

# Furthering Environmental Justice in New Jersey

EPA Region 2 Environmental Conference  
May 19, 2023

Kandyce Perry  
Director, Office of Environmental Justice



NEW JERSEY  
DEPARTMENT OF  
ENVIRONMENTAL  
PROTECTION



# NJDEP's Office of Environmental Justice



## Priority 1:

Amend DEP's internal work to incorporate environmental justice.



## Priority 2:

Facilitate a council of NJ agencies to amend the way the entire state achieves environmental justice.



## Priority 3:

Engage with overburdened communities to remove barriers to accessing resources so that communities are better informed, heard, and able to advocate for justice locally.

# NJ's Executive Order No.23 and EJ Law



Executive Order No. 23 signed April 20, 2018



EJ Law signed September 18, 2020

An aerial photograph of a large industrial refinery or chemical plant. The facility is densely packed with complex piping, distillation columns, and numerous large white cylindrical storage tanks. Several smokestacks are visible, with thick white plumes of smoke or steam rising from them. In the background, a body of water is visible, along with other industrial structures and a distant city skyline under a clear sky. A semi-transparent white rectangular box is overlaid in the center of the image, containing the text "Environmental Justice Rule".

# Environmental Justice Rule



NEW JERSEY  
DEPARTMENT OF  
ENVIRONMENTAL  
PROTECTION

# The Environmental Justice Law (1/2)

The Legislature finds and declares...

- All New Jersey residents, regardless of income, race, ethnicity, color, or national origin, have a right to live, work, and recreate in a clean and healthy environment.
- Historically, New Jersey's low-income communities and communities of color have been subject to a disproportionately high number of environmental and public health stressors, including pollution from numerous industrial, commercial, and governmental facilities located in those communities.
- The legacy of siting sources of pollution in overburdened communities continues to pose a threat to the health, well-being, and economic success of the State's most vulnerable residents and that it is past time for the State to correct this historical injustice.

# The Environmental Justice Law (2/2)

The Legislature finds and declares...

- No community should bear a **disproportionate share** of the adverse environmental and public health **consequences that accompany the State's economic growth**.
- The State's overburdened communities must have a **meaningful opportunity to participate** in any decision to allow facilities which, by the nature of their activity, have the potential to increase environmental and public health stressors.
- It is in the public interest for the State, where appropriate, to **limit the future placement and expansion of such facilities in overburdened communities**.

# Disproportionate Impact

Goal: Avoid disproportionate impact to overburdened communities

---

“Disproportionate impact” occurs under two scenarios:

1. Facility **creates** adverse cumulative stressors in an overburdened community as a result of its contribution; or
2. Facility **contributes to** an adverse environmental and public health stressor in an overburdened community that is already subject to adverse cumulative stressors.

Where cannot avoid: analyze and propose feasible measures to minimize contributions to environmental and public health stressors, or provide a net environmental benefit.



# Step 1: Applicability Determination

(1) Located in **Overburdened Community** census block group in which:

- at least 35 percent of the households qualify as low-income households;
- at least 40 percent of the residents identify as minority or as members of a State recognized tribal community; or
- at least 40 percent of the households have limited English proficiency

(2) **Facility**

- major sources of air pollution (e.g., power plants, cogeneration facilities);
- incinerators or resource recovery facilities;
- large sewage treatment plants (more than 50 million gallons per day);
- transfer stations or solid waste facilities;
- recycling facilities that receive at least 100 tons of recyclable material per day;
- scrap metal facilities;
- landfills; or
- medical waste incinerators, except those attendant to hospital and universities.

(3) **Permit:** solid waste and recycling, land use, water supply and pollution, and air pollution.

- Applies to individual permits (those permits for more substantial activities requiring deeper review) and excludes authorizations or approvals necessary to perform remediation and minor modification to major source air permits that do not increase emissions
- Applies to new facilities, expansions and Title V renewals only

Applicants seeking clarification regarding applicability of the rules to a specific activity, expansion, or otherwise, may seek an applicability determination pursuant to N.J.A.C. 7:1C-2.1(g).

**Note:** If the EJ rules are applicable, all permitting clocks are stopped until the completion of the EJ process.



Scrap Yard



# Definition of “Overburdened Community”

- **Low-Income:** At least 35% of households qualify as low- income households; or
- **Minority:** at least 40% of the residents identify as minority or as members of a state-recognized tribal community; or
- **Limited English Proficiency:** at least 40% of the households have limited English proficiency

## Overburdened Communities (OBC)

Under the Environmental Justice Rule

Data from the 5 Year American Community Survey (2017 to 2021)

