









Safe Space

Space to come together and have deep and meaningful judgement free conversations. Place to feel welcome to ask questions without criticism or judgement.

Respect

Keep in mind that many of us are on individual journeys of understanding and growing and we promise to maintain kindness and respect towards those on this journey. We also promise to be kind to ourselves on this journey.

Growth

Take what we've learned and try to implement it into our daily lives. We strive to create a community and support system for one another.







• Environmental justice is 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.



 Fair treatment means that no population bears a disproportionate share of negative environmental consequences resulting from industrial, municipal, and commercial operations or from the execution of federal, state, and local laws; regulations; and policies.



 Meaningful involvement requires effective access to decision makers for all, and the ability in all communities to make informed decisions and take positive actions to produce environmental justice for themselves.

Traditionally, engineering ethics have been taught only in terms of micro-ethics – the individual ethical decision-making of the engineering professional.



ENGINEERING ETHICS VS ENVIRONMENTAL JUSTICE

However, engineers are more and more expected to be moral agents responsible for helping to develop solutions to societal ethical problems.

Unfortunately, macro ethics problems don't fit neatly into traditional engineering education and the unavoidable fact that there are no concise "right answer" that can be imposed by the individual engineer challenges the typical engineering student.



ENGINEERING ETHICS VS ENVIRONMENTAL JUSTICE

5 million people die each year from diseases caused by unsafe drinking water, lack of sanitation, and insufficient water for hygiene. In fact, over 2 million deaths occur each year from water-related diarrhea alone



SUPERFUND SITE

In the late 1970s, toxic waste dumps such as Love Canal and Valley of the Drums received national attention when the public learned about the risks to human health and the environment posed by contaminated sites.

In response, Congress established the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) in 1980 also informally known as Superfund

When there is no viable responsible party, Superfund gives EPA the funds and authority to clean up contaminated sites.

Superfund's goals are to:

- Protect human health and the environment by cleaning up contaminated sites;
- Make responsible parties pay for cleanup work;
- •Involve communities in the Superfund process; and
- •Return Superfund sites to productive use.





SUPERFUND SITES BUT WAIT....

Toxic waste sites are not dispersed evenly throughout communities. Often, those most at risk of living near them are low-income or racial/ethnic minorities. Over the past few decades, researchers have looked into exactly where these sites are located, and the demographics of neighboring communities.

"We show that the closer you are to a [S]uperfund site the more likely you will find African American families. ...that minority populations are at a significantly greater risk of environmental health issues."

"The more a district is gerrymandered, the less exposure to environmental pollution."

"In answer to 'Which came first?', our findings show that rather than hazardous waste treatment, storage, and disposal facilities [TSDFs] 'attracting' people of color, neighborhoods with already disproportionate and growing concentrations of people of color appear to 'attract' new facility siting."

"We find that the cleanup of Superfund sites listed in the initial phase of the program in the early 1980s suffered from a number of biases against sites located in black, urban neighborhoods but in favor of sites located in areas with a highly educated population."

SUPERFUND SITES BUT WAIT....



"Of the 29.5 percent of Blacks living in South Carolina, 55.9 percent live in Superfund host census tracts."

"The researchers found that the buffer zones around Superfund sites had higher percentages of minorities as compared to the rest of the county. There were not significant differences between Superfund buffer zones and the rest of the county when considering household income and homeownership status."

"Our results support prior research that suggested race, rather than class, was the major indicator of environmental inequality."

This analysis finds that a typical National Priorities List (i.e., Superfund) site in Texas and Lousiana "tends to be located in lower working-class neighborhoods with less knowledge of the political system."



BEAN V. SOUTHWESTERN WASTE MANAGEMENT CORP (1979 -2021)

Nations first lawsuit to challenge environmental discrimination using civil rights law

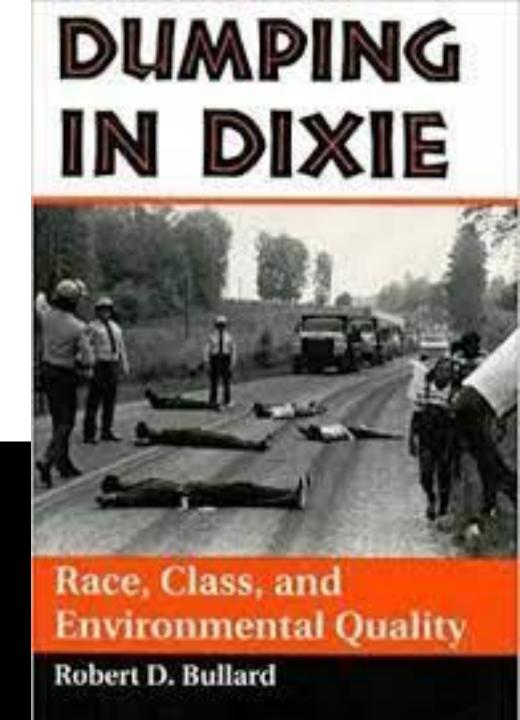






DUMPING IN DIXIE (1990)

The first book to document the connection between waste dumping, pollution, income, and race

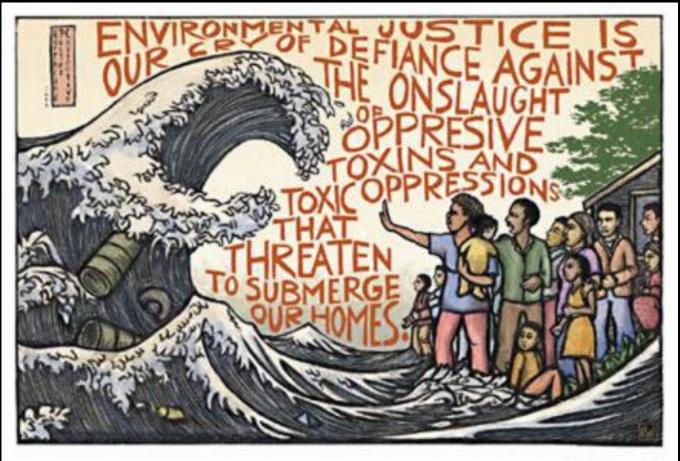


NATIONAL PEOPLE OF COLOR ENVIRONMENTAL LEADERSHIP SUMMIT

The first summit to discuss environmental justice

Adopted 17 principles of environmental justice

Main principle being that people who are being impacted or affected by a decision involving their community should have a say in that decision



"ENVIRONMENTAL RACISM IS A POVERTY THING NOT A RACE ISSUE"

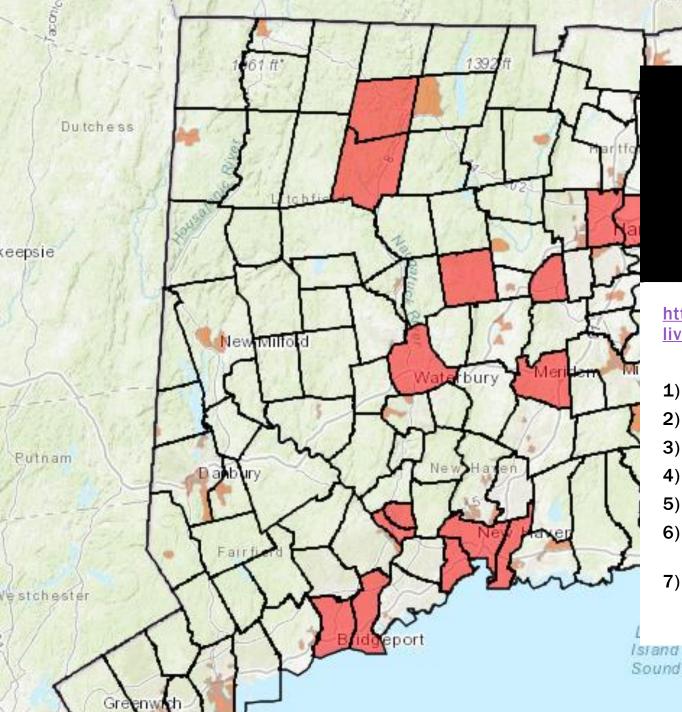
- Unequal Burden of pollution cannot be reduced to a poverty issue
- Black households with incomes considered middle class (50 – 60 K) live in neighborhoods that are more polluted than the average neighborhood in which white households with incomes below 10K live



