

Frontiers of research and action  
on environmental justice amidst  
growing urgency of  
transformative environmental  
policy

Dr. Ann Wolverton

U.S. Environmental Protection Agency

OECD Environmental Justice Conference

28 - 29 May 2024

# What can be done better to tackle persisting and emerging environmental justice issues?

- Raise awareness of environmental justice concerns and create familiarity with their relevance in a wide array of contexts
- Build on success of the OECD report and this workshop to foster further cross-country learning
- Identify ways to meaningfully engage and build trust with vulnerable communities

As the scale and urgency of environmental policy grows, how can countries promote equitable processes and outcomes?

- Routinely conduct prospective analysis of possible impacts of national policies and programs on vulnerable communities
- Meaningfully involve vulnerable communities early and often to inform policy design and analysis
- Routinely conduct retrospective analyses of policies and programs to more fully understand how government efforts have affected these outcomes of interest

# What are the key equity considerations of environmental policy for the labour market and households?

- As in other countries, the United States seeks to advance environmental justice by reducing disparities in health and environmental risks
- While environmental justice is not typically described in terms of costs and benefits, household burden and program access are increasingly relevant
- Link household and worker exposure profiles to better understand the cumulative implications of multiple exposures across the places where individuals spend their time

# Example: Disparities in ubiquitous chemical exposure

- Well documented disparities in exposure to certain chemicals in the home and workplace
- Those highly exposed to one type of chemical tend to be highly exposed to other ubiquitous chemicals
- Exposure has been linked to higher incidence of pre-term births, gestational diabetes and hypertension, and cancer
- Exposure disparities driven in part by differences in product use, behavior, occupation, and housing across socioeconomic groups
- Lack of information on who uses these products and how

Image Source: NIH.



# What are the frontiers for economic and policy research to support this agenda?

- Understanding barriers that inhibit access, or adaptation and avoidance behaviors
- Understanding and addressing cumulative impacts
- Navigating the tension between local concerns and national goals
- Leveraging novel data sources and methods

# Example: Replacing leaded drinking water service lines

Possible barriers to household participation:

- Cost
- Legal/access due to split ownership of line between local government and homeowner
- Landlord/tenant incentives
- Mistrust of local institutions
- Language/communication issues
- Scheduling constraints/limited time
- Inconvenience of construction in home/yard





## Case study:

### Lead pipe inspection & replacement program in Trenton, New Jersey, 2020-2022

#### Two program evaluations:

- Field experiment
- Quasi-experiment
- Owner-occupied and higher valued properties were more likely to participate in the lead service line program
- Providing information on fully subsidized replacement was not enough
  - Neighborhood outreach
  - Reducing inconvenience cost of the application process



# What can be done better to tackle persisting and emerging environmental justice issues?

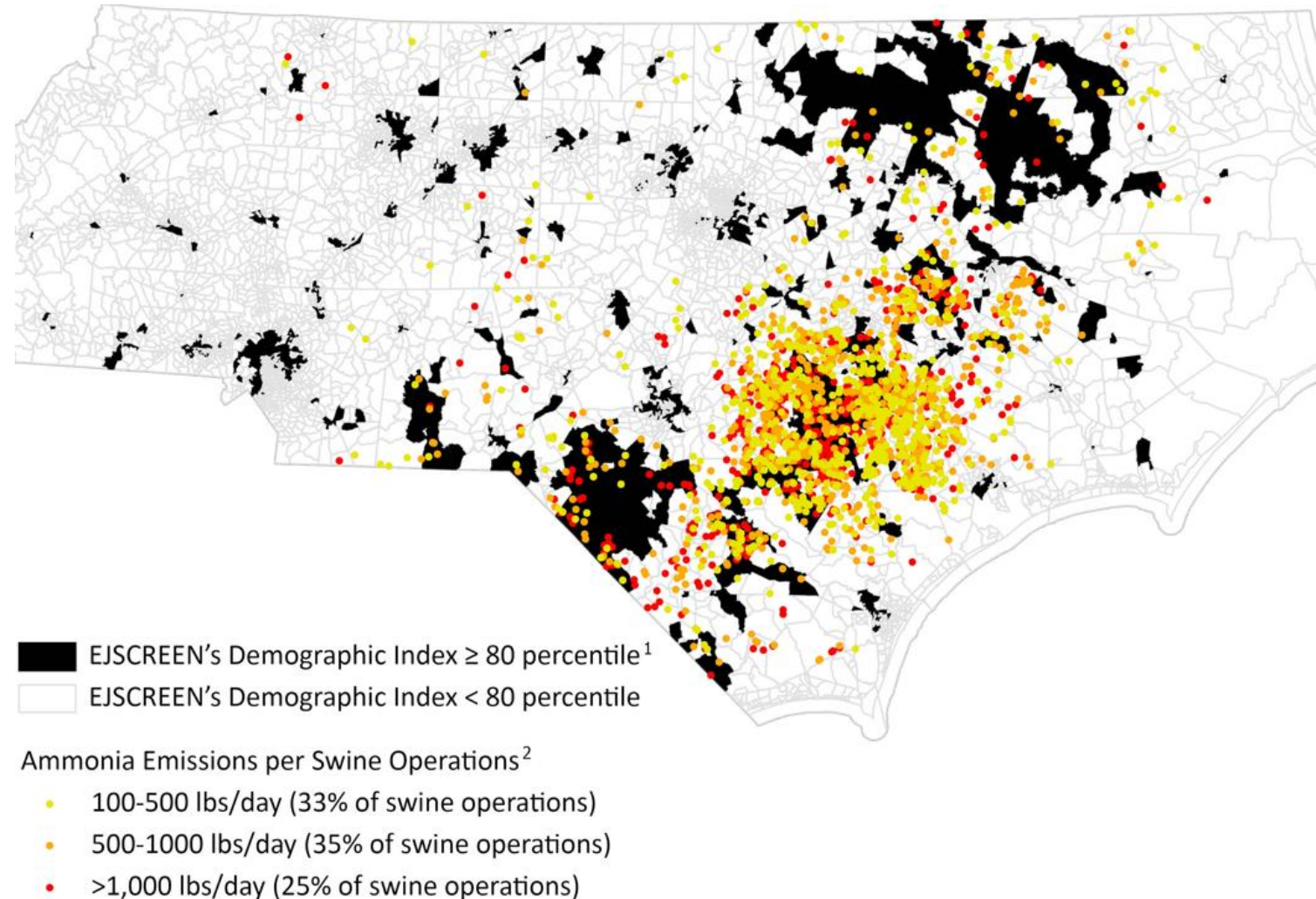
- Possible next steps for OECD environmental justice work:
  - Assemble repository of links to tools, studies, and datasets useful across multiple country contexts
  - Invest in harmonizing/cleaning/processing relevant environmental, socioeconomic and/or demographic data across multiple countries
  - Evaluate approaches that have (or have not) worked to improve access to environmental programs and benefits