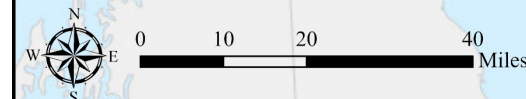
Overburdened Community Criteria	Number of Block Groups	Population
Adjacent	51	0
Limited English	2	771
Low Income	211	296,378
Low Income & Limited English	1	1,570
Low Income & Minority	1,112	1,604,345
Low Income, Minority, & Limited English	115	165,951
Minority	1,981	2,877,020
Minority & Limited English	23	30,126
<b>Total</b>	<b>3,496</b>	<b>4,976,161</b>

County Boundaries

The State has updated mapping of New Jersey's OBCs, as required by the Act (see the Overburdened Communities tab above). Specifically, OBCs are block groups with:

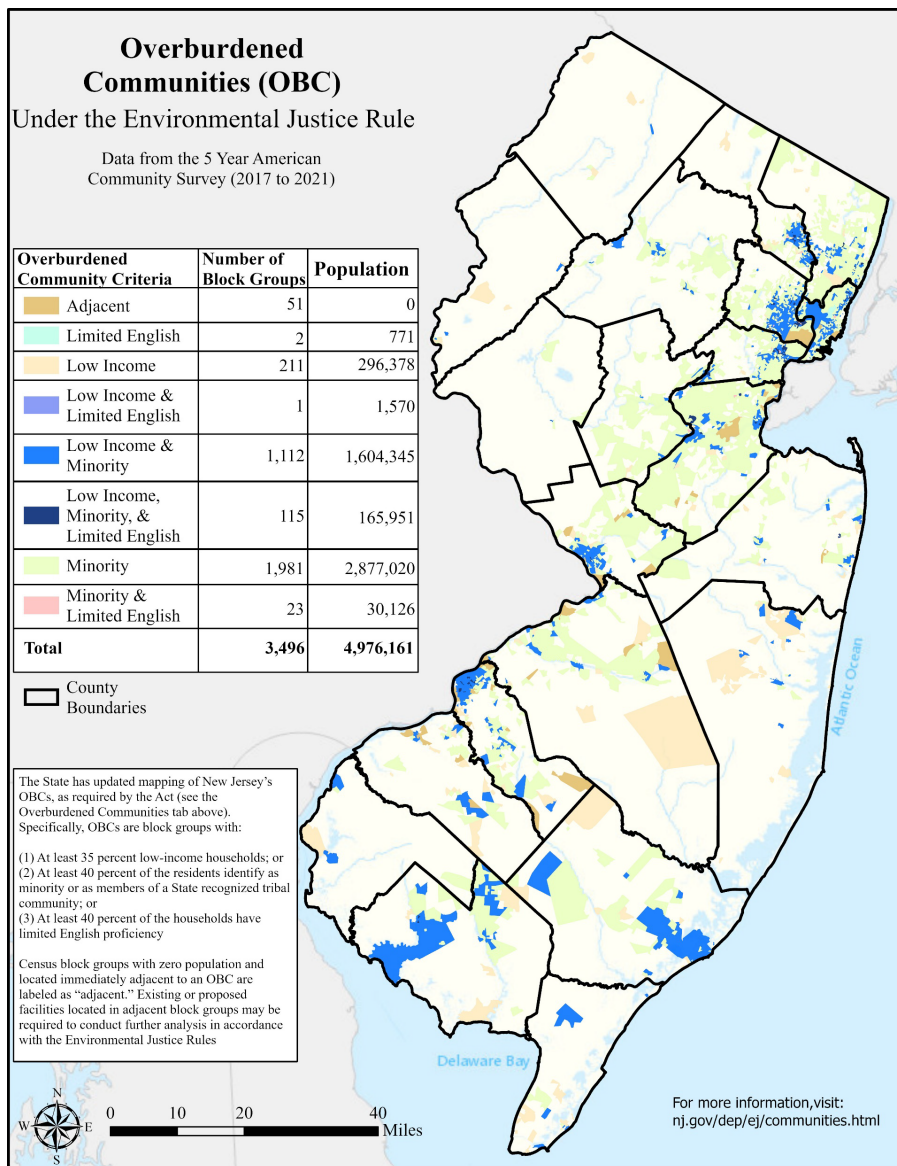
- (1) At least 35 percent low-income households; or
- (2) At least 40 percent of the residents identify as minority or as members of a State recognized tribal community; or
- (3) At least 40 percent of the households have limited English proficiency

Census block groups with zero population and located immediately adjacent to an OBC are labeled as "adjacent." Existing or proposed facilities located in adjacent block groups may be required to conduct further analysis in accordance with the Environmental Justice Rules



For more information, visit:  
[nj.gov/dep/ej/communities.html](http://nj.gov/dep/ej/communities.html)

