



INTRODUCTION TO ENVIRONMENTAL JUSTICE

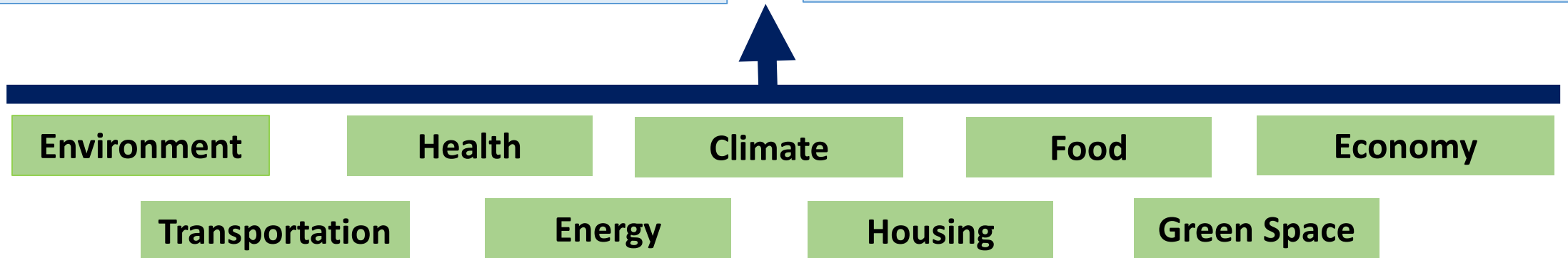
2021 National CWA 303(d) and Data Management
Training Workshop
June 7, 2021

Charles Lee
Senior Policy Advisor for Environmental Justice
U.S. Environmental Protection Agency

Definitions of environmental justice

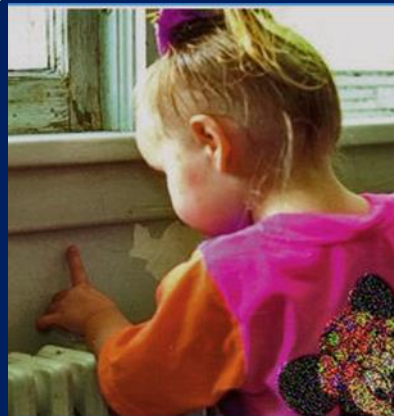
Fair treatment and meaningful involvement of all people, regardless of race, color, national origin or income, in the development, implementation and enforcement of environmental laws, regulations and policies
US EPA

Refers to those cultural norms and values, rules, regulations, behaviors, policies, and decisions to support sustainable communities where people can interact with confidence that the environment is safe, nurturing, and productive
Professor Bunyan Bryant



What does environmental injustice look like?

Hundreds of empirical studies have confirmed that minority, low-income and tribal/indigenous populations are disproportionately located near pollution sources of all types



Environmental Justice's Arc of History

“The arc of the moral universe is long, but it bends toward justice.”
(Martin Luther King, Jr.)



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Warren County, NC (1982)

E 121
PCB PROTESTS
Toxic waste illegally dumped along N.C. roads was moved to landfill 2 mi. E., 1982. Protests sparked environmental justice movement in U.S.



Michael F. Easley
Governor

State of North Carolina
Office of the Governor

For Release: IMMEDIATE Contact: Ernie Senn
Date: August 21, 2003 Phone: 919-733-9642

PCB REYIFICATION AT WARREN COUNTY LANDFILL NEARS COMPLETION

RELEASE: The landfill located in Warren County is home to 100,000 tons of obsolete and discontinued polychlorinated biphenyls (PCBs) dumped illegally in the late 1970s in nearby Woodruff. Crews anticipate completing work by the end of September and being off-site before year's end.

