



EJ, Climate Impacts, and Community Engagement: Lessons to a First Year Consultant

*A&WMA NFS Seminar
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ESI – Air Practice Leader*

Chris Whitehead – ESI, Air Practice Lead

- 15+ years of environmental compliance experience
- National CAM for multiple large industrial clients
- Qualified Environmental Professional and Certified Environmental Systems Manager
- M.S. – Environmental Management and Policy – American University
- Certificate – Sustainability Program Management – M.I.T.
- Published numerous times on environmental justice, climate impacts, and offshore wind project development
- Born, raised, and raising a family in New Jersey



ESI Consulting and Technical Services

Environmental Impact Statements	Phase I & II Environmental Site Assessments	Due Diligence Reviews
Litigation Support	Regulatory Negotiations	Ecological Services and Permitting
Soil & Groundwater investigations	Contaminant Delineation	Groundwater Monitoring & Modeling
	Air Quality Permits, Monitoring & Modeling	

- Certified Small Business Enterprise (SBE) in New Jersey
- Offshore wind planning and permitting
- Compliance Plans (SPCC, RCRA, other)
- Stormwater/Wastewater Permitting
- Treatment, Storage and Disposal Facility (TSDF) Audits
- Facility Audits
- Indoor Air Quality Evaluations
- Workplace/Process Hazards Assessment
- TSCA Compliance
- Environmental Risk Assessment
- Environmental Oversight

CODE Climate Risk Framework (C.O.D.E., 2021)

	High Likelihood of Hazard	Low Likelihood of Hazard
Low Capacity	<i>High Risk</i> Communities that have poor infrastructural and financial capacity and face high likelihood of exposure to climate-related hazards.	<i>Medium Risk</i> Communities that have low likelihood of exposure to climate-related hazards but also low infrastructural and financial capacity.
High Capacity	<i>Medium Risk</i> Communities that have strong financial and infrastructural capacity and relatively high threat of exposure to climate-related hazards.	<i>Low Risk</i> Communities that have strong financial and infrastructural capacity and face low likelihood of exposure to climate-related hazards.

Current Distribution of Socially Vulnerable Populations in the Coastal Counties of the Contiguous U.S. (Whitehead and Kolian, 2021)

Region	Low Income (% population)	Minority* (% population)	No High School (% population)	65 and Older (% population)
Contiguous U.S. Coast	32	39	13	15
Northwest (Detroit)	26	29	8	15
Northeast (Philadelphia)	26	44	12	15
Southeast-Atlantic	36	51	12	18
Southwest (Los Angeles)	30	63	17	14
Southern Great Plains	37	67	20	11
Southeast-Gulf	35	33	12	20

The Role of Grassroots Organizations

- Midwest Environmental Justice Network (MWEJN), Climate Justice Alliance (CJA), Grassroots Global Justice Alliance (GGJA), Deep South Center for Environmental Justice - 501c3
- Many have received increased grant funding, actively participate in comment period and scoping, leadership in the White House Environmental Justice Advisory Council (WHEJAC)
- Internationally recognized authorities on the topics like Dr. Robert Bullard and Dr. Beverly Wright
- Often focused on specific issues
- More likely to highlight environmental racism and the role of indigenous peoples

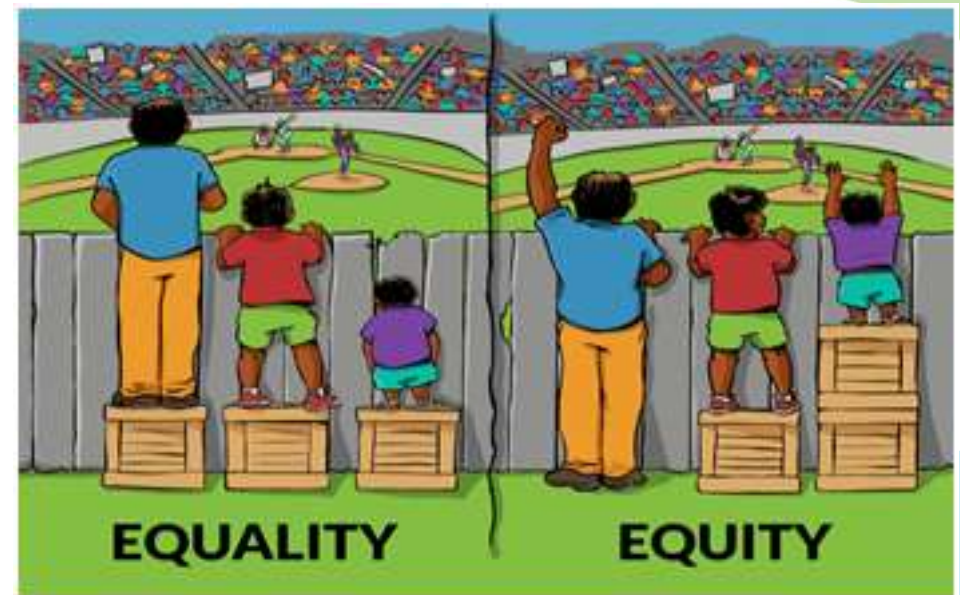


Drivers for State Action

Title VI of the CRA...

“No person in the USA shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”

- Many challenges to individual permitting actions in states across the country
- Also pushes individual states to act for fear of losing federal funding



Basis for EJ Action

The Environmental Rights amendment is a simple 15-word addition to the Bill of Rights of the New York State Constitution stating,

“Each person shall have a right to clean air and water, and a healthful environment.”

New York, Pennsylvania, and Montana have green amendments.

Delaware, Hawaii, Maine, New Mexico, New Jersey, and Washington all have Green Amendment campaigns.