# EJMAP & Overburdened Communities (OBCs)



- 5-year American Community Survey Data, 2017-2021
- The final [EJMAP](#) tool includes a revised analysis based on 2021 ACS data
- OBC data will be updated at least every two years
- Information that can be found on the [Office of Environmental Justice's website](#):
  - Excel Spreadsheet listing Overburdened Communities (OBCs) block groups with town names
  - PDF maps
  - OBC technical notes
  - OBC frequently asked questions
- EJMAP also shows relative stressor values – “living” resource that the Department will continue to update to provide updated data and ease understanding of what is covered by the rule
  - Updates will be made biannually (January/July)
  - Version current at time of application controls



# Environmental Justice in New Jersey



# Environmental Justice Mapping, Assessment and Protection Tool (EJMAP)



- Introduction
- Overburdened Communities
- Facilities
- Stressor Summary

Overburdened Communities [NJDEP Home](#) [NJDEP EJ Home](#)



Find address or place

Map navigation controls: zoom in (+), zoom out (-), home, refresh, layers, and a grid icon.

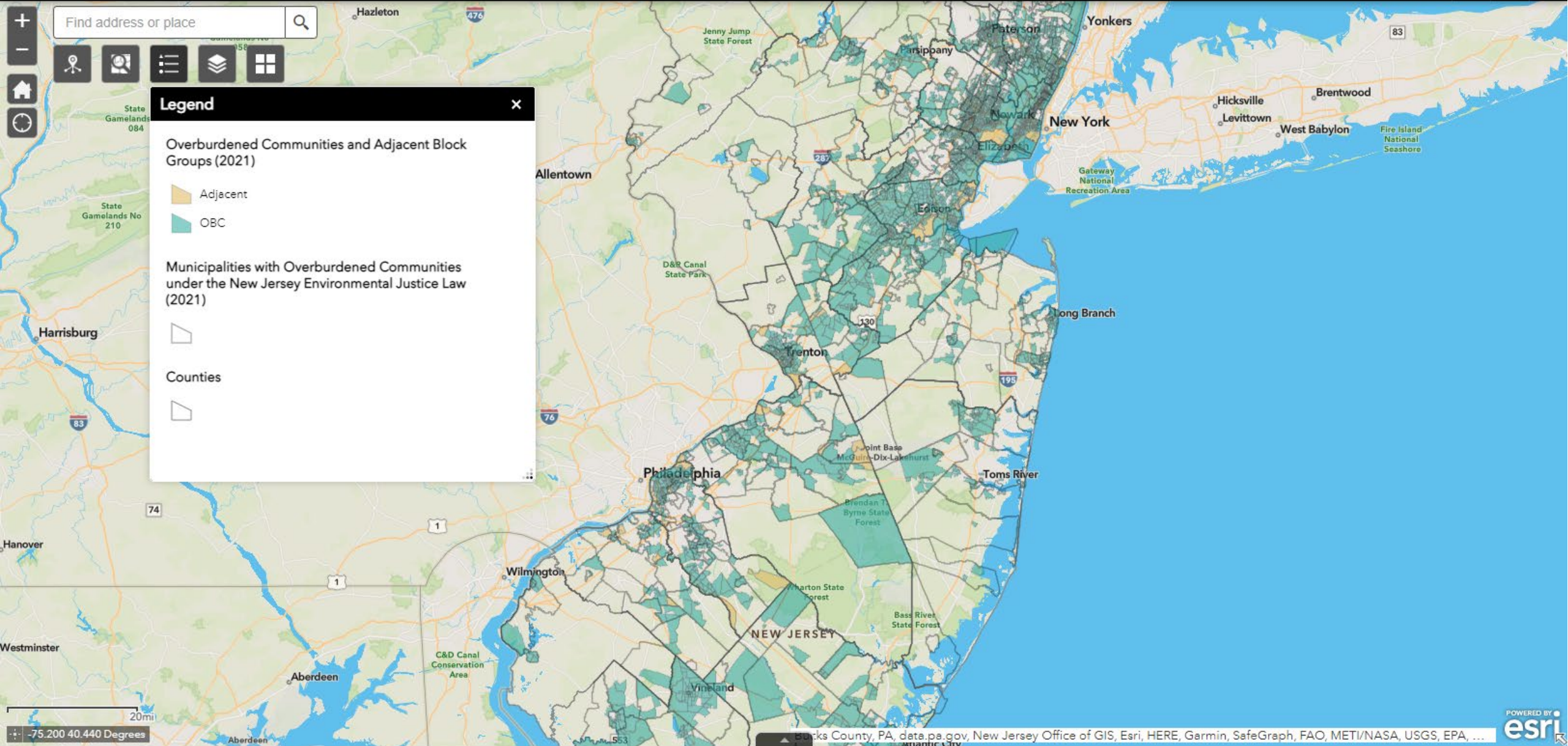
### Legend

Overburdened Communities and Adjacent Block Groups (2021)

- Adjacent
- OBC

Municipalities with Overburdened Communities under the New Jersey Environmental Justice Law (2021)

