WELCOME!

Community Science Solutions: Documenting the Impacts of Contamination…

While you wait …

- Please introduce yourself in the chat (name, org, location)
- Please use the chat box for questions.
- Please fill out the post-webinar survey so we can improve!

URBAN WATERS LEARNING NETWORK

ABOUT THE URBAN WATERS LEARNING NETWORK

We are a peer-to-peer network of people and organizations working to conserve, restore and revitalize America's urban waterways, supporting our members' work through tools, training, mentoring and financial assistance.

Meet the network and search our membe
map on our website!
urbanwaterslearningnetwork.org

A LEARNING JOURNEY

Recordings are available for all previous sessions at urbanwaterslearningnetwork.org

OUR PRESENTERS

La’Veesha Rollins

Executive Director

Concerned Citizens of Charles City County (C5)

Kennedy Moore

Ambassador, New Orleans/Lake Pontchartrain UWFP & State Policy Coord.

The Water Collaborative of Greater NOLA

Javier (Javi) Cardenas

Green Team Coord. & Earth Lab Educator

Groundwork San Diego- Chollas Creek

C5 & WATER

C5 & WATER

C5 began water testing in 2023 to continue our investigation on the high cancer rate in Charles City County, VA

- Who are we?
- What do we do?
- When did we decide to formally focus on water quality
- Where do you collect water samples?
- How are you managing your program and is it helping?

Want to follow us?
www.c5groupinform.com or www.projectblacc.org

C5 & WATER

Volunteer water testing is rewarding but it comes with its challenges

- Volunteer Participation
- Is your data credible
- What does it mean? Do you understand it?
- How do you get volunteers vested in your program
- It's a marathon not a sprint- Data takes time!

Want to follow us?
www.c5groupinform.com or www.projectblacc.org

C5 & WATER

Water Testing- How to Keep Volunteers Engaged with all the data?

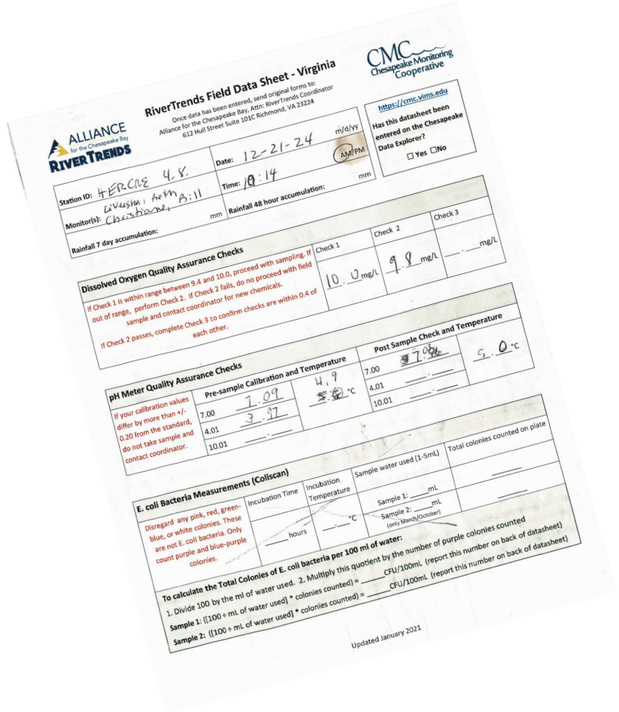
- Things to Consider
  - Site Accessibility
  - Fun Sites
    - Rice Center (Outdoor classroom)
  - Incentives
    - Snacks
    - Bring kids & Family

Want to follow us?
www.c5groupinform.com or www.projectblacc.org

C5 & WATER

So what's next for C5 & its environmental work?

- Expand Our Data
- Donations
- Expansion of Services
  - Soil
  - Air
  - Water



REACH OUT TO US!

804-362-6464

@Project_blacc
@ConcernedCitizensofCharles City

https://www.facebook.com/C5ConcernedCitizensofCharlesCityCounty

https://www.linkedin.com/in/concernedcitizensof-charlescitycounty-6442492bb/

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FALL 2024

THE WATER COLLABORATIVE
LIVE. THRIVE. LOVE. WATER.