“EJ in Air Permitting: Principles for Addressing EJ Concerns in Air Permitting – Dec 2022”

1. Identify communities with potential EJ Concerns
2. Engage early in the permitting process to promote “meaningful participation”
3. Enhance public involvement throughout the permitting process
4. Conduct a “fit for purpose analysis”
5. Minimize and mitigate disproportionately high and adverse effects associated with the permitting action
6. Provide federal support through the air permitting process
7. Enhance transparency through the process
8. Build capacity to enhance the consideration of EJ in the air permitting process



[Click to see the original EPA document](#)

Quick Case Study

*Passaic Valley Sewerage Commission
Newark, NJ*

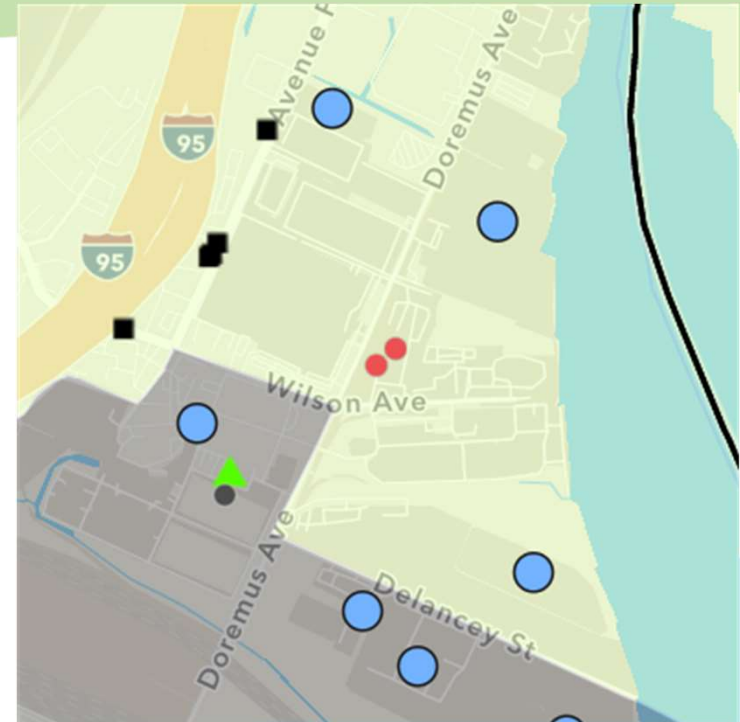
Six other Title V facilities within ~1.5 miles