Counties



20mi  
-75.200 40.440 Degrees

# Environmental Justice Mapping, Assessment and Protection Tool (EJMAP)



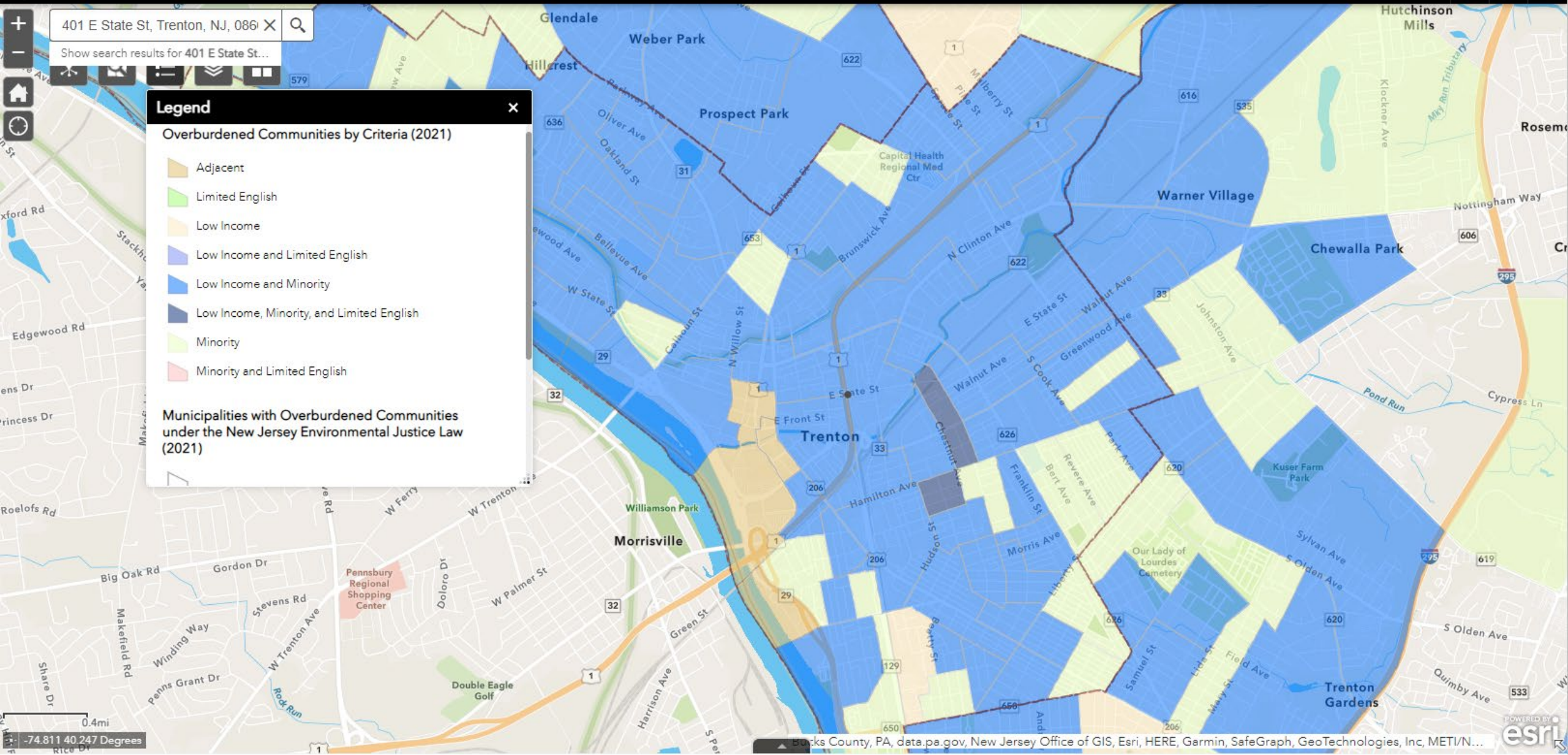
401 E State St, Trenton, NJ, 08616 X  
Show search results for 401 E State St...

### Legend

Overburdened Communities by Criteria (2021)

- Adjacent
- Limited English
- Low Income
- Low Income and Limited English
- Low Income and Minority
- Low Income, Minority, and Limited English
- Minority
- Minority and Limited English

Municipalities with Overburdened Communities under the New Jersey Environmental Justice Law (2021)



