office of Environmental Justice defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The San Francisco Public Utilities Commission's (SFPUC) Environmental Justice Policy affirms this definition as it applies to all of its operations, programs, and policies.

The report presents existing conditions related to a broad selection of environmental justice indicators for the community of Bayview-Hunters Point. It analyzes the community's minority and low-income status (the typical indicators used to identify a community where environmental justice may be a concern), and also presents a larger set of indicators to better understand the existing environmental justice challenges facing the Bayview-Hunters Point community. Indicators are available from a variety of sources, depending on the geographic area and the environmental issue being analyzed. They can relate to pollution and environmental degradation, neighborhood infrastructure and the availability of services and community support, and demographics and health statistics, for example. In preparation for this report, SFPUC staff met with the Southeast Working Group and the SFPUC Citizens Advisory Committee Wastewater Subcommittee to gather input on potential indicators and existing sources of information. This report reflects the input of these groups.

The report presents information for each indicator on the conditions in Bayview-Hunters Point and the larger San Francisco area and draws a comparison between the neighborhood and the citywide context to determine whether conditions related to that indicator are disproportionately adverse in Bayview-Hunters Point. As shown in the table below, 33 of the 62 indicators studied in this report were found to be indicators of environmental justice concern for Bayview-Hunters Point, meaning that they indicate an existing disproportionate adverse condition in this neighborhood compared to San Francisco as a whole.

In outreach to the community groups described above, SFPUC asked members to rank indicators by level of concern. Although no clear consensus was observable, the indicators that received the highest rankings were unemployment, poverty status, cost of living, educational attainment,

diesel particulate matter (DPM) concentration, toxic releases from facilities, and groundwater threats.

As indicated in the table below and expanded upon in the full report, Bayview-Hunters Point experiences double the citywide unemployment rate and more than double the citywide poverty rate, and has one of the lowest high school graduation rates among San Francisco neighborhoods, and each is considered an indicator of an existing disproportionate adverse condition. Several measures of the cost of living were reviewed as potential indicators. These include housing affordability, childcare costs, and proximity to goods and services. The report found that the rental affordability gap (difference between median income and median rental price), childcare burden, and proximity to healthy food retail and financial services were indicators of existing disproportionate adverse conditions related to the cost of living.

Review of available information indicated that DPM concentrations in Bayview-Hunters Point census tracts are below the citywide average, and therefore are not disproportionately adverse in this neighborhood. Similarly, several studies indicate that other neighborhoods experience a substantially higher burden from toxic releases from facilities than does the Bayview-Hunters Point neighborhood, and that the neighborhood is not disproportionately exposed to toxic releases from facilities. While the potential for groundwater contamination is considered disproportionately greater in Bayview-Hunters Point than citywide, groundwater is not used as a recognized or approved potable water source in Bayview-Hunters Point and thus groundwater threats were not considered an environmental justice indicator. However, conversations with community members have indicated that there are groundwater wells present in Bayview-Hunters Point for which no documentation is known to exist. SFPUC intends to research this issue during the preparation of the environmental review for SSIP projects.

The full report provides detail and sources of information for the indicators presented in the summary table. The report is intended to serve as a baseline evaluation for the analysis of potential contributions of SFPUC's SSIP implementation to environmental justice impacts. It is also meant to indicate to SFPUC and community stakeholders where existing disproportionate adverse conditions exist in Bayview-Hunters Point that could benefit from initiatives to avoid or eliminate disproportionate impacts of SFPUC decisions and activities, as directed by SFPUC's Community Benefits Policy. SFPUC expects that some indicators will be more closely related to SFPUC activities and initiatives (e.g., nuisance odors from operation of the Southeast Plan) and some will have a less clear connection (e.g., academic performance). However, SFPUC will evaluate the potential for its projects and initiatives to affect all identified environmental justice indicators in an effort to best direct its investments in community benefits.

