



W-L₂ ENFORCEMENT WITH REGULATED SITE PORTAL AND CALENVIROSCREEN

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Session Code: (W-L/2)

February 28, 2024

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**26th California Unified Program
Annual Training Conference
February 26-29, 2024**



Background of the Regulated Site Portal

It combines data from environmentally regulated sites and facilities in California into an interactive map of the state.

Data is incorporated from numerous state and federal databases such as: Cal/OSHA, CERS, CIWIQS, EIS, EnviroStor, GeoTracker, SMARTS, and SWIS.

The portal provides an overview of regulated activities statewide for environmental programs.

Such activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface water, and toxic materials.





Data Sources

EnviroStor - This system is used by the Department of Toxic Substances Control to track permitting, enforcement and cleanup activities at hazardous waste facilities and sites with known or suspected contamination.

EIS - US EPA's Air Emission Inventory System (EIS) that maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about sites and their physical location, emission units, emission processes, release points, control approaches, and regulations.

CIWQS - The California Integrated Water Quality System (CIWQS) was developed by the State Water Resources Control Board to manage permitting, compliance and enforcement activities related to sites which discharge to surface water (or otherwise affect surface water quality).

CERS - The California Environmental Reporting System was developed by CalEPA to support the reporting of information by regulated businesses and Certified Unified Program Agencies (CUPAs) pertaining to hazardous materials and hazardous waste throughout the state.

Cal/OSHA - Cal/OSHA inspection and enforcement information for specific higher hazard facilities, including refineries, reported to federal OSHA.



Data Sources Continued

GeoTracker - Developed for the State Water Resources Control Board, this database contains information about impacted groundwater sites within the state, such as leaking underground storage tanks, cleanup sites, and permitted facilities such as landfills and operating underground storage tanks facilities.

SMARTS - The Stormwater Multiple Application and Report Tracking System (SMARTS) was developed by the State Water Resources Control Board to collect permit and inspection information on industrial and construction storm water management.

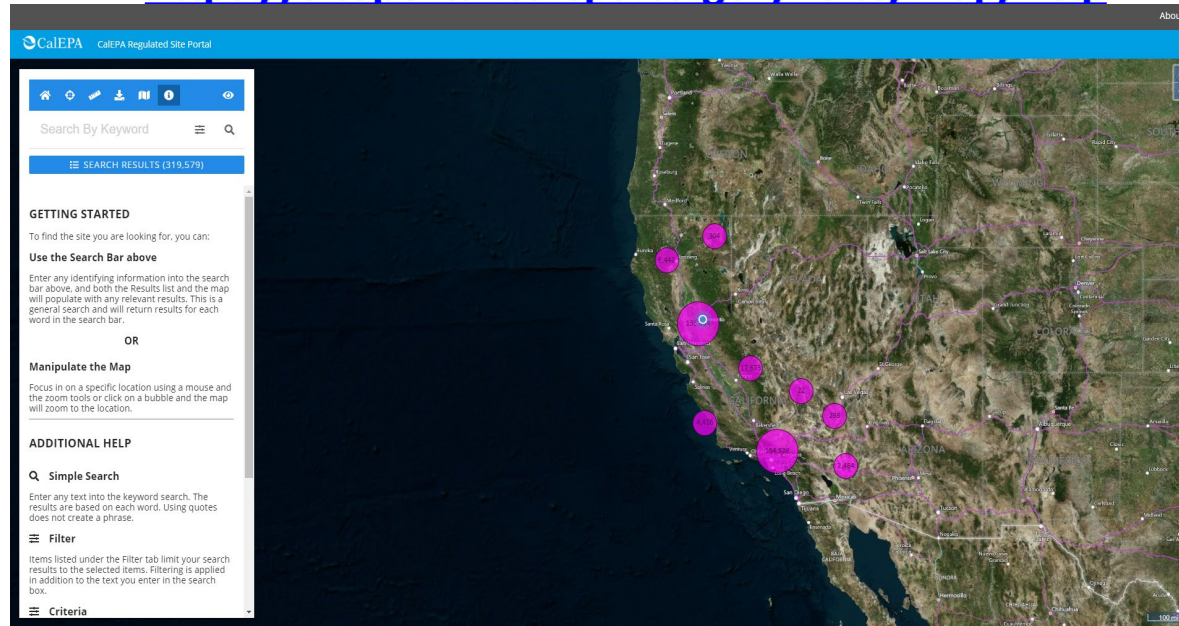
SWIS - The Solid Waste Information System (SWIS) was developed by CalRecycle to collect information on solid waste facilities, operations, and disposal sites throughout the state.

TRI - The Toxics Release Inventory (TRI) is a federal database that contains detailed information on nearly 650 chemicals and chemical categories that over 1,600 industrial and other facilities in the state manage through disposal or other releases, recycling, energy recovery, or treatment. The data is collected from these facilities by the U.S. Environmental Protection Agency.



Regulated Site Portal

<https://siteportal.calepa.ca.gov/nsite/map/help>



CalEPA Regulated Site Portal

Search By Keyword

SEARCH RESULTS (219,579)

GETTING STARTED

To find the site you are looking for, you can:

Use the Search Bar above

Enter any identifying information into the search bar above, and both the Results list and the map will populate with any relevant results. This is a general search and will return results for each word in the search bar.

OR

Manipulate the Map

Focus in on a specific location using a mouse and the zoom tools or click on a bubble and the map will zoom to the location.

ADDITIONAL HELP

Simple Search

Enter any text into the keyword search. The results are based on each word. Using quotes does not create a phrase.

Filter

Items listed under the Filter tab limit your search results to the selected items. Filtering is applied in addition to the text you enter in the search box.

Criteria

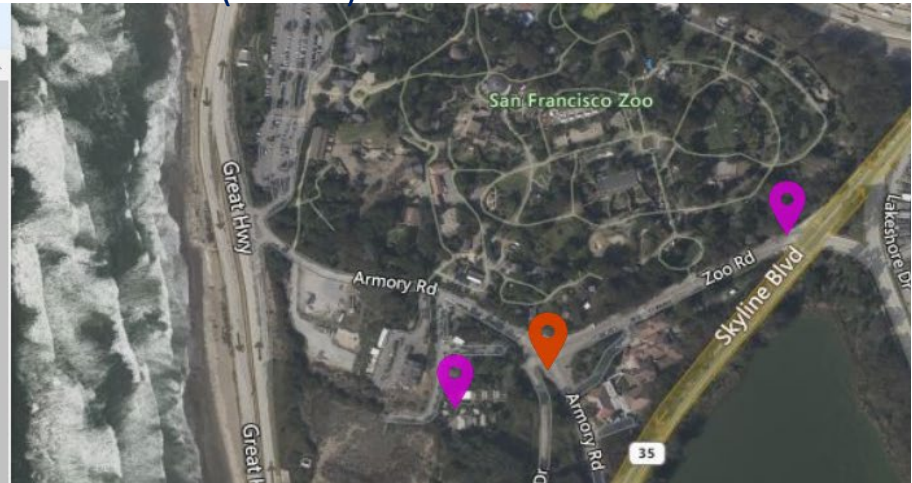


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Regulated Site Portal Continued

- Home page the “Getting Started” information.
- Use the search bar to enter identifying information of locations.
- Find a location as an example “SF Zoo”.
- Manually manipulate the map through scrolling, zooming in and out, clicking, etc.
- Find a location by manually finding the location (SF Zoo).

[SHOW MORE INFORMATION >](#)



Navigation and Features, Profile Tab

- Once you find a location you want to view more information, select “Show more information”
- Profile, Map, Regulatory Programs, Compliance, and Chemicals Tabs then become available regarding that location to look up.

The screenshot displays a web application interface. At the top, there is a navigation bar with icons for home, search, and other functions. Below the navigation bar, a search bar contains the text "sf zoo". A dropdown menu shows search results, including "SF ZOO" at "1 ZOO RD, SAN FRANCISCO CA 94132". The "SF ZOO" entry is selected, and its profile is displayed. The profile includes a map of the zoo location, a "Regulatory Programs" section with a "Hazardous Waste Generator" entry, and a "Geopolitical" section with "COUNTY" and "CALENVIROSCREEN 3.0 PERCENTILE RANGE" information. The "Regulatory Programs" section shows "ENVIRONMENTAL INTEREST START DATE" as 07/10/2013, "LAST INSPECTED" as 11/02/2021, "SOURCE SYSTEM" as "California Environmental Reporting System", and "SOURCE SYSTEM ID" as 10057756.

SF ZOO
1 ZOO RD
SAN FRANCISCO CA 94132

PROFILE MAP REGULATORY PROGRAMS COMPLIANCE CHEMICALS < SHOW LESS INFORMATION

5 sites found

Did you mean: US-101 S, Calabasas, CA 91302

SF ZOO
1 ZOO RD
SAN FRANCISCO CA 94132

Verizon Wireless Zoo (SF)
100 ARMORY DR
SAN FRANCISCO CA 94132

Geopolitical

COUNTY
San Francisco County

CALENVIROSCREEN 3.0 PERCENTILE RANGE

Regulatory Programs

Hazardous Waste Generator

ENVIRONMENTAL INTEREST START DATE
07/10/2013

LAST INSPECTED
11/02/2021

SOURCE SYSTEM
California Environmental Reporting System

SOURCE SYSTEM ID
10057756





Map Tab



Search By Keyword  

5 sites found

San Francisco Armory
100 ARMORY DRIVE
SAN FRANCISCO CA 94132

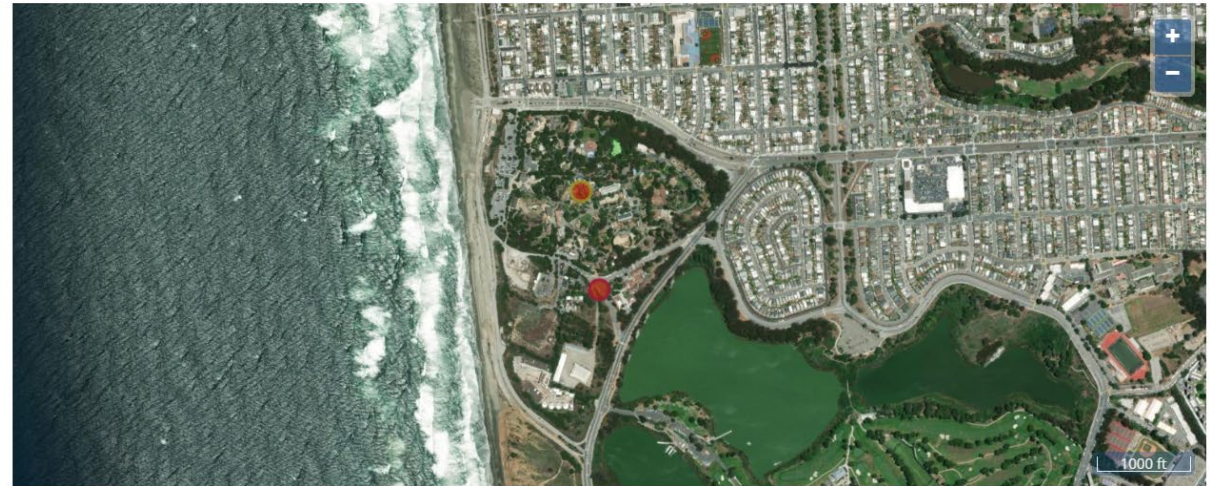
Verizon Wireless Zoo (SF)
100 ARMORY DR
SAN FRANCISCO CA 94132

