



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



# Environmental Justice Policy and PennEnviroScreen

September 2023

Josh Shapiro, Governor

Richard Negrin, Secretary

# DEP Mission

"To protect Pennsylvania's air, land, and water from pollution and to provide for the health and safety of its citizens through a cleaner environment. We will work as partners with individuals, organizations, governments and businesses to prevent pollution and restore our natural resources."

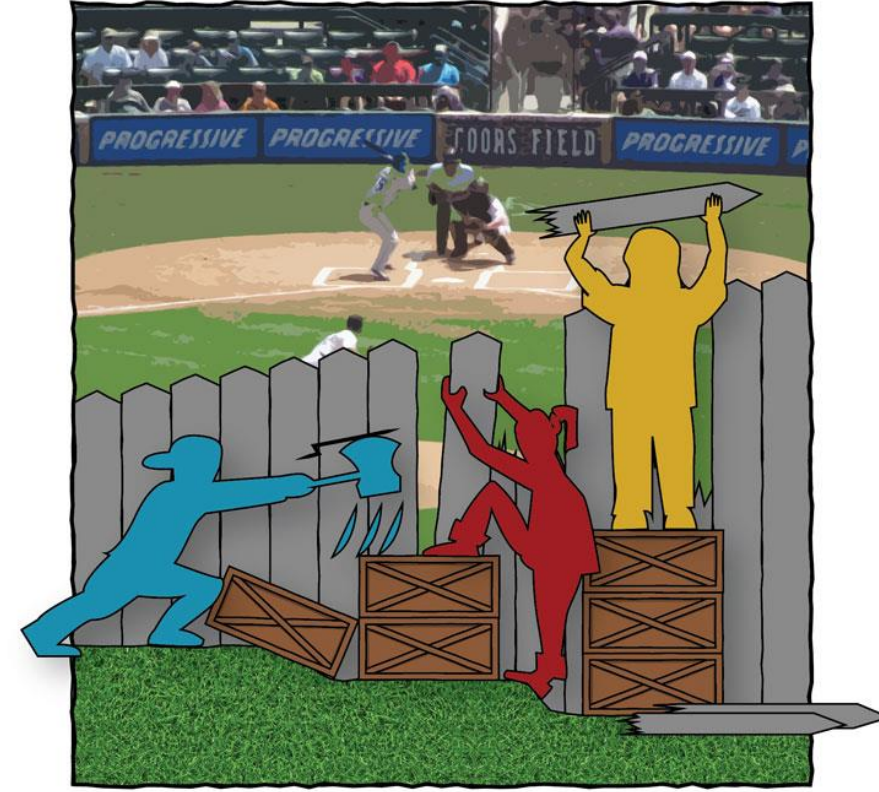
# Equality, Equity, and Justice



**EQUALITY**



**EQUITY**

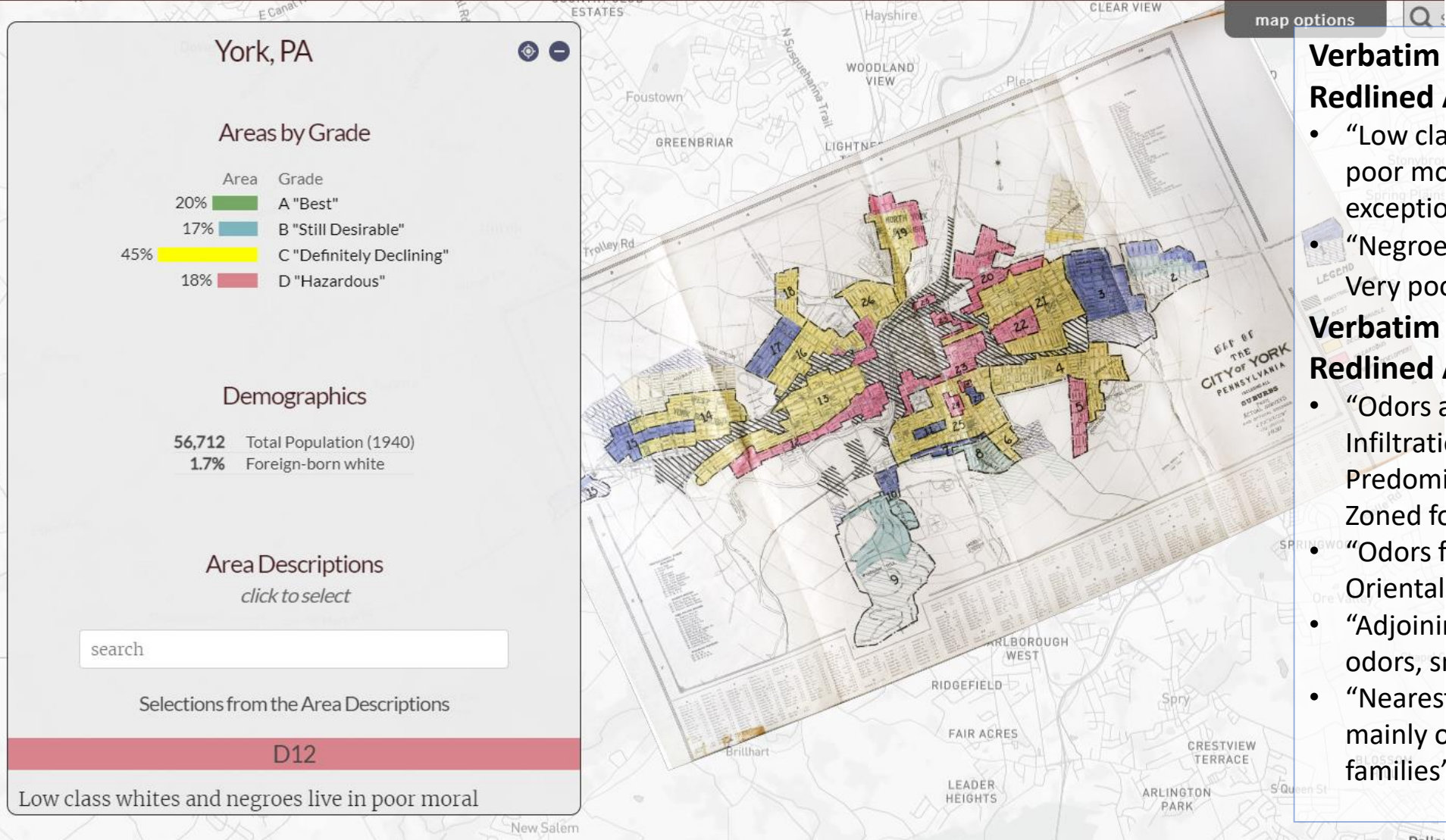


**JUSTICE**

# Historical Legacy of EJ: Redlining & Structural Racism

Mapping Inequality Redlining in New Deal America

Introduction Downloads & Data About



**Verbatim Surveyor Description of Redlined Areas on the York Map:**

- “Low class whites and negroes live in poor moral conditions. The area is exceptionally bad.”
- “Negroes, foreigners, low class whites. Very poor residential section.”