## SUMMARY OF ENVIRONMENTAL JUSTICE INDICATORS

Indicator Type	EJ Indicator	Notes Regarding Disproportionality
Ozone Concentrations		Citywide rates are all the same (and lowest statewide)
PM2.5 Concentrations	●	Percentage of people in an area with a PM2.5 concentration at or above 10 µg/m3 is 3.7 times the citywide percentage
DPM Concentrations		DPM concentrations below citywide average
Toxic Releases from Facilities		Rate of exposure to toxic releases is consistent with other tracts citywide
Cancer Risk from TACs	●	Percentage of people in an area with total cancer risk greater than 100 cases per 1 million people is 1.6 times the citywide percentage
Nuisance Odors	●	Nuisance odors are a known issue for this neighborhood
Traffic Density	●	Only an indicator for western census tracts near U.S. 101 and I-280
Truck Routes		Lower percentage of residents live near truck routes than citywide
Outdoor Noise Levels		Lower percentage of residents live in an area of high outdoor noise than citywide
Traffic-Related Injuries		Lower rates of injuries than citywide
Polluted Discharges / Impaired Water Bodies		Census tracts in proximity to Bay, Golden Gate, and Ocean all have high rates
Drinking Water Contamination		SFPUC water is some of the least contaminated in the state
Agricultural Pesticide Use		Data not available for or applicable to BV-HP
Presence of Cleanup / Brownfield Sites	●	While several neighborhoods have a higher concentration of sites, approximately one-third of all sites citywide are located in BV-HP
LUST Concentration		LUSTs are most associated with gas stations, evenly distributed throughout City
Hazardous Waste Generators / Facilities Proximity	●	Proximity score between 1.3 and 2.5 times the citywide average
Solid Waste Sites and Facilities Proximity	●	Highest concentration in BV-HP compared to all other neighborhoods
Groundwater Threats		Groundwater is not used as a potable supply in San Francisco
Zoning for Industrial Uses	●	More than half of all industrial-zoned land in City is in BV-HP
Affordability Gap: Homeownership		One of the lowest affordability gaps in the City
Affordability Gap: Rental	●	Among the highest affordability gaps in the City
Rent Burden		Citywide concern, with every neighborhood burdened
Percent of Housing Stock Affordable		BV-HP housing stock almost five times more affordable than citywide stock
Prevalence of At Risk Foreclosure	●	BV-HP foreclosure rate four times citywide average
Overcrowding		Less overcrowded than citywide, and several neighborhoods more overcrowded
Displacement	●	Percentage of BV-HP residents living in low-income tracts experiencing displacement is more than 35 percent greater than the city as a whole.
Housing Tenure		Higher homeownership rate in BV-HP than citywide
New Housing Construction		Not considered an indicator in and of itself
Housing Condition / Code Violations		Lower rate of Code violations than citywide
Residential Mobility		Similarly likely to move away as residents in City as a whole
Homelessness	●	Citywide homelessness concentrated in Districts 10 and 6
Residential Density	○	Most neighborhoods have a density at least double that of BV-HP
Motor Vehicle Access		Higher car ownership rate than citywide
Public Transit Ridership and Score	●	Less access to high-transit ridership streets than citywide
Bicycle Network	●	Limited bike lanes, especially given geographic size of neighborhood
Walkability	●	Most of San Francisco has low-to-moderate walkability, but walking is perceived as substantially less safe in BV-HP compared to other neighborhoods

## SUMMARY OF ENVIRONMENTAL JUSTICE INDICATORS (Continued)

Indicator Type	EJ Indicator	Notes Regarding Disproportionality
Library Proximity		Similar proximity rate to citywide
Religious / Spiritual Density		Higher concentration of such facilities than citywide
Community Center Proximity		Similar concentration of such facilities citywide
Academic Performance of Schools	●	Some of the lowest test scores in the City
Recreational Area Score	●	Markedly lower score than citywide, although partially offset by other facilities
Open Space and Trees	●	Poor proximity and access to open space, among the lowest concentration of trees in the City
Child Care Availability		Performs less well than citywide, but not disproportionately so
Average Child Care Burden	●	Cost burden higher; higher percentage of children not receiving subsidies
Healthy Food Retail Proximity	●	Much lower proximity score than citywide
Financial Services Proximity	●	Much lower proximity score than citywide
Concentration of Alcohol Vendors		Lower concentration than citywide
Poverty: % Below Two Times Federal Poverty Level	●	Also indicated in standard and enhanced community screening
Unemployment	●	Double the citywide rate
Earned Income Tax Credit	●	Percentage of EITC filers in BV-HP is more than double citywide
Population of Children	●	Percentage of households with children more than double citywide
Population of Elderly		Lower percentage of elderly residents than citywide
Pre-Natal Care Rate	●	Worst pre-natal care rate in the City
Low Birth Weight	●	BV-HP census tracts among the highest rate of low-birth weight babies statewide
Asthma Hospitalization Rate	●	Rate is 3 times the citywide average
Preventable Hospitalizations / Emergency Room Visits	●	Rate is almost double the citywide average
Voter Turnout	●	Markedly lower than citywide participation rate
Educational Attainment	●	Rate of non-high school graduates almost double citywide rate
Linguistic Isolation	○	Only one BV-HP census tract ranks at or about 75th percentile citywide, but overall limited English proficiency population is greater than citywide
Violent Crime Rate	●	Double the citywide rate
Property Crime Rate		Close to the citywide rate
Community Resiliency to Climate Change	●	Ranked least resilient citywide, with five other neighborhoods

**Symbol Key:** ● Means this is an indicator of environmental justice concern ○ Means this may be an indicator

**NOTE:** Bayview-Hunters Point is abbreviated BV-HP in indicator tables throughout this section.