AT&T Mobility - Lake Merced (USID12768)
100 ARMORY DR
SAN FRANCISCO CA 94132

SF ZOO
1 ZOO RD
SAN FRANCISCO CA 94132






PROFILE **MAP** REGULATORY PROGRAMS COMPLIANCE CHEMICALS [SHOW LESS INFORMATION](#)



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Regulatory Programs Tab





Search By Keyword  

5 sites found

San Francisco Armory
100 ARMORY DRIVE
SAN FRANCISCO CA 94132

Verizon Wireless Zoo (SF)
100 ARMORY DR
SAN FRANCISCO CA 94132

AT&T Mobility - Lake Merced (USID12768)
100 ARMORY DR
SAN FRANCISCO CA 94132

SF ZOO
1 ZOO RD
SAN FRANCISCO CA 94132

PROFILE MAP **REGULATORY PROGRAMS** COMPLIANCE CHEMICALS [< SHOW LESS INFORMATION](#)

Description	Source System	Program Id	Start Date	End Date	Long D
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Chemical Storage Facilities	California Environmental Reporting System	10057756	07/10/2013		Facilitie
Hazardous Waste Generator	California Environmental Reporting System	10057756	07/10/2013		Facilitie agencie



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Compliance Tab



Search By Keyword



5 sites found

San Francisco Armory

100 ARMORY DRIVE
SAN FRANCISCO CA 94132

Verizon Wireless Zoo (SF)

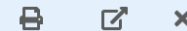
100 ARMORY DR
SAN FRANCISCO CA 94132



AT&T Mobility - Lake Merced (USID12768)

100 ARMORY DR
SAN FRANCISCO CA 94132

SF ZOO
1 ZOO RD
SAN FRANCISCO CA 94132



PROFILE

MAP

REGULATORY PROGRAMS

COMPLIANCE

CHEMICALS

< [SHOW LESS INFORMATION](#)

Evaluations

Evaluations With Violations	2
Evaluations Without Violations	4

Violations

Total	4
-------	---

Compliance

Total	0
-------	---

Evaluations With Violations (2)

	Date	Program	Type
	<input type="text"/>	<input type="text"/>	<input type="text"/>
+	10/23/2015	HMRRP - Hazardous Materials Release Response Plans (HMRRP)	Other, not routine, do
+	09/20/2013	HMRRP - Hazardous Materials Release Response Plans (HMRRP)	Routine done by local



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Chemicals Tab

Home, Settings, Keyboard, Download, Bookmarks, Info, Eye

Search By Keyword ☰ 🔍

5 sites found

San Francisco Armory
100 ARMORY DRIVE
SAN FRANCISCO CA 94132

Verizon Wireless Zoo (SF)
100 ARMORY DR
SAN FRANCISCO CA 94132

AT&T Mobility - Lake Merced (USID12768)
100 ARMORY DR
SAN FRANCISCO CA 94132

SF ZOO
1 ZOO RD
SAN FRANCISCO CA 94132

PROFILE MAP REGULATORY PROGRAMS COMPLIANCE **CHEMICALS** [SHOW LESS INFORMATION](#)

Chemical Storage

REPORTING PERIOD: 2023 SUBMITTED ON: 08/11/2023

Chemicals

Name	Max Daily Amount / Unit	Avg Daily Amount / Unit
+ Zero Voc Interior Paint Egg Shell	12-59 Gallons	0-11 Gallons
+ Waterborne Exterior Semi-Gloss Paint	0-11 Gallons	0-11 Gallons
+ Virkon S	12-59 Gallons	12-59 Gallons
+ Urethane Trim Enamel	12-59 Gallons	0-11 Gallons
+ Thompsons Waterseal Water Proofing	0-11 Gallons	0-11 Gallons





Layers

1

Base Layers – You can select your desired base layer with map preference. (Bing Hybrid is the default.)

2

Map Layers – Choose from numerous layers to show Chemical, Enviro, Fire, Flood Risk FEMA, Other, Political, and Water layers.

3

Deselect current filters selected or click on the Clear button to reset.



Layers Location

The screenshot displays the CalEPA Regulated Site Portal interface. At the top, the CalEPA logo and "CalEPA Regulated Site Portal" are visible. Below the navigation bar, there is a search bar with the text "Search By Keyword" and a search icon. A red arrow points to the search bar. Below the search bar, a blue bar indicates "SEARCH RESULTS (16,808)".

The main content area is divided into two sections: "Base Layer" and "Map Layers".

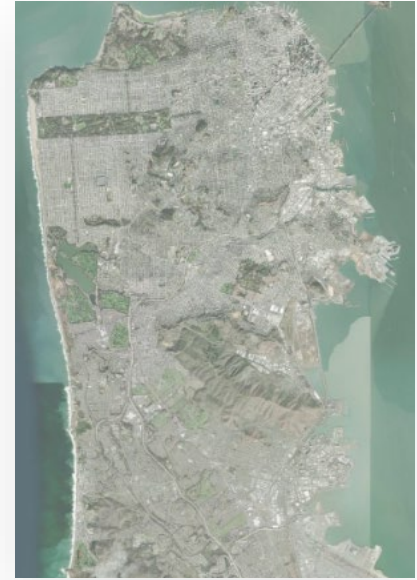
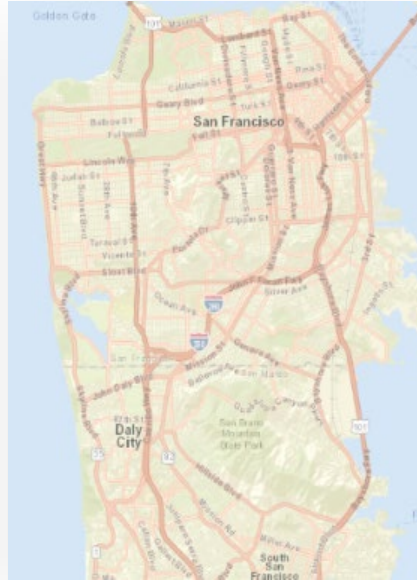
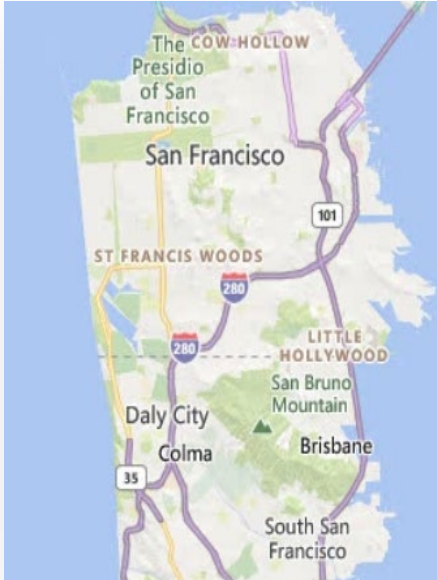
- Base Layer:** A dropdown menu showing "Bing Hybrid" with an upward arrow icon. A red arrow points to this icon.
- Map Layers:** A dropdown menu showing "Choose..." with an upward arrow icon. A red arrow points to this icon.

The map on the right shows a satellite view of San Francisco and the surrounding area, including San Francisco Bay, Treasure Island, and various cities like Daly City, San Bruno, and Burlingame. Numerous pink circular markers with numbers are overlaid on the map, indicating specific locations or data points. A scale bar at the bottom right of the map shows "5 mi".

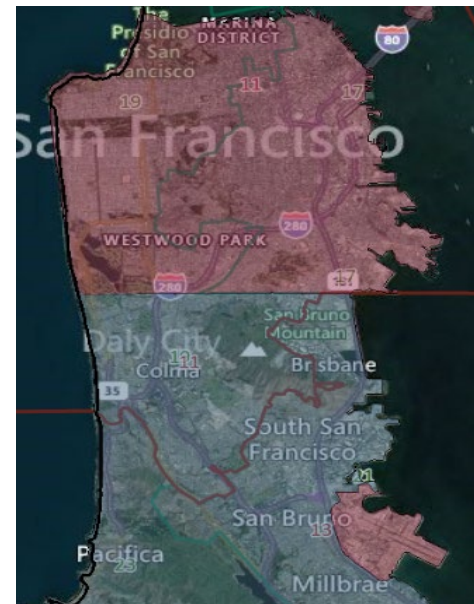
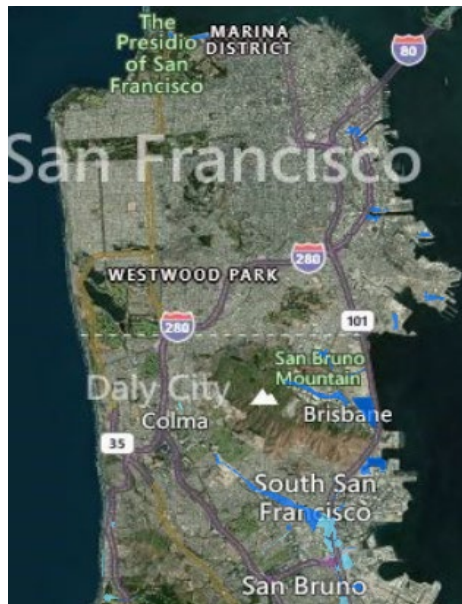
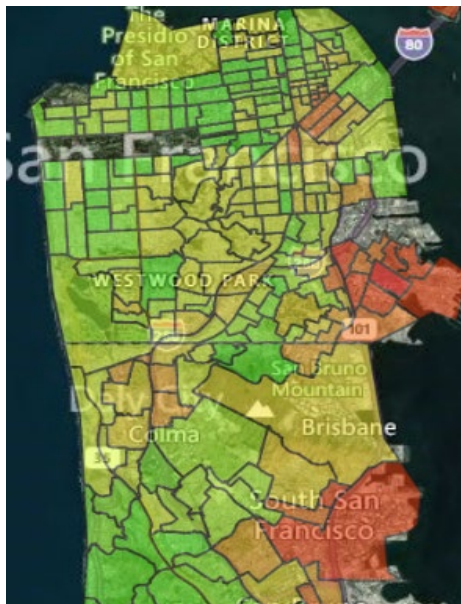


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Different Base Layer Examples



Different Map Layer Examples





Criteria and Filters

1

Criteria – You can narrow your site search in the Criteria Tab (Advanced Search Criteria) by manually typing text in the text boxes.

2

Filters – These boxes include Site Identifier, Site Name, Site Address, etc. to help target in on specific sites.

3

NOTE: Text box entries will only narrow the scope within the current screen view of the Regulated Site Portal.