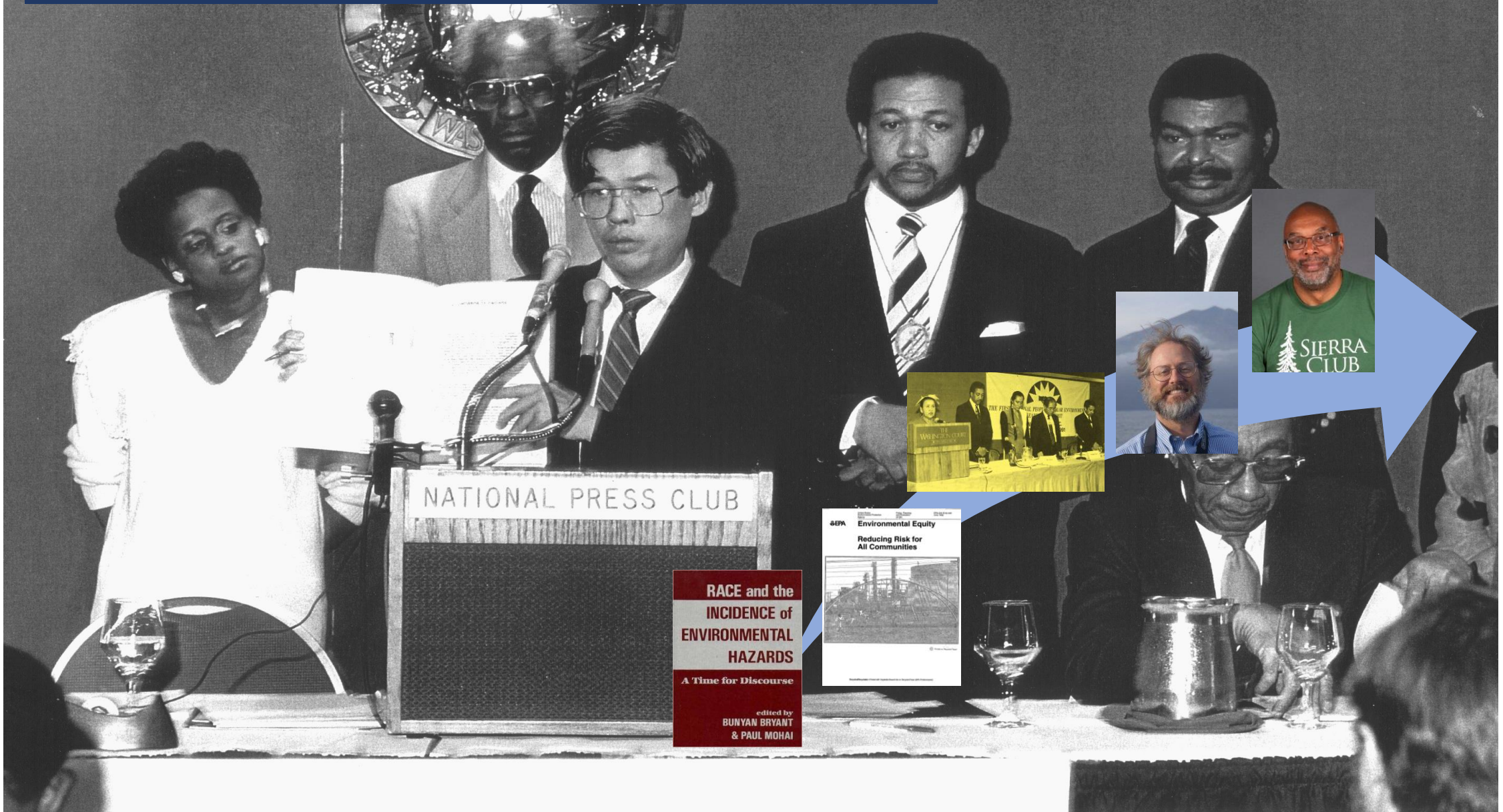
"The landfill's identification is a watershed event for the many people who came together and worked diligently to identify and solve through a solution," said Gov. Mike Easley, who has helped more than 500 families in the project since taking office.



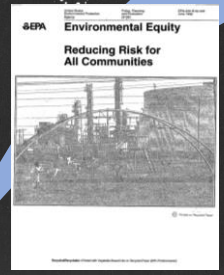
"Environmental justice is the convergence of two great social movements during the latter half of the twentieth century, i.e., civil rights and environmentalism."

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Toxic Wastes and Race (1987)



**RACE and the
INCIDENCE of
ENVIRONMENTAL
HAZARDS**
A Time for Discourse
edited by
BUNYAN BRYANT
& PAUL MOHAI



Executive Order 12898 (1994)



Federal Register / Vol. 86, No. 19 / Monday, February 1, 2021 / Presidential Documents 7619

Presidential Documents

Executive Order 14008 of January 27, 2021

Tackling the Climate Crisis at Home and Abroad

The United States and the world face a profound climate crisis. We have a narrow moment to pursue action at home and abroad in order to avoid the most catastrophic impacts of that crisis and to seize the opportunity that tackling climate change presents. Domestic action must go hand in hand with United States international leadership, aimed at significantly enhancing global action. Together, we must listen to science and meet the moment.

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

E.O. 14008 on Climate Crisis

erally and multilaterally, to put the world on a sustainable climate pathway. The United States will also move quickly to build resilience, both at home and abroad, against the impacts of climate change that are already manifest and will continue to intensify according to current trajectories.

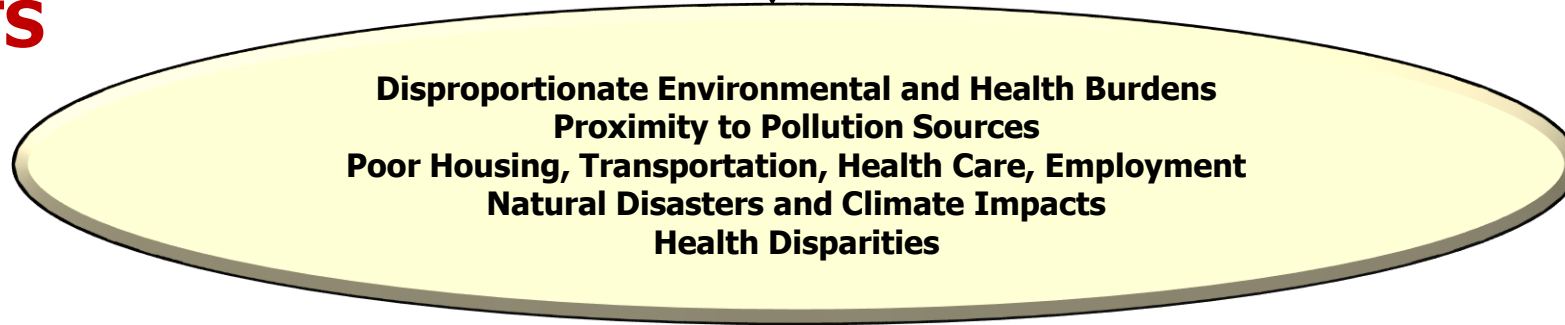
Sec. 102. Purpose. This order builds on and reaffirms actions my Administration has already taken to place the climate crisis at the forefront of this Nation's foreign policy and national security planning, including submitting the United States instrument of acceptance to rejoin the Paris Agreement. In implementing—and building upon—the Paris Agreement's three overarching objectives (a safe global temperature, increased climate resilience, and financial flows aligned with a pathway toward low greenhouse gas emissions and climate-resilient development), the United States will exercise its leadership to promote a significant increase in global climate ambition to meet the climate challenge. In this regard:

(a) I will host an early Leaders' Climate Summit aimed at raising climate ambition and making a positive contribution to the 26th United Nations Climate Change Conference of the Parties (COP26) and beyond.

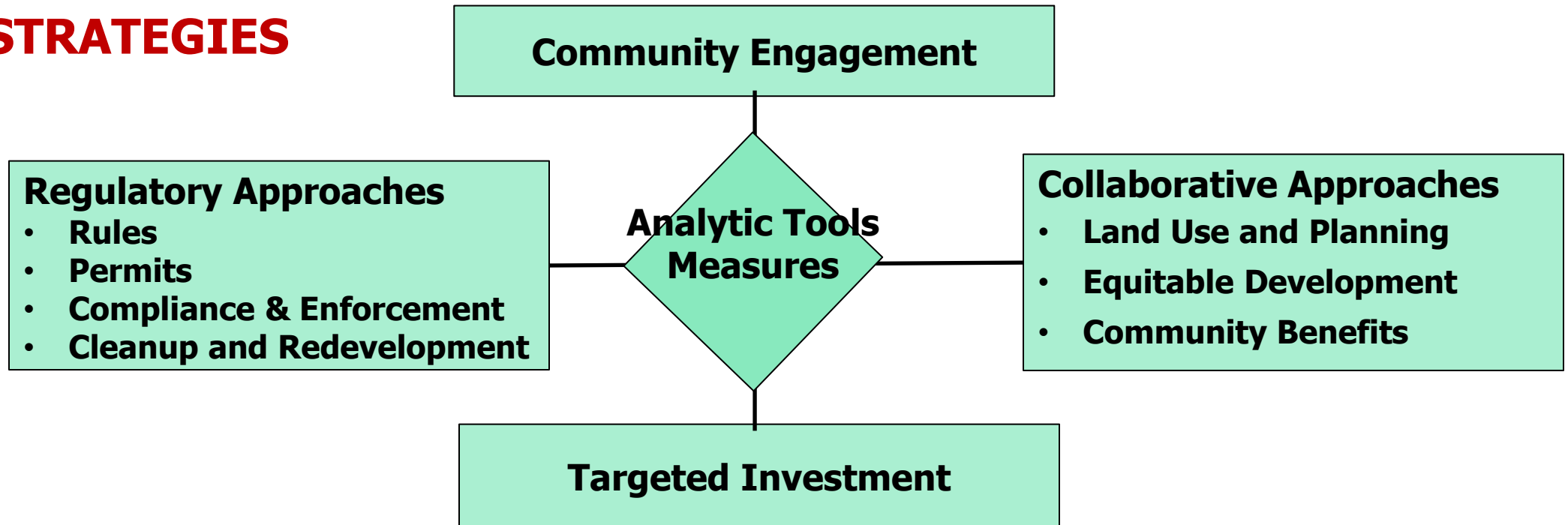
(b) The United States will reconvene the Major Economies Forum on Energy and Climate, beginning with the Leaders' Climate Summit. In cooperation with the members of that Forum, as well as with other partners as appropriate, the United States will pursue green recovery efforts, initiatives to advance the clean energy transition, sectoral decarbonization, and alignment of financial flows with the objectives of the Paris Agreement, including with respect to coal financing, nature-based solutions, and solutions to other climate-related challenges.



