# Environmental Justice: Race, Poverty, and the Environment

Exploring environmental justice issues impacting Washington State communities and possible solutions

**Edmund Seto** 

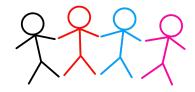
March 23, 2021



# Cumulative Environmental Health Impacts



Environmental Hazards, Emissions, Contamination, and Exposures



Health Impacts on Individuals and Communities



# Cumulative Environmental Health Impacts





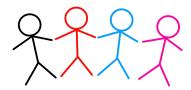








Environmental Hazards, Emissions, Contamination, and Exposures



Health Impacts on Individuals and Communities



# **Cumulative Environmental Health**

## Impacts















- Do these disproportionately impact certain groups?
- How vulnerable/resilient is the population?
- Do environmental policies and regulations offer protection?
- Can we mitigate these impacts?
- What was the history for why there's a source of pollution?
  - Environmental Hazards, Emissions, Contamination, and Exposures

Health Impacts on Individuals and Communities



# Partnerships, Inspirations, and Goals

- > Cumulative Impact Assessment
- > US EPA EJ Screen
- > CalEPA OEHHA CalEnviroScreen
- > Creating a policy-relevant tool
- > Avoiding stigma, but moving towards data transparency and collective action
- > Statewide interactive mapping tool of environmental health determinants at the census tract level
- > Grassroots, bottom-up driven to better reflect the lived experience of our communities



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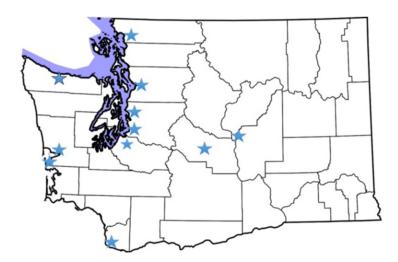






## A Community-Engaged Approach

- > Esther Min, PhD student, UW DEOHS
- > 11 community listening sessions in different parts of the state





### Front and Centered

2017 Community Listening Sessions:

Pollution, Climate Change, and the Puget Sound



## **Listening Sessions**

- > Involved Front & Centered Partnering Organizations
- > Multi-cultural/lingual conversations about pollution, climate change, sensitivity, and resilience.

What kinds of pollution, if any, are impacting your life or work and that of your family and community?

What factors best show if your community is healthy or doing well compared to other communities?

Organization	Date	Location	Participant Information	Participant Count	Language	Issues
OneAmerica	7/31/2017	Vancouver	Latinx from Fruit Valley and surround- ing neighbor- hoods	20	Spanish/ English	Pollution, Climate, Puget Sound
Chaplains on the Harbor	8/15/2017 8/20/2017	Westport & Aberdeen	Homeless, Incarcerated, Native, Latinx, from Grays Harbor County	9	English	Pollution, Climate, Puget Sound
Community to Community	8/17/2017	Bellingham	Farm Work- ers, Latinix, Youth from Whatcom and Skagit County.	15	Spanish	Pollution, Climate, Puget Sound
Latino Commu- nity Fund	8/18/2017	Ellensburg	Latinx youth, from central Washington	29	Spanish/ English	Pollution, Climate, Puget Sound
Entre Her- manos	8/23/2017	Seattle	Latinx from Seattle metropolitan area	12	Spanish	Pollution, Climate, Puget Sound
Na'ah Illahee Fund	8/25/2017 9/7/2017	Port Angeles & Yakima	Native, from Peninsula, central and eastern Wash- ington	7	Various/ English	Pollution, Climate, Puget Sound
Mother Africa	8/25/2017	Kent	North African / Arab from south King County	12	Arabic/ English	Pollution, Climate
NAACP Sno- homish	9/9/2017	Everett	African Amer- ican, various from Snohom- ish County	10	English	Pollution, Climate
Asian Pacific Cultural Center	11/13/2017	Pierce Coun- ty	Asian Pacifica Islanders from Pierce County	44	Korean/ English	Pollution, Climate, Puget Sound

#### THE 18 INDICATORS

Environmental exposures

Diesel emissions Ozone

Particulate matter 2.5 (PM2.5)

Toxic releases from facilities

Traffic density

Environmental effects

Lead risk and exposure

Proximity to hazardous waste generators and facilities

Proximity to Superfund sites

Proximity to facilities with highly toxic substances

Wastewater discharge

Sensitive populations

Cardiovascular disease

Low birth weight infants

Socioeconomic factors

Low educational attainment

Housing burden

Transportation cost

Linguistic isolation

Poverty

Race (people of color)