Criteria

The screenshot displays the CalEPA Regulated Site Portal interface. At the top, the CalEPA logo and "CalEPA Regulated Site Portal" are visible. The main content area is divided into three sections:

- Search Results:** A search bar labeled "Search By Keyword" contains the text "Oracle Park/SF Giants". Below the search bar, it indicates "1 site found". A red arrow points from the search bar to the "Advanced Search Criteria" panel.
- Advanced Search Criteria:** A panel titled "Advanced Search Criteria" with a close button (X) is open. It shows "CRITERIA (1)" and "FILTERS (0)". The "SITE NAME" field is populated with "Oracle Park/SF Giants", which is highlighted in yellow. Other fields include "SITE IDENTIFIER", "SITE ADDRESS", and "SITE CITY". A red arrow points from the search bar to the "SITE NAME" field.
- Map:** A satellite map of the San Francisco Bay Area is shown on the right. A purple pin is placed on the Oracle Park location in San Francisco. The map includes labels for various cities and landmarks like Treasure Island, Emeryville, Oakland, Alameda, and San Francisco Bay.



Criteria Continued

- With text entered in the “SITE NAME” Text Box (Oracle Park/SF Giants), the specific location of Oracle Park was isolated in a search result.

Advanced Search Criteria ×

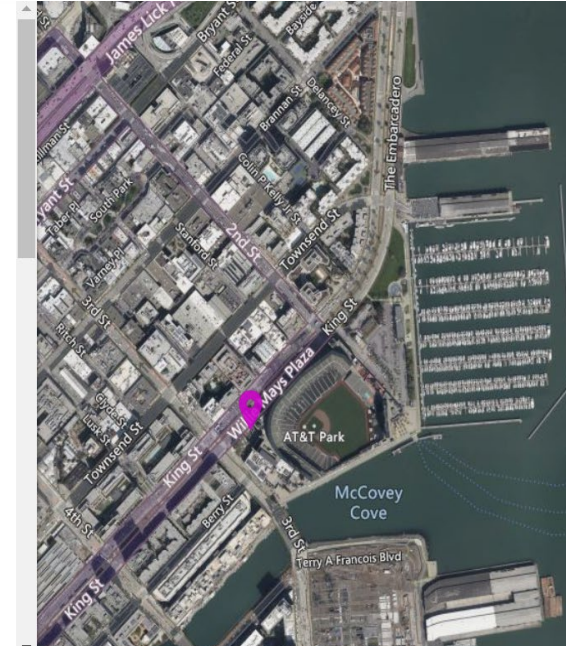
CRITERIA (1) FILTERS (0)

SITE IDENTIFIER

SITE NAME ×

SITE ADDRESS

SITE CITY



Filters

The screenshot displays the CalEPA Regulated Site Portal interface. On the left, a search bar contains the text "Search By Keyword" and a magnifying glass icon. Below the search bar, it indicates "20,269 sites found". Three search results are listed:

- U-Haul of Hayward**
529 JACKSON ST
HAYWARD CA 94544
- SPINELLI COFFEE COMPANY**
495 BARNEVELD AVENUE
SAN FRANCISCO CA 94124-1501
- ACME CAR SERVICE**
1015 GROVE WAY
HAYWARD CA 94541

On the right, an "Advanced Search Criteria" panel is open, showing a list of criteria with checkboxes and expandable arrows. The "FILTERS (0)" section is highlighted in yellow, and a red arrow points to it. The criteria listed are:

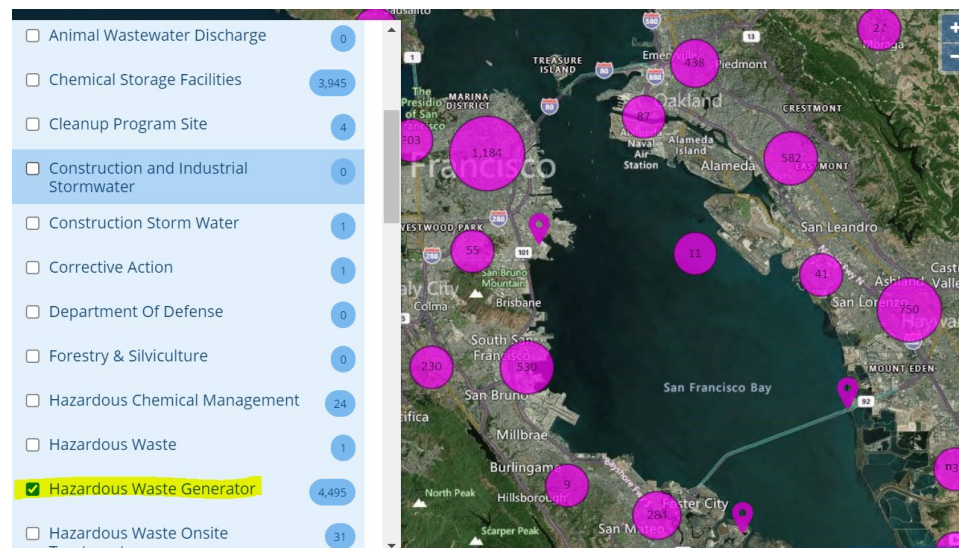
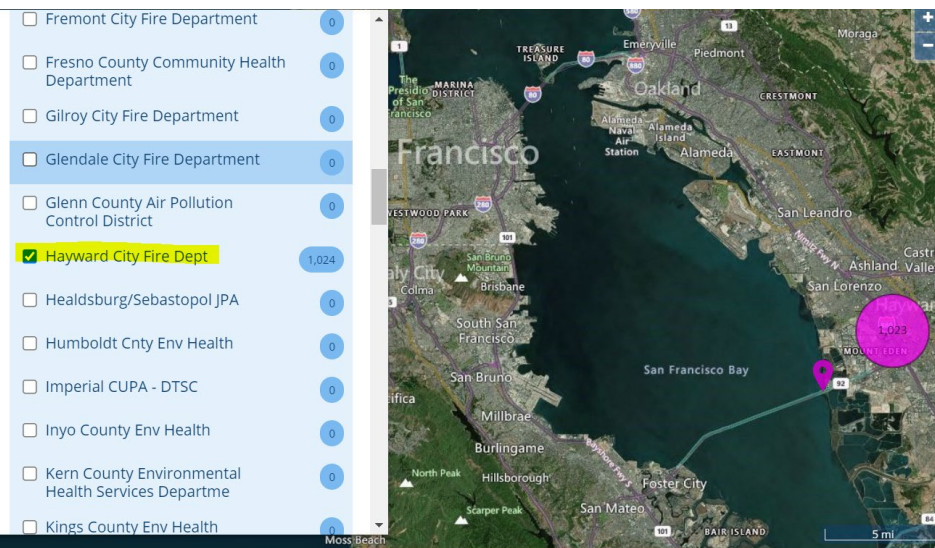
- Regulatory Programs
- Regulatory Agencies
- Evaluation Type
- Has Violation YN
- Enforcement Type
- Site County

The background of the interface is a map of the San Francisco Bay Area, overlaid with numerous pink circular markers of varying sizes, each containing a numerical value representing the number of sites at that location. The markers are scattered across the region, with some larger markers in the central and eastern parts of the bay area.



Different Map Filter Examples

- Available filters to select from include Regulatory Programs, Regulatory Agencies, Evaluation Type, Has Violation YN, Enforcement Type, Site County, Originating Data System, and CUPA Jurisdiction. More options become available for selection when one of the above-mentioned filters are chosen by clicking on the up arrow.



More Map Filter Examples

CRITERIA (0) FILTERS (1)

- Regulatory Programs
- Regulatory Agencies 1
- CalEPA Unified Program 8,168
- CalRecycle 0
- Department of Toxic Substances Control 8
- EIS Air Sites 94
- Water Boards 80
- Evaluation Type
- Has Violation YN

The map displays the San Francisco Bay Area with numerous pink circular markers of varying sizes, each containing a number. The markers are distributed across the region, with larger markers in the central and eastern parts of the bay.

Regulatory Agencies

Evaluation Type	Count
AGT SPCC inspection	0
Cal/OSHA Inspection	11
Complaint Inspection	11
Compliance	0
Construction Storm Water Compliance Evaluation	47
DTSC Case Development Inspection	0
DTSC Compliance Evaluation Inspection	7
DTSC Financial Records Review	3
DTSC Focused Compliance	2

The map displays the San Francisco Bay Area with numerous pink circular markers of varying sizes, each containing a number. The markers are distributed across the region, with larger markers in the central and eastern parts of the bay.



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Measure Tool

The Measure Tool allows users to draw a line, circle, or polygon to help identify a specific geographic area or measure particular distances.

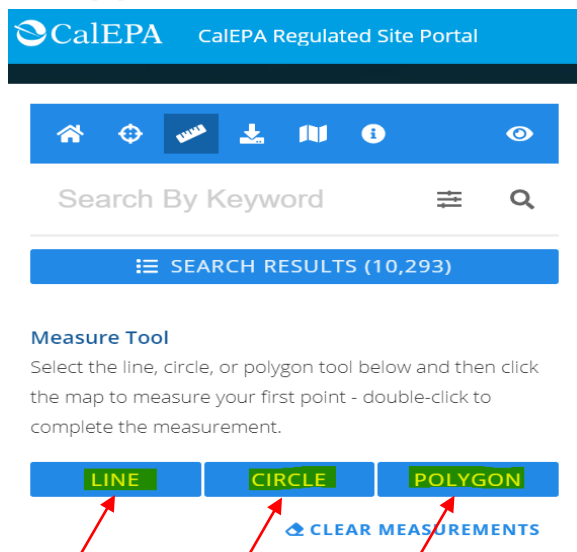
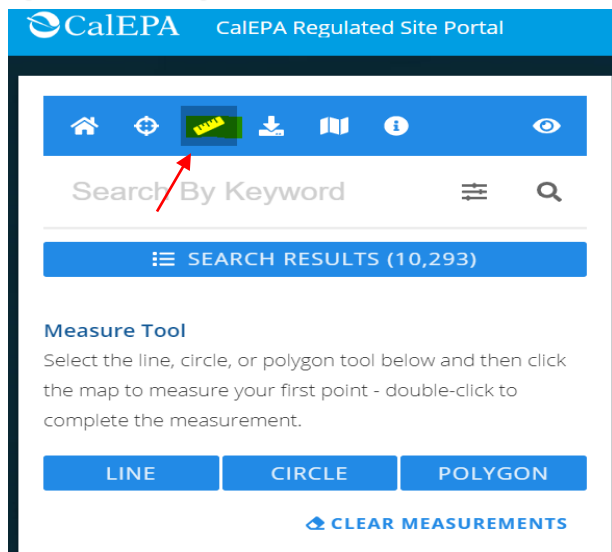
Measurements can be displayed in either feet, miles, meters, or kilometers for distances.

This gives the user a visual aid when identifying sites within a customizable search area.



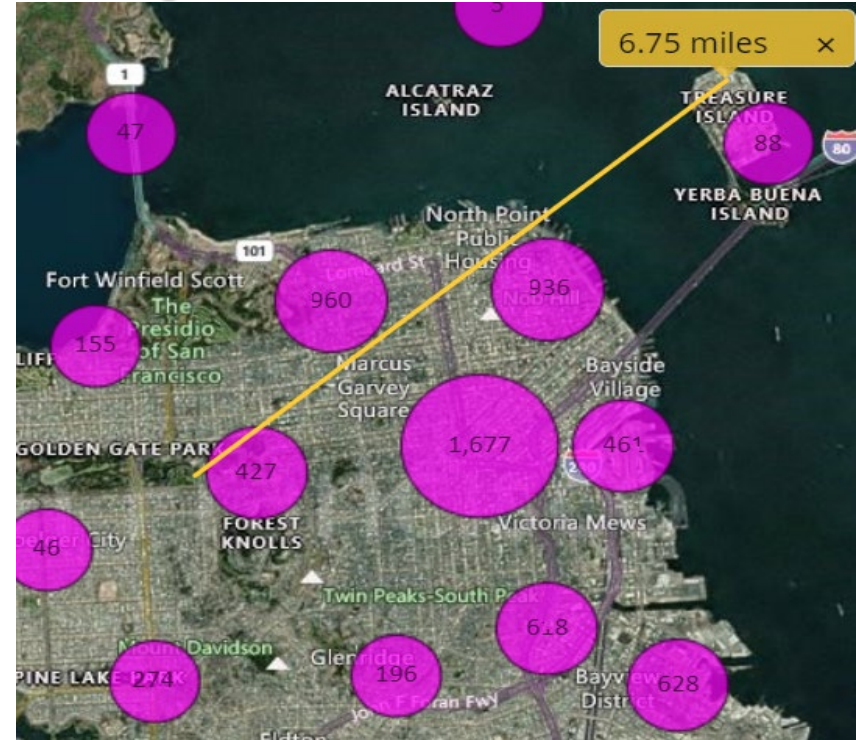
Measure Tool Location

- The Measure Tool can be found by clicking on the ruler icon on the left-hand side of the screen next to the other selectable buttons.
- Once opened, options for Line, Circle, and Polygon appear.



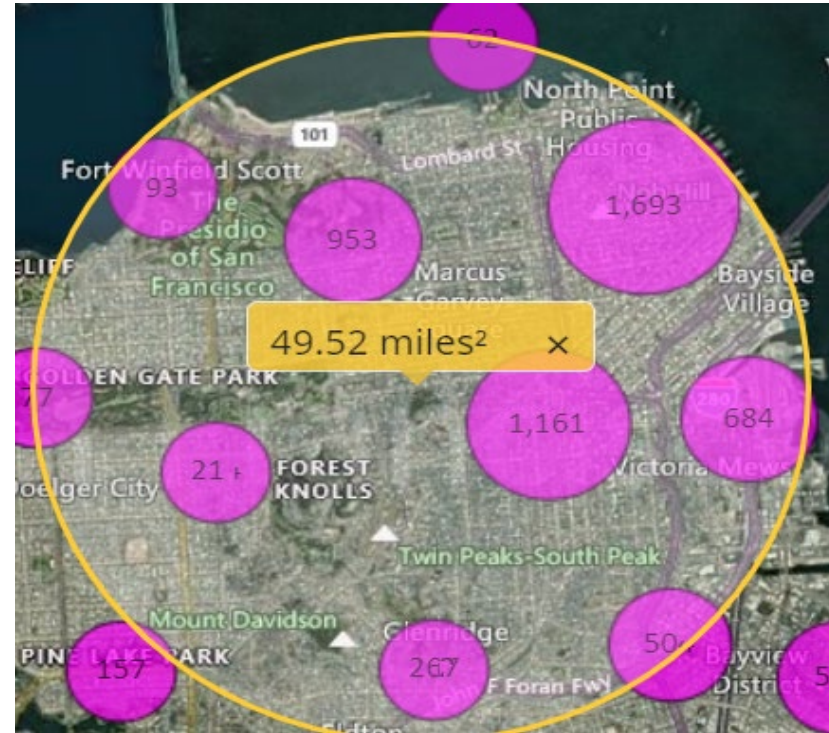
Measure Tool Example (Line)

- A line is illustrated showing the distance from Golden Gate Park to Treasure Island is 6.75 miles.
- Connecting lines can be added with a single-click and a double-click ends the line-making process.
- The distance will accumulate with lines that are added measuring the total distance.



Measure Tool Example (Circle)

- A circle was made here measuring a total of 49.52 square miles.
- Once the Circle tool is selected, click and start your circle generally in the middle of where you want it, then expand out.
- Click again to stop at desired size.



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Measure Tool Example (Polygon)

- A polygon can be initiated by first selecting that button and clicking in the area you wish to start.
- Each following click will add additional angles to the polygon.
- A double-click will end the shape and display the total distance within the polygon (this one shows a total area of 20.51 square miles.)



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Export Downloads

- **The Regulated Site Portal provides the ability to download numerous reports and insightful information.**
- **Site downloads include Site, Site Regulated Programs, Affiliations, Coordinates, and Chemicals (top 2,000 chemicals.)**
- **Compliance downloads include Evaluations, Violations, and Enforcements.**
- **Any download that is run will be reflective of the current screen view of the map and what sites are shown at that moment.**



Export Example (Site)

- First, click on the Download data to your computer button on the top blue bar.
- Then once you have a preferred geographic area on the map in which you want sites to appear in the download, click on the Download button.

The screenshot displays a web application interface. At the top, there is a blue navigation bar with several icons: a home icon, a location pin icon, a keyboard icon, a download icon (highlighted with a red arrow), a book icon, an information icon, and an eye icon. Below the navigation bar is a search bar with the text "Search By Keyword" and a search icon. A blue banner below the search bar indicates "SEARCH RESULTS (11,117)". The main content area shows a list of results. The first result is titled "Site" and has a yellow "DOWNLOAD" button with a download icon (highlighted with a red arrow). Below this result is a description: "Export a CSV file containing information for the current sites." The second result is titled "Site Regulated Programs" and has a blue "DOWNLOAD" button with a download icon. Below this result is a description: "Export a CSV file containing all site regulated programs for the current sites."

Export Example (Site)

- Once the Site download report has downloaded, select it and open the CSV document. The report will have SiteID, SiteName, Address, City, ZIP, Longitude, and Latitude populated in columns.

	A	B	C	D	E	F	G
1	SiteID	SiteName	Address	City	ZIP	Latitude	Longitude
2	133	100 BUSH CORPORATION	100 BUSH ST	SAN FRANCISCO	94104	37.79157	-122.39997
3	134	100 California St LLC	100 CALIFORNIA ST	SAN FRANCISCO	94111	37.79362	-122.39778
4	137	100 Pine St Building	100 PINE ST	SAN FRANCISCO	94111	37.79265	-122.39897
5	146	101 California	101 CALIFORNIA ST STE 1050	SAN FRANCISCO	94111	37.79295	-122.3981
6	153	101 Lombard Street Homeowner Associati	101 LOMBARD ST	SAN FRANCISCO	94111	37.80387	-122.40348
7	194	100 Van Ness Associates, LLC	100 VAN NESS AVE	SAN FRANCISCO	94102	37.77672	-122.41918
8	201	101 mission st	101 MISSION ST	SAN FRANCISCO	94105	37.79243	-122.39415
9	202	101 Second Street, INC	101 2ND ST	SAN FRANCISCO	94105	37.78809	-122.39915
10	209	1028 Howard St Apartment	1028 HOWARD ST	SAN FRANCISCO	94103	37.77947	-122.40792
11	214	1080 Chestnut Corporation	1080 CHESTNUT ST APT 2B	SAN FRANCISCO	94109	37.80305	-122.42108
12	224	1101 Howard St Apartments	1101 HOWARD ST	SAN FRANCISCO	94103	37.77762	-122.40939
13	234	111 Pine St Building	111 PINE ST	SAN FRANCISCO	94111	37.79222	-122.39885



Export Example (Compliance, Evaluations)

- First, click on the Download data to your computer button on the top blue bar.
- Then once you have a preferred geographic area on the map in which you want Evaluations to appear in the download, click on the Download button.

The screenshot shows a web application interface with a top blue navigation bar. The bar contains several icons: a home icon, a location pin icon, a 'DATA' label, a download icon (a green square with a white download symbol), a book icon, an information icon, and an eye icon. Below the navigation bar is a search bar with the text 'Search By Keyword' and a magnifying glass icon. Below the search bar is a blue bar with the text 'SEARCH RESULTS (5,795)'. Below this bar is a section titled 'Compliance'. Under 'Compliance', there are two sections: 'Evaluations' and 'Violations'. The 'Evaluations' section has a description: 'Export a CSV file containing facilities with evaluations (e.g., inspections) for the current sites.' and a yellow 'DOWNLOAD' button with a download icon. The 'Violations' section has a description: 'Export a CSV file containing facilities with violations for the current sites.' and a blue 'DOWNLOAD' button with a download icon. A red arrow points from the top blue bar to the 'DOWNLOAD' button in the 'Evaluations' section.



Export Example (Compliance, Evaluations)

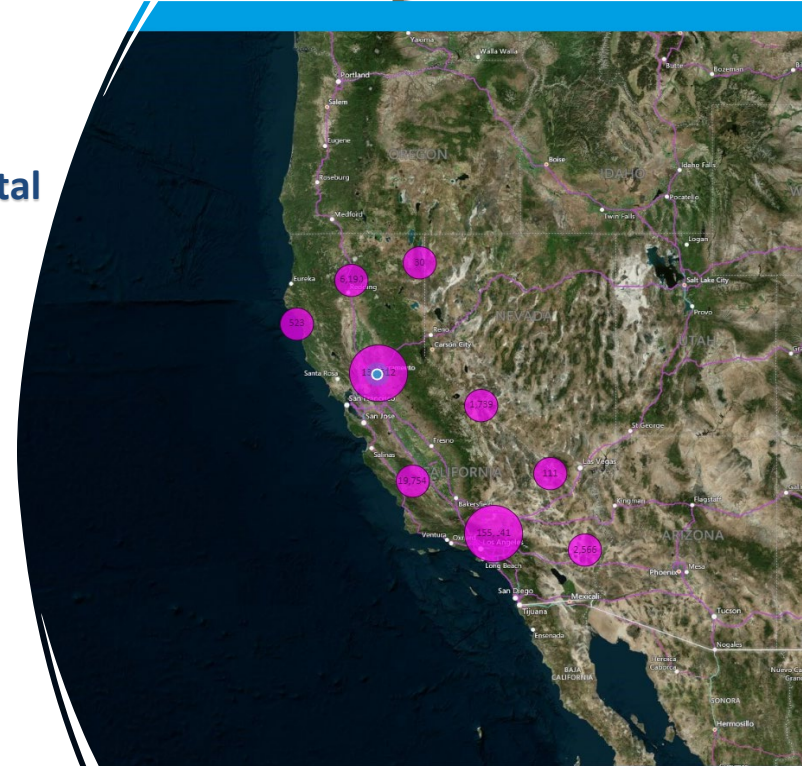
- Once the Evaluation download report has downloaded, select it and open the CSV document. The report will have SiteID, SiteName, EvalDate, ViolationsFound, EvalGeneralType, EvalType, Eval Division, EvalProgram, and EvalSource populated in columns.