IMPACTS



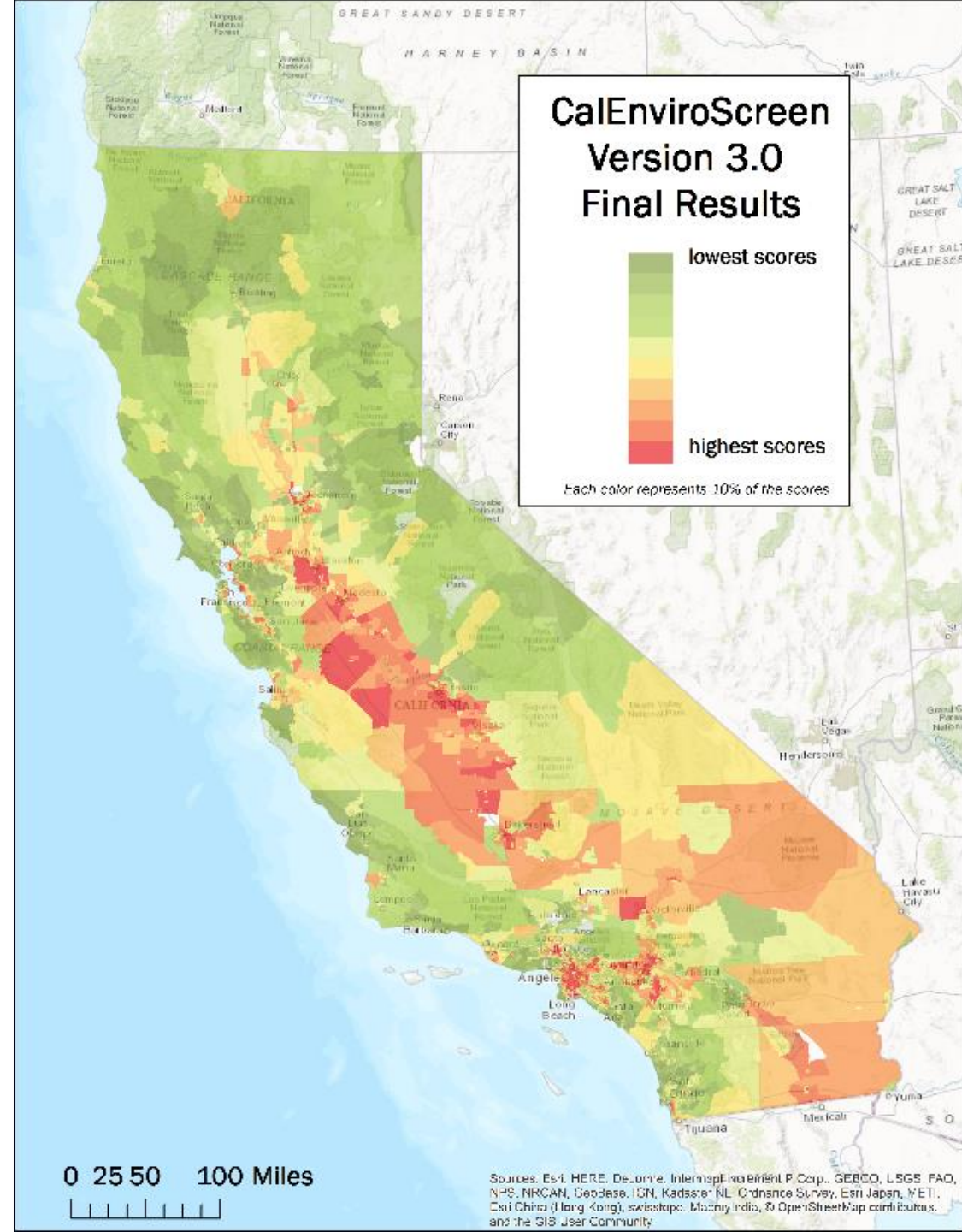
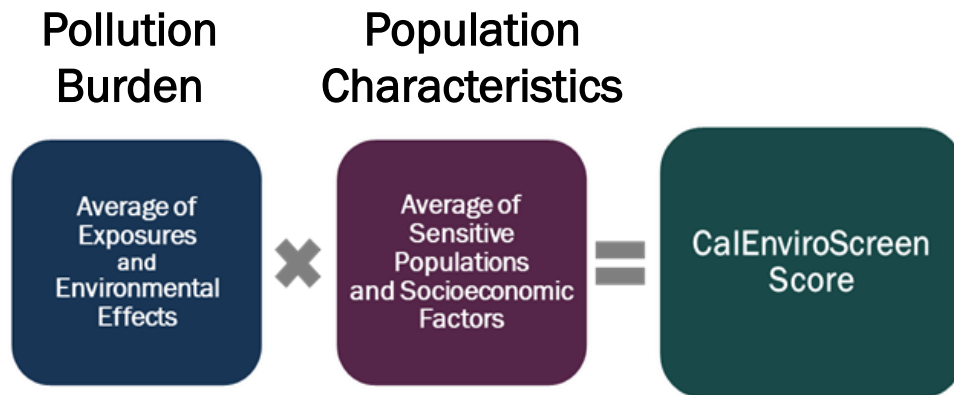
STRATEGIES





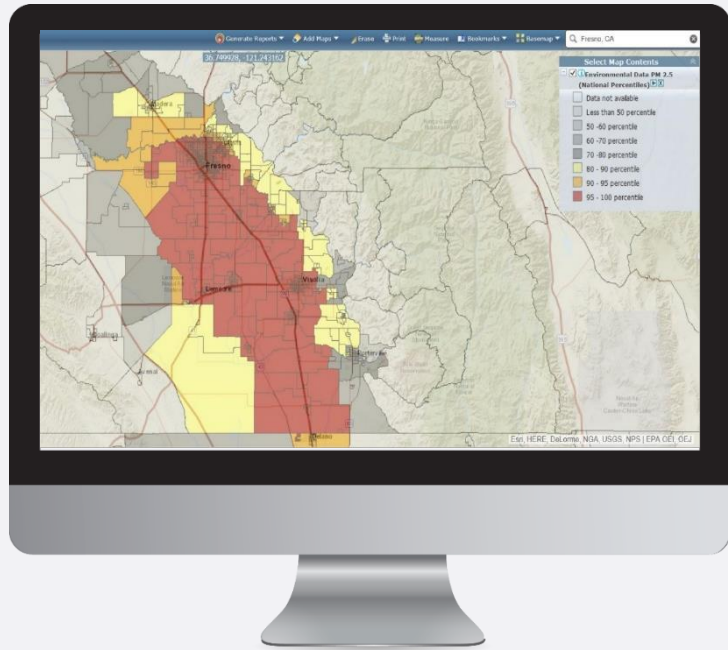
CalEnviroScreen

- Combines pollution burden and population characteristics
- Ranks communities according to combined scores for cumulative impacts
- Informed by significant and ongoing public input