SUPERFUND ACTIVITY

https://www.epa.gov/superfund/search-superfund-sites-where-you-live

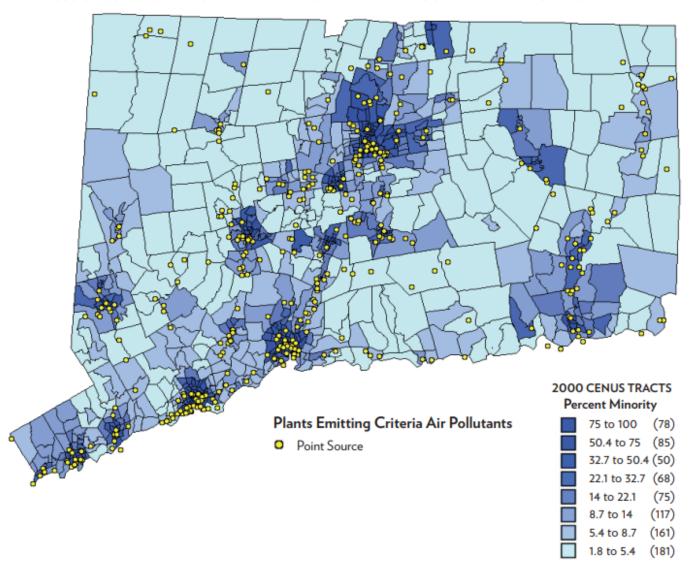
- 1) Go to the link
- 2) Select the state you call "home"
- 3) Scroll to find your "home" city
- 4) Locate the Superfund site in your home town
- 5) Make a map of all the Superfund site(s) in your city
- Work together as a group to make a map of CT using the cities you are from
- Using that map now look up demographics and map that over locations of the superfund sites



Air Pollution in Minority Areas This map shows that pollution sources (yellow dots) are concentrated in minority communities (blue

shading) in Connecticut

2000 CENSUS TRACTS PERCENT MINORITY AND PLANTS EMITTING CRITERIA AIR POLLUTANTS



Biases in Exposure to Pollution in Massachusetts

Study each of the four graphs below. In the space below each graph, write a sentence that summarizes in words what the graph shows.

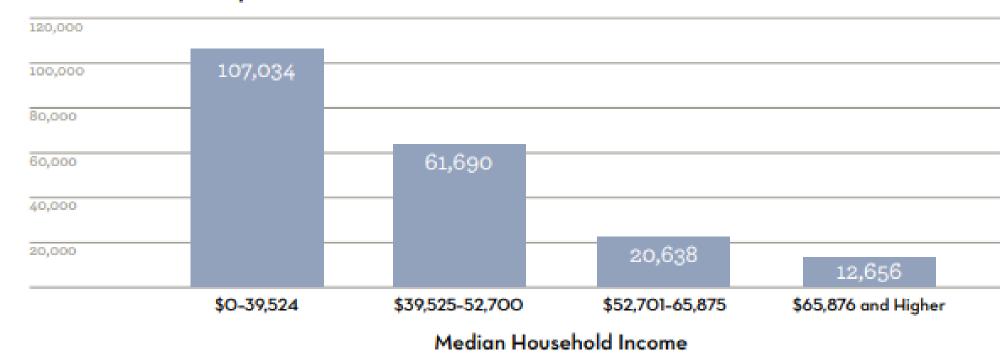
Graph 1: Exposure to Chemical Releases According to Income

Mean Cumulative Industrial

Chemical Releases per

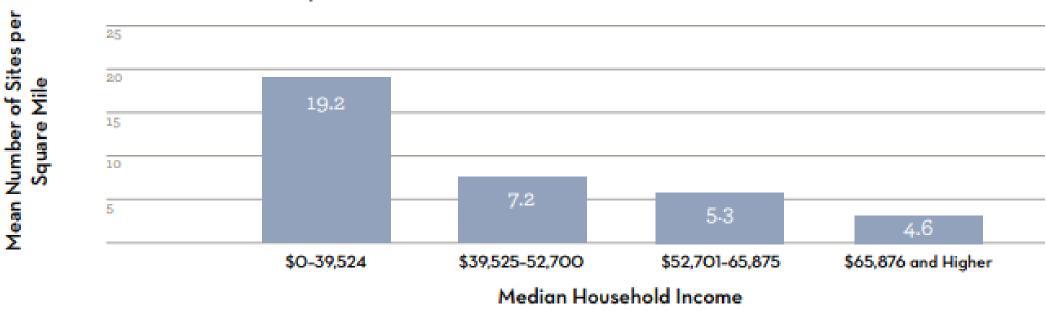
Square Mile (1990-2002)