Cancer Alley

WATER QUALITY TESTING STUDY

THE WATER COLLABORATIVE OF GREATER NEW ORLEANS

AGENDA

01	**Background**	• The Water Collaborative • Program Overview • Contaminants
02	Planning	• Study Overview • Site selection • Outreach
03	**Methodology**	• Sampling Process • Data Collection • Contamination Limits

The Water Collaborative of Greater New Orleans

Who We Are

- The Water Collaborative is a nonprofit promoting sustainable urban water management in the Greater New Orleans region.

Our Mission

- We bridge the gap between data, advocacy, and policy to empower communities across Southeast Louisiana, addressing water quality, accessibility, and resilience.

Our Programs

- Water Quality Studies (2024: Lead in Orleans Parish, PFAS in Cancer Alley)
- Water Justice Fund
- Brackish Artist Collective
- Water History Tours
- and more!

Our Drinking Water Quality Program

The Water Collaborative started its Cancer Alley *Water Quality Testing Program in June 2022, focusing on testing for PFAS in soil and surface water along the Mississippi River*

Later, in September 2024, TWC focused its efforts to raise awareness of PFAS in drinking water among River Parishes located in southeast Louisiana

Both projects were funded by Aquilateral

Background of Contaminants

What are PFAS?

- PFAS stands for Per- and Poly-fluoroalkyl Substances and is better known as the “forever chemical”
- PFAS are manufactured chemicals that have been used in industry and consumer products since the 1940s

- Side effects of exposure include:
  - Increased risk of cancer
  - Reduced immune system ability
  - Decrease in fertility

Background of Contaminants

Why study PFAS?

- In 2022, the EPA released four drinking water health advisories for PFAS
  - This update led to TWC conducting its first PFAS study - focusing on surface water and soil along the banks of the Mississippi River spanning across 9 different parishes

- In 2023, the EPA dedicated $5 billion of grant funding through the Bipartisan Infrastructure Law (BIL) to address PFAS in drinking water

Study Overview

Objectives

1. Assess the extent of PFAS and heavy metal contamination in residential tap water
2. Empower residents with data and resources
3. Advocate for improved water quality standards and increased funding

Study Overview

- **Duration:** 8 weeks (Oct - Dec)
- **Sampling Team:** 5 trained fellows
- **Participant Selection:** First-come, first-served basis Fifteen homes per parish
  - St. James
  - St. John
  - St. Charles
  - Jefferson
  - Orleans
  - St. Bernard
  - Plaquemines
- **Resident Outreach:** 150 residents contacted, 107 homes tested
- **Testing Analysis:** Pace Analytical Laboratory with Louisiana Drinking Water Certifications

Outreach

Community partners:
Rise St. James
Keep St. Bernard Beautiful
Concerned Citizens
Healthy Gulf

Fellows interviewing residents confirmed information and explained the overall study process

Residents received comprehensive results spanning across 17 types of PFAS and 7 types of heavy metals

Application questions included living situation, residence type, and parish residence

While one fellow collected water samples from kitchen sink, the other would ask residents survey questions

Sampling Process & Data Collection

Sampling Process

- Collection of two PFAS samples and one heavy metal sample
- Field blanks were used to ensure no cross contamination was found
- Chemical agents were used in heavy metal and PFAS bottles to ensure stability, while samples were kept on ice

Sampling Process & Data Collection

Data Collection

- **Recorded Data:** Collection time, temperature, and pH
- **Surveys Conducted:**
  - Collected demographic and household data
  - Surveyed awareness of PFAS and heavy metal risks and mitigation

Sampling Process & Data Collection

Community Support

- Educational resource provided mitigation strategies
- Gift card provided to all participants

THE WATER COLLABORATIVE

Thank you for participating in The Water Collaborative's 2024 Water Testing Study in the Industrial Corridor!

PFAS, or "forever chemicals," and heavy metals in drinking water are major public health concerns in Southeast Louisiana. The Mississippi River, which serves as the region's primary water source, is impacted by industrial runoff from over 150 local petrochemical plants and refineries, as well as by upstream pollution.

The presence of these contaminants in your water does not necessarily mean that you will experience the related health effects. We are here as a resource to help you better understand the results and to provide guidance on potential next steps to reduce your exposure.

MITIGATION STRATEGIES

HEAVY METALS