Thank you!

# Additional slides

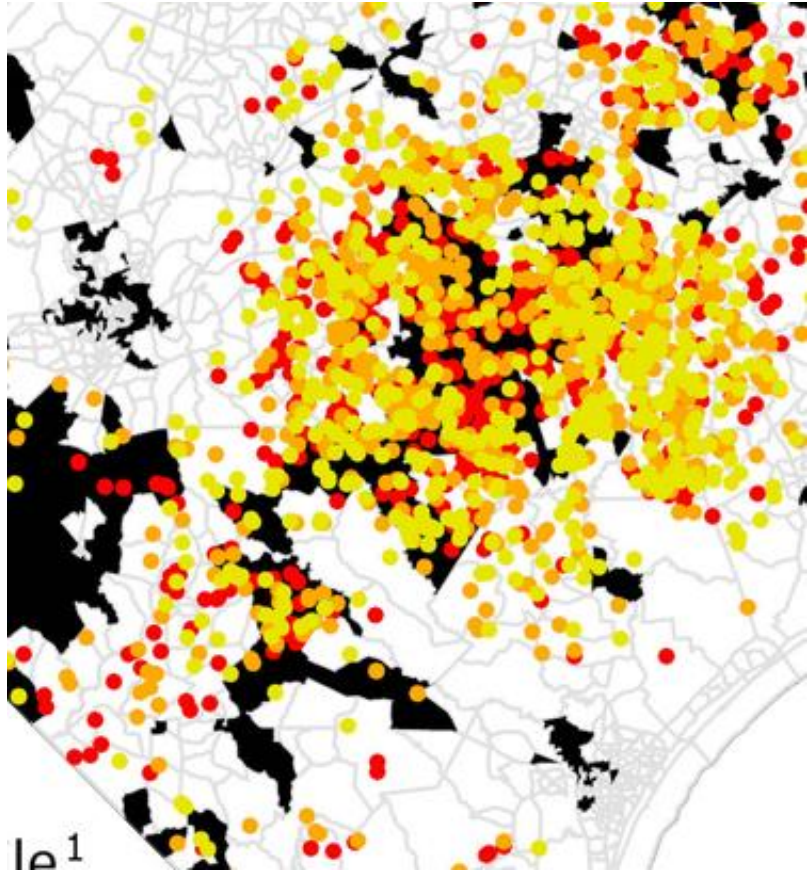
## Example: Reporting Requirements for Animal Feeding Operation Air Emissions

- When deciding on whether to change the reporting threshold for large animal feeding operations emitting ammonia, might consider:
  - How to balance value of information to the public with reporting burden
  - Importance of clustering of operations; individually one animal feeding operation may be emitting small quantities, but collectively a community may be near many operations