Unemployment

### Washington Tracking Network

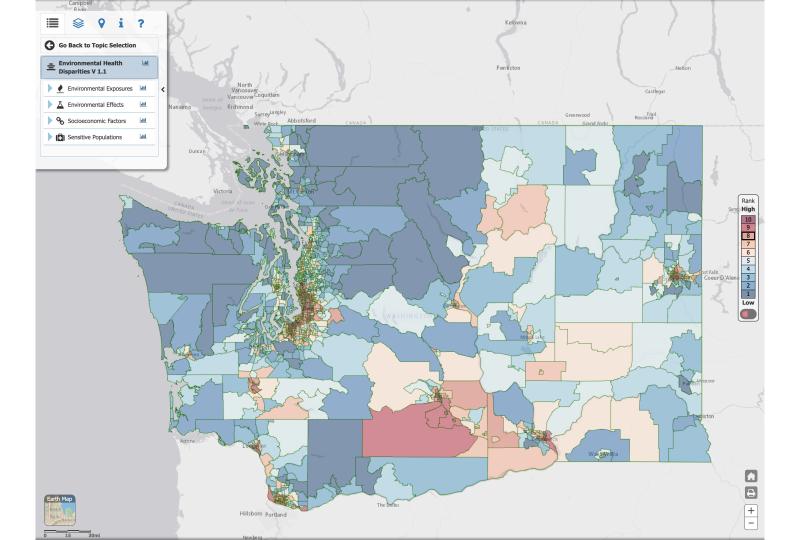
<b>W</b> Health			Topics A-Z	Home   Newsroon Español Google Custom	n   Publications   About Us Search
You and Your	Community and	Licenses, Permits	Data and Statistical	Emergencies	For Public Health and
Family	Environment	and Certificates	Reports		Healthcare Providers

# Data and Statistical Reports > Environmental Health > Washington Tracking Network (WTN)

Washington Tracking Network (WTN)	Washington Tracking Network (WTN) Welcome to WTN, your source for environmental and public health data.				
Air Quality					
Asthma	Search WTN Data Sort, export, chart and map data for environmental and public health measures. Search data now				
Biomonitoring	Solt, export, chart and map data to environmental and public realist measures. Search data now				
Birth Outcomes					
Body Mass Index	Information by Location (IBL)				
Cancer	Explore community rankings for topics such as health disparities (differences) and lead exposure risk. View Information by Location tool now.				
Carbon Monoxide					
Climate Change					
Community Characteristics	WTN Dashboards				
Drinking Water	View WTN data in a new way. Like our current tools, these <u>dashboards</u> have maps, charts and graphs. You can see these features in the same view.				
Heart Attack					
Heat Stress	WTN On The Go Use your phone or tablet to view our new tool for environmental health topics, such as radon.				
Information by Location	Touch the maps to see data for your community.				

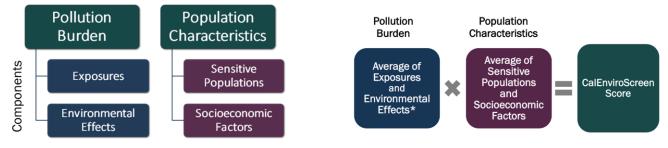
#### Find it at:

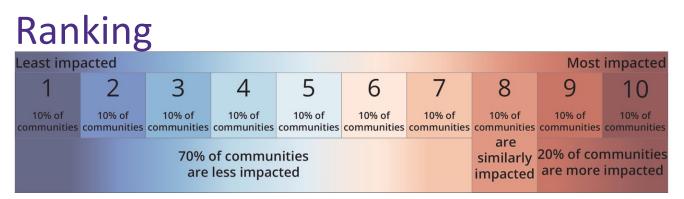
#### https://fortress.wa.gov/doh/wtn/WTNIBL/