**Verbatim Surveyor Descriptions of Redlined Areas during 1930s:**

- “Odors and noises from local industries. Infiltration of colored and Orientals. Predominance of older, cheap cottages. Zoned for industry.”
- “Odors from factories; infiltration of Orientals and colored.”
- “Adjoining industrial area with attendant odors, smoke, etc.”
- “Nearest to the industries, thereby being mainly occupied by wage earning families”

# Transportation and EJ History

- [How Interstate Highways Gutted Communities—and Reinforced Segregation](#) (Farrell Evans).
- The highway expansion, implemented largely between the late 1950s and the early 1970s, came at a huge cost to America's urban communities of color.
- The communities decimated by highway projects were largely Black and impoverished
- Highway engineers came to think of “killing two birds with one stone” to “improve traffic conditions and remove undesirable populations.



[This Photo](#) by Unknown Author is licensed under [CC BY](#)

# Relationship of EJ to Civil Rights

## State programs receiving EPA financial assistance must comply with federal non-discrimination laws\*:

- Title VI of the Civil Rights Act of 1964: recipients of federal financial assistance cannot discriminate on the basis of race, color, national origin (including limited-English proficiency)

*“[C]ompliance with environmental laws does not ensure compliance with Title VI. ... [Recipients] are required to operate their programs in compliance with the non-discrimination requirements of Title VI and EPA’s implementing regulations.” EPA Title VI Public Involvement Guidance, 71 F.R. 14207, 14210*



### Other Non-discrimination Laws\*

- Section 504 of the Rehabilitation Act of 1973
- Age Discrimination Act of 1975
- Title IX of the Education Amendments of 1972
- Section 13 of Federal Water Pollution Control Act Amendments of 1972
- EPA’s nondiscrimination regulation, 40 C.F.R. Parts 5 and 7

# Historical Roots of Environmental Justice



# Historical Roots of Environmental Justice



Warren County,  
North Carolina (1982)



United Church of  
Christ Study (1987)



First People of Color  
Environmental  
Leadership Summit  
(1991)

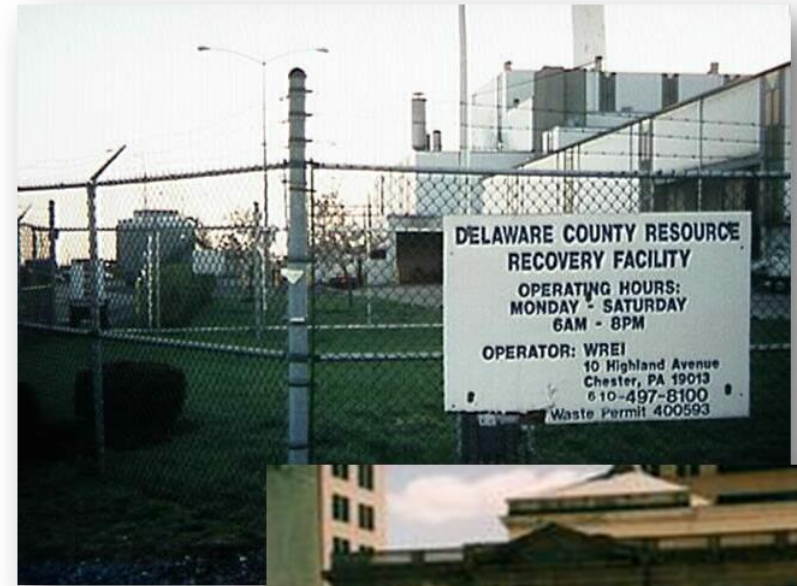


Executive Order  
12898 (1994)

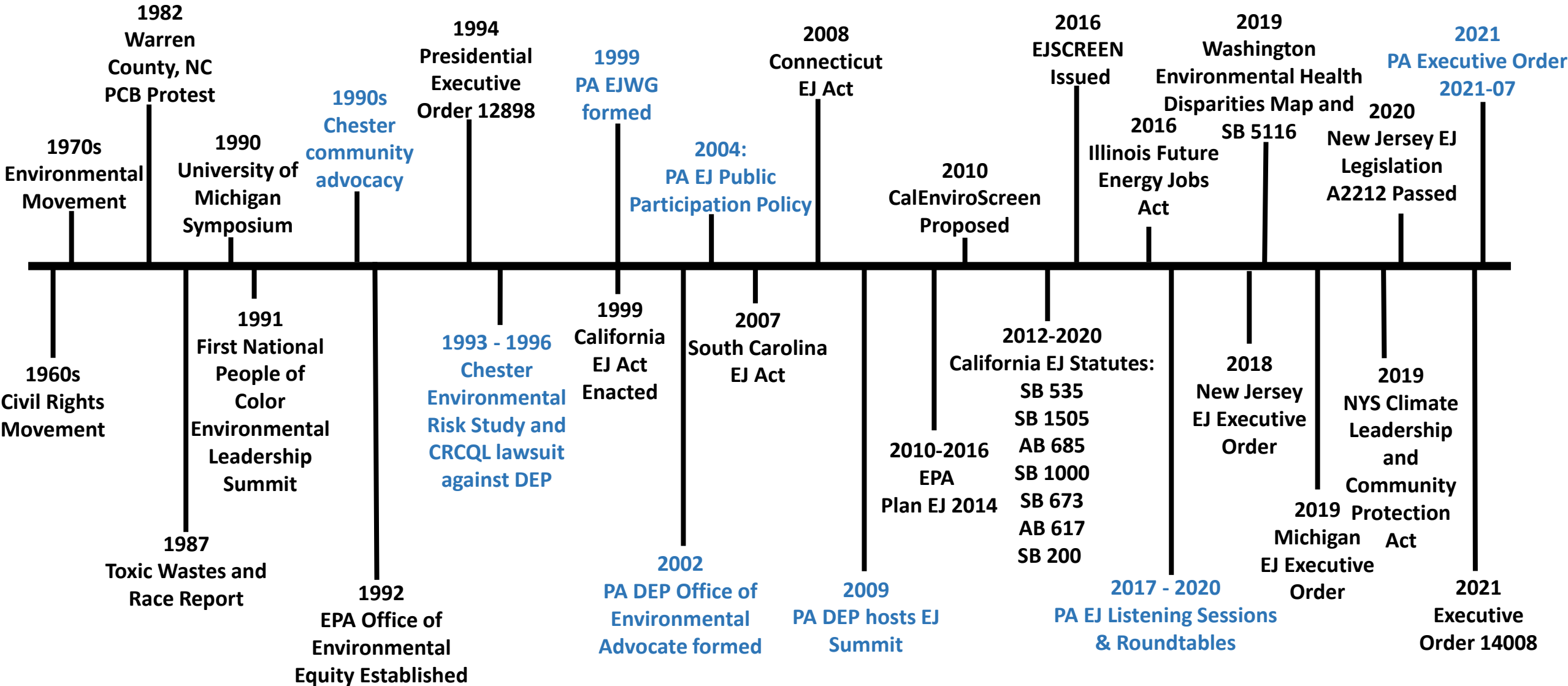
The EJ movement, started by people (primarily people of color) to address inequitable environmental protection and environmental services in their communities was grounded in civil rights and the environmental movement. The movement builds on the lived experience of disproportionately impacted communities. The work of these early advocates paved the way for program development starting in the early 1990's, over the past 30 years, have resulted in significant progress at all levels of government.

# Roots of EJ in Pennsylvania

- Organizing in the City of Chester in early 1990s
- Environmental Risk Study by EPA in conjunction with DER in 1993
- Chester residents (CRCQL) lawsuit against DEP in 1996
- DEP Environmental Justice Work Group (EJWG) created in 1999 Report and Recommendations released in 2001



# Timeline of Federal and State Government Response



# 2021 EJ Executive Order

- An [Executive Order](#) on environmental justice was issued on October 28, 2021.
- Permanently establishes the Office of Environmental Justice.
- Formally establishes the Environmental Justice Advisory Board
- Creates an Environmental Justice Interagency Council
- Outlines activities that executive branch agencies should take to further environmental justice goals.



