CalEnviroScreen 3.0 Factsheet

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.
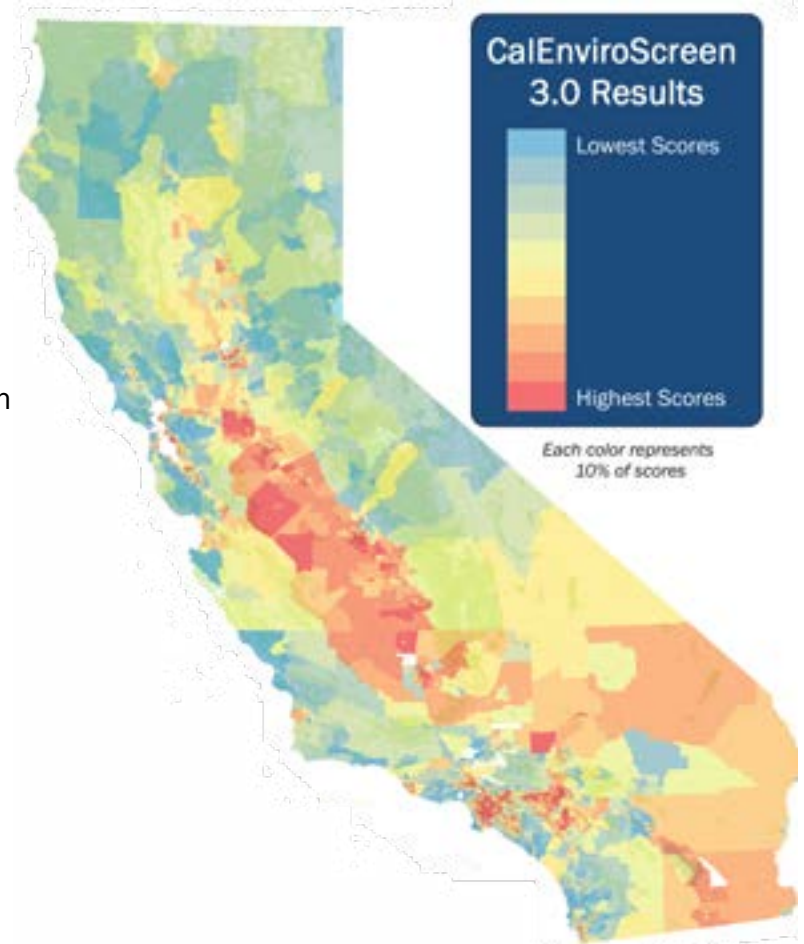
Who developed CalEnviroScreen?

◊ 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.
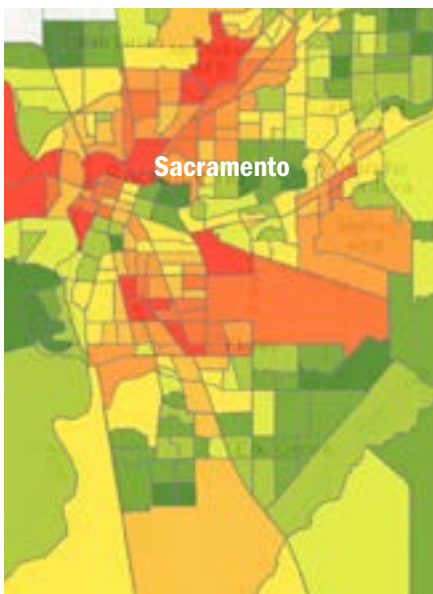

CalEnviroScreen 3.0 Results

Lowest Scores

Highest Scores

Each color represents 10% of scores
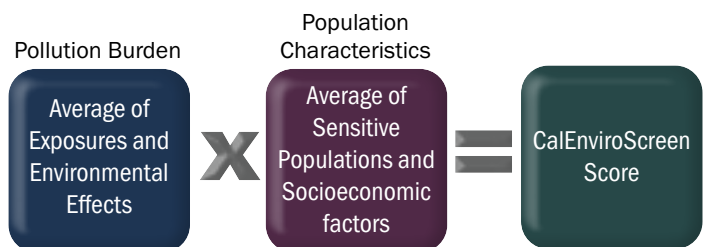
CalEnviroScreen 3.0

Focus of CalEnviroScreen

"... exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socioeconomic factors, where applicable and to the extent data are available."

Definition of "cumulative impacts" adoptedby CalEPA in 2005

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:

Exposures	*Contact with pollution*
Environmental Effects	*Adverse environmental conditions caused by pollution*
Sensitive Populations	*Populations with biological traits that may magnify the effects of pollution exposures*
Socioeconomic Factors	*Community characteristics that result in increased vulnerability to pollution*

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.

Sacramento

Indicators

Pollution Burden	Population Characteristics
Exposures	**Sensitive Populations**
Ozone · PM 2.5 · Diesel PM · Traffic · Pesticides · Drinking water contaminants · Toxic releases from facilities	Asthma · Cardiovascular disease · Low birth-weight infants
Environmental Effects	**Socioeconomic Factors**
Solid waste sites and facilities · Cleanup sites · Groundwater threats · Impaired water-bodies · Hazardous waste generators and facilities	Poverty · Unemployment · Educational attainment · Linguistic isolation · Housing burdened low-income households

CalEnviroScreen Formula

Pollution Burden: Average of Exposures and Environmental Effects

X

Population Characteristics: Average of Sensitive Populations and Socioeconomic factors

=

CalEnviroScreen Score

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