Four major highways

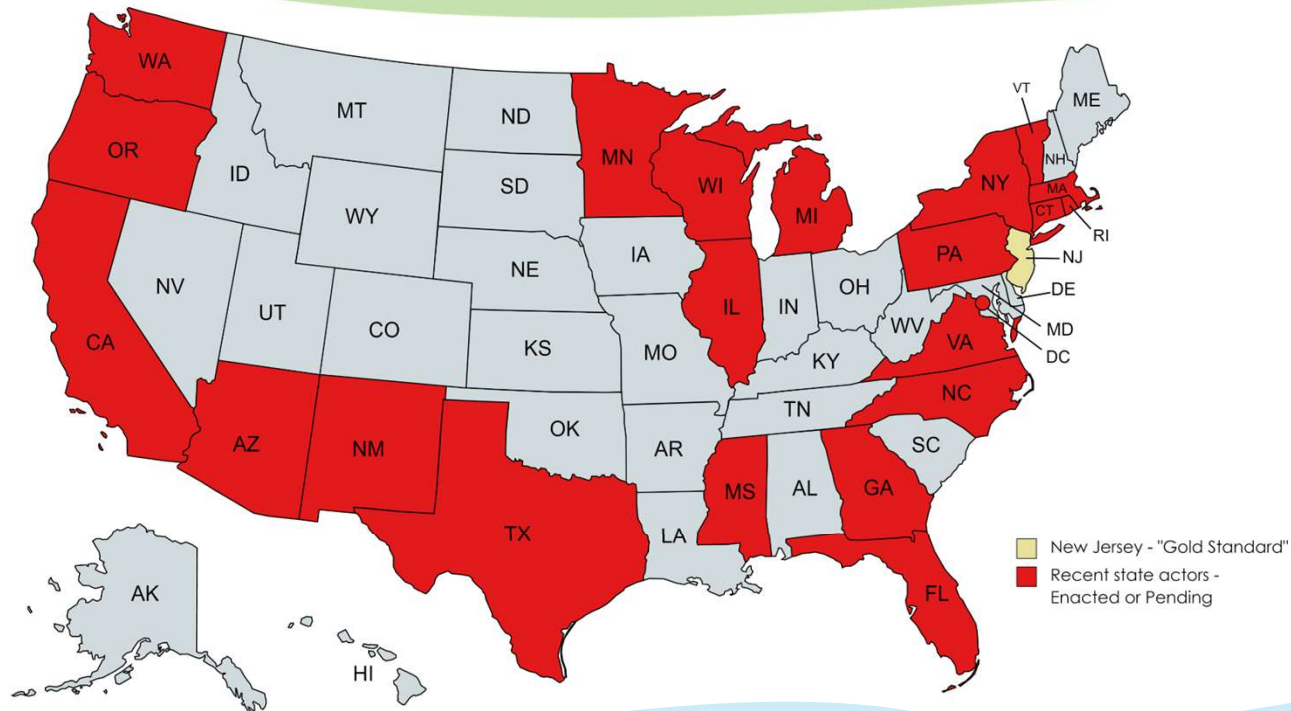
Newark Airport

Port of Newark

Over 100 years of industrial history



Other States Following Suit

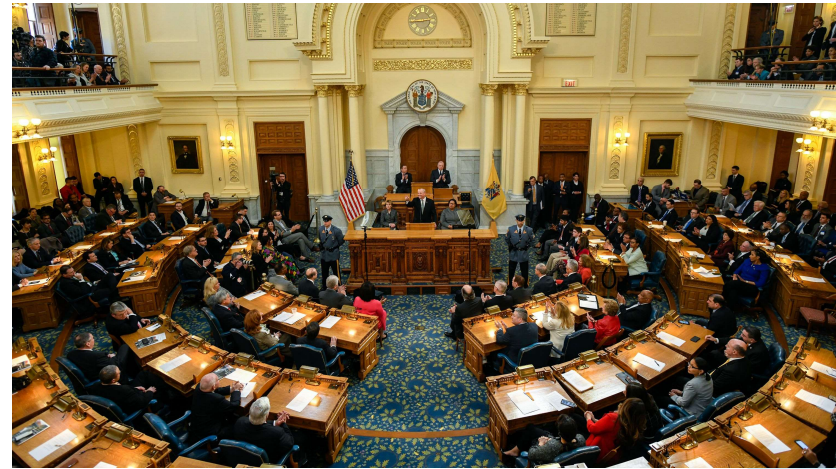


Since September 2020 numerous states have continued action on their state EJ policy and practices.

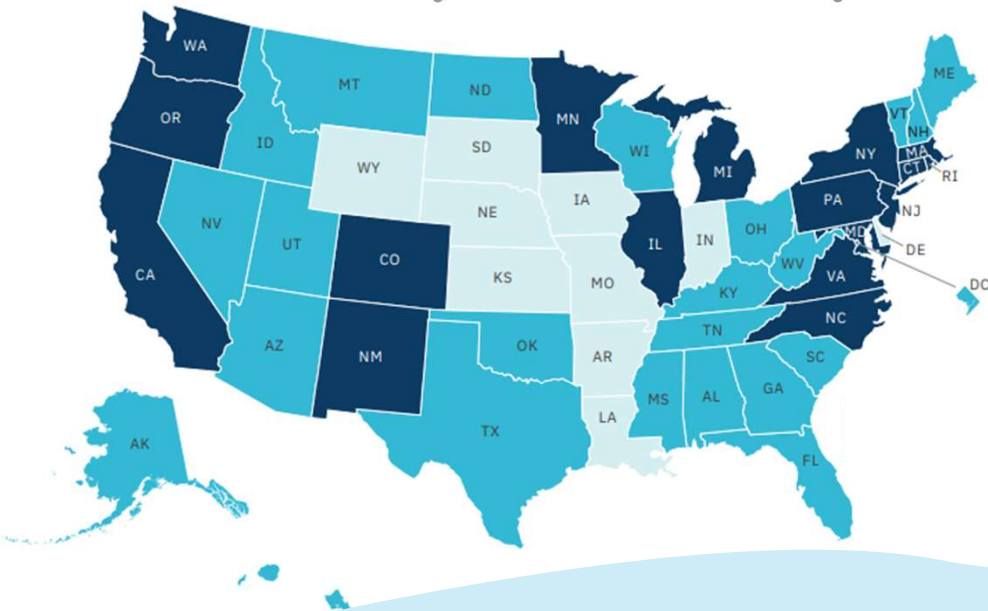
Many refer to New Jersey as the "Gold Standard". Collaboration has been occurring through intra-state working groups.

EJ State Policy Action Spectrum

Create an EJ Advisory Council
Center EJ ideas in state policy
Specific issue advocacy (e.g., lead pipe removal)
Identify OBCs within the state
Establish a state-specific EJ Mapping Tool
Cumulative Impacts Assessment in Permitting?
Public input period toward implementation



EJ Actions by State



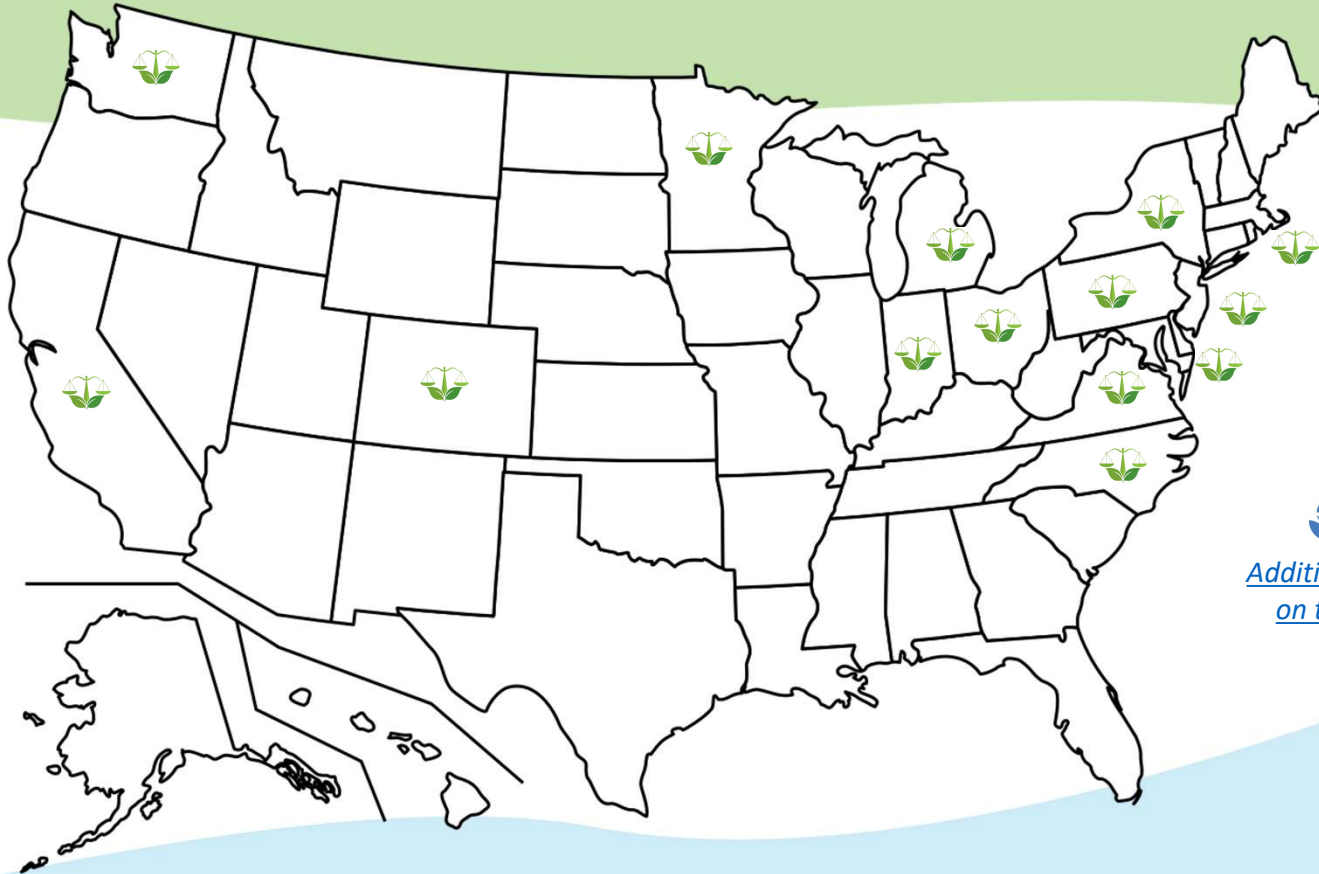
As of August 2022, even more states have begun following suit.