# Science of Disproportionate Environmental Impacts



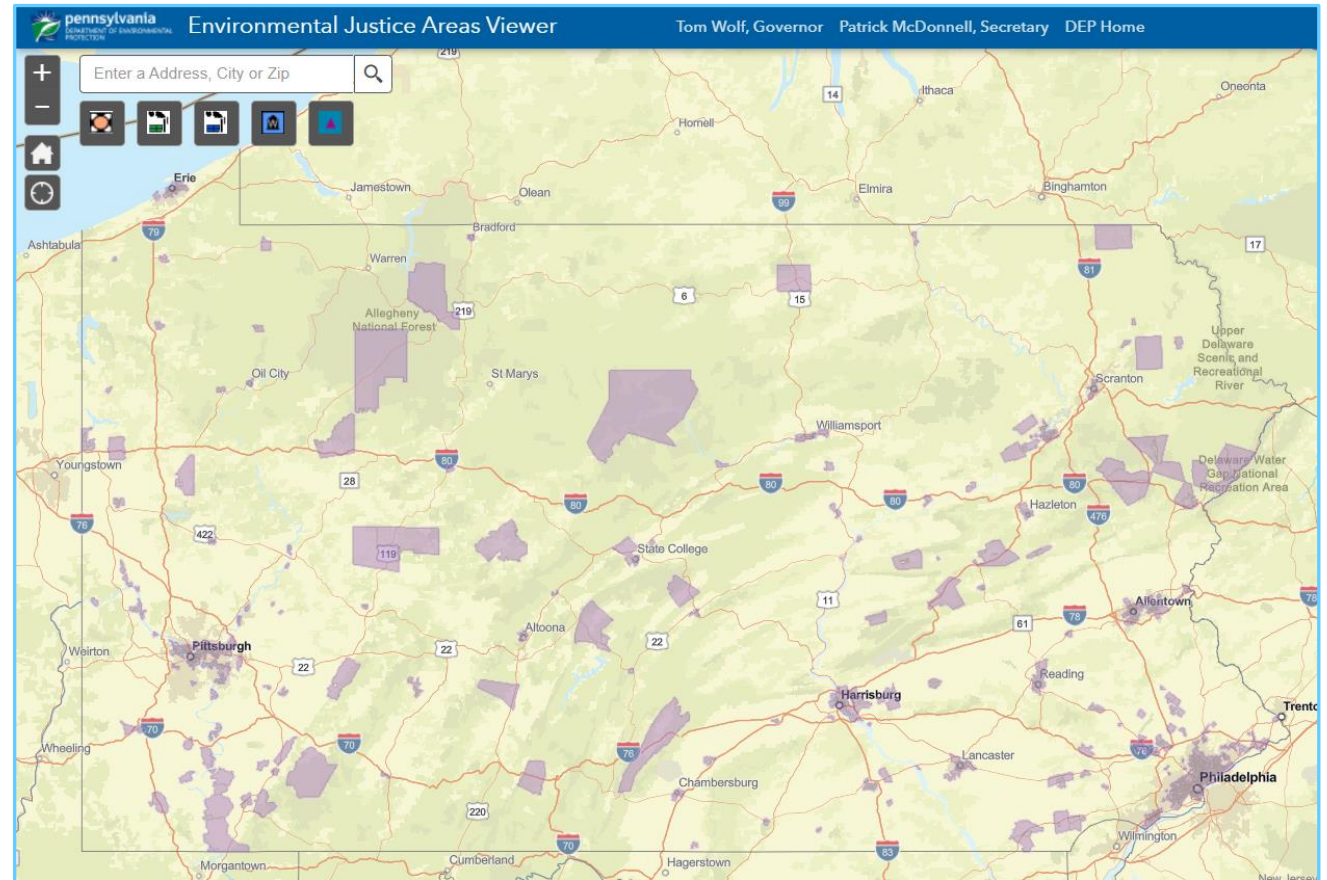
## DRIVERS

- Built Environment: Proximity to pollution sources (e.g., stationary and mobile air emissions)
- Natural Environment: Disasters (e.g., wildfires, heat waves, pandemics)
- Social Environment: Health disparities (e.g., asthma, heart disease, hypertension, diabetes)

**Environmental injustice  
is a force multiplier**

# EJ Public Participation Policy

- Applies to Trigger Permits (and Opt-in Permits).
- In Environmental Justice Areas and Area of Concern.
  - EJ Areas – 30% People of Color and/or 20% Low-income
  - Area of Concern is 0.5-mile buffer.



# 2018 EJ Policy Updates

- 2018 public comment period around policy revisions.
  - Enhancing public participation during permit reviews for specific trigger permits.
  - Update EJ Areas to block groups from census tracts.
- Withdrew a draft Policy revision.
- How can DEP address EJ in addition to public participation in the permit review process?
- Meaningful community engagement process to ensure inclusive community voice.
- Center this discussion on the voices of those who live in communities facing environmental burdens.



# 2022 Outreach Efforts

## Tools to share:

- [Press Release](#)
- [Webpage \(dep.pa.gov/EJPolicyRevision\)](http://dep.pa.gov/EJPolicyRevision)
- [Share kit](#) (evolving)
- [Recorded EJ Policy webinar](#) (3/28)

## Outreach efforts:

- Four (4) virtual public hearings (April 5, 12, 28, & May 4)
- Press Events
- Twenty (20) presentations
- [Video](#)
- Flier
- Social media

## ENVIRONMENTAL JUSTICE



The PA Department of Environmental Protection's draft Environmental Justice Public Participation Policy (EJ Policy) strengthens language on how DEP oversees and participates in environmental justice priorities and reform with community partners.

Public comment period on the policy is open through Wednesday, May 11, 2022.

**Learn more and participate:**

 [dep.pa.gov/EJPolicyRevision](http://dep.pa.gov/EJPolicyRevision)

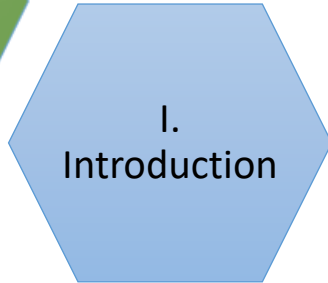


# EJ Policy Components



- I. Introduction
- II. Definitions
- III. Environmental Justice Area Criteria
- IV. Proactive Community Engagement
- V. Enhanced Public Participation
- VI. Inspections, Compliance, and Enforcement
- VII. Community Development and Investment
- VIII. Climate Initiatives
- IX. Policy Updates

# Introduction



- Background on the Policy.
- Some history of the policy
- Streamline the enhanced public participation process to work within existing timeframes.