0.4mi  
-74.811 40.247 Degrees

# Environmental Justice Mapping, Assessment and Protection Tool (EJMAP)

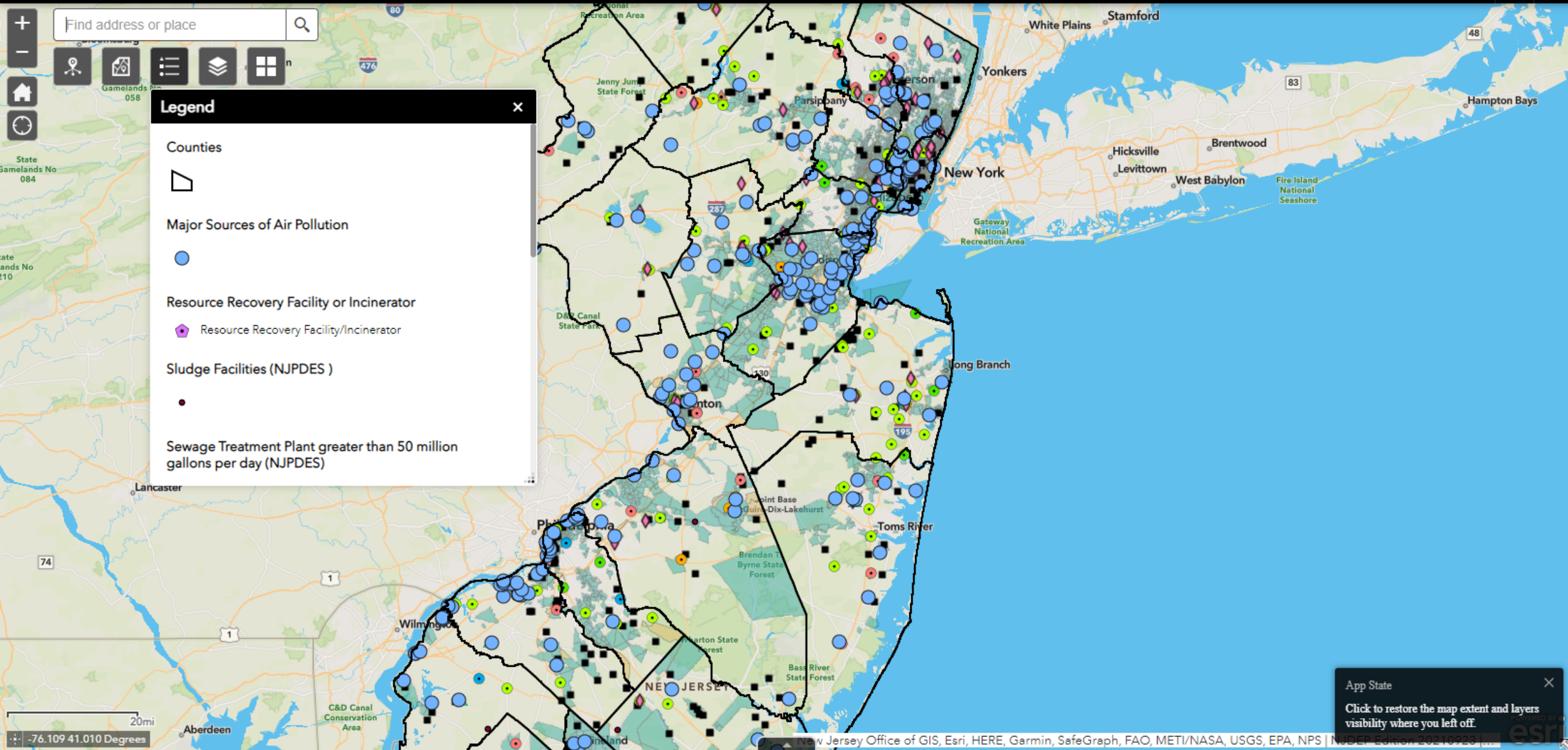


Find address or place

Map navigation controls: zoom in (+), zoom out (-), home, search, layers, legend, full screen

### Legend

- Counties
- Major Sources of Air Pollution
  - Resource Recovery Facility or Incinerator
    - Resource Recovery Facility/Incinerator
  - Sludge Facilities (NJPDES)
    - Sewage Treatment Plant greater than 50 million gallons per day (NJPDES)