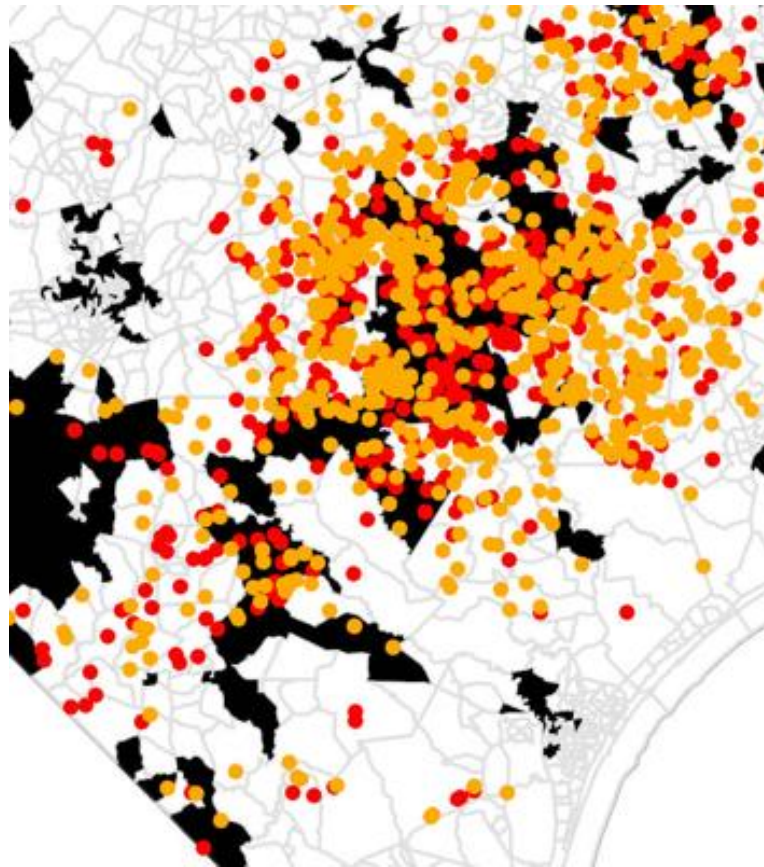


# Example (continued): Reporting Requirements for Animal Feeding Operation Air Emissions

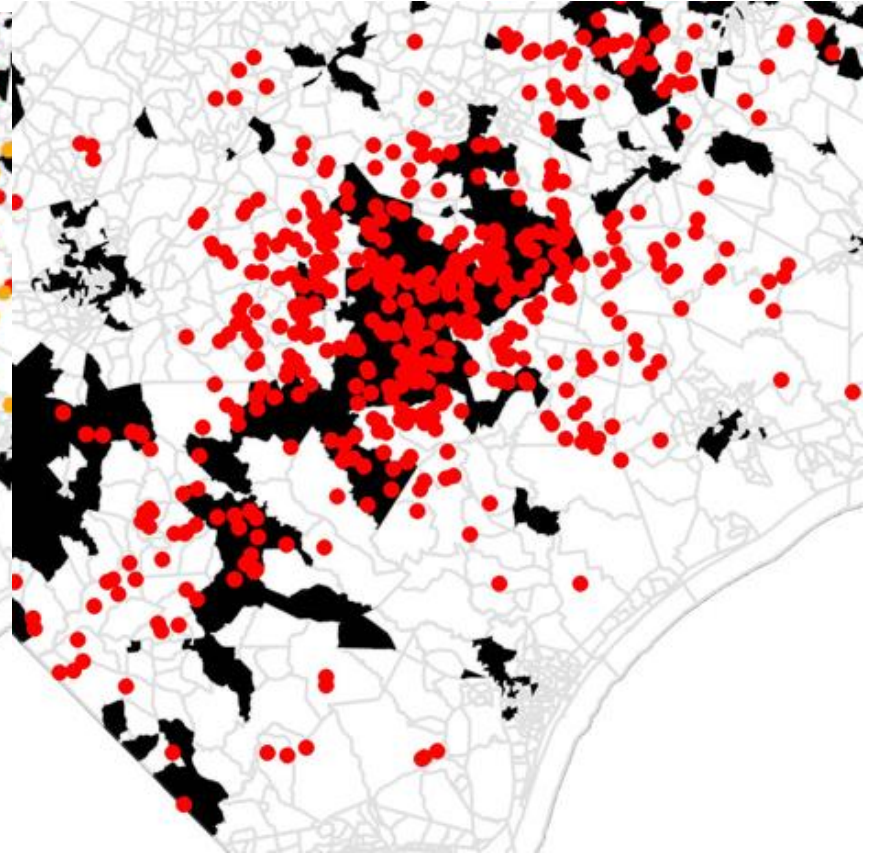
Include Small AFOs – report if emit 100 or more lbs ammonia per day



Report if emit 500 or more lbs ammonia per day



Report if emit 1,000 or more lbs ammonia per day



# Example: Oil & Gas Flaring in the Mandan, Hidatsa, and Arikara (MHA) Nation

- Substantial oil and gas activity in the MHA Nation, a Tribal nation in midwestern US
  - Rampant flaring of associated gas
  - Flaring leads to GHG emissions and local air pollutants (e.g., respiratory issues, pre-term births)
  - Tribal landowners don't receive royalties from flared gas
- Leverage satellite data to detect flaring
  - Analysis of flaring activity on Tribal lands showed high levels of misreporting to regulators
  - Consider as part of an enforcement strategy



Source: Jim Wilson/The New York Times