# Definitions



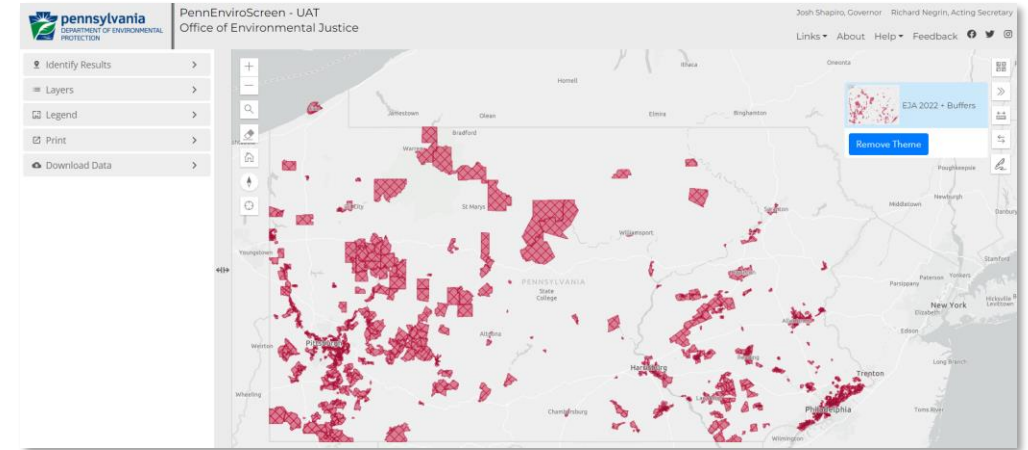
## II. Definitions

- Robust definitions section defines terms ranging from applicant to public meeting.
- Assist in clarifying the document and ensuring that it is similarly interpreted by the public, DEP staff, and permit applicants.
- Enhances the overall readability and accessibility of the document.

# Environmental Justice Areas

## III. Environmental Justice Criteria

- Describes **where** the policy applies
- Refers to Appendix for detailed mapping of where the policy will apply to allow for easy updating.
- Introduces PennEnviroScreen as the tool for researching these areas.



# Proactive Community Engagement

## IV. Proactive Community Engagement



- Reaching communities before an environmental project or crisis.
- Centering on community voices

# Enhanced Public Participation Process

## V. Enhanced Public Participation

- Details the Enhanced Public Participation Process
  - A. Projects Covered (**To which projects** it can be applied in the permitting context)
    1. Trigger Projects
    2. Opt-in Projects
  - B. Enhanced Process (**How** it is applied in the permitting process)
    1. Pre-Project Community Outreach
    2. Language Access
    3. Permit Application

# Enhanced Public Participation Process (Cont)

## V. Enhanced Public Participation

- Details the Enhanced Public Participation Process
  - B. Enhanced Process (**How** it is applied in the permitting process)
    - 3. Permit Application
      - i. Public Participation Strategy
      - ii. Pre-Application Meeting
      - iii. Notice
      - iv. Public Meetings
      - v. Public Comment
      - vi. Technical Support
    - 4. Communication After the DEP Authorization or Permit Issuance

# Inspection, Compliance and Enforcement



## VI. Inspections, Compliance, and Enforcement

- Moving beyond public participation within DEP's existing regulatory authority
- Prioritizing of Competing Demands
- Civil Penalty Enhancements
- Use of Civil Penalties
- Community Environmental Projects
- Filing Complaints

# Community Development and Investment

## VII. Community Development and Investments

- Targeting grants
- Promoting brownfield redevelopment



# Climate Initiatives



- Climate Action Plan involvement
- Climate adaptation
- Integrates EJ considerations into climate investments
- Directs DEP to engage in public involvement that integrates the stated needs and concerns of EJ communities

# Policy Updates

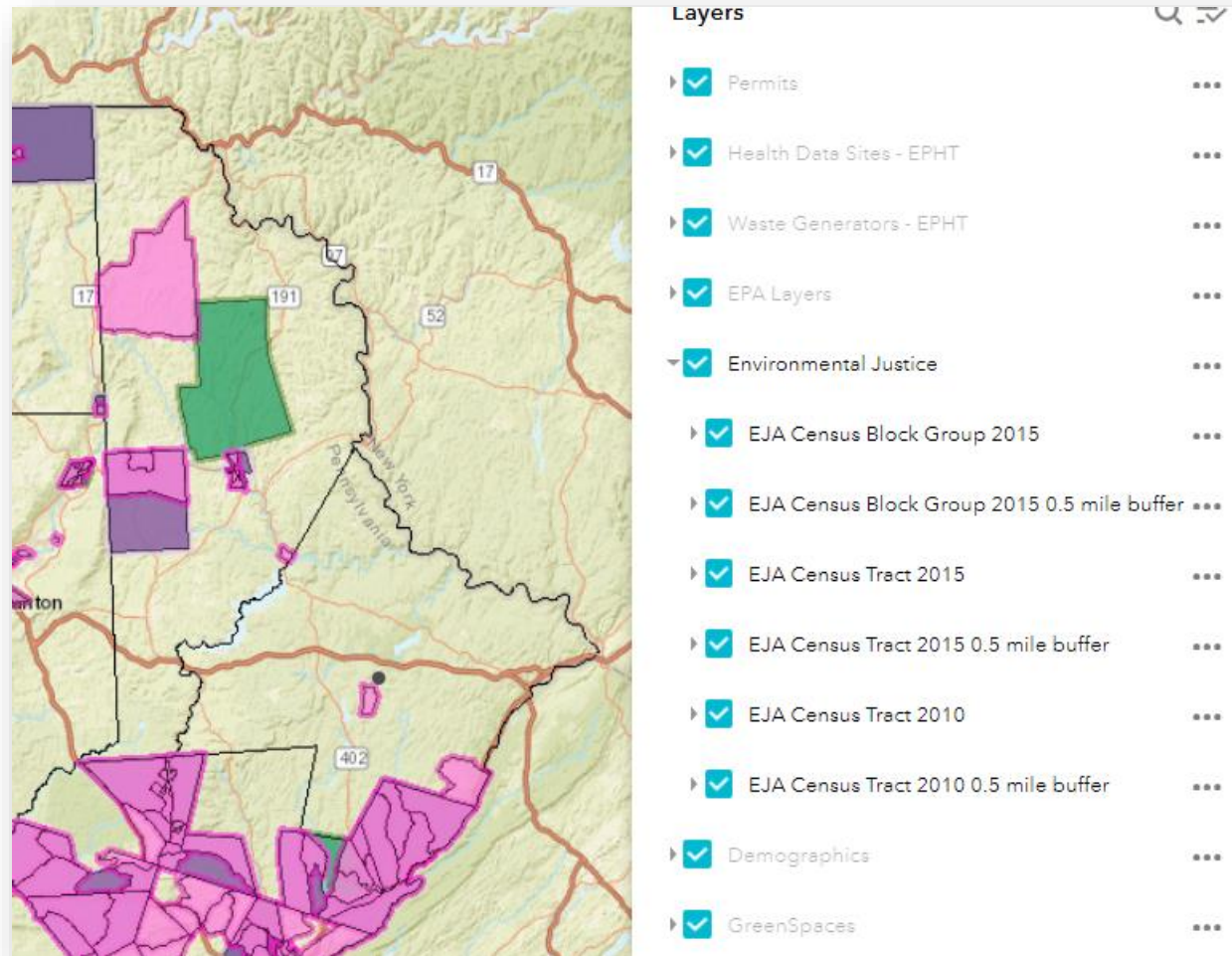


## IX. Policy Updates

- Requires review of the EJ policy for updates every 5 years
- Update EJ area identification and mapping every 2 years, based on latest data