However, it is clear at this point that states with the most active EJ programs largely reside in the North, despite the fact that EJ really began in the South.

States with EJ Mapping Tools



*Click on the EJ icon to
visit the relevant site
for each state*



[Additional information
on the US EPA site](#)

EJ Index – Agency for Toxic Substances and Disease Registry (ATSDR)

The Environmental Justice Index (EJI) is the first national, place-based tool designed to measure the cumulative impacts of environmental burden through the lens of human health and health equity.

The EJI delivers a single score for each community so that public health officials can identify and map areas most at risk for the health impacts of environmental burden.

Social factors such as poverty, race, and ethnicity, along with preexisting health conditions may increase these impacts.

This tool helps public health officials prioritize action for those communities most at need.

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Location	Census Tract 139.01, Albany County, New York
Total Population	2,336.00
EJI Ranks	0.44
Air Pollution	0.44
Ozone	0.46
PM2.5	0.25
Diesel Particulate Matter	0.66
Air Toxics Cancer Risk	0.35
Potentially Hazardous & Toxic Sites	0.65
National Priority List Sites	0.00
Toxic Release Inventory Sites	0.55

The NJ EJ Law Model – Leading the Way

- Three-part test for applicability
- First time an agency is mandated to deny permits for new facilities if undue impacts cannot be avoided
- Creates a LICT standard for reducing projected impacts above the CST total



NJ EJ Law – Critical Dates



Sep 18, 2020 – Governor Murphy signs NJ EJ law



Sep 22, 2021 – NJDEP Releases AO25



June 6, 2022 – NJDEP proposes EJ implementation regs



Sep 4, 2022 – Comment period ends on rule proposal after multiple public hearings across the state



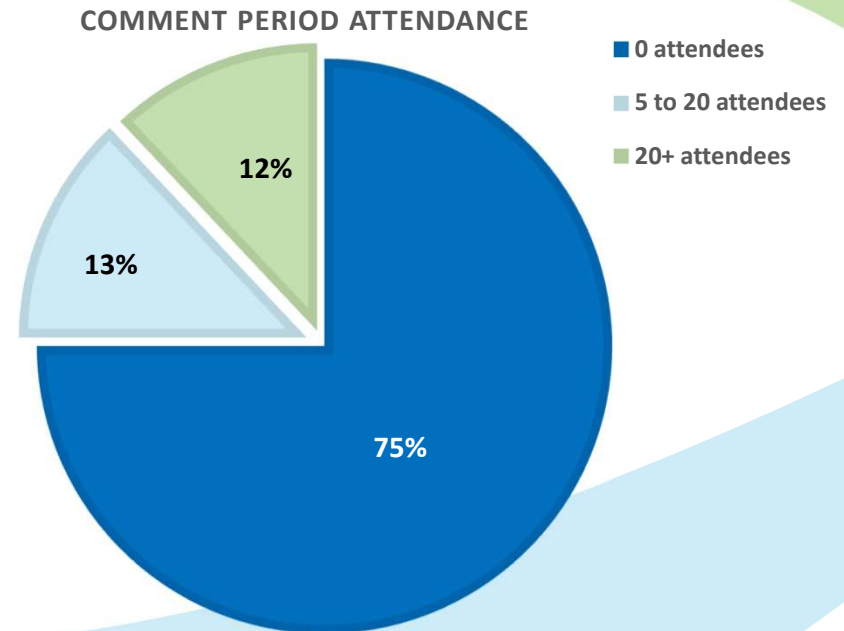
NJ EJ AO 2021-25 Stats (as of 12/22)

Public Info Sessions & Public Comment Period

DEP Office of Permit and
Project Navigation (OPPN) had

76 cases

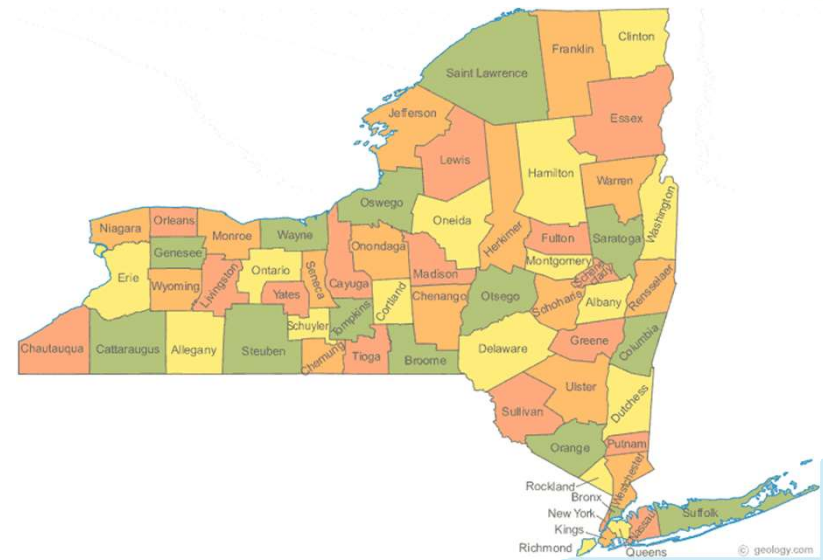
- 6 received written comment only
- 25 are completed and now in permit review
- None have required enhanced permit conditions thus far



EJ in New York – Criteria for EJ Areas

Potential EJ Areas are U.S. Census block groups of 250 to 500 households each that, in the Census, had populations that met or exceeded at least one of the following statistical thresholds:

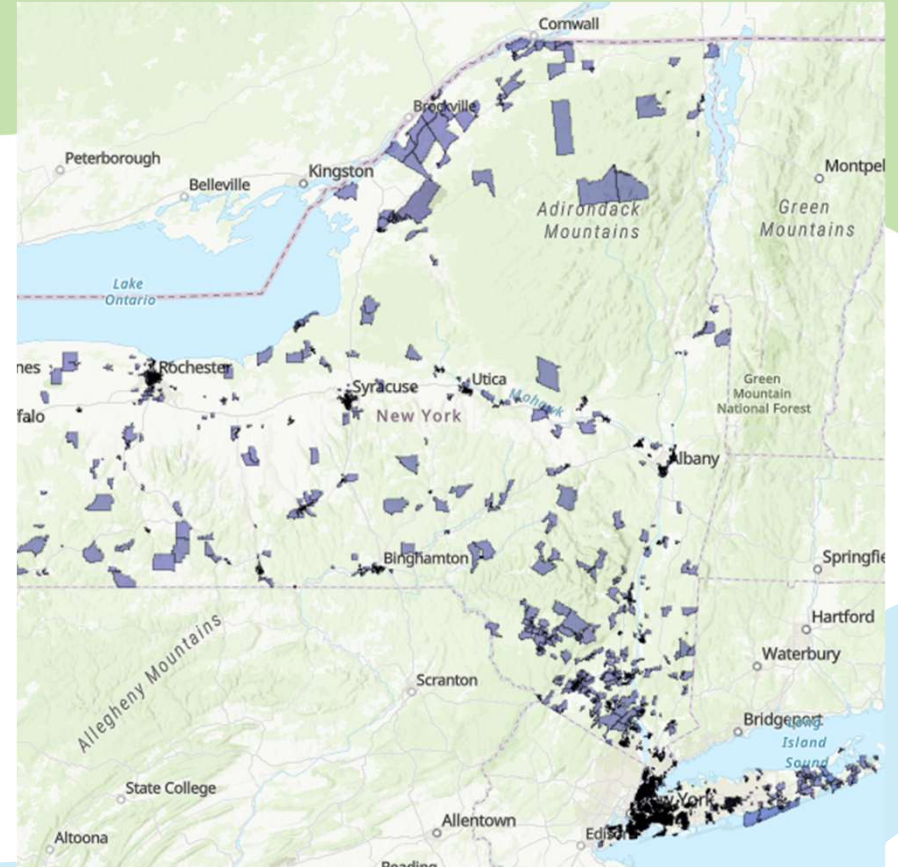
- *At least 52.42% of the population in an urban area reported themselves to be members of minority groups; or*
- *At least 26.28% of the population in a rural area reported themselves to be members of minority groups; or*
- *At least 22.82% of the population in an urban or rural area had household incomes below the federal poverty level.*



Potential EJ Areas in New York



ArcGIS Interactive Mapping Tool
Potential NYS Environmental Justice Areas



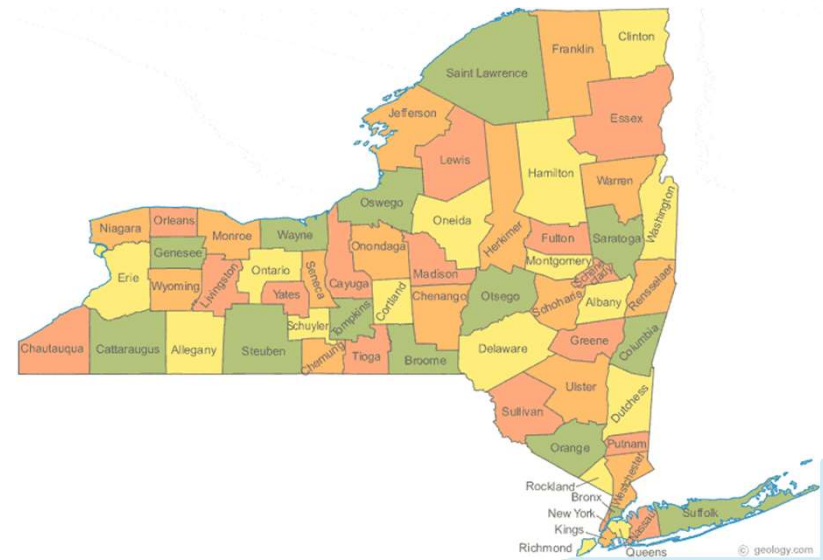
EJ in New York

Commissioner Policy 29, EJ and Permitting (2003)

- *Identifies potential EJ areas*
- *Provides EJ info to permit applicants in EJ areas*
- *Requirements for potential projects with at least one projected significant adverse impact*
- *Strengthens the SEQR process*

Cumulative Impacts Bill (S8830) – signed 12/31/22

- *Requires a CI Assessment before a permit is issued or renewed. Second state to NJ. Maryland also on a similar path.*
- *DEC will now work through implementation. This took two years in NJ.*



