What is CalEnviroScreen?

CalEnviroScreen is a science-based mapping tool that helps identify California communities that are most affected by many sources of pollution, and that are often especially vulnerable to pollution’s effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce a numerical score for each census tract in the state.

The results are depicted on maps so that different communities can be compared to one another. A census tract with a high score is one that experiences higher pollution burden and vulnerability than census tracts with low scores. CalEnviroScreen ranks census tracts based on data that are available from state and federal government sources. CalEnviroScreen 3.0 is the most current version and was released in January 2017.

Who developed CalEnviroScreen?

◊ Office of Environmental Health Hazard Assessment (OEHHA)
◊ California Environmental Protection Agency (CalEPA)

Uses of CalEnviroScreen

◊ To identify California’s most environmentally burdened and vulnerable communities.
◊ To assist CalEPA’s boards and departments with decisions, such as prioritizing resources and cleanup activities.
◊ Disadvantaged communities in California are targeted for investment of proceeds from the State’s cap-and-trade program. CalEPA designated census tracts with the highest CalEnviroScreen scores as disadvantaged communities for investing cap-and-trade proceeds.
◊ Used by CalEPA’s Environmental Justice Task Force and other state entities as guidance in allocating grants and in other decisions.

The CalEnviroScreen Model

◊ Is made up of a suite of 20 statewide indicators of pollution burden and population characteristics associated with increased vulnerability to pollution’s health effects.
◊ Uses a weighted scoring system to derive average pollution burden and population characteristics scores for each census tract.
◊ Calculates a final CalEnviroScreen score for a given census tract relative to the other tracts in the state by multiplying the pollution burden and population characteristics components together.
◊ The score measures the relative pollution burdens and vulnerabilities in one census tract compared to others and is not a measure of health risk.

CalEnviroScreen 3.0 Results

Each color represents 10% of scores

This map shows the CalEnviroScreen 3.0 scores by census tract. The darkest red color represents the highest ten percent of the scores, or the 91st to 100th percentile.
Data Used in CalEnviroScreen

Indicators in CalEnviroScreen are measures of either environmental conditions, in the case of pollution burden indicators, or health and vulnerability factors for population characteristic indicators.

CalEnviroScreen indicators fall into four broad groups:

<table>
<thead>
<tr>
<th>Exposures</th>
<th>Contact with pollution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Effects</td>
<td>Adverse environmental conditions caused by pollution</td>
</tr>
<tr>
<td>Sensitive Populations</td>
<td>Populations with biological traits that may magnify the effects of pollution exposures</td>
</tr>
<tr>
<td>Socioeconomic Factors</td>
<td>Community characteristics that result in increased vulnerability to pollution</td>
</tr>
</tbody>
</table>

Geographic Scale

Census tracts from the US Census Bureau (2010 census) are used to represent the locations of communities across California. The average size of a census tract is around 4,000 people and represents a relatively fine scale of analysis. Below are the results by census tract in the Sacramento area.

CalEnviroScreen Formula

\[
\text{CalEnviroScreen Score} = \left( \text{Average of Exposures and Environmental Effects} \times \text{Average of Sensitive Populations and Socioeconomic Factors} \right) / 2
\]

*The Environmental Effects component is weighted one-half when combined with the Exposures component.

How to learn more and access the tool:
Website: [http://oehha.ca.gov/calenviroscreen](http://oehha.ca.gov/calenviroscreen)
Email: CalEnviroScreen@oehha.ca.gov

The CalEnviroScreen 3.0 report (in English and Spanish), maps and additional data: