



- The slides for today's presentations are posted on the Watershed Academy webpage.
- A recording of the webcast will be posted within the next month.

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Webcast Logistics

- To Ask a Question Type your question into the "Questions" tool box on the right side of your screen and click "Send."
- To Report any Technical Issues (such as audio problems) Type your issue in the "Questions" tool box on the right side of your screen and click "Send" and we will respond by posting an answer in the "Questions" box.

Audience Polling



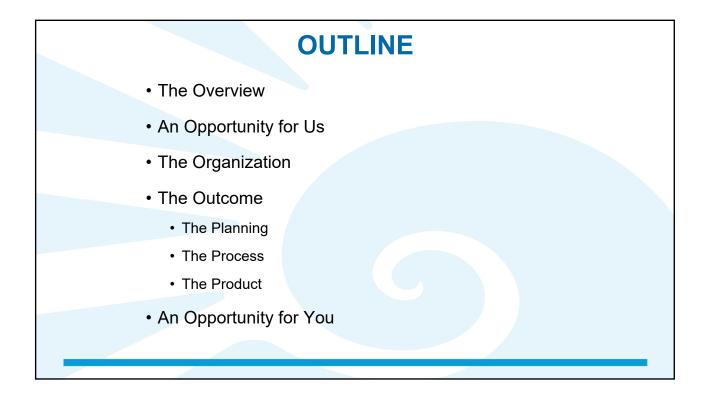
DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES

ENVIRONMENTAL JUSTICE FOR NORTH PORT ST. JOE: AN LID APPROACH TO SECURING BASIC INFRASTRUCTURE

PRESENTERS:

Monica Woodruff Dr. Kwame Owusu-Daaku

May 3rd, 2022.



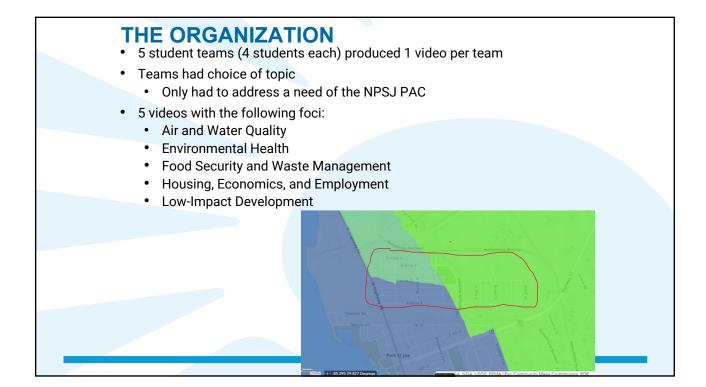
THE OVERVIEW



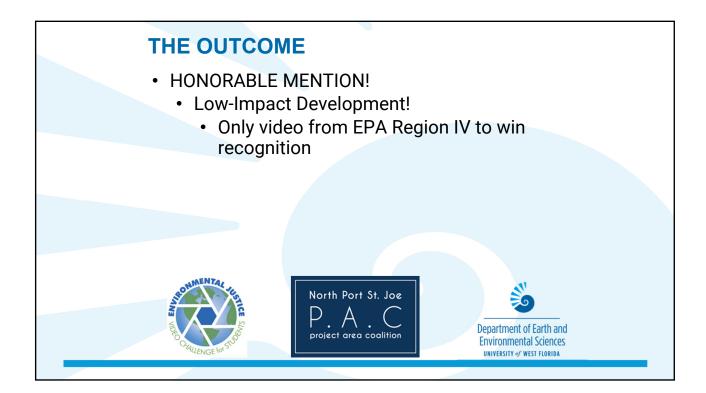
AN OPPORTUNITY FOR US



THE ORGANIZATION

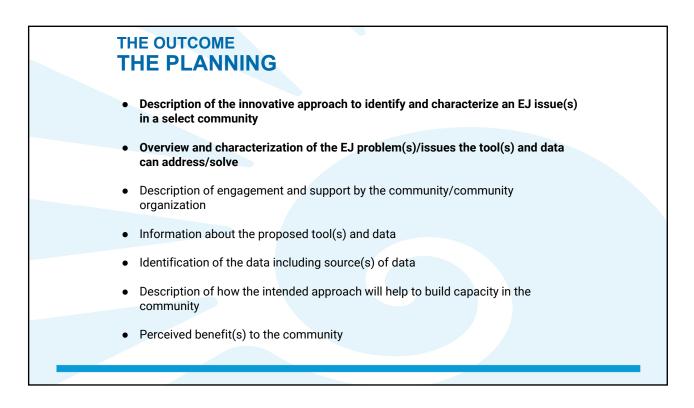


THE OUTCOME



THE OUTCOME

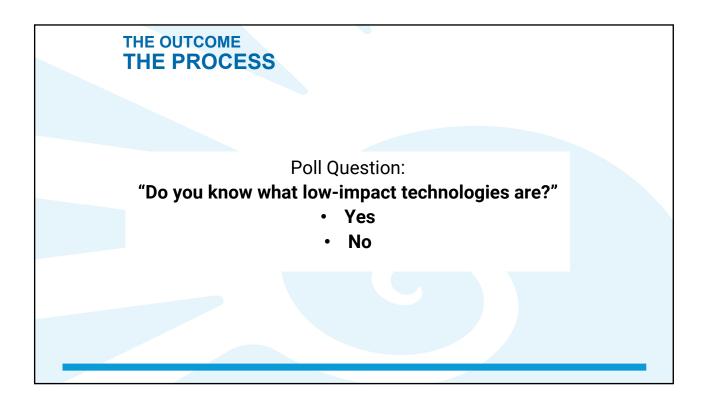
THE PLANNING

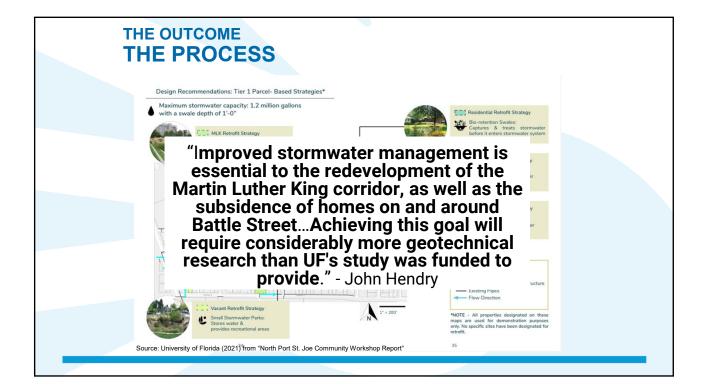


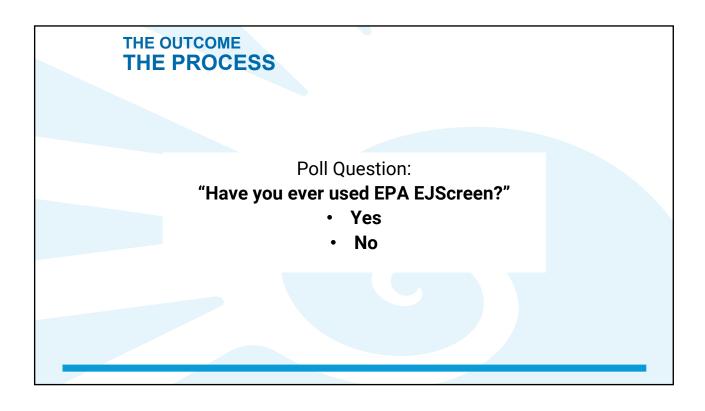


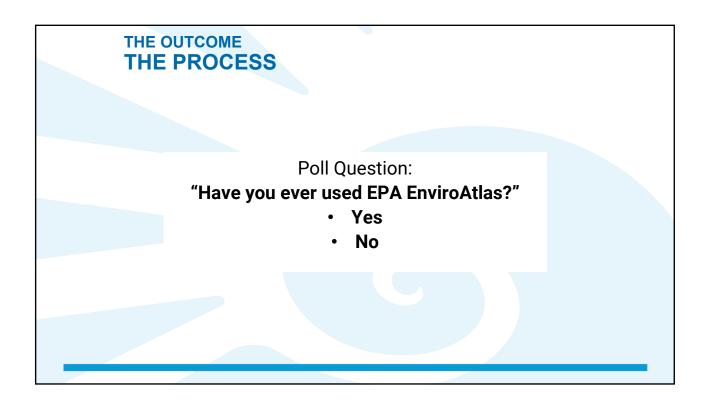
THE OUTCOME

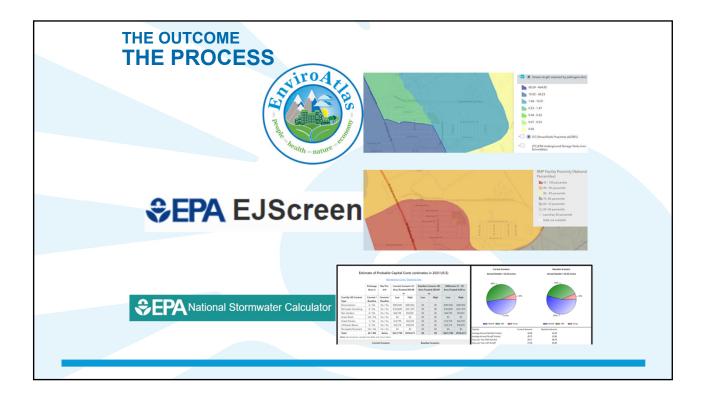
THE PROCESS

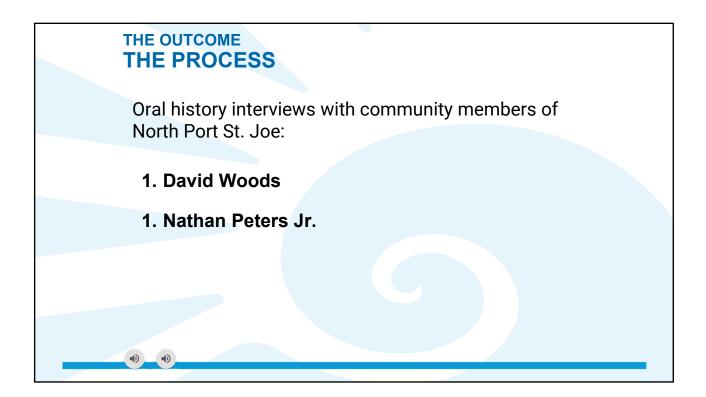




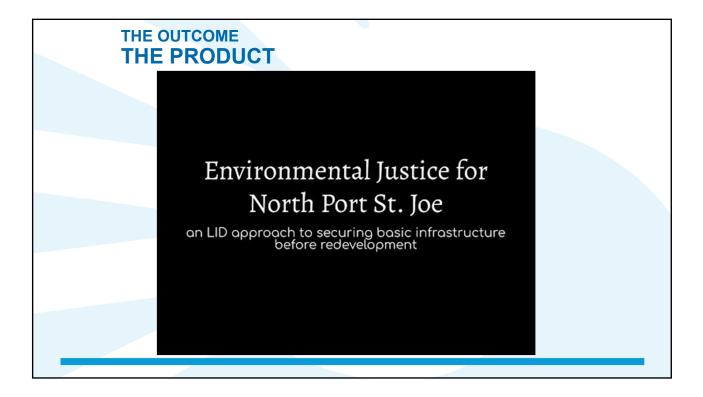








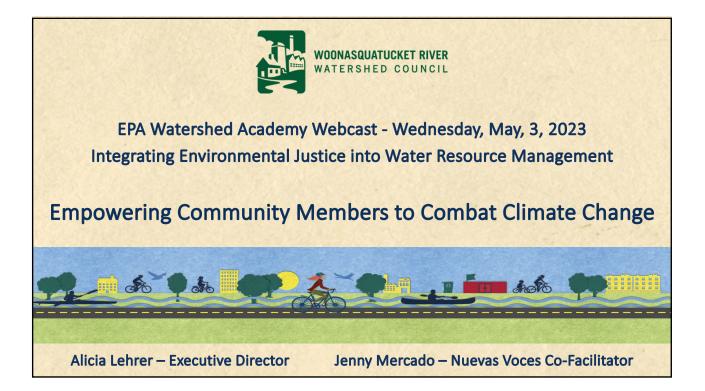




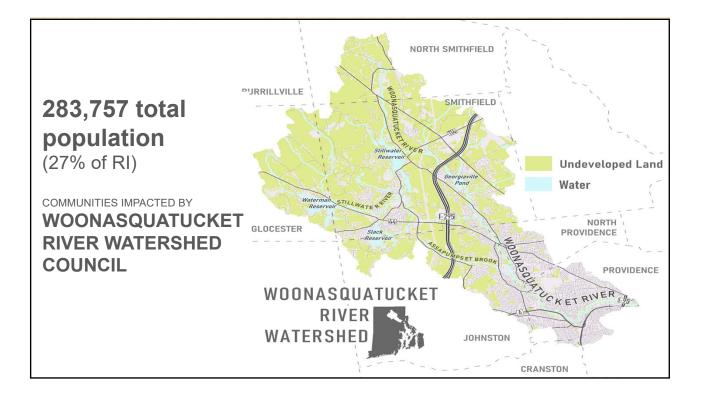
AN OPPORTUNITY FOR YOU

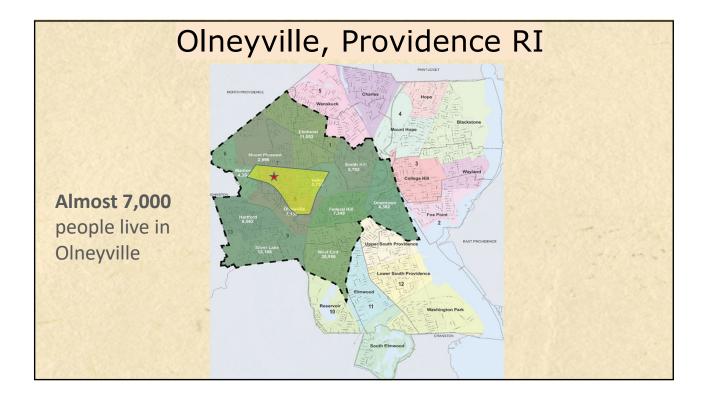








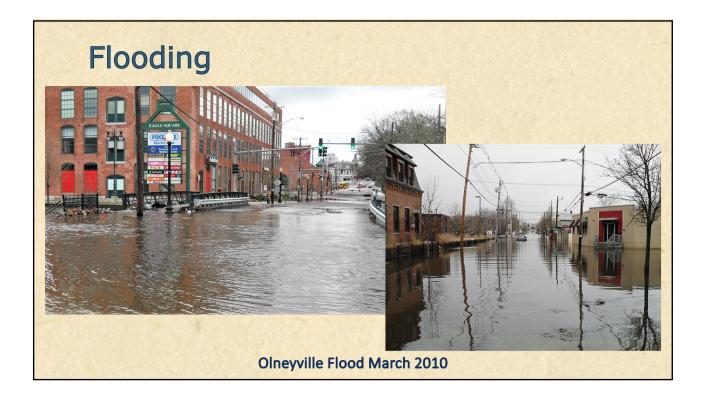




Olneyville, Providence RI

- 60% Hispanic/LatinX, 15% white, 13% Black
- Median household income: \$30,000-\$40,000 a year
- Main countries of origin Guatemala & Dominican Republic
- Also Mexicans, Bolivians, other Central Americans







Initial Surveys

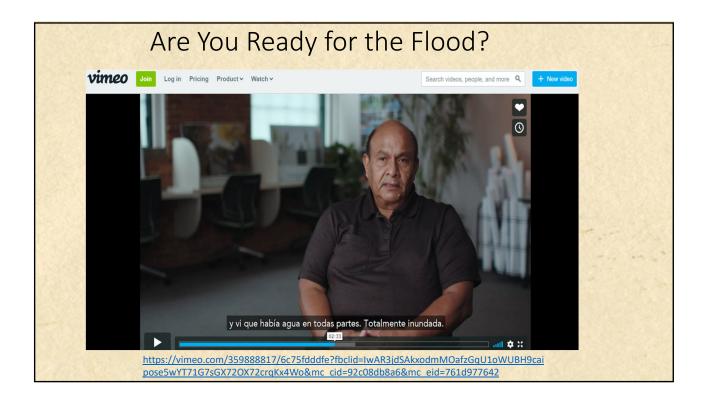
Door to Door Canvassing: Bilingual (Spanish/English) Well Known in the Community (paid \$25/hour)

- <u>Shirley Fuertes</u> Local Community Member, Leader of English for Action, Native Spanish Speaker
- <u>Virginia Morgan</u> PTA Lead Parent at William D'Abate Elementary (neighborhood school)
- WRWC River Ranger Raz
- former Clean Water Action canvasser
- Wearing WRWC Identifying Clothing
- Work in pairs with another Ranger on same block



RESULTS Knowledge/Perceptions on Climate Change

- How much do you know about CC? 50% little or nothing
- Is climate changing in OV? 63% Yes, 28% Not Sure, 9% No
- If yes, what risks are there in OV?
 - Major Themes Identified:
 - Flooding
 - More Extreme Weather
 - Illness/Flu/Fever
- How likely is a disaster here? 71% somewhat to very likely
- How severe would the impact be to you? 75% somewhat to very severe





New Voices / Nuevas Voces Learning Cohort (2021)



- 20 cohort members originally recruited
- Compensation (\$25 an hour)
- Translation & Interpretation

 Transportation and Childcare for Inperson Activities

 Technology & Digital Content Accessibility (Computers and Wi-Fi)



Environmental Justice Conversations, but also gathering information on community needs

Learning Between Sessions – Green Infrastructure Tour





16 out of 20 completed the program. Received citations from the Mayor. Met with Office of Sustainability and Racial and Environmental Justice Committee

	End of Year 1 & Next Steps
٦	Transferring Power:
•	Two NV Graduates Facilitate 2022 NV Cohort
•	NV Graduate Appointed to Represent Olneyville in Providence Human Relations Commission
•	Grads Recruited Future Cohorts
•	NV Grad is WRWC Environmental Educator
	WRWC Board & Staff Actively Soliciting Membership from NV Grads

Nuevas Voces Co-Facilitators

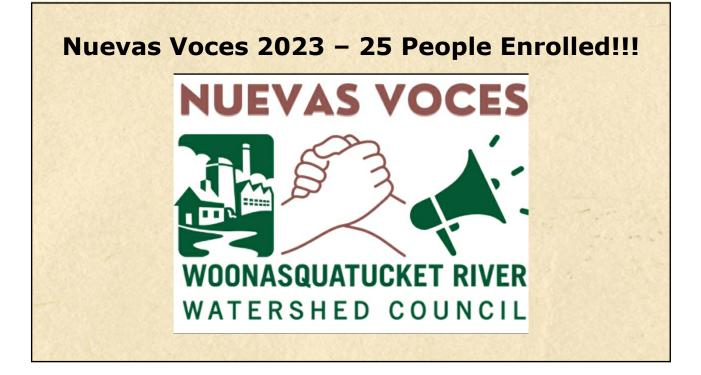
Maria Jose Gutierrez

- Moved from Bolivia 2021
- Professional nature tour guide and French teacher in Bolivia
- Amazing designer of interactive programming
- Currently learning English but still only fluent in Spanish



Jenny Mercado

- Nicaraguan, lived in RI for over 10 years
- Emergency Room CNA at Hasbro Children's Hospital
- Bilingual
- Mother of twins
- Directing Nicaraguan organization to help new residents find services



¿Qué es Nuevas Voces?/ What is New Voices

Misión:

CREAR CONCIENCIA AMBIENTAL PROPORCIONANDO CONOCIMIENTO HISTÓRICO, CIENTÍFICO Y AMBIENTAL DE NUESTRA COMUNIDAD PARA ENTENDER Y TOMAR ACCIONES PARA SU PROTECCIÓN Y CONSERVACIÓN PARA QUE LAS GENERACIONES VENIDERAS PUEDAN SEGUIR DISFRUTANDO DE SU MEDIO AMBIENTE

Objetivos

- 1. Fomentar la conciencia sobre los problemas ambientales locales.
- 2. Comodidad para discutir temas ambientales.
- 3. Construir conexiones comunitarias a largo plazo.
- Desarrollo de habilidades y oportunidades de liderazgo.

Mission:

CREATE ENVIRONMENTAL AWARENESS BY PROVIDING HISTORICAL, SCIENTIFIC & ENVIRONMENTAL KNOWLEDGE OF OUR COMMUNITY IN ORDER TO UNDERSTAND AND TAKE ACTION FOR ITS PROTECTION AND PRESERVATION SO THAT THE GENERATIONS TO COME CAN CONTINUE TO ENJOY THEIR ENVIRONMENT.

Objectives

- 1. Foster consciousness around local environmental issues.
- 2. Comfortability discussing environmental issues.
- 3. Build long term community connections.
- 4. Development leadership skills and opportunities.

NV Program Sessions Total of 8 Sessions (Monthly)

1. History and identity of the neighborhood, relationship to the river and history of Providence

- 2. Understand climate change and environmental hazards
- 3. Emergency Preparedness Code Red & Emergency Kits
- 4. Environmental Justice Meaning, Where we Fit
- 5. Political System Meeting our Reps
- 6. Community Organizing
- 7. Next Steps for Leaders
- 8. Graduation

Interactive and Collaborative Pedagogy



Example: Environmental Justice

- Guest speaker REJC
 - Very image-based presentations
- Small group discussion- "Asthma in Community"
- Shareback
- Info on Clinics & Services

Interpreter- translates for English-speaking guests



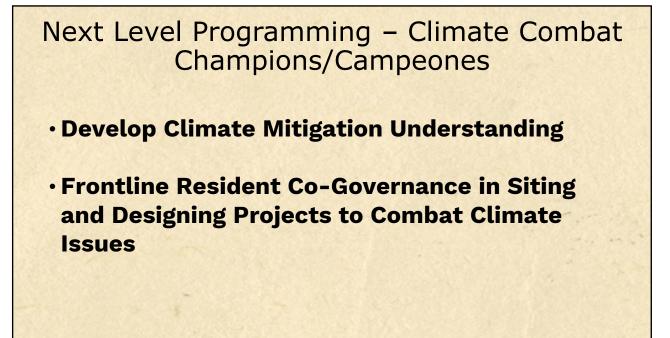


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Residents/WRWC – Relationship with Environment

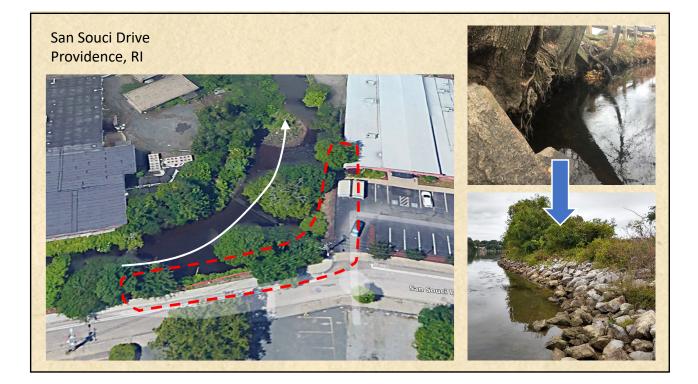


Re-establishing living relationships with the environment that have been disrupted because of migration people chose in hopes of a better life





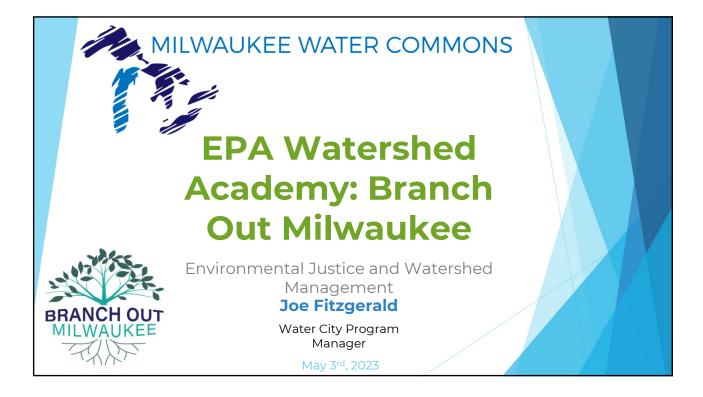




San Souci Drive -Campeones Field Visit Completed Project









Who We Are



Milwaukee Water Commons is a crosscity network that fosters connection, collaboration and broad community leadership on behalf of our waters.

What We Do

We promote stewardship of, equitable access to and shared decision-making for our common waters.

How We Organize



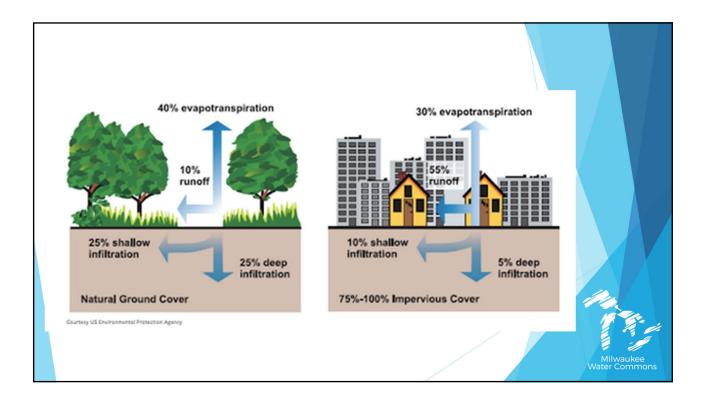
Frameworks

- 1. Environmental Justice
- 2. Collective Impact
- 3. The Commons
- 4. Community Engagement

How We Organize

- 1. Community Engagement
- 2. Jemez Principles

Water City 3.0 BUILDING 5 EDUCATION & RECREATION Water City Agenda: BLUE GREEN JOBS A 10 Year, Community Defined Vision of Milwaukee as a Model Water City G GREEN INFRASTRUCTURE 6 Initiatives WATER QUALITY 2 Blue Green Jobs • Water Quality DRINKING WATER Goal Drinking Water Arts & Culture 4 ARTS & CULTURE Education & Recreation Goa Green Infrastructure TT





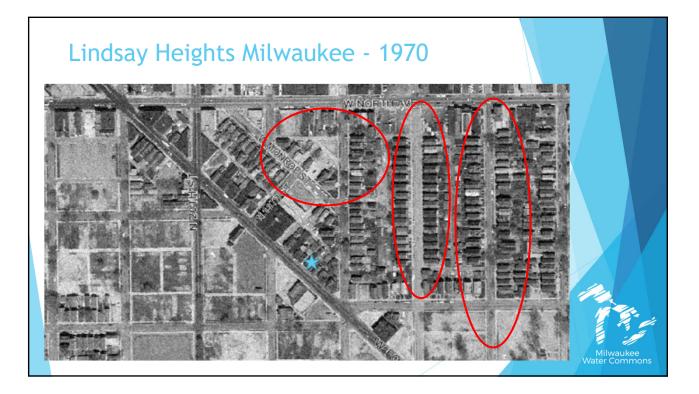
Branch Out Milwaukee Campaign: Benefits of Trees

- Improvements to Water Quality
- Reduced flooding and basement backups
- Lower temperatures and address Heat Vulnerability
- Improve Air Quality
- Improve Public Health by reducing respiratory and cardiovascular disease
- Fight and protect against Climate Change
- Produce Cost Savings and create Employment Opportunities











Three Components of Environmental Justice (Procedural, Distributive, Restorative)

Distributive Justice - Distributive justice refers to the equitable distribution of resources and opportunities across communities. This may be in regard to the prioritization of planned programs and investments, or even the distribution of employment opportunities.





Branch Out Milwaukee

Is a collectively organized campaign to maximize the benefit of Milwaukee's tree canopy by focusing on equity, public health, environmental health, climate resilience, and workforce development.

Identifying Tree Planting Locations

Project Area Selection

- Sherman Park Tree Inventory A tree inventory collects information about trees in a specific area including species, size, and health. This information informs management decisions, programming and investments.
- Public Tree Planting Event Selection



Three Components of Environmental Justice (Procedural, Distributive, Restorative)

Procedural Justice - Procedural justice calls for inclusion of all stakeholders in decision-making, especially those who are impacted by the decisions being made. This means eliminating barriers for engagement, and ensuring that policies and procedures result in fair treatment and equitable access.



Sherman Park Neighborhood Tree Board

A community led committee of residents living and working in the Sherman Park Neighborhood who help to guide and inform decisions about trees and green spaces in the Sherman Park Neighborhood

Three Components of Environmental Justice (Procedural, Distributive, Restorative)

Restorative Justice- Restorative justice refers to actions that intentionally interrupt past and current harm and empower communities. This includes the need to focus resources on addressing the legacy impacts on communities where there has been long-term marginalization, exclusion, and or oppression.



Branch Out Milwaukee

- 1. Equitable
- 2. Sustainable
- 3. Multi-Dimensional
- 4. Respectful

Prioritizing Community Benefits

- Sherman Park Tree Inventory While identifying existing trees, we also identify plantable space, maintenance needs and record stories about each tree
- Tree Maintenance Sustaining our existing canopy is one of the most impactful ways to protect our watershed and support the needs of residents.
- Tree Planting Our free tree planting program partners with residents to find the right tree for the right place







MINNESOTA POLLUTION CONTROL AGENCY

Our mission and vision

Mission: to protect and improve the environment and human health

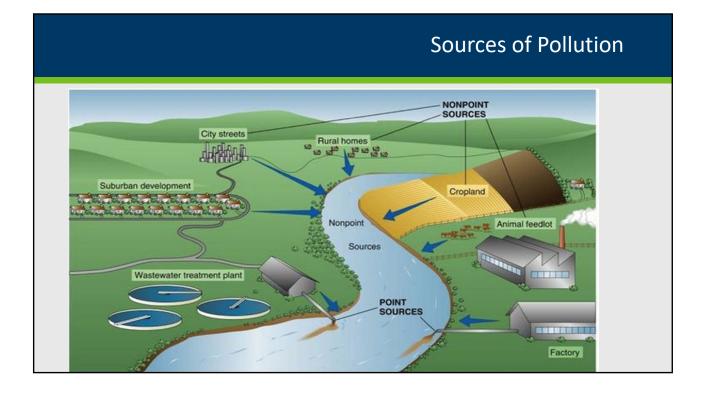
Vision: MPCA is a national leader in developing services that support healthy people and ecosystems, and a thriving economy



Overview of MPCA approach

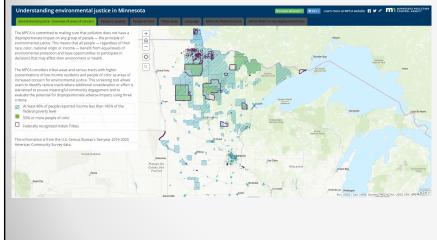
- Identify areas where lower-income Minnesotans, people of color and tribal communities may be experiencing more harm
- Change our approach and increase our work in these areas:
 - · Better understand sources of pollution and risks
 - Reduce pollution, improve livability
 - Communicate and engage earlier, more often and more effectively
- Integrate environmental justice strategies into MPCA programs





Minnesota environmental justice areas of concern

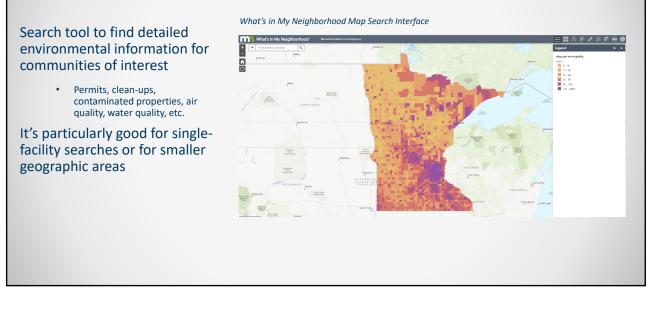
Main Page of the Environmental Justice Story Map



Data was updated with 2016-2020 American Community Survey data

- Data is by census tracts
- 5 years of survey data combined
- Ensures as accurate of data as possible while tracts are small enough to understand local communities

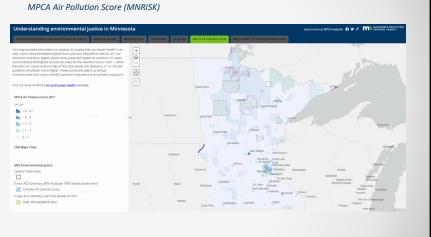
Minnesota areas of environmental justice concern: What's in my Neighborhood



Minnesota areas of environmental justice concern: MPCA Air Pollution Score (MNRISK)

Modeling that estimates levels of air pollution in regions of the state

- Higher scores have greater air pollution risks
- Uses a variety of pollution sources like car traffic, land use, wood burning, facility emissions, etc.



Beyond Demographics: Environmental Justice Scoring and Cumulative Impacts

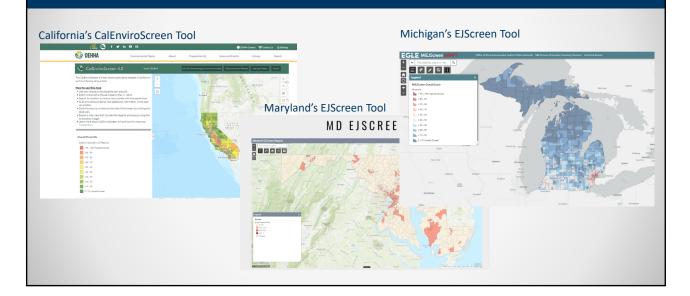
How do we start to connect demographic data and trends related to environmental justice with actual environmental conditions and how pollution impacts broader ecosystem services & human health?