	A	B	C	D	E	F
1	SiteID	SiteName	EvalDate	ViolationsFound	EvalGeneralType	EvalType
2	133	100 BUSH CORPORATION	3/11/2016	Yes	Compliance Evaluation Inspection	Routine done by local agency
3	133	100 BUSH CORPORATION	5/15/2014	Yes	Other/Unknown	Other, not routine, done by local agency
4	133	100 BUSH CORPORATION	12/12/2019	Yes	Compliance Evaluation Inspection	Routine done by local agency
5	134	100 California St LLC	4/27/2016	Yes	Compliance Evaluation Inspection	Routine done by local agency
6	134	100 California St LLC	4/27/2016	Yes	Compliance Evaluation Inspection	Routine done by local agency
7	134	100 California St LLC	11/22/2013	No	Compliance Evaluation Inspection	Routine done by local agency
8	134	100 California St LLC	11/22/2013	No	Compliance Evaluation Inspection	Routine done by local agency
9	134	100 California St LLC	12/16/2019	No	Compliance Evaluation Inspection	Routine done by local agency
10	134	100 California St LLC	12/16/2019	No	Compliance Evaluation Inspection	Routine done by local agency
11	137	100 Pine St Building	2/24/2021	No	Compliance Evaluation Inspection	Routine done by local agency
12	137	100 Pine St Building	2/24/2021	No	Compliance Evaluation Inspection	Routine done by local agency
13	137	100 Pine St Building	2/24/2021	Yes	Compliance Evaluation Inspection	Routine done by local agency



Regulated Site Portal Recap

- A public-facing website that is accessible to anyone.
- An interesting and useful layer of the Regulated Site Portal is the CalEnviroScreen layer showing an area's EnviroScreen's range. For more information about CalEnviroScreen in a comprehensive way, here is Karen.
- A visual tool to look up information on facilities within the state.
- Capabilities to find information related to chemicals, evaluations, violations, and more.



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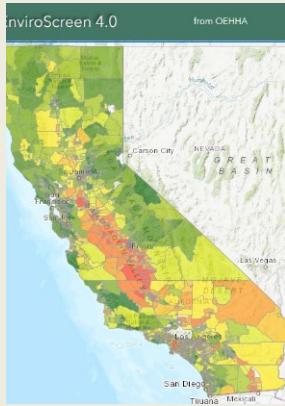
CalEnviroScreen 4.0

Office of Environmental Health Hazard
Assessment (OEHHA)

CUPA Conference 2024

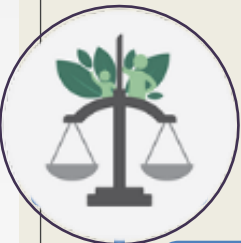
Karen.Riveles@oehha.ca.gov





CalEnviroScreen 4.0

- Environmental Justice Screening Method and Tool: Cumulative analysis of relative burdens in California communities from pollution and population vulnerability
- Geographic focus: 21 indicators combined into a single score at the census tract scale
- Identifies California communities that are most affected by many sources of pollution, and where people are especially vulnerable to the effects of pollution
- Version 4.0 was released in 2021



California
EJ Statutes

1999-2000



Advisory
Committee
Recommendations
& CalEPA EJ
Action Plan

Cumulative
Impacts
Work Group

2008-2013



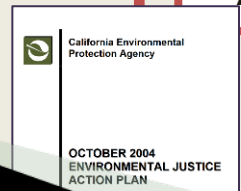
2010-2021

Workshops and
Consultation
Processes



CalEnviroScreen
Public Versions
1.0 to 4.0

2013-2023



26th California Unified Program
Annual Training Conference
February 26-29, 2024



What are cumulative impacts?

“Cumulative impacts means 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.”

CalEPA Interagency Working Group on Environmental Justice (2005)



Exposures

Contact with pollution

Environmental Effects

Adverse environmental conditions caused by pollutants

Sensitive Populations

Populations with physiological traits or health status that may magnify the effects of pollutant exposures






















Socioeconomic Factors

Community characteristics that result in increased vulnerability to pollutants





CalEnviroScreen 4.0 Indicators

Pollution Burden		Population Characteristics	
Exposures	Environmental Effects	Sensitive Populations	Socioeconomic Factors
 Ozone  PM2.5  Diesel Particulate Matter  Drinking Water Contaminants  Toxic Releases from Facilities  Traffic  Children's Lead Risk from Housing  Pesticide Use	 Solid Waste Sites and Facilities  Cleanup Sites  Groundwater Threats  Impaired Water Bodies  Hazardous Waste Generators and Facilities	 Asthma  Cardiovascular Disease  Low Birth Weight Infants	 Educational Attainment  Housing Burden  Linguistic Isolation  Poverty  Unemployment

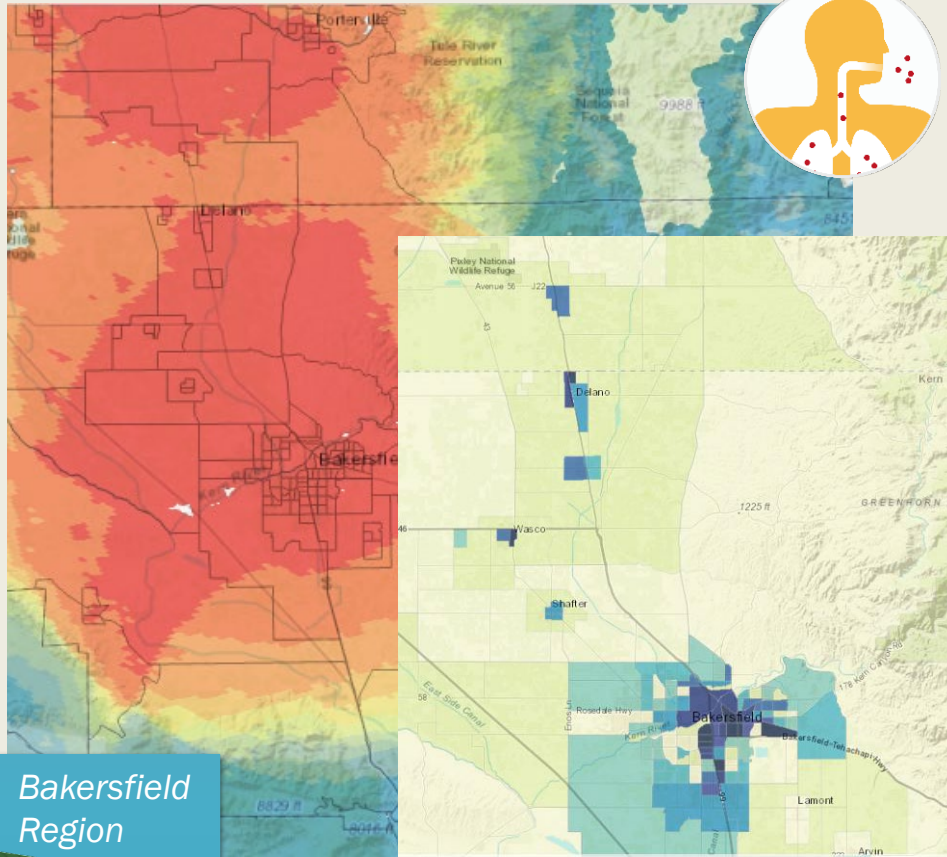
New



Data Sources & Support

- California Environmental Protection Agency's Boards and Departments
 - California Air Resources Board
 - State Water Resources Control Board
 - Department of Toxic Substances Control
 - Department of Pesticide Regulation
 - CalRecycle
- US Environmental Protection Agency
- California Department of Health Care Access & Information
- California Department of Public Health & Tracking California
- US Census Bureau
- University of California





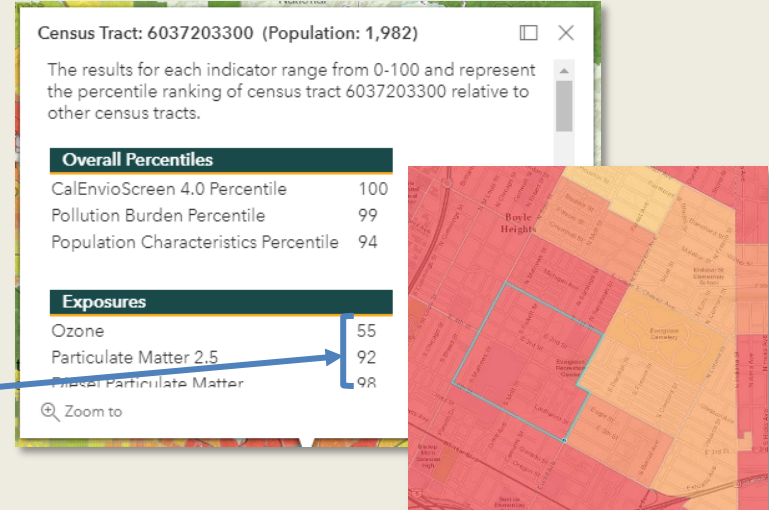
Indicator Example

Particulate Matter 2.5

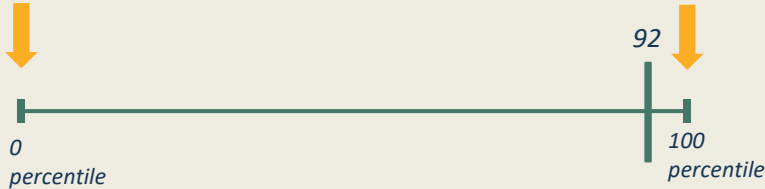
- Indicator represents the annual mean PM_{2.5} concentration for 2015-2017 by census tract
- Satellite data used in combination with monitor data
- PM_{2.5} estimates generated from a 1-km square grid layer,
- Census tract results calculated by taking the average of each grid cell value within the tract

Indicator Scoring

- Each census tract's raw indicator score is assigned a percentile value based on where it falls among values state-wide
- Percentiles represent relative scores for each of the 21 indicators



All ~8,000 tracts in California fall somewhere on this line

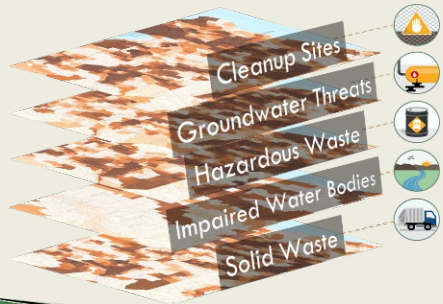
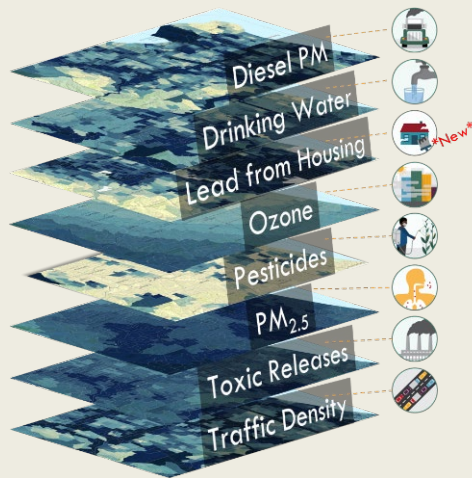


For example, this Los Angeles area census tract is in the 92nd percentile for PM2.5, meaning its value is higher than 92% of all other census tracts in California.