[Available as an interactive web map](#)

EJSCREEN



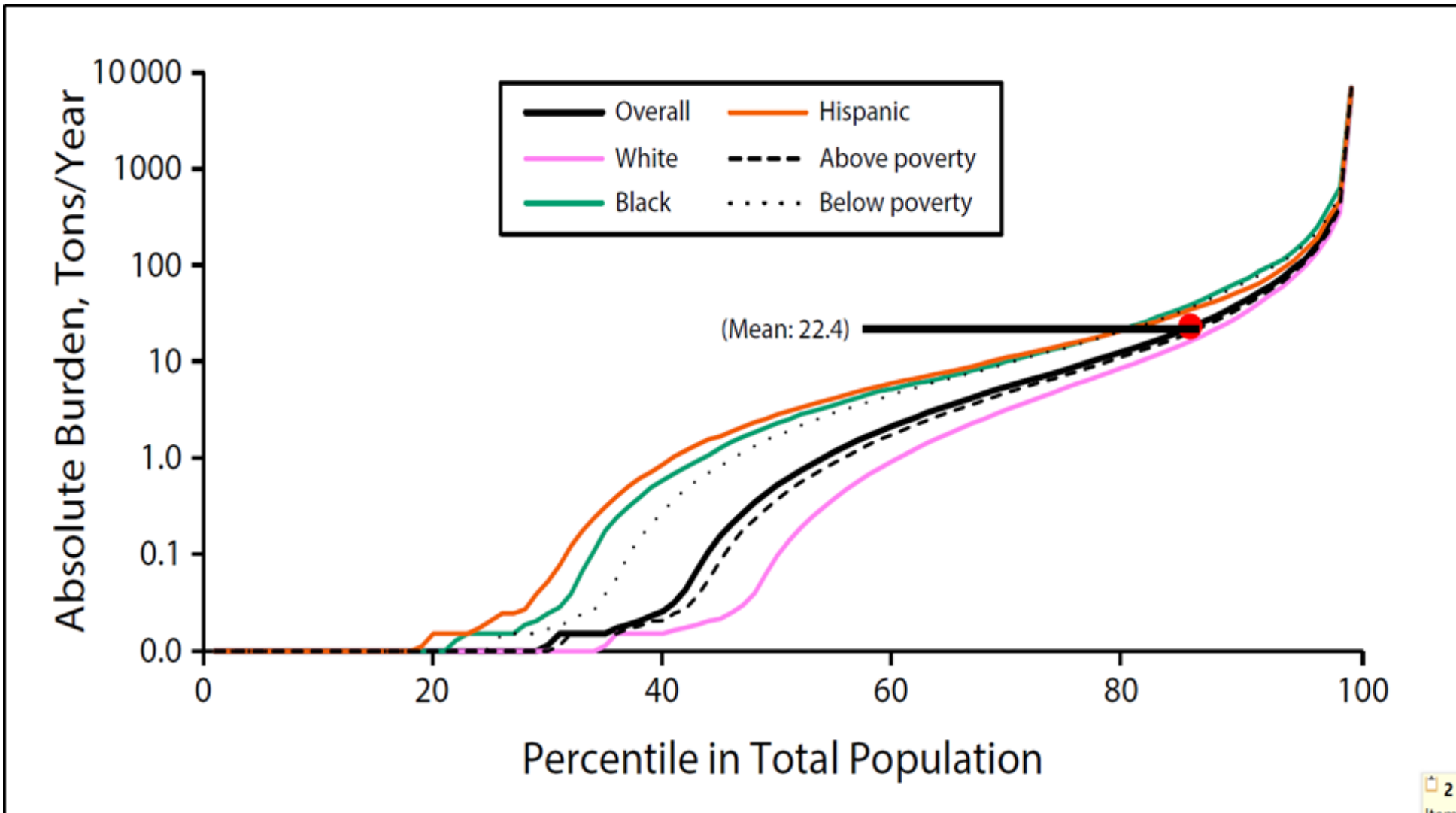
Environmental Indicators

- PM 2.5
- Ozone
- NATA Diesel PM
- NATA Air Toxics Cancer Risk
- NATA Respiratory Hazard Index
- Lead Paint (pre-1960s Housing)
- Traffic Proximity
- Proximity-NPL Sites
- Proximity-RMP Facilities
- Proximity-TSD Facilities
- Proximity-Waste Water Dischargers

Demographic Indicators

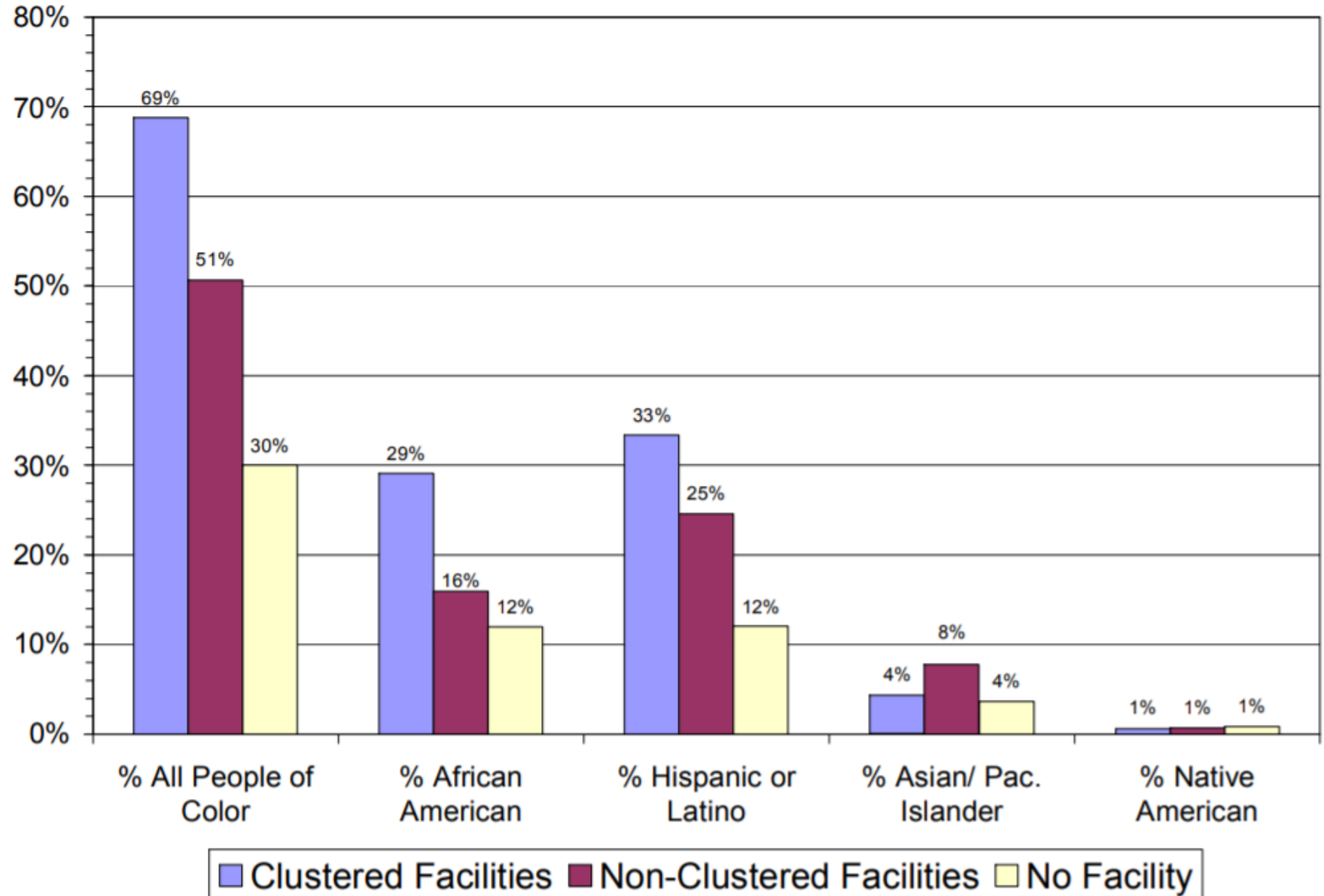
- Low-Income
 - Minority
 - Less than High School Education
 - Linguistic Isolation
 - Individuals under Age 5
 - Individuals over Age 64
- Index:** Calculated as (Low income + minority) / 2

Air Pollution: PM Disparities from Stationary Sources (2018)



Toxic Wastes and Race at Twenty (2017)

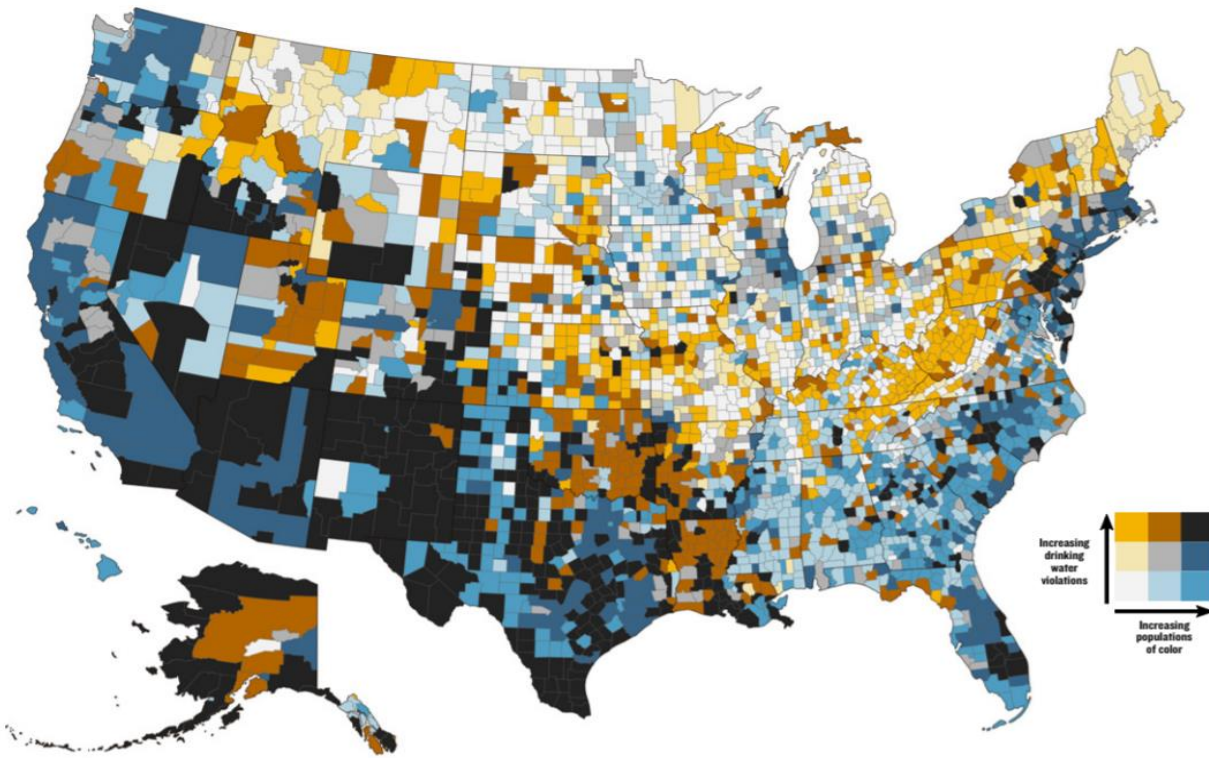
Figure 4.1 – People of Color Percentages in Neighborhoods with Clustered Facilities, Non-Clustered Facilities and No Facility