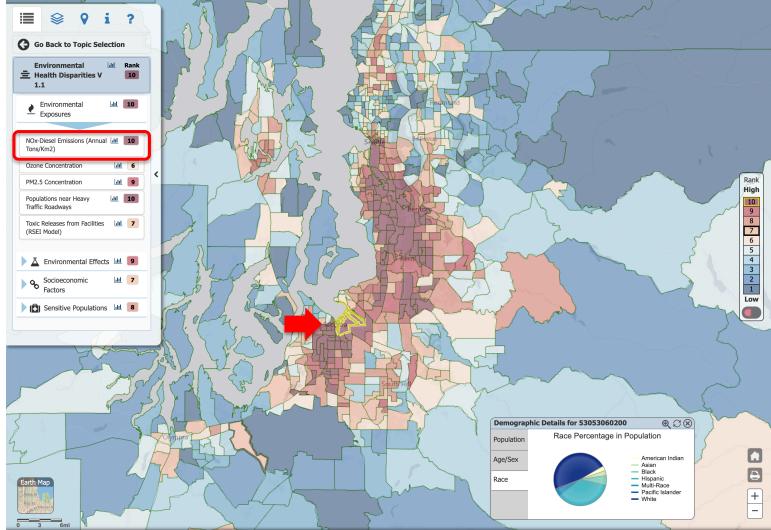
### **Cumulative Impacts Approach**

• Similar to CalEnviroScreen, the WA Environmental Health Disparities Map uses a cumulative impacts approach:

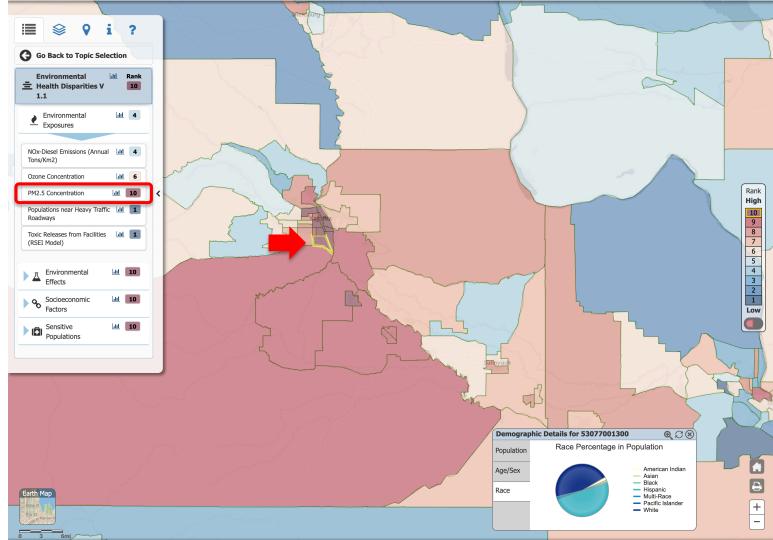




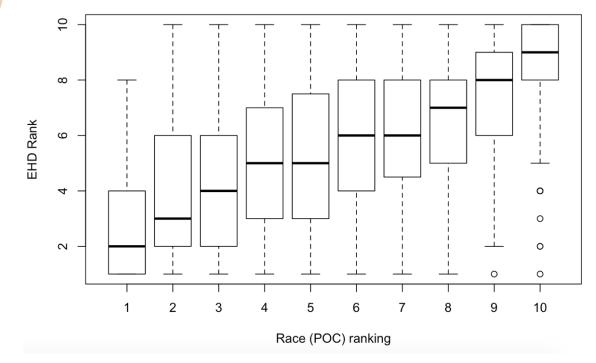
### A census tract in Tacoma



#### A census tract in Yakima County



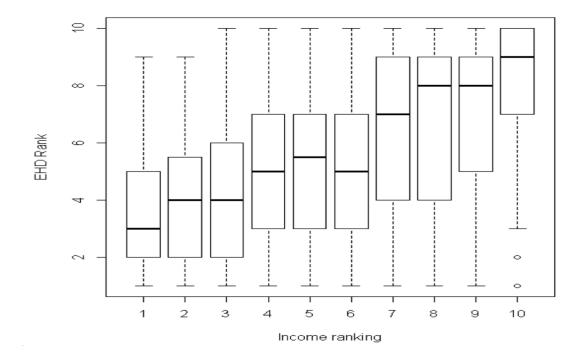
# WA Environmental Health Disparities Impact on People of Color (POC)



W

Min et al., Int. J. Environ. Res. Public Health 2019, 16(22), 4470;

# WA Environmental Health Disparities Impact on Low Income Populations





Min et al., Int. J. Environ. Res. Public Health 2019, 16(22), 4470;



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