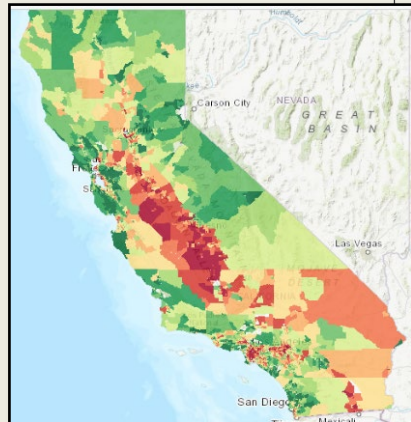
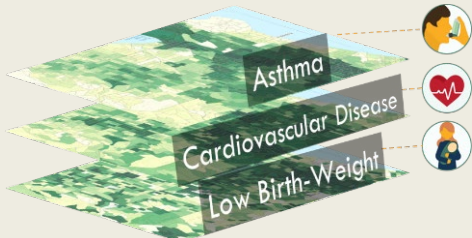
CalEnviroScreen Model

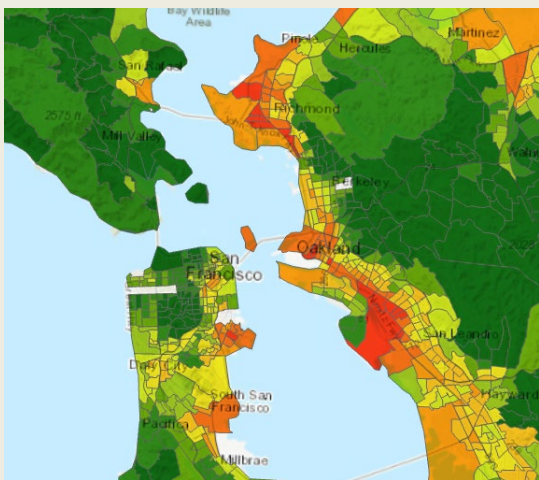


Pollution Burden

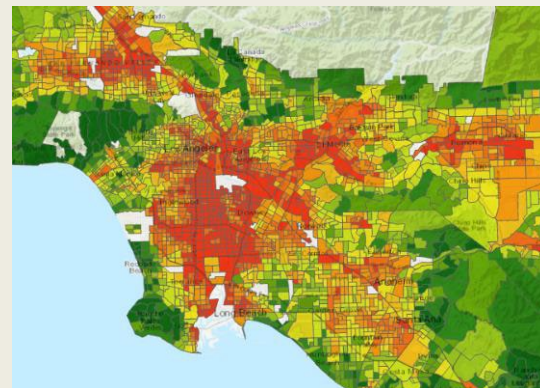
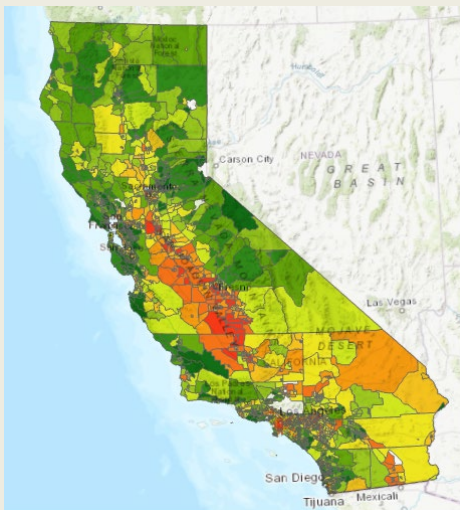


Population Characteristics





San Francisco Bay Area



Greater Los Angeles Area

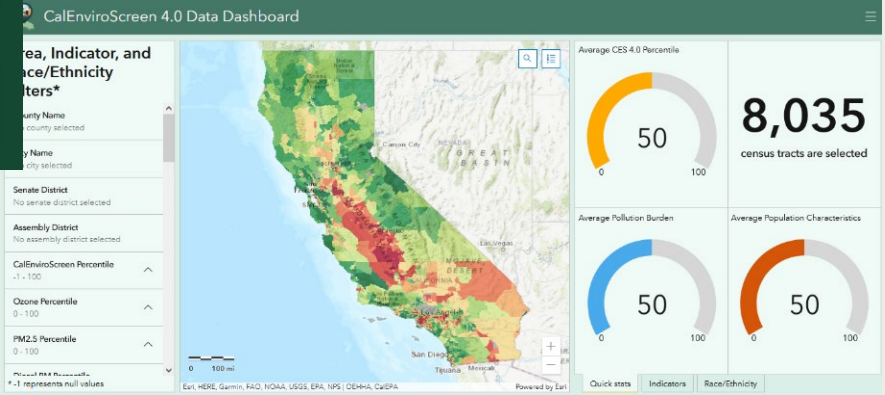
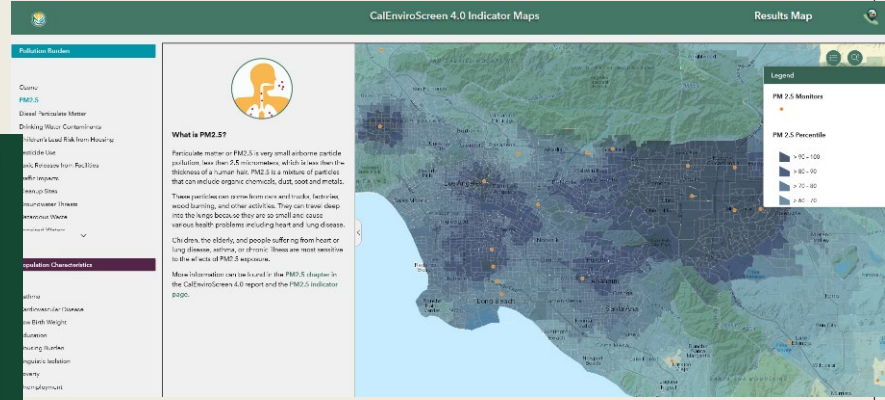
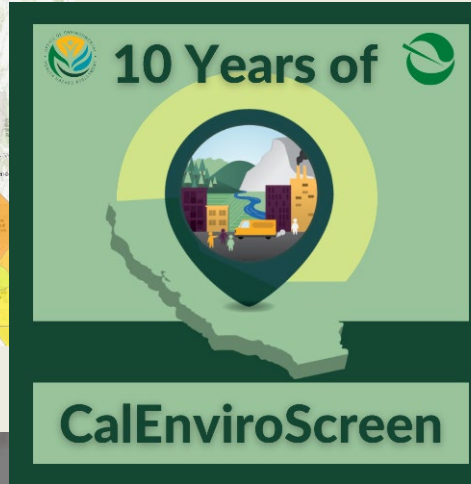
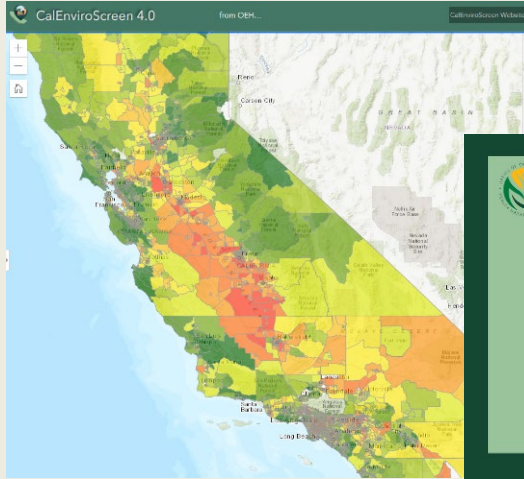
CalEnviroScreen 4.0 Results

Scores represent a relative ranking of the burden of combined pollution and population vulnerability.

Disproportionate high scores in Greater Los Angeles Area and the San Joaquin Valley.

Broad similarity across versions of CalEnviroScreen.

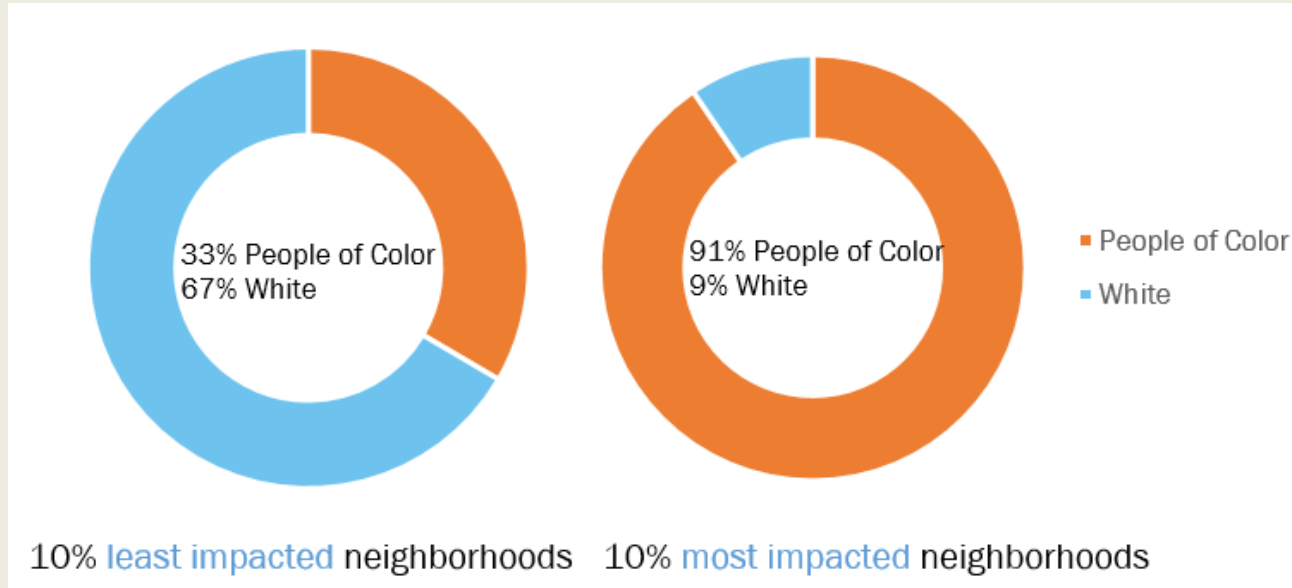
CalEnviroScreen Interactive Products



Inequitable Distribution of Burden

CalEnviroScreen 4.0 Data

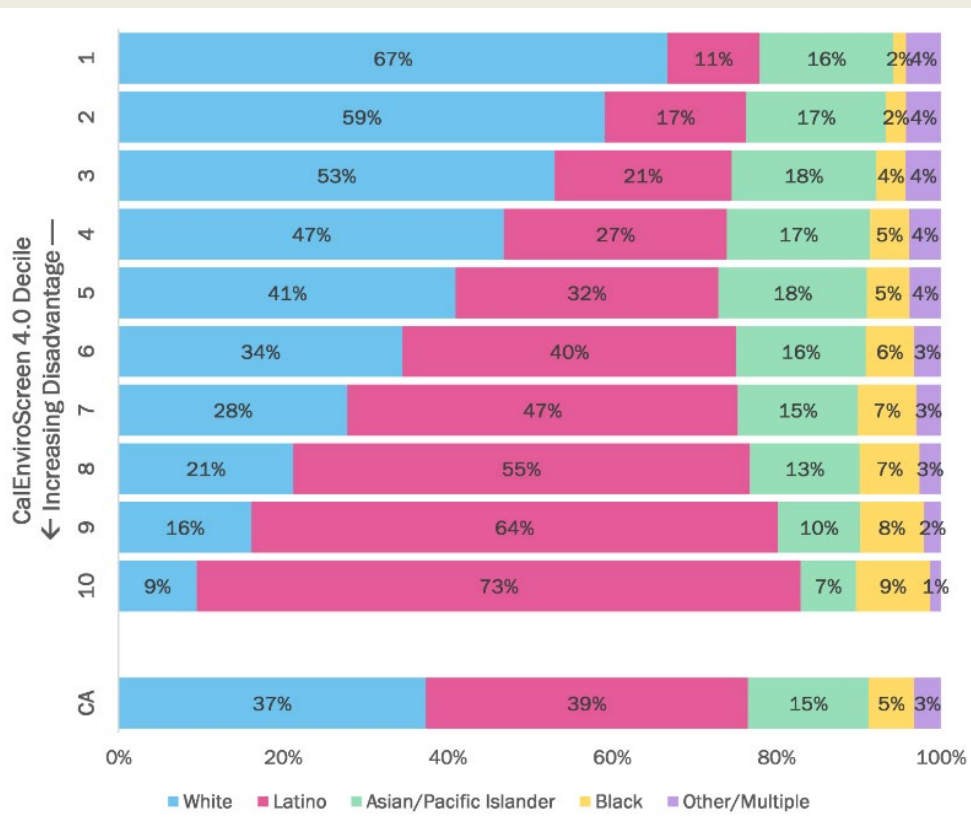
Race in the least and most impacted census tracts by CalEnviroScreen 4.0 decile



Story map and report:

<https://storymaps.arcgis.com/stories/f555670d30a942e4b46b18293e2795a7>

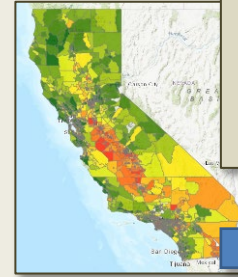
Racial Makeup of Each Decile of CalEnviroScreen 4.0 Score.