Disproportionate Impacts and Water: Empirical Evidence

INTERSECTION OF HEALTH-BASED DRINKING WATER VIOLATIONS AND RACIAL, ETHNIC, AND LANGUAGE VULNERABILITY

ACCORDING TO COUNTY, JUNE 1, 2016 TO MAY 31, 2019.

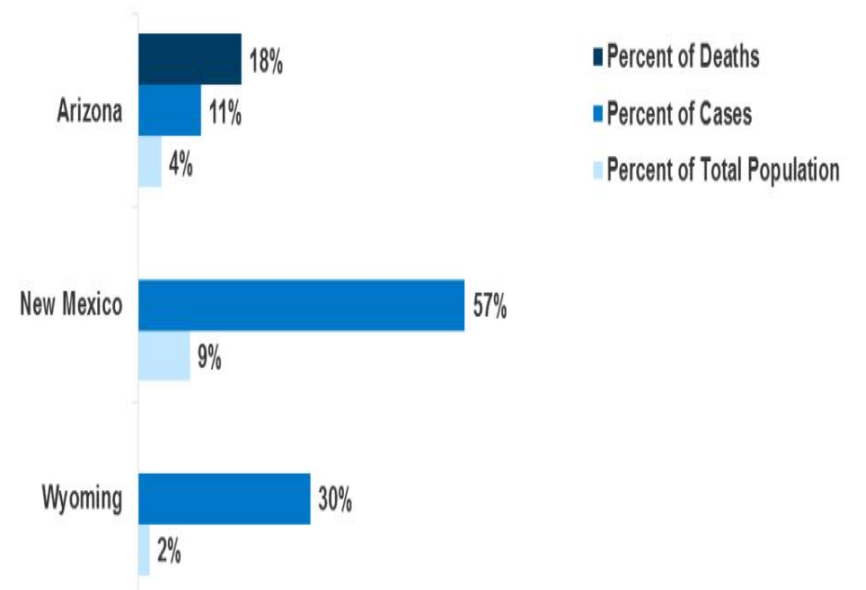


Counties are shaded by the intersections of increasing rate of health-based drinking water violations and increasing racial, ethnic, and language vulnerability, Demographic data from the 2016 CDC Social Vulnerability Index.

Watered Down Justice (NRCDC, 2018)

Data Point to Stark Impacts of COVID-19 for American Indian and Alaska Native People in Some States

American Indians and Alaska Natives as a Share of Confirmed Coronavirus Cases, Deaths, and Total Population in Select States, as of May 11, 2020



SOURCE: KFF, "COVID-19: Confirmed Cases & Deaths by Race/Ethnicity as of May 11, 2020", <https://www.kff.org/coronavirus-covid-19/issue-brief/state-data-and-policy-actions-to-address-coronavirus/>

