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<th>22-IEPR-04</th>
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<td><strong>Project Title:</strong></td>
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<td>Presentation - Pollution and Prejudice</td>
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<tr>
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<td>2. ABC Kevin Olp, Jaimie Huyn, Jennifer McGovern</td>
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<td>Raquel Kravitz</td>
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Pollution and Prejudice

Redlining and Environmental Injustice in California
Kevin Olp, BAAQMD
Jennifer McGovern, SWRCB
Jaimie Huynh, CalEPA
I always ask my mother.

https://twitter.com/LordAshcroft/status/1269639037737938944
THE BEGINNING: POLLUTION AND REDLINING IN STOCKTON
CalEPA’s Commitment to Racial Equity

- **Normalize**
  - A shared analysis and definitions
  - Urgency / prioritize

- **Operationalize**
  - Racial equity tools
  - Data to develop strategies and drive results

- **Organize**
  - Internal infrastructure
  - Partnerships

- **Visualize**
Lack of sovers

Heterogeneous population and improvements. Surrounded by industrial and business areas. Mormon Channel traverses area is infested with subversive racial influences. It has wide, well improved str
eetage and poor maintenance. There is a concentration of Mexican residents in the area, as well as many negroes and Orientals. The best that can be hoped for this area, is that it will develop into a business or industrial section. The area is graded low rod.
CalEPA Racial Equity Team

Storymap released February 1, 2021

Pollution and Prejudice: CalEPA Releases Redlining StoryMap

As part of its commitment to racial equity, CalEPA has released a draft StoryMap highlighting the connection between racist land use practices of the 1930s and environmental injustice, as reflected by CalEnviroScreen scores. Redlining practices systematically included both race and environmental factors as criteria in assessing the credit-worthiness of neighborhoods. Explore the StoryMap: Pollution and Prejudice | Contaminación y Prejuicio (Download English, español) (02/01/21)

Project Team:
- Greg Gearheart, State Water Resources Control Board
- Beti Girma, State Water Resources Control Board
- Jaimie Huynh, CalEPA
- Maraid Jimenez, State Water Resources Control Board
- Charles Lee, USEPA Office of Environmental Justice
- Jennifer McGovern, State Water Resources Control Board
- Kevin Olp, Bay Area Air Quality Management District
- Deldi Reyes, California Air Resources Board
- Amy Schwanhausser, former CalEPA Intern
- Walker Wieland, Office of Environmental Health Hazard Assessment
- Angie Ye, former CalEPA Intern
Background – History

- FDR and The New Deal- 1930s
  - Housing crisis relief
  - Created Home Owners’ Loan Corporation (HOLC)
    - Evaluated mortgage lending risk maps
      - Green - “Best”
      - Blue - “Still Desirable”
      - Yellow - “Declining”
      - Red= “Hazardous”

“...A neighborhood earned a red color if African Americans lived in it, even if it was a solid middle-class neighborhood of single family homes.”

Background – History

1930s “Residential Security” maps of major cities across the country (population >40,000), including 8 in California:

- Fresno
- Los Angeles
- Oakland
- Sacramento
- San Diego
- San Francisco
- San Jose
- Stockton
RESIDENTIAL SECURITY MAP

LEGEND

- A FIRST GRADE
- B SECOND GRADE
- C THIRD GRADE
- D FOURTH GRADE
- SPARSELY BUILT UP
  (COLOR INDICATES GRADE)
- INDUSTRIAL
- COMMERCIAL
- UNDEVELOPED OR FARMLAND
  (NO PROBABLE CHANGE WITHIN 5 YEARS)

PREPARED BY
DIVISION OF RESEARCH AND STATISTICS
FEDERAL HOME LOAN BANK BOARD
WITH THE CO-OPERATION OF THE
APPRaisal DEPARTMENT
HOME OWNERS LOAN CORPORATION
SEPTEMBER 1, 1938
AREA DESCRIPTION - SECURITY MAP OF Sacramento, Cal.

1. AREA CHARACTERISTICS:
   a. Description of Terrain. Level with favorable grade and no construction hazards.

b. Favorable Influences. Convenience to transportation, schools, churches, trading and amusement areas. Nearness to city center. Proximity to centers of commercial and industrial employment.


d. Percentage of land improved 95%; e. Trend of desirability next 10-15 yrs. Declining

2. INHABITANTS: All groups from relief to
   a. Occupation Oriental business and. b. Estimated annual family income $ Relief to professional men & executives $3600
   c. Foreign-born families 75%; Latin and Japanese predominating; d. Negro Yes 10%
   e. Infiltration of Orientals has occurred; f. Relief families Many