Uses of CalEnviroScreen

▪ In State Government

- ❑ Training opportunities
- ❑ To designate disadvantaged communities (DACs)* for investments Greenhouse Gas Reduction Fund
- ❑ To support identification of enforcement priorities
- ❑ To consider cumulative impacts in DTSC permitting hazardous waste facilities (SB 673)
- ❑ To support CARB's identification of communities for air pollution reduction (AB 617)
- ❑ Public Utilities Commission and Energy Commission: funding prioritization tool
- ❑ CA Natural Resources Agency: equity decision support layer
- ❑ Local use: integrating EJ element into city general plans (SB 1000)



SB 535
Disadvantaged
Communities:
Based on
CalEnviroScreen
Scores*

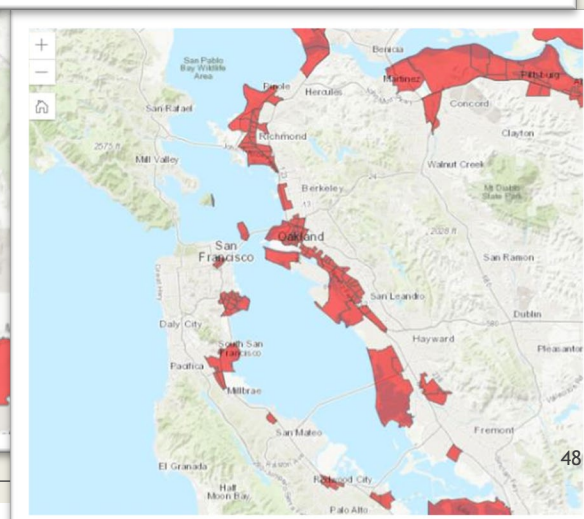
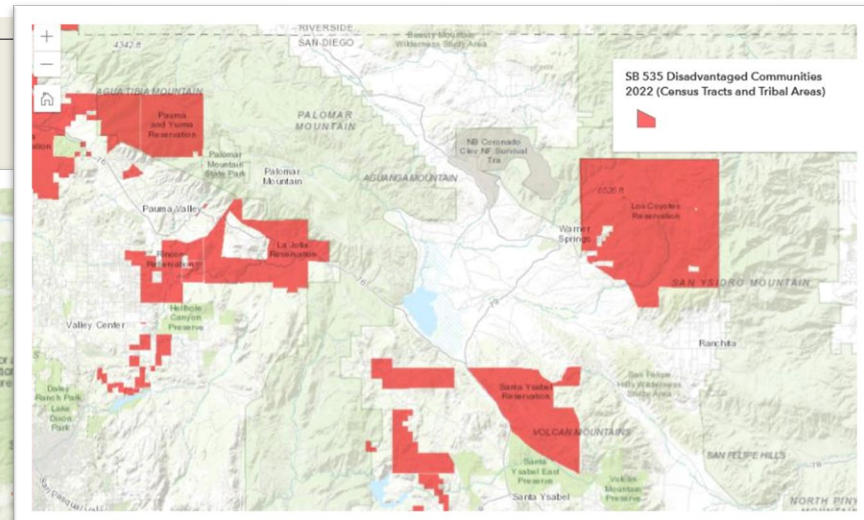
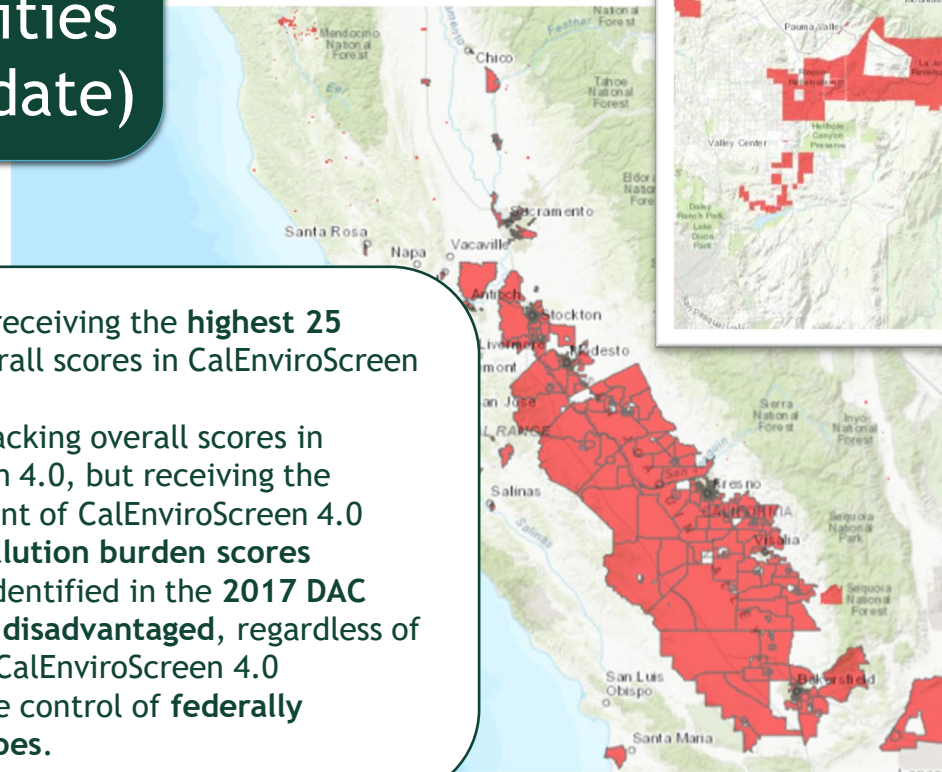


*Designation
made by
CalEPA



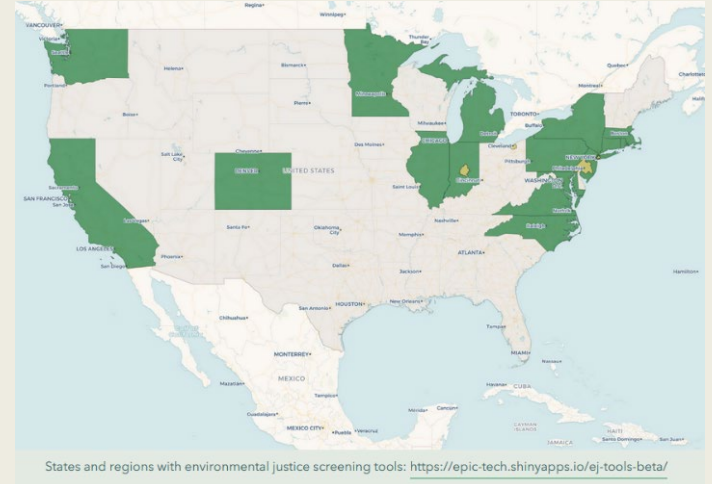
SB 535 Disadvantaged Communities (2022 Update)

- Census tracts receiving the **highest 25 percent** of overall scores in CalEnviroScreen 4.0
- Census tracts lacking overall scores in CalEnviroScreen 4.0, but receiving the highest 5 percent of CalEnviroScreen 4.0 **cumulative pollution burden scores**
- Census tracts identified in the **2017 DAC designation as disadvantaged**, regardless of their scores in CalEnviroScreen 4.0
- Lands under the control of **federally recognized tribes**.



Other Uses of CalEnviroScreen

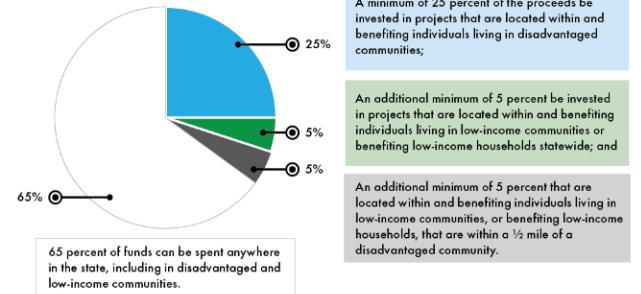
- ❑ As a model for developing EJ tools in the US, other states, local and regional governments
- ❑ As a teaching tool in schools and other settings
- ❑ As a tool to evaluate EJ issues by communities



Different DAC definitions

- California has different legal definitions of 'disadvantaged' communities
- Disadvantaged communities using CalEnviroScreen
 - SB 535 (California Health and Safety Code section 39711)
 - Priority populations are the CalEnviroScreen DACs and AB 1550 communities:
 - Together with AB 15150 communities (9713 of the Health and Safety Code), which are communities with incomes either at or below 80 percent of the statewide median or below a threshold designated as low-income by the Department of Housing and Community Development.
- Disadvantaged communities (Prop 1, Water Code)
 - 80% Statewide Median Household Income
 - <https://gis.water.ca.gov/app/dacs/>

Per SB 535 and AB 1550, California Climate Investments must be allocated, at minimum, as follows:



Demonstration of CES 4.0 and CES Data Dashboard

Relevant Links

- [CalEnviroScreen | OEHHA](#)
- [CalEnviroScreen 4.0 | OEHHA](#)
- Ten Years of CalEnviroScreen Story Map: [CalEnviroScreen 10th Anniversary \(arcgis.com\)](#)
- [SB 535 Disadvantaged Communities | OEHHA \(ca.gov\)](#) page
- CES 4.0 Data Dashboard: [CalEnviroScreen 4.0 Data Dashboard \(arcgis.com\)](#)



Indicator Maps and Data Sources and Explanations

CalEnviroScreen 4.0 Indicator Maps Results Map

Pollution Burden

Overall CalEnviroScreen scores are calculated from the scores for two groups of indicators: Pollution Burden and Population Characteristics.