# Tools: EJ Areas Viewer

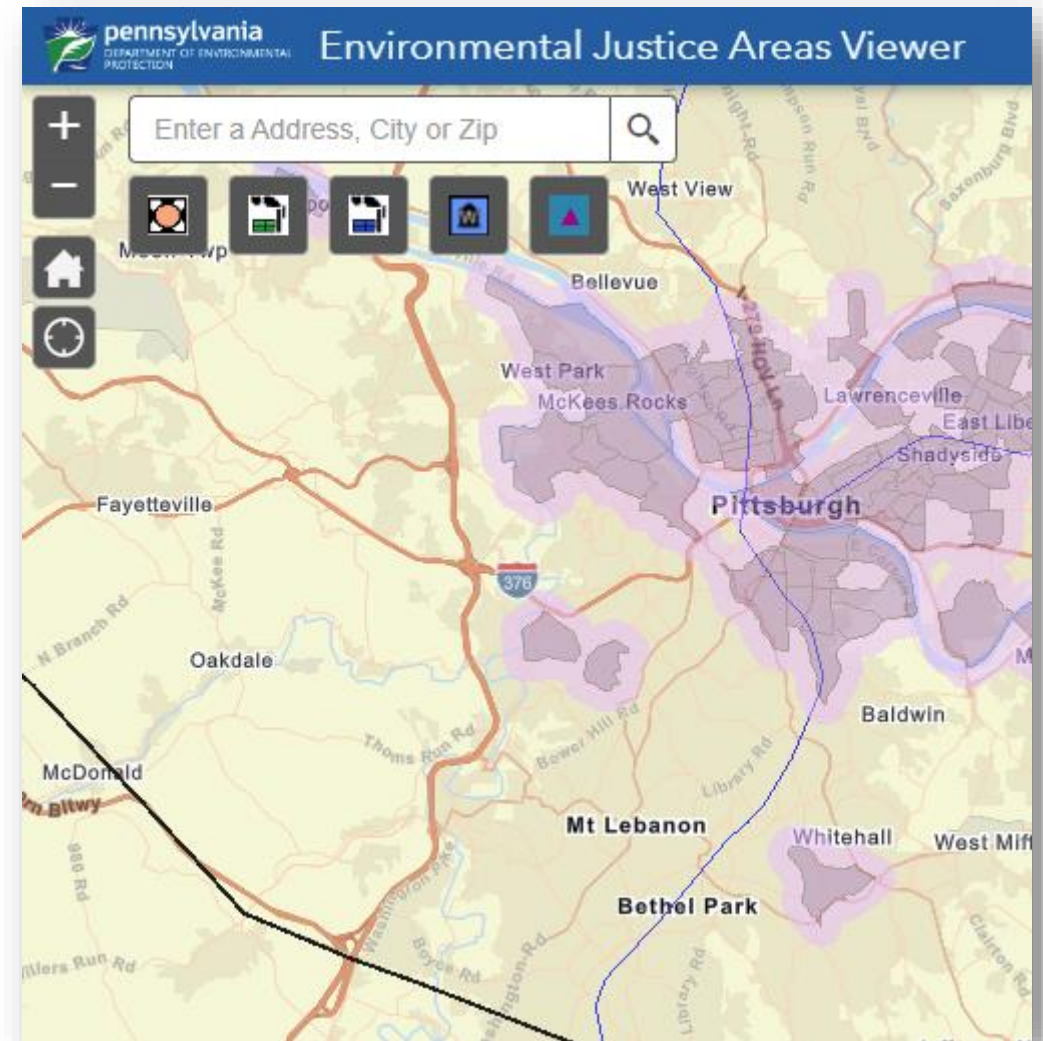
- Mapping tool
- Allows user to search by address
- Use for DEP and community partners
- Determines whether DEP engages in enhanced public outreach
- Used by other PA agencies



[dep.pa.gov/ejviewer](http://dep.pa.gov/ejviewer)

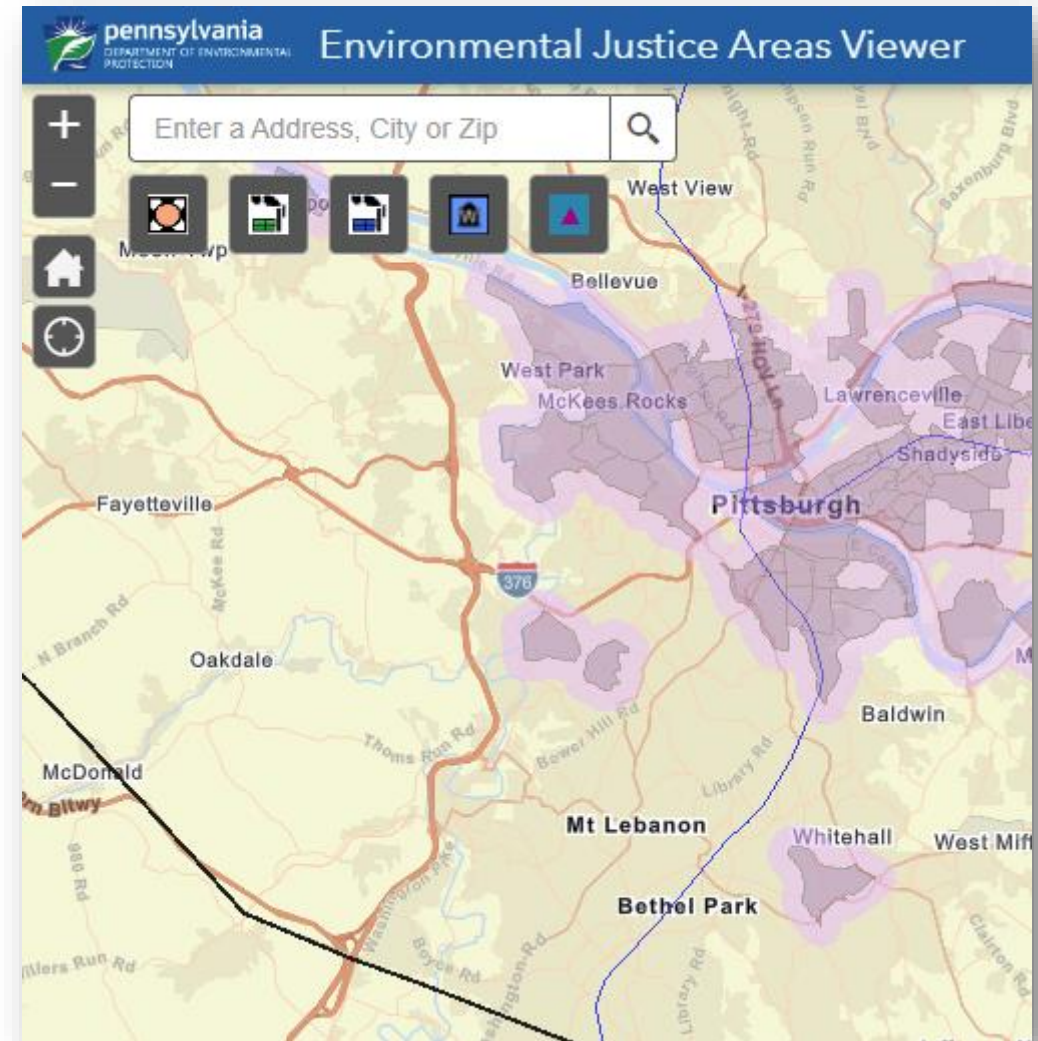
# Updating State Mapping Tools

- Heard from community members, DEP Staff, and other agencies on the limitations of using only two demographic indicators
- More publicly available and regularly updated data available
- Being used more broadly than just our EJ Policy implementation
- Nationally tools are looking at pollution burden
- Look to have more regular updates to keep the data up to date