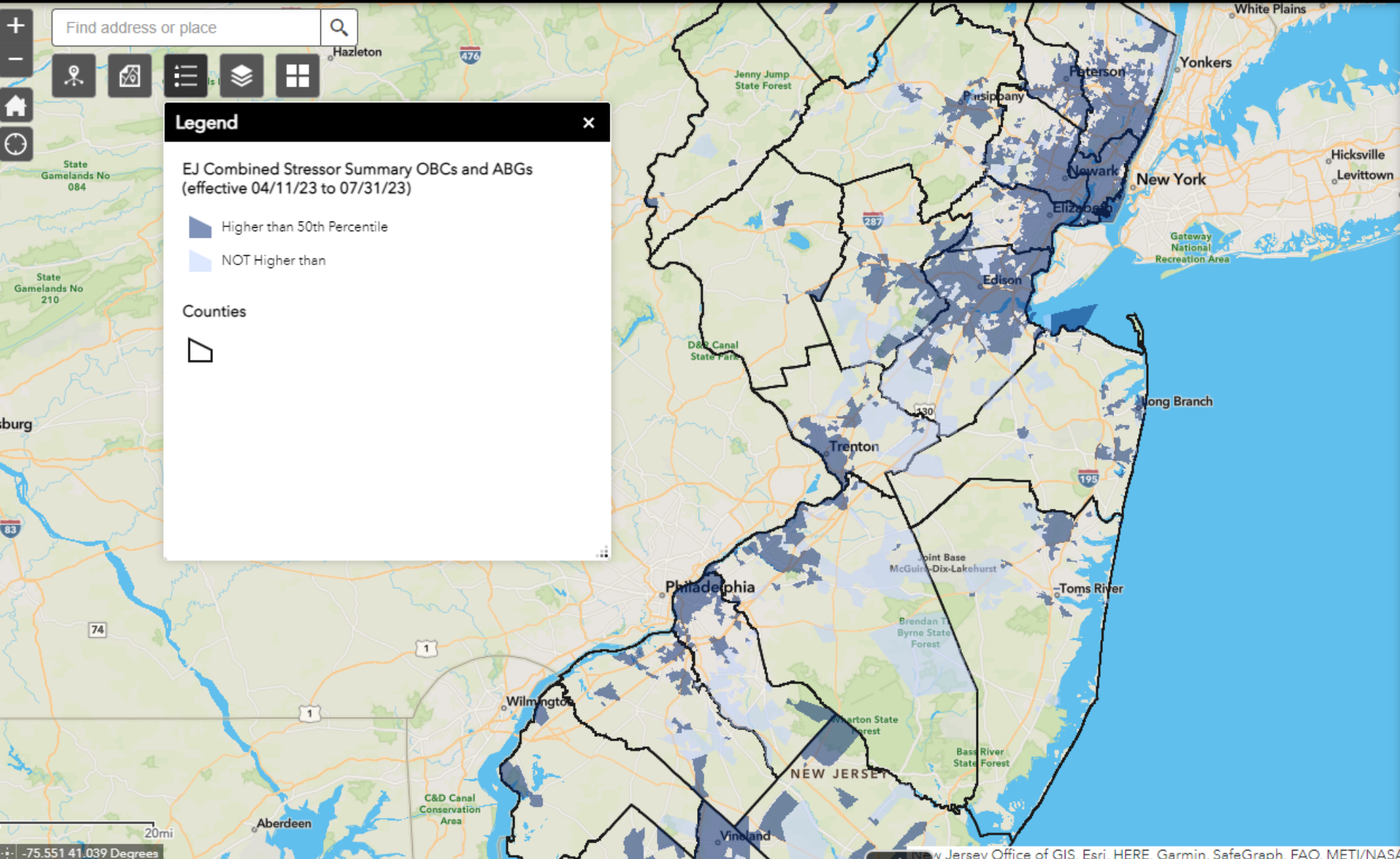
App State

Click to restore the map extent and layers visibility where you left off.



# Environmental Justice Mapping, Assessment and Protection Tool (EJMAP)

- Introduction
- Overburdened Communities
- Facilities
- Stressor Summary



### Legend

EJ Combined Stressor Summary OBCs and ABGs (effective 04/11/23 to 07/31/23)

- Higher than 50th Percentile
- NOT Higher than

Counties

## About

The Stressor Summary tab presents the block group-level data for each of the 26 environmental or public health stressors and the Combined Stressor Total (CST), as well as the Geographic Points of Comparison (GPC) for each. The Geographic Point of Comparison is the lower of the 50th percentile of the State or relevant County Non-OBC block groups. For these calculations, ABGs are included in the non-OBC totals.

The table below shows the GPC values and identifies the GPC used the CST comparison. Using this approach, approximately 2973 out of 3496 OBC block groups (85%) are considered subject to averse cumulative stressors ("higher than"). OBC block groups that are considered "higher than" account for 58% of the land area where OBC block groups are covered. Clicking any block group brings a pop up with a link to a table with all the relevant information for that specific area.

County	County Non-OBC 50th Percentile	State Non-OBC 50th Percentile	Geographic Point of Comparison
Atlantic	11	13	11
Bergen	15	13	13
Burlington	13	13	13
Camden	14	13	13
Cape May	12	13	12
Cumberland	12	13	12
Essex	14	13	13
Gloucester	11	13	11
Hudson	17	13	13
Hunterdon	11	13	11
Mercer	13	13	13
Middlesex	14	13	13
Monmouth	12	13	12
Morris	13	13	13
Ocean	11	13	11
Passaic	14	13	13
Salem	12	13	12
Somerset	13	13	13
Sussex	13	13	10.5
Union	13	13	13
Warren	13	13	12

App State

Click to restore the map extent and layers visibility where you left off.