Class Biases to Exposure from Chemical Releases

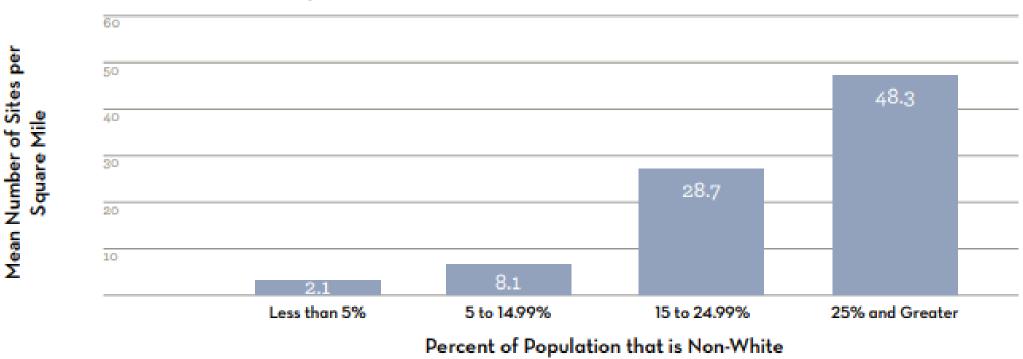


Graph 2: Exposure to Hazardous Waste Sites According to Income

Class Biases to Exposure from Hazardous Waste Sites



Racial Biases to Exposure from Hazardous Waste Sites

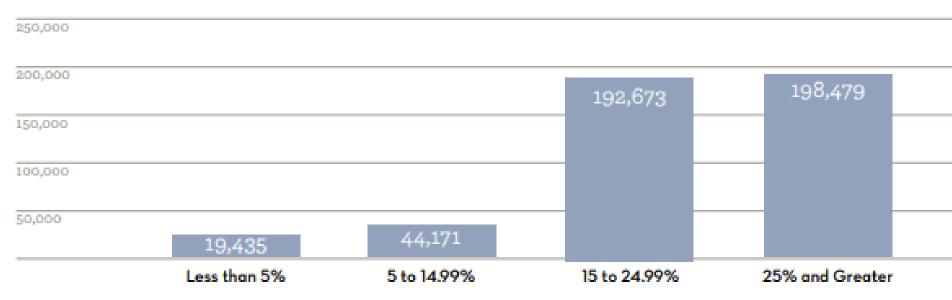


Graph 4: Exposure to Chemical Releases According to Race

Mean Cumulative Industrial

Chemical Releases per Square Mile (1990-2002)

Racial Biases to Exposure from Chemical Releases

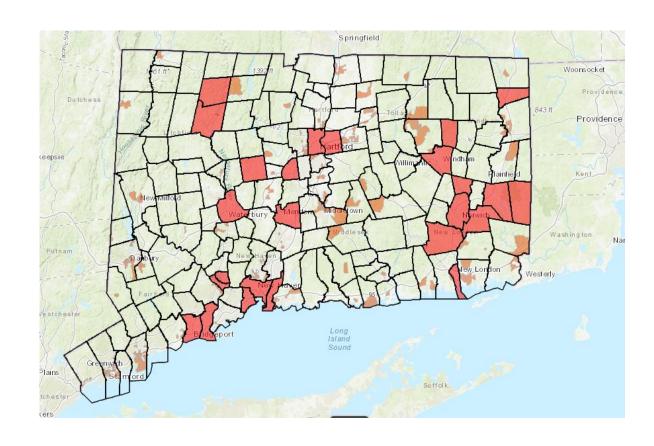


Percent of Population that is Non-White

ENVIRONMENTAL JUSTICE COMMUNITIES

- determined in accordance with the most recent United States census, for which thirty percent or more of the population consists of low income persons who are not institutionalized and have an income below two hundred percent of the federal poverty level, or
- a distressed municipality.

https://portal.ct.gov//media/DEEP/environmental_justice/EJfspdf.pdf



Reflection

- Look at your own community, town, or state.
- What examples of environmental biases do you see?
 - For example, do highways, with their noise and pollution, cut through neighborhoods where people who are poor live?
 - Is there a landfill or a hazardous waste disposal area? Is there a power plant that is noisy and puts smoke into the air?
 - Do people who are members of poor and/or minority communities live near power plants that pollute the air?
- What would a more environmentally just situation look like in your community?