2. Population is increasing — decreasing — static Yes
CalEnviroScreen 3.0

**Pollution Burden**
- **Exposures**
  - Ozone
  - PM2.5
  - Diesel PM
  - Pesticide Use
  - Traffic
  - Drinking Water Contaminants
  - Toxic Releases from Facilities

**Population Characteristics**
- **Sensitive Populations**
  - Asthma
  - Cardiovascular Disease
  - Low Birth-Weight Infants

**Environmental Effects**
- Solid Waste Sites and Facilities
- Cleanup Sites
- Groundwater Threats
- Impaired Water Bodies
- Hazardous Waste Generators and Facilities

**Socioeconomic Factors**
- Poverty
- Unemployment
- Educational Attainment
- Linguistic Isolation
- Housing Burdened Low Income Households
CalEnviroScreen 4.0

Top 10% least polluted neighborhoods are 67% white

Top 10% most polluted neighborhoods are 90% people of color

Figure 3. Racial Makeup of Each Decile of the Draft CalEnviroScreen 4.0 Score.
Analysis-Digitized Redlining Maps

Sacramento, CA

Areas by Grade

<table>
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<tr>
<th>Area</th>
<th>Grade</th>
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<tbody>
<tr>
<td>6%</td>
<td>A &quot;Best&quot;</td>
</tr>
<tr>
<td>17%</td>
<td>B &quot;Still Desirable&quot;</td>
</tr>
<tr>
<td>65%</td>
<td>C &quot;Definitely Declining&quot;</td>
</tr>
<tr>
<td>13%</td>
<td>D &quot;Hazardous&quot;</td>
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Demographics

- Total Population (1940): 105,958
- Foreign-born white: 11.5%
- Foreign-born Japanese: 0.9%
- Foreign-born Chinese: 0.5%
Translating CalEnviroScreen Scores to Redline Maps

Zoom To:
- Oakland

CalEPA Regulated Sites:
- Site Selection Options:
  - None

Redlining Data:
- Filter For Sites By HOLC Grade or Location:
  - OFF

Environmental, Public Health, & Socioeconomic Data:
- Select CalEnviroScreen (CES) Parameter:
  - CES 3 Percentile

Filter Sites By Score of Selected CES Parameter:
- 0

NOTE: Use the left side map to pan/zoom, and use the button in the upper right corner of each map to toggle layers on or off (some map layers must be activated in the sidebar on the left first). Tabular data for the selected sites is available to view/download below the maps.
Demo

https://storymaps.arcgis.com/stories/f167b251809c43778a2f9f040f43d2f5
Average CES 3 Score by City and HOLC Grade for Neighborhoods in California Cities Assessed by the HOLC in the 1930s

Black lines represent the average CES 3 Score of all neighborhoods assessed by the HOLC in the given city.

City Average

HOLC Grade
- A (Best)
- B (Desirable)
- C (Declining)
- D (Hazardous)

Note: Higher CES 3 scores indicate greater pollution burden and/or population vulnerability.
Results – Present-Day Demographics

Present-Day Distribution of Racial / Ethnic Group Populations Within Neighborhoods Assessed by the HOLC in the 1930s in California

- **White**
- **Other**
- **Asian American**
- **African American**
- **Native American**
- **Hispanic**

**HOLC Grade**
- A (Best)
- B (Desirable)
- C (Declining)
- D (Hazardous)

**Percent of Population**

Note: Present-day demographic information is from 2010 U.S. Census data.
Where can I find all this information?

**Storymap (ESRI/ArcGIS)** - Pollution and Prejudice: Redlining and Environmental Injustice in California

**Shiny App (R/RStudio)**
Take-Aways and Next Steps

- Combining HOLC maps with CES shows how systemic racism in government policies contributed to the environmental injustices we see today.
- Using a racial equity lens requires the reliance on data-driven approaches.
Breaking the cycle of injustice

Historical injustices led to current inequality
Permeates as implicit bias

Inequality decreases participation
Leads to learned helplessness, individuals have seen they have no control over decisions affecting their health

Lower participation increase cycle of inequality
Pollution manifests in the places of least resistance

Share power, prepare for conflict
Emphasize accountability and transparency

Make environmental justice explicit
Place responsibility for action on equity at the highest level of government

Build meaningful community partnerships
Partner with communities; commit resources and creativity to overcome barriers
proximity to city dump

so strong is the racial threat

uring neighborhood. Whether industry invaded Mexicans encroached upon an industrial district they are inextricably mixed. The district is

Lack of severs (outside city limits).

adjacence to oil wells and industry inharmonious racial elements, rende:

a residential island in a sea of industry.

along the numerous highways are found scattered groups of dwellings which house Mexican and Japanese farm laborers

WHAT DOES THIS HISTORY MEAN FOR YOU?
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