Key Line from S8830

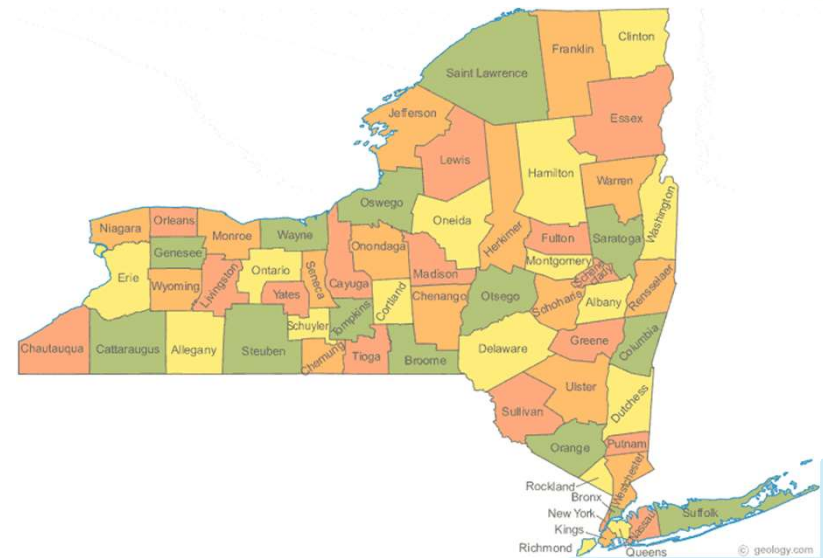
“No permit shall be approved or renewed by the department if it may cause or contribute to, either directly or indirectly, a disproportionate or inequitable or both disproportionate and inequitable pollution burden on a disadvantaged community.”



EJ in New York – What's New

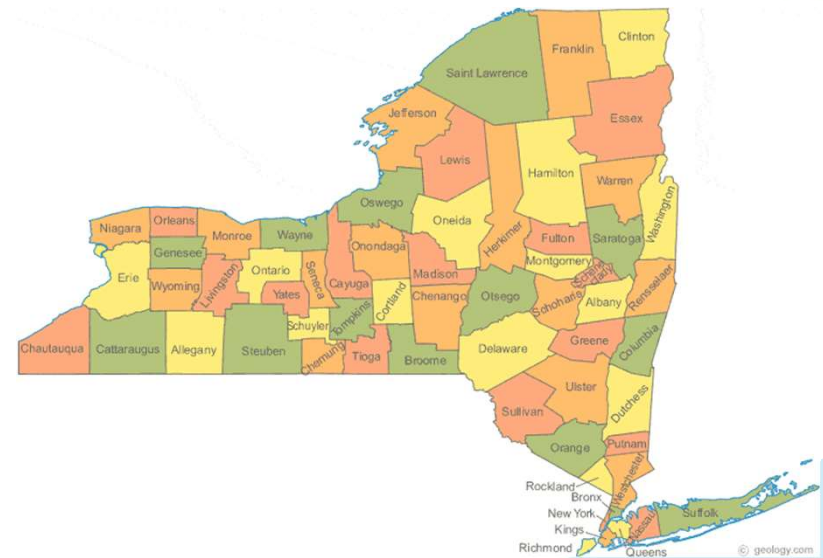
Facilities in EJ areas will be required to submit an existing burdens report including baseline monitoring data collected within the last two years. Some minor facility exceptions. No CPI exception.

- *Each “existing pollution source or categories of sources affecting” the community and “the potential routes of human exposure to pollution from that source or categories of sources”*
- *Ambient concentration of regulated air pollutants and regulated or unregulated toxic air pollutants*
- *Traffic volume*
- *Noise and odor levels*
- *Exposure or potential exposure to lead paint*

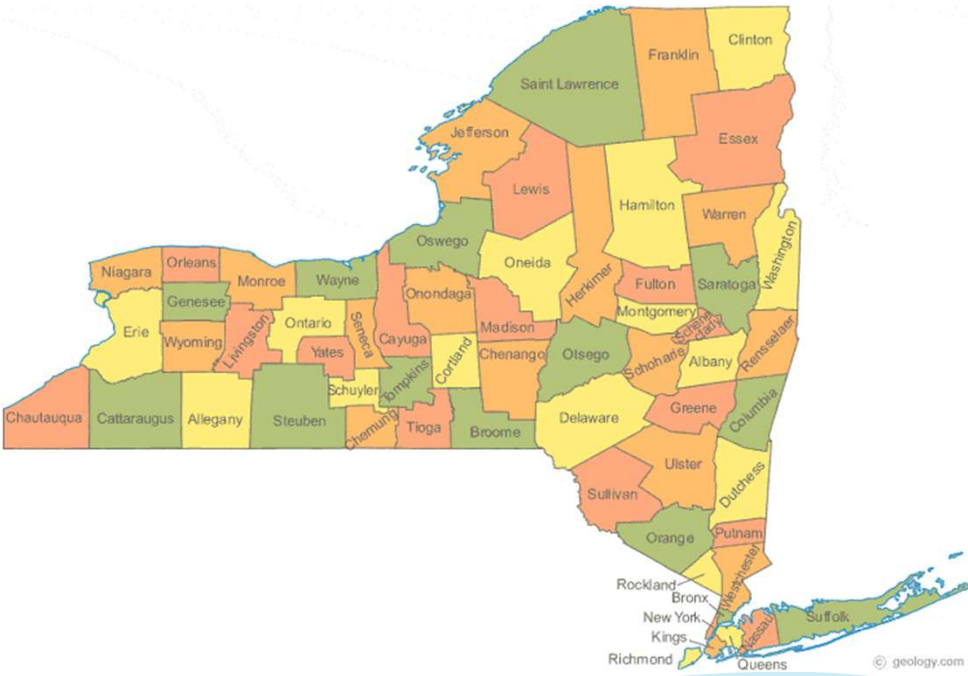


EJ in New York

- *Exposure or potential exposure to contaminated drinking water supplies*
- *Proximity to sources like solid or hazardous waste management facilities, wastewater treatment plants, hazardous waste sites, incinerators, recycling facilities, waste transfer facilities and petroleum or chemical manufacturing, storage, treatment or disposal facilities*
- *The potential or documented cumulative human health effects of the foregoing pollution sources*
- *The potential or projected contribution of the proposed action to existing pollution burdens in the community and potential health effects of such contribution, taking into account existing pollution burdens*



New York vs. New Jersey Model



How do the two differ?