# What Isn't Changing

- Use by DEP to implement the EJ Policy.
  - Which projects are automatically triggered for inclusion, and which are potential for Opt-In?
- Search by address functionality
  - Favored by DEP staff and the general public alike



# Mapping Update Background

## Review of other states:

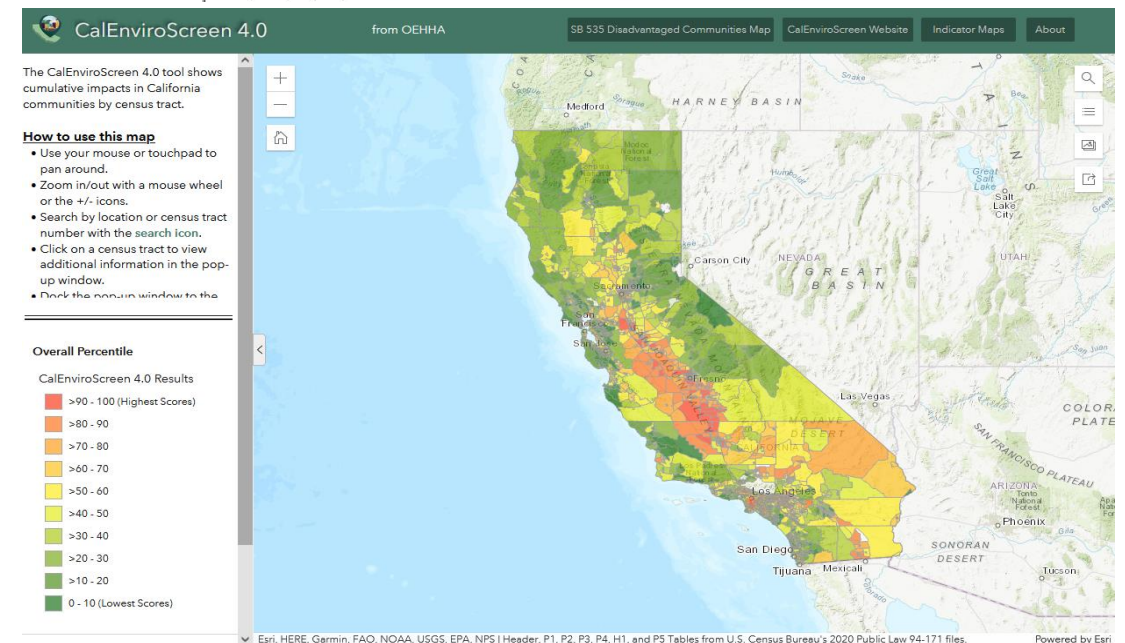
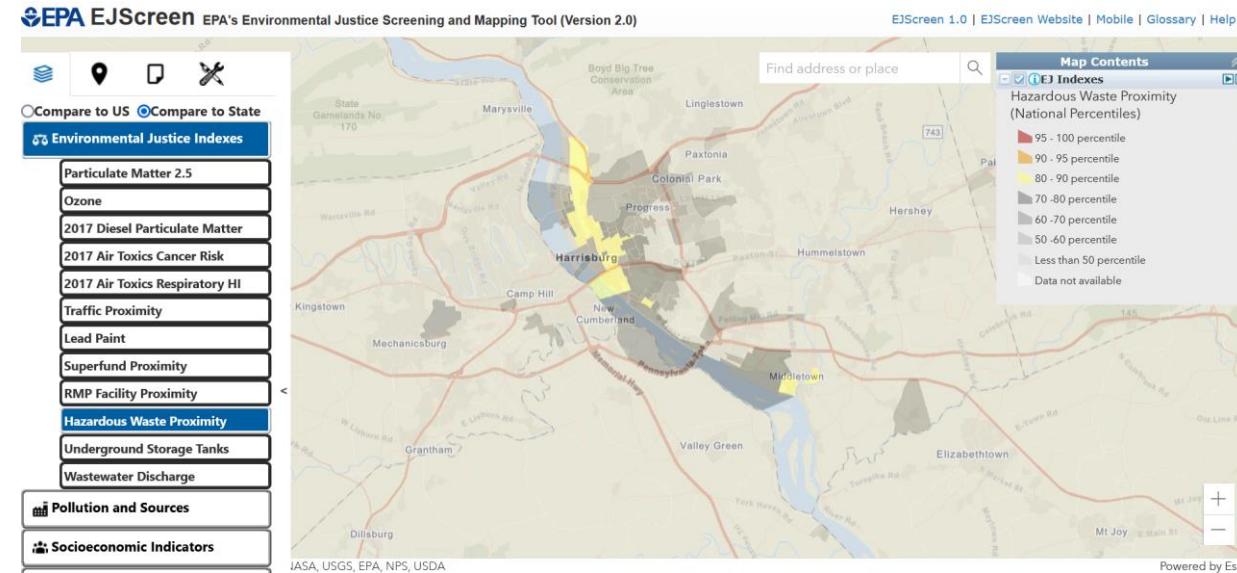
- How EJ Areas defined
- Data sets used
- Calculations performed

## Types of indicators used by other states:

- Environmental: land, water, air quality
- Population: socioeconomic, community health

## Our framework:

Risk = pollution burden (threat) × population characteristics (vulnerability)



# Indicator Categories

Pollution Burden

Environmental  
Exposures

Environmental  
Effects

Population  
Characteristics

Sensitive  
Populations

Socioeconomic  
Populations

Final Score

=

Pollution Burden

×

Population Characteristics

# Indicator Categories

Pollution Burden: Environmental Exposures	Pollution Burden: Environmental Effects	Population Characteristics: Sensitive Populations	Population Characteristics: Socioeconomic Population
Ozone	Oil Gas Locations (Conventional wells)	Asthma	Low Educational Attainment
PM2.5	Oil Gas Locations (Hydraulic Fracturing / unconventional wells)	No Health Insurance	Linguistic Isolation
Diesel Particulate Matter	Proximity to Railroads	Cancer	Housing-Burdened Low- Income Households
Toxic Air Emissions	Land Remediation	Disability	Poverty
Toxic Water Emissions	Hazardous Waste and Storage Sites	Heart Disease	Unemployment
Pesticides	Municipal Waste Sites		Race
Traffic Density	Coal Mining		Age over 64
Compressor Stations	Impaired lakes and streams		Age under 5
Children's Lead Risk	Abandoned Mining Concerns		
	Flood Risk		

# Calculating Final Score

$$C = \frac{\sum c}{n}$$

C = Component score

Σc = Sum of all indicator percentiles within component

n = Number of indicators within component

$$PB = \frac{EXP_{avg} + (EE_{avg} \times 0.5)}{1.5}$$

PB = Pollution Burden score

EXP = Environmental Exposures component score (average of all Environmental Exposures indicators)

EE = Environmental Effects component score (average of all Environmental Effects indicators)

$$PC = \frac{SOC_{avg} + SP_{avg}}{2}$$

PC = Population Characteristics score

SOC = Socioeconomic Populations component score (average of all Socioeconomic Populations indicators)