Environmental Justice Scoring Tools

The EPA and several states are creating environmental justice data tools

- Incorporates a broader set of information beyond demographics like environmental conditions (impaired waters, solid waste activities, remediation sites, etc.), human health issues (asthma, cardiovascular disease), and direct exposure to pollution (traffic congestion, levels of particulate matter, etc.)
- Most tools result in overall scores for census tracts throughout the given state. The scores are in
 percentiles so there will always be a range of scores
- Water-specific indicators like impaired waters or pollution discharges into waterways are commonly included in these tools

Environmental Justice Scoring Tools



Cumulative Impacts

When projects or actions are proposed that might affect pollution levels in an area, communities want to know how it will affect human health when combined with other pollutants and stressors in their community. A full cumulative impact analysis would include all of these elements:

- · Sensitivity: The magnitude of response to stimuli. People respond differently to pollutants and stressors.
- Additivity: Summing impacts across many chemicals, or integrating the effects of multiple chemicals rather than a single-pollutant analysis.
- Multiple pathways: Recognizing the many ways people are exposed to pollutants, such as breathing, eating, touching, etc.
- Multiple sources: Assessing all sources of pollution, including facilities, background sources, and so on.
- Non-chemical stressors: Taking into account non-chemical factors with adverse effects, such as radon (physical), noise (physical), or bacteria (biological).
- Vulnerability factors: Historical economic and social marginalization impacts a community's ability to recover and repair. This can be shown through health disparities, economic insecurity, safety fears, and other factors.

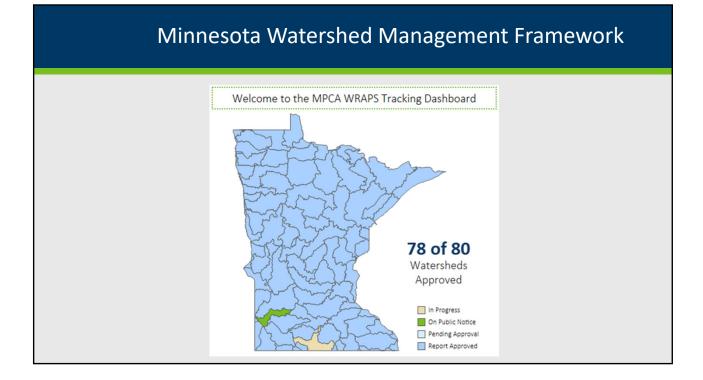
Examples of cumulative impact analysis:

<u>Cumulative levels and effects analysis</u> — A requirement for evaluating air permit applications in parts of South Minneapolis.
 <u>Environmental review</u> — An information-gathering activity that helps determine a project's potential environmental impacts.

Takeaways from Environmental Justice Data and Tools

- Data is an important aspect of this work, and it helps guide and prioritize our environmental justice efforts
- Often times, these data tools are initial ways to prioritize and evaluate where we need to engage. However, data alone cannot lead to meaningful engagement and 'on the ground' work in communities





WRAPS and EJ

<u>Watershed Division specific goals for incorporating EJ considerations into WRAPS include</u>: 1. Efforts to engage with communities of EJ concern are made, and

2. The WRAPS process lays the groundwork to prompt the One Watershed, One Plan (1W1P) effort to engage on the <u>water quality issues</u> that affect communities of EJ concern.

As with other work in the WRAPS process, the nature of EJ work will vary as widely as the context and conditions vary from watershed to watershed. The intent of this guidance is to serve as a baseline for discussions to begin and ideas to be generated. There is no universal answer to how incorporating EJ considerations in WRAPS will look like across all watersheds.

WRAPS and EJ

Steps:

- 1. Identify (use tools and checklist)
- 2. Reach out
- 3. Listen
- 4. Develop Goals
 - a. Determine with your team and supervisor what is the correct and reasonable path
 - b. There are minimum expectations, but there is no one right answer.
- 5. Document your efforts and results- summarize in appropriate reports- (WRAPS Update, TMDL, etc.)

WRAPS and EJ

Each watershed is at a different place in its work, and it's never too early or late to start this process, as it is ongoing and iterative, and will be incorporated in future work in that watershed.

It's recognized that each watershed (and project manager) could be starting from a different point of progress and understanding, and therefore the goals should be developed with that in mind.

Most important thing is to build relationships, listen and understand what water quality issues are affecting communities of EJ concern. Go in with an open mind ready to learn, and not with predetermined solutions.





Participation Certificate

• If you would like to obtain a participation certificate you can access the PDF in the **Handouts** section of your control panel.

Watershed Academy Webcasts

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Contact Information

- Monica Woodruff, University of West Florida
 <u>mw19326@gmail.com</u>
- Alicia Lehrer, Woonasquatucket River Watershed Council
 alehrer@wrwc.org
- Jenny Mercado, Woonasquatucket River Watershed Council
 - <u>nuevasvoces@wrwc.org</u>
- Kwame Owusu Daaku, University of West Florida
 kowusudaaku@uwf.edu
- Joe Fitzgerald, Milwaukee Water Commons

 jfitzgerald@milwaukeewatercommons.org
- Amy Adrihan, Minnesota Pollution Control Agency
 amy.adrihan@state.mn.us
- Quinn Carr, Minnesota Pollution Control Agency
 guinn.carr@state.mn.us
- Helen Waquiu, Minnesota Pollution Control Agency
 - helen.waquiu@state.mn.us

Thank You!