# Environmental & Public Health Stressors

“Environmental or public health stressors” means sources of environmental pollution, including, but not limited to:

1. concentrated areas of air pollution,
2. mobile sources of air pollution,
3. contaminated sites,
4. transfer stations or other solid waste facilities, recycling facilities, scrap yards, and
5. point-sources of water pollution including, but not limited to, water pollution from facilities or combined sewer overflows;

or conditions that may cause potential public health impacts, including, but not limited to:

1. asthma,
2. cancer,
3. elevated blood lead levels,
4. cardiovascular disease, and
5. developmental problems in the overburdened community.



Second River, Newark

**Note:** The Department provides baseline stressor information via [EJMAP](#).



# Environmental & Public Health Stressors

- After considering data availability, data quality, appropriate geographic scale, quantifiability, and marginal value, we are now considering 26 stressors.



# Concentrated Areas of Air Pollution

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
1	Ground-Level Ozone	Days above National Ambient Air Quality Standard (NAAQS)	<ul style="list-style-type: none"> <li>NJ monitoring data</li> <li>Points (monitors)</li> </ul>	✓	✓
2	Fine Particulate Matter (PM 2.5)	Days above National Ambient Air Quality Standard (NAAQS)	<ul style="list-style-type: none"> <li>NJ monitoring data</li> <li>Points (monitors)</li> </ul>	✓	✓
3	Cancer Risk from Diesel PM	Estimated cancer risk	<ul style="list-style-type: none"> <li>NATA data</li> <li>Census Tract</li> </ul>	✓	✓
4	Cancer Risk from Air Toxics Excluding Diesel PM	Estimated cancer risk	<ul style="list-style-type: none"> <li>NATA data</li> <li>Census Tract</li> </ul>	✓	✓
5	Non-Cancer Risk from Air Toxics	Estimated noncancer risk	<ul style="list-style-type: none"> <li>NATA</li> <li>Census Tract</li> </ul>	✓	
6	Permitted Air Sites	Number of sites per square mile	<ul style="list-style-type: none"> <li>NJ Air Permitting data</li> <li>Points (facility locations)</li> </ul>		

# Mobile Sources of Air Pollution

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
7	Traffic - Cars, Light- and Medium-Duty Trucks	Vehicle density per square mile	<ul style="list-style-type: none"> <li>• USDOT FHA</li> <li>• Highway Performance Monitoring System (HPMS)</li> </ul>	✓	✓
8	Traffic – Heavy-Duty Trucks	Vehicle density per square mile	<ul style="list-style-type: none"> <li>• USDOT FHA</li> <li>• Highway Performance Monitoring System (HPMS)</li> </ul>		
9	Railways	Rail miles per square mile	<ul style="list-style-type: none"> <li>• ArcGIS Railroad Layer</li> <li>• Line segments</li> </ul>		

# Point Sources of Water Pollution

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
10	Surface Water	Non-attainment of designated uses for the Integrated Report	<ul style="list-style-type: none"> <li>• Integrated Report</li> <li>• Block Group</li> </ul>		✓
11	Combined Sewer Overflows	Number of CSOs in block group	<ul style="list-style-type: none"> <li>• NJPDES Permitting Database</li> <li>• Points (CSO locations)</li> </ul>		
12	NJPDES Sites	Number of sites per square mile	<ul style="list-style-type: none"> <li>• NJPDES Permitting Database</li> <li>• Points (facility locations)</li> </ul>		

# Solid Waste & Scrap Yards

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
13	Solid Waste Facilities	Number of transfer stations, solid waste and recycling facilities, and incinerators per square mile	<ul style="list-style-type: none"> <li>NJDEP Division of Solid and Hazardous Waste Database</li> <li>Points (facility locations)</li> </ul>		✓
14	Scrap Metal Facilities	Number of sites per square mile	<ul style="list-style-type: none"> <li>NJ Environmental Management System</li> <li>Points (facility locations)</li> </ul>		✓

# Contaminated Sites

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
15	Known Contaminated Sites	Density of Weighted Known Contaminated Sites (KCSL)	<ul style="list-style-type: none"> <li>NJDEP Site Remediation Database</li> <li>Points (facility locations)</li> </ul>	✓	✓
16	Soil Contamination Deed Restrictions	Percent acres of the block group with Deed Notice restrictions	<ul style="list-style-type: none"> <li>NJDEP Site Remediation Database</li> <li>Polygons</li> </ul>		
17	Groundwater Classification Exception Areas/Current Known Extent Restrictions	Percent acres of block group with Classification Exception Area (CEA) or Currently Known Extent (CKE) notice restrictions	<ul style="list-style-type: none"> <li>NJDEP Site Remediation Database</li> <li>Polygons</li> </ul>		