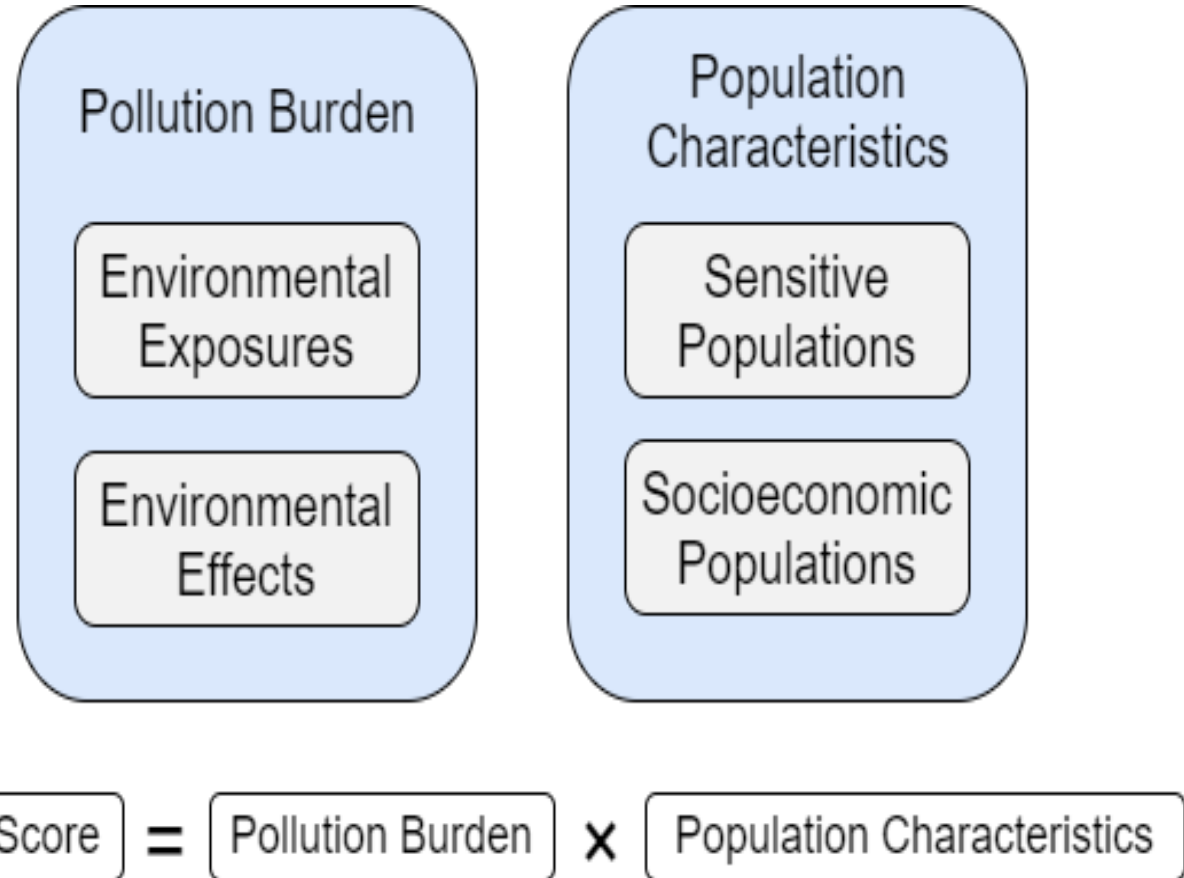
SP = Sensitive Populations component score (average of all Sensitive Populations indicators)

$$F = \left( \frac{PB}{PB_{max}} \times 10 \right) \times \left( \frac{PC}{PC_{max}} \times 10 \right)$$