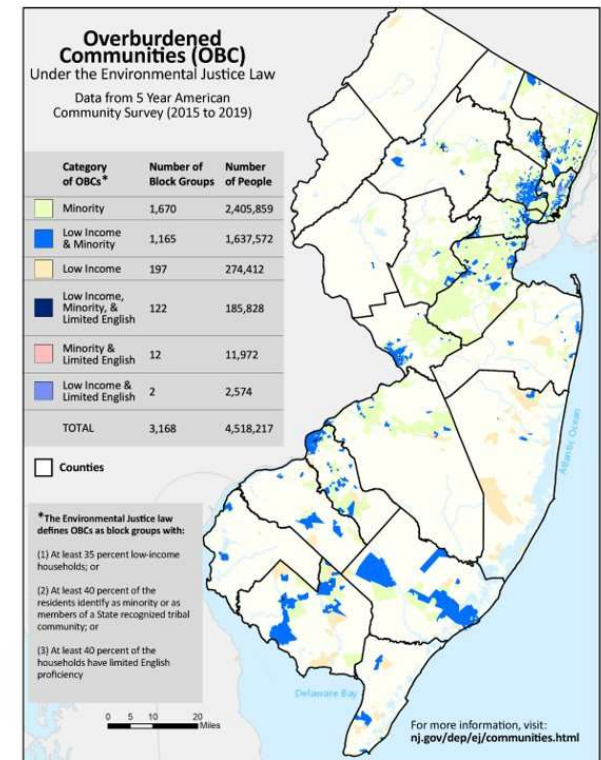


Defining 'Overburdened Community'

Includes any census block group, as determined in accordance with the most recent U.S. Census, in which:

- a) at least 35% of the households qualify as low-income households; **OR***
- b) at least 40% of the residents identify as minority or as members of a state-recognized tribal community; **OR***
- c) at least 40% of the households have limited English proficiency.*

Overburdened Community Criteria	# Block Groups	Population
Minority	1,670	2,405,859
Low Income and Minority	1,165	1,637,572
Low Income	197	274,412
Low Income, Minority, and Limited English	122	185,828
Minority and Limited English	12	11,972
Low Income and Limited English	2	2,574
	3,168	4,518,217



Facilities Subject to the NJ EJ Law

One of eight (8) types of facilities:

1. Major sources of air pollution (e.g., power plants, cogeneration facilities);
2. Incinerators or resource recovery facilities;
3. Large sewage treatment plants (more than 50 million gallons per day);
4. Transfer stations or solid waste facilities;
5. Recycling facilities that receive at least 100 tons of recyclable material per day;
6. Scrap metal facilities;
7. Landfills; or
8. Medical waste incinerators, except those attendant to hospital and universities.



Covered Permits

- **Air Quality, Energy & Sustainability Permits**
 - N.J.S.A. 26:2C-1 (Air Pollution Control Act)
- **Solid Waste Permits**
 - N.J.S.A. 13:1E-1, 13:1E-26 (Solid Waste Management Act)
 - N.J.S.A. 13:1E-99.11 (New Jersey Statewide Mandatory Source Separation and Recycling Act)
- **Water Resources Management Permits**
 - N.J.S.A. 58:1A-1, 58:4A-5 (Water Supply Management Act)
 - N.J.S.A. 58:10A-1, 58:10A-21 (Water Pollution Control Act)
- **Watershed & Land Management Permits**
 - N.J.S.A. 12:5-1 (Waterfront Development)
 - N.J.S.A. 13:1D-29 (Construction Permits)
 - N.J.S.A. 13:9B-1 (Freshwater Wetlands Protection Act)
 - N.J.S.A. 13:19-1 (Coastal Area Facility Review Act)
 - N.J.S.A. 13:20-1 (Highlands Water Protection and Planning Act)
 - N.J.S.A. 58:16A-50 (Flood Hazard Control Act)
 - N.J.S.A. 13:9A-1 (The Wetlands Act of 1970)
- **Other Permits**
 - N.J.S.A. 13:1F-1 (Pesticide Control Act of 1971)
 - N.J.S.A. 13:1E-48.1, 13:1E-99.21a (Comprehensive Regulated Medical Waste Management Act)