This map shows the combined Pollution Burden scores, which is made up of indicators from the Exposures and Environmental Effects components of the CalEnviroScreen model. Pollution Burden represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution.

To explore this map, zoom to a location or type an address in the search bar. Click on a census tract to learn more about the indicator data. The indicator maps can be viewed by clicking on the indicators to the left.

A report with detailed description of indicators and methodology and downloadable results is available at the CalEnviroScreen 4.0 website.

Population Characteristics

Ashtma
Cardiovascular Disease
Low Birth Weight
Education
Housing Burden
Linguistic Isolation
Poverty
Unemployment

Exp. HERE, Garmin, USGS, NOAA, EPA, USDA, NPS

**Explore the
CalEnviroScreen 4.0
Indicator Maps**

[CalEnviroScreen 4.0 Indicator Maps \(arcgis.com\)](https://arcgis.com)

[Air Quality: PM2.5 | OEHHA \(ca.gov\)](#)

How to Use the CalEnviroScreen 4.0 Indicator Maps

Select the numbered steps below to learn how to interact with the CalEnviroScreen 4.0 Tool

CalEnviroScreen 4.0 Indicator Maps

Pollution Burden 1

Overall CalEnviroScreen scores are calculated from the scores for two groups of indicators: Pollution Burden and Population Characteristics.

This map shows the combined Pollution Burden scores, which is made up of indicators from the Exposures and Environmental Effects components of the CalEnviroScreen model. Pollution Burden represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution.

To explore this map, zoom to a location or type an address in the search bar. Click on a census tract to learn more about the indicator data. The 12 Pollution Burden indicator maps can be viewed by clicking on the tabs across the top. Click on the Population Characteristics tab at the very top to access the eight Population Characteristics indicators maps.

Population Characteristics 2

Ashtma
Cardiovascular Disease
Low Birth Weight
Education
Housing Burden
Linguistic Isolation
Poverty
Unemployment

Search: 6037141102 3

CalEnviroScreen 4.0 Pollution Burden: 6037141102

Population:	3074
CalEnviroScreen 4.0 Percentile:	48
Ozone:	77
PM 2.5:	64
Diesel PM:	71

Legend: Pollution Burden Percentile 4.0

- > 90 - 100
- > 80 - 90
- > 70 - 80
- > 60 - 70
- > 50 - 60
- > 40 - 50

Powered by Esri

Click outside window to close



Disadvantaged Communities Map

[Click to open this map in a new window](#)



SB 535 Disadvantaged Communities (2022 Update)

CalEPA SB 535 Page

CalEnviroScreen 4.0

About

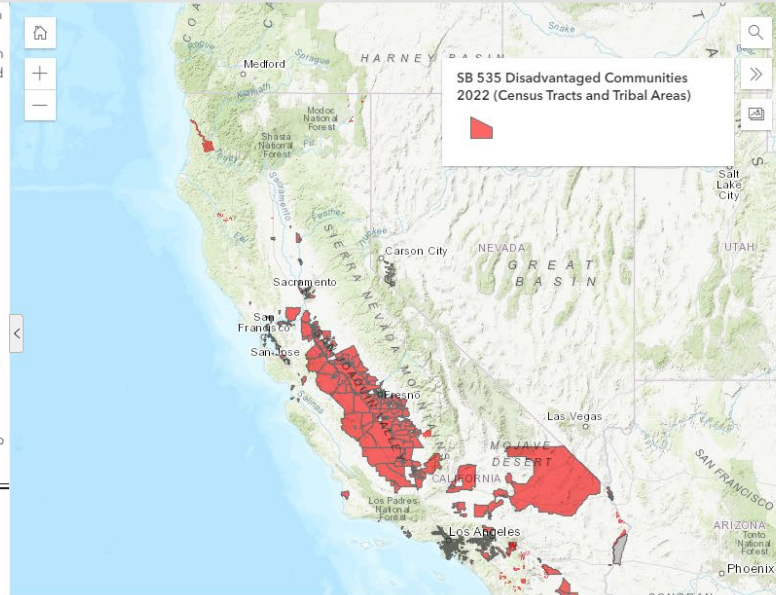
California Climate Investments are funds (Greenhouse Gas Reduction Fund and appropriated by the Legislature) from the proceeds of the State's Cap-and-Trade Program specifically targeted for investment in disadvantaged communities in California. These funds must be used for programs that further reduce emissions of greenhouse gases.

Senate Bill 535 (De León, Statutes of 2012) directed that at least a quarter of the proceeds go to projects that provide a benefit to disadvantaged communities and at least 10 percent of the funds go to projects located within those communities. The legislation gives CalEPA the responsibility for identifying those communities.

How to use this map

- Use your mouse or touchpad to pan around.
- Zoom in/out with a mouse wheel or the +/- icons.
- Search by location or census tract number with the search icon.
- Click on a census tract to view additional information in the pop-up window.
- Dock the pop-up window to the side of the screen by clicking the dock icon.
- Export a map view that includes the legend and popup using the screenshot widget.
- Click the links in the header to view additional resources related to SB 535 Disadvantaged Communities

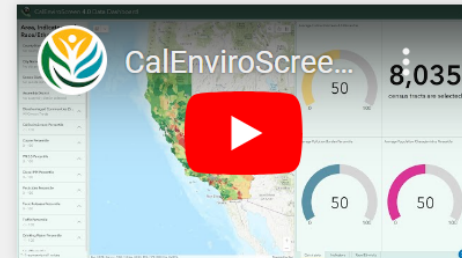
SB 535 Disadvantaged Communities 2022 (Census Tracts and Tribal Areas)



CES 4.0 Data Dashboard:

[CalEnviroScreen 4.0 Data Dashboard \(arcgis.com\)](https://arcgis.com)

Welcome to the CalEnviroScreen 4.0 Data Dashboard



This data dashboard can be used to filter, visualize, and download CalEnviroScreen 4.0 data along with geographic boundaries and demographic information.

For guidance on how to use this data dashboard, *click the images above to view the [Data Dashboard User Guide](#) or the [Data Dashboard How-To Video](#).*

Don't show this again

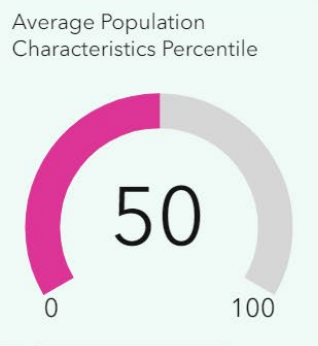
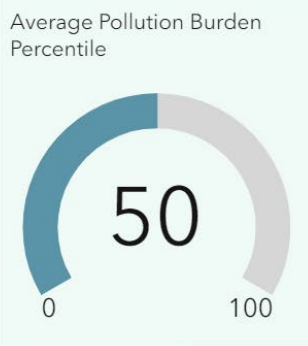
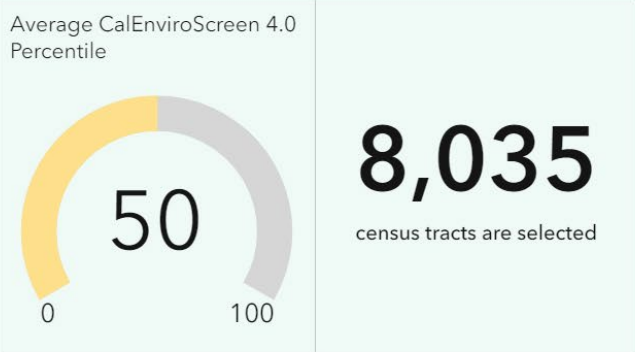
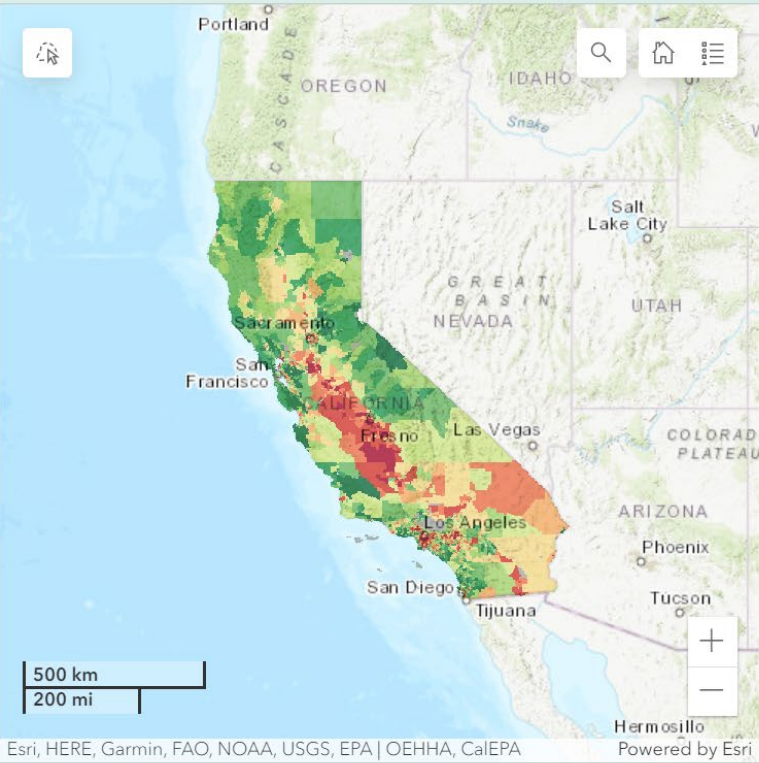
OK

CalEnviroScreen 4.0 Data Dashboard

Area, Indicator, and Race/Ethnicity Filters*

- County Name
No county selected
- City Name
No city selected
- Senate District
No senate district selected
- Assembly District
No assembly district selected
- Disadvantaged Communities (S...
All Census Tracts
- CalEnviroScreen Percentile
1 100

* -1 represents null values
























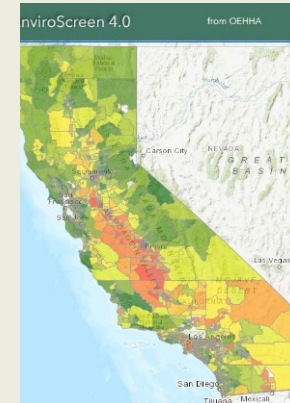
Quick stats Indicators Race/Ethnicity



CES 4.0 Data Dashboard Demonstration

[CalEnviroScreen 4.0 Data Dashboard \(arcgis.com\)](https://arcgis.com)

Pollution Burden		Population Characteristics	
Exposures	Environmental Effects	Sensitive Populations	Socioeconomic Factors
 Ozone  PM2.5  Diesel Particulate Matter  Drinking Water Contaminants  Toxic Releases from Facilities  Traffic  Children's Lead Risk from Housing  Pesticide Use	 Solid Waste Sites and Facilities  Cleanup Sites  Groundwater Threats  Impaired Water Bodies  Hazardous Waste Generators and Facilities	 Asthma  Cardiovascular Disease  Low Birth Weight Infants	 Educational Attainment  Housing Burden  Linguistic Isolation  Poverty  Unemployment



New





Any Questions?

Karen Riveles, PhD MPH

Staff Toxicologist

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(OEHHA), CalEPA**

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Nick Antilla, AGPA, CalEPA

Nicholas.Antilla@calepa.ca.gov



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