COVID-19 and Indigenous People

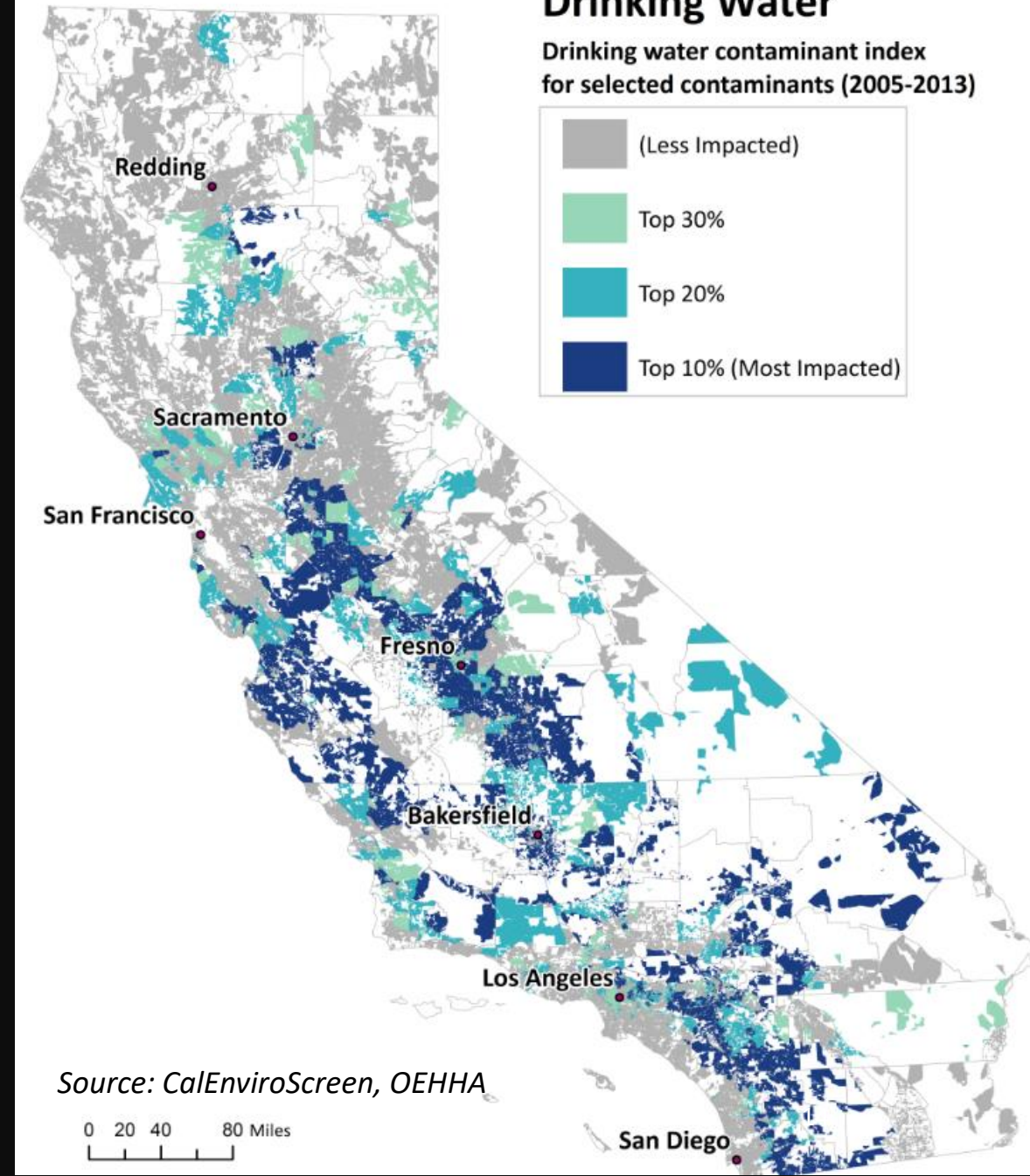
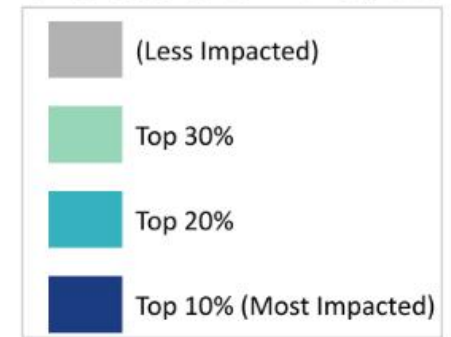
California's Human Right to Water

- Small water systems impacted by contaminants like nitrate and arsenic
 - Disproportionate impacts in small, low-income communities and communities of color
 - Systems with aging infrastructure, unreliable supplies, and unaffordable water rates
-

Most impacted areas in California

Drinking Water

Drinking water contaminant index for selected contaminants (2005-2013)



Source: CalEnviroScreen, OEHHA

0 20 40 80 Miles

WATER ADEQUACY

Water Quality

Exposure



Potential high exposure

How many contaminants' annual average concentration exceeded the MCL?



Presence of acute contaminants

Are the above contaminants associated with health effects from short term exposure? (nitrate, perchlorate, fecal/E. coli)



Maximum duration of potential high exposure

How long did potential high exposure last?



Data availability

Was water quality data available?

Compliance



Non-compliance with primary drinking standards

How many contaminants received at least one MCL violation in study period?



Presence of acute contaminants

Are the above contaminants associated with health effects from short term exposure? (nitrate, perchlorate, fecal/E. coli)



Maximum duration of non-compliance

How long did non-compliance last?

Water Accessibility

Physical Vulnerability



Physical vulnerability to water outages

What is the source type and how many sources?

Institutional Vulnerability



Institutional constraints

What is the size and disadvantaged community (DAC) status?



Managerial constraints

How many monitoring and reporting violations?

Water Affordability

Affordability



Affordability ratio at the median household income level



Affordability ratio at the county poverty threshold level



Affordability ratio at the deep poverty threshold level

California's Human Right to Water Assessment Tool

- **13 indicators**
- **Unit of analysis:** Community Water System
- **Time period:** 2008-2016
- **Statewide application**



OEHHA
California Office of Environmental
Health Hazard Assessment

Agencies shall make achieving environmental justice part of their missions by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts

**E.O. 13985:
Advancing Racial
Equity and Support**

**E.O. 13990: Protecting
Public Health and the
Environment and
Restoring Science to
Tackle the Climate Crisis**

**E.O. 14008:
Tackling the
Climate Crisis at
Home and Abroad**

**Presidential
Memorandum:
Modernizing
Regulatory Review**



Anna Moneymaker-Pool/Getty Images-CAP

**PRESIDENTIAL EXECUTIVE
ORDERS AND MEMORANDA (2021)**