F = Final Score

PB = Highest block group Pollution Burden score in state

PC = Highest block group Population Characteristics score in state



# PennEnviroScreen

<https://gis.dep.pa.gov/PennEnviroScreen/>

# PennEnviroScreen – EJ Areas

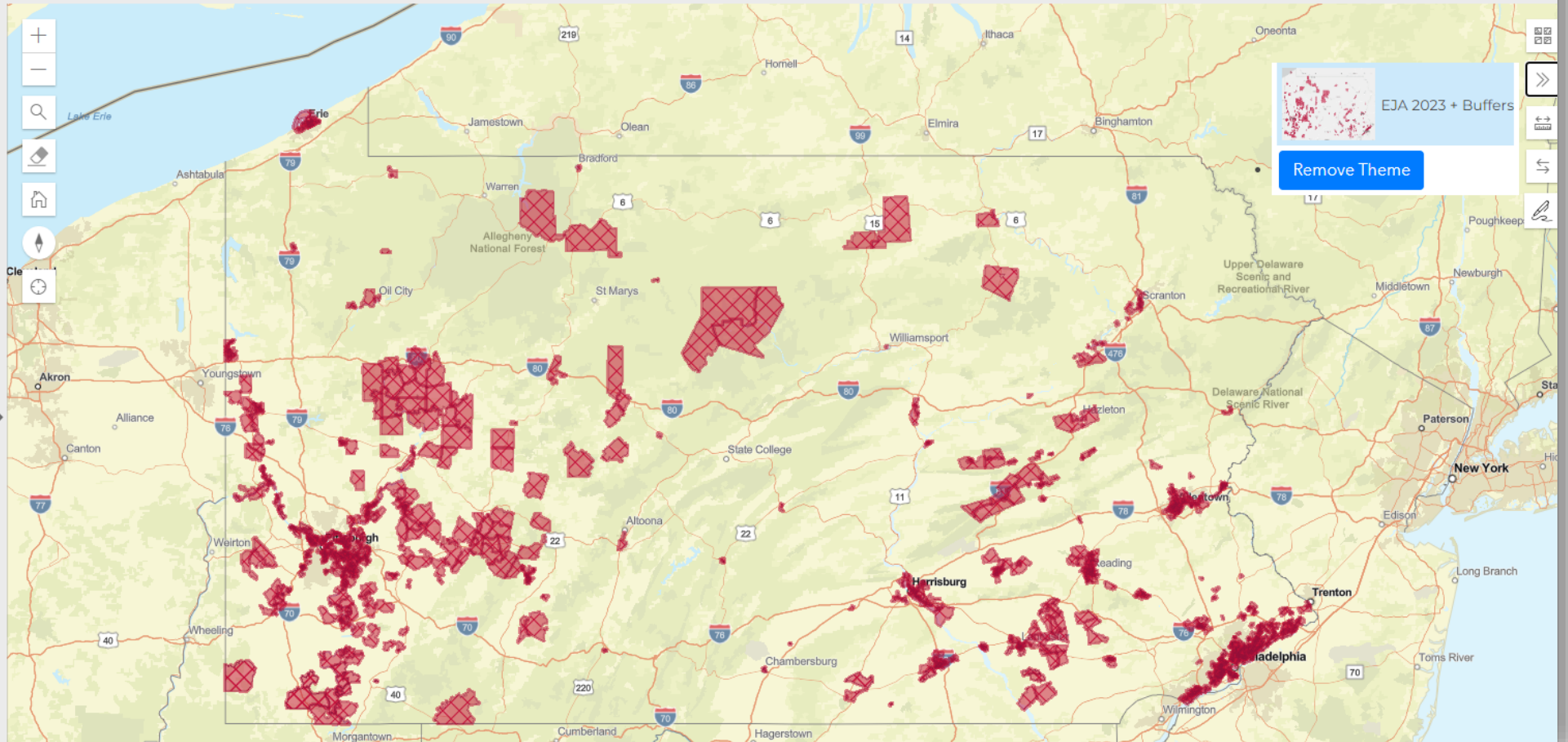


PennEnviroScreen - UAT  
Office of Environmental Justice

Josh Shapiro, Governor Richard Negrin, Secretary

Links About Help Feedback

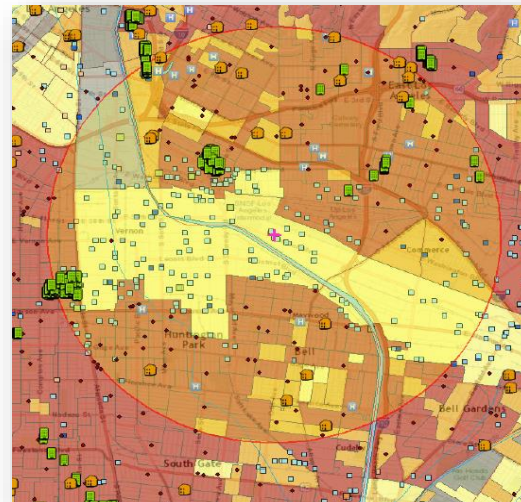
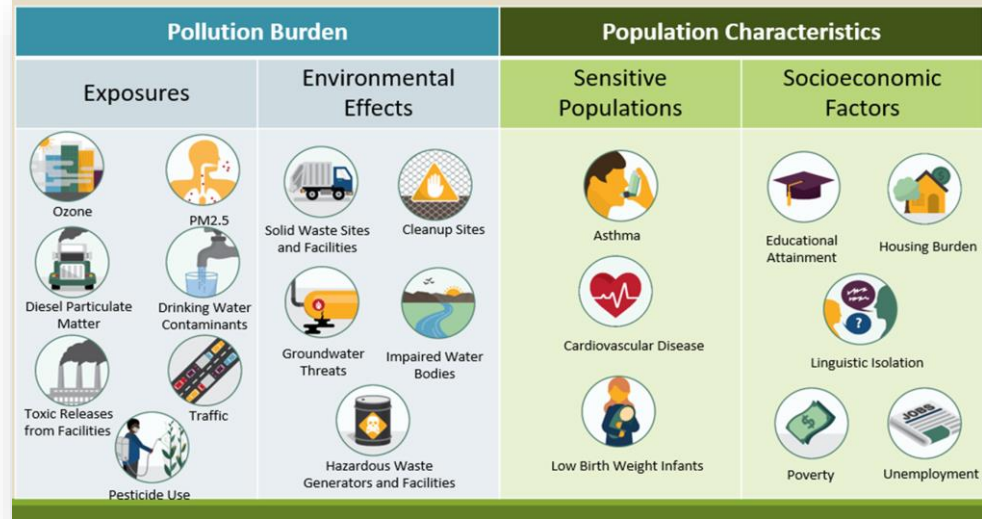
- Identify Results >
- Layers >
- Legend >
- Print >
- Download Data >



<https://gis.dep.uat.pa.gov/PennEnviroScreen/>



# Describing-Quantifying-Mapping Disproportionate Impacts



Disproportionate impacts is the consistent pattern of a combination of greater **pollution burden** and **population vulnerability** affecting the same communities, primarily minority, low-income, indigenous populations, as demonstrated by ample evidence.

Sources: CalEPA Office of Environmental Health Hazard Assessment and EPA EJSCREEN



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## DEP Vision and Pillars

1. Operational Excellence
2. Climate Leadership
3. Cultural Competence
4. Environmental Justice



### 1) Operational Excellence –

DEP will achieve operational excellence by utilizing the Center of Excellence (KPI, Permit Reform) moving from process-focused performance management to an outcome-based strategy. Organizational units are empowered to drive strategic outcomes and mission-critical initiatives through individualized, innovative approaches and are held accountable for achieving results in a manner that breaks down silos and shares best practices.

### 2) Climate Leadership –

DEP will serve as a Thought Leader on proactive climate action. That involves considering new initiatives such as the sequestration potential of protecting wetland from development, creating new wetlands to sequester carbon, or monitoring harmful algal blooms. It also means the creation of new programs that assist with citing renewable energy on Brownfields or reclaimed mine lands and incorporating climate considerations into DEP's new enforcement strategy and Community Environmental Projects.

### 3) Cultural Competence –

Cultural competence goes beyond traditional definitions of good cultural awareness and includes agency interaction, communication and the general customer experience with both internal and external entities. Our diverse executive leadership team will lead by example, track internal and external outcomes while mentoring staff when outcomes don't meet agency standards and policies.

### 4) Environmental Justice –

All of us at DEP will be working to ensure environmental justice because our most vulnerable across all communities will not flourish without it. DEP aims to reach out proactively to provide communities with the necessary tools to advocate for themselves more effectively, to benefit from available resources proactively and with the goal of preventing environmental crises from occurring in the first place.



Richard Negrin, Acting DEP Secretary



# EJ Plan

1. Establish a broad definition of Environmental Justice to support all vulnerable populations.
2. Elevate the Office of Environmental Justice to a Special Deputy Secretary level to raise its profile and influence.
3. Add a Deputy Director to create bandwidth across the state.
4. Add an environmental justice regional coordinator per each of DEP's six regions to increase programmatic capacity.
5. Develop a proactive community outreach and engagement program that will allow DEP to build long-lasting relationships with communities outside of individual projects.
6. Publish an updated Environmental Justice Policy with a community outreach-first approach, enhanced public participation process, and includes compliance with Title VI, in permitting, enforcement, grants, remediation, and climate change.
7. Design PennEnviroScreen, a new environmental justice mapping and screening tool that contains environmental, health, socioeconomic, and demographic indicators and is the main tool for mapping EJ Areas in Pennsylvania.



- 1) Define EJ broader to support all vulnerable populations.
- 2) Elevating it to a Special Deputy Secretary for environmental justice.
- 3) Adding a Deputy Director to create bandwidth across the state.
- 4) Adding an environmental justice regional coordinator per each of DEP's six regions.
- 5) Proactive community outreach and engagement program.
- 6) Updated Environmental Justice Policy with a community outreach-first approach, enhanced Public Participation Process, and includes compliance with Title VI, in permitting, enforcement, grants, remediation, and climate change.
- 7) Design PennEnviroScreen, a new environmental justice mapping and screening tool that contains environmental, health, socioeconomic, and demographic indicators and is the main tool for mapping.

# EJ Definition (PADEP)

Environmental justice means **the just treatment and meaningful involvement** of all people, regardless of income, wealth, race, color, national origin, area of residence, Tribal affiliation, or disability, in agency decision-making and other activities that affect human health and the environment so that people: are **fully protected from disproportionate and adverse human health and environmental effects** (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, **and the legacy of racism or other structural or systemic barriers**; and have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices. **It further involves the prevention of future environmental injustice and the redress of historic environmental injustice.**

# REVISED EPA Definition (April 2023)

(b) “**Environmental justice**” means the just treatment and **meaningful involvement** of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other Federal activities that affect human health and the environment so that people:

(i) are fully protected from disproportionate and adverse human health and environmental effects (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers; and

(ii) have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices.

# Tool Comparison

U.S. EPA EJ Screen	Updated EJ Areas Viewer
Provides data in percentiles	Will provide data in percentiles
Uses data available on a national level	Will use statewide and national data
Can explore individual factors	Will be able to explore individual factors
Updated periodically	Will have data updated on an annual schedule, with periodic larger updates
Pre-decisional analysis tool	Will be used to determine whether to implement the EJ policy