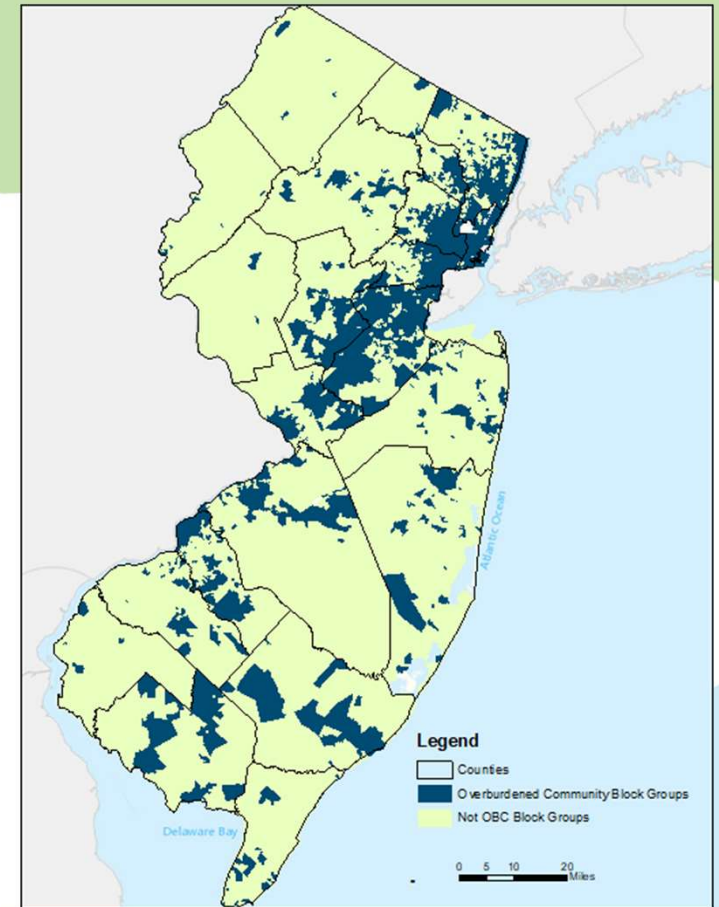


Geographic Points of Comparison

The EJ Law requires the DEP to determine whether environmental or public health stressors are higher than those borne by other communities within the state, county or other geographic unit of analysis as determined by the department.

Proper Comparison Percentile

- 50th (higher than)
- NJ-specific GIS mapping tool



Environmental & Public Health Stressors



Ground-level ozone
PM2.5
Air Toxics Cancer Risk (Including Diesel PM)
Air Toxics Cancer Risk (Excluding Diesel PM)
Air Toxics Non-Cancer Risk
Mobile Sources
Traffic (Heavy-duty trucks)
Contaminated Sites
Soil Contamination

Deed Restrictions
Ground water classification exemption areas
Transfer Stations/Solid waste facilities/Recycling
Facilities/Scrap metal facilities
Point-sources of water pollution
Combined sewer overflows (CSOs)
Drinking water
Lead exposure
Lack of recreational open space

Lack of tree canopy
Impervious Surface
Flooding (Land use cover)
Permitted Air Sites
NJPDES Sites
Emergency Planning Sites
Unemployment Rate in OBC
Education Rates in OBC

Requirements for DEP and Applicants

- Requires the submission of an environmental justice impact statement and public hearing for any application for a permit to expand, construct or renew the authorization to operate a covered facility.
- NJDEP reviews the environmental justice impact statement, along with other relevant information, to determine environmental and public health stressors' impact on overburdened communities that cannot be avoided through additional controls.
- If there is a disproportionate impact that cannot be avoided for a new facility, DEP shall deny applications for new facilities in overburdened communities unless there is a compelling public interest.
- For renewals and expansions, DEP may apply additional conditions to satisfy Local Impact Control Technology (LICT) standards, but cannot deny a permit
- See ESI Summary of the NJ EJ Rule Proposal in the chat box for a detailed breakdown of this process!



Themes to Remember



Know the Regulations



Know your project/site and its environmental impacts.

Reassess potential impacts annuals

Even if your site is SOTA making emissions and effluent reductions difficult, you may be able to reduce impacts elsewhere in related processes.



Have ongoing community outreach that is not just linked to a project

Listen more than you speak at these events

When possible, hire from within the community

Community Engagement Plans (CEP)

- Written document, publicly available on website, updated regularly
- Can start small – focusing on basic themes without firm commitments
- Coordinate with State, Local Groups, Employees
- Tangible way to prove investment in the issue
- Gradually increase goals with each plan revision
- Highlight cumulative positive effects from your site
- Train and educate



CEP Fundamentals



Background information. Include project context and any previous lessons learned from other projects that are relevant to this project and community.



Clearly defined engagement purpose and engagement objectives. This will determine the engagement methods you select and help when evaluating your community engagement activities and provides measures of success.



Engagement principles to guide how you're going to engage with the community.



Risks and challenges and mitigation strategies. Think through any potential risks, rate the likelihood and impact of each risk and consider ways to reduce any risks.

CEP Fundamentals

5. Level of engagement.

This determines how you will engage with the community and what role the community will have in decision making (if any) from informing/being informed to empowering/being empowered to make a decision.

6. Stakeholder analysis - includes details of all stakeholders, internal and external, their level and nature of interest in the project and level of engagement. Consider the contribution that stakeholders can make to the project.

Also think about how to provide access to a diverse range of community members including those with a disability, youth, people from different cultures and those who have little time to contribute such as busy parents.

9. Engagement methods.

Here's where the rubber hits the road in your community engagement plan. We recommend identifying how and when you will engage with the stakeholders.

10. Closing the loop.

How will you report back to the community about the community engagement findings and how they influenced the project? This is important for building trust with the community for future projects.

11. Evaluation.

What worked well and what lessons can you carry forward for your next community engagement project? Did you meet the engagement purpose and engagement objectives of your community engagement plan?

CLE Questions

1. *To date, which states have passed cumulative impacts laws linked to permitting?*
2. *OBCs are defined by socio-economic factors on a census block basis (True/False)*
3. *What are the parts of the climate risk framework?*
4. *How many states currently have their own EJ Mapping tool?*
5. *Community Engagement Plans have to contain numerical metrics? (True/False)*

Contact Info



If you have any questions or comments about this presentation or about the Environmental Justice/Community Engagement movement in general, please contact Chris at: 732-484-1968 or cwhitehead@esienv.com

Visit our [Resource Page](#) for more information and a downloadable library of relevant Environmental Justice and Community Engagement resources.

For an overview of our other environmental consulting and remediation services, visit us at www.esienv.com



ESI provides comprehensive professional consultation and field services to identify, prevent, and resolve environmental issues related to water, soil, air quality, and facilities.

With innovative technical skills and a clear understanding of our clients' goals, we effectively reduce or eliminate environmental impacts.

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