# May Cause Public Health Issues (Environmental, 1/2)

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
18	Drinking Water	Number of Maximum Concentration Level (MCL), Treatment Technique (TT), and Action Level Exceedance (ALE) violations	<ul style="list-style-type: none"> <li>Public Violations Reports for MCL, TT, and ALE</li> <li>Purveyor Areas</li> </ul>		✓
19	Emergency Planning Sites	Density of TCPA, DPCC and CRTK facilities	<ul style="list-style-type: none"> <li>FACITS, NJEMS, NJDEP databases</li> <li>Points (facility locations)</li> </ul>	✓	
20	Potential Lead Exposure	Percent of pre-1950 housing	<ul style="list-style-type: none"> <li>US Census Data</li> <li>Block Group</li> </ul>	✓	✓

# May Cause Public Health Issues (Environmental, 2/2)

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
21	Lack of Recreational Open Space	Population living greater than a ten-minute walk (¼ mile) from Public Recreational Open Space	<ul style="list-style-type: none"> <li>ArcGIS Dataset</li> <li>Polygons of open space</li> </ul>		
22	Lack of Tree Canopy	Spatially weighted mean tree canopy cover	<ul style="list-style-type: none"> <li>USDA Tree Cover Data</li> <li>Raster, 100 ft. grids</li> </ul>		
23	Impervious Cover	Percent impervious surface in a block group	<ul style="list-style-type: none"> <li>ArcGIS Data Layer</li> <li>Polygons</li> </ul>		
24	Flooding (Urban Land Cover)	Percent of urban land use area flooded	<ul style="list-style-type: none"> <li>FEMA Maps/NJDEP Flood Hazard Standards</li> <li>Polygons</li> </ul>		



# May Cause Public Health Issues (Social)

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
25	Unemployment	Percent of an adult population that is unemployed	<ul style="list-style-type: none"> <li>US Census Data</li> <li>Block Group</li> </ul>		✓
26	Education	Percent of an older population that has less than a high school diploma	<ul style="list-style-type: none"> <li>US Census Data</li> <li>Block Group</li> </ul>	✓	✓

# Step 2: Environmental Justice Impact Statement & Meaningful Public Participation

## Environmental Justice Impact Statement (EJIS) Assesses

- The potential environmental and public health stressors associated with the facility;
- The environmental or public health stressors already borne by the overburdened community;
- Any adverse environmental or public health stressors that cannot be avoided if the permit is granted; and
- Measures to avoid or minimize facility contributions to stressors in the OBC.

## EJIS plus Supplemental Information

- Supplement information required when a community is already subject to adverse cumulative stressors, or where a facility will create adverse cumulative stressors.

## Meaningful Public Participation

- The applicant conducts a public hearing in the overburdened community to present EJIS.
- Public Notice in multiple forms: newspaper, property owners within 200 feet, sign at facility, online and additional community-specific methods.
- There is a minimum 60-day public comment period, and applicants must respond to all public comments in writing.

# Step 3: Department Decision

The Department considers the EJS and any supplemental information, testimony, written comments, the applicant's response to comments, and determines whether the facility can avoid a disproportionate impact.

If the facility **can avoid a disproportionate impact to the overburdened community**, the Department would impose permit conditions necessary to ensure that a disproportionate impact remains avoided.

If the facility **cannot avoid a disproportionate impact to the overburdened community**, the Department would:

- **Deny** an application for a new facility unless it demonstrates it will serve a compelling public interest **in the overburdened community**.
- Expanded facilities/Major source renewals: authorize the applicant to proceed with Department permitting subject to appropriate conditions to address facility impacts to environmental and public health stressors.

# Guidance and Supportive Materials

The Office of Environmental Justice's [website](#) is updated to include the final copy of the rule and supportive materials.

## **Policy**

- [Environmental Justice Law](#)
- [Environmental Justice Rule](#)
- [Frequently Asked Questions](#)
- [EJ Rule Training Video](#)
  - [EJ Rule Training Presentation](#)
- [Glossary of Terms](#)

## **Environmental Justice Mapping, Assessment and Protection (EJMAP) Tool**

- [Environmental Justice Mapping, Assessment and Protection \(EJMAP\) Tool](#)
- [EJMAP Tutorial](#)
- [EJMAP Technical Guidance](#)
- [OBC Technical Notes](#)
- [OBC Frequently Asked Questions](#)

## **Applicant Resources**

- [EJ Submission Service Instructions](#)
- [Public Hearing Best Practices](#)



**Thank You!**

**Learn more about Environmental Justice**  
[nj.gov/dep/ej/](https://nj.gov/dep/ej/)

**Kandyce Perry**

Director, Office of Environmental Justice  
[Kandyce.Perry@dep.nj.gov](mailto:Kandyce.Perry@dep.nj.gov) | (609) 292-2908

@NJGov

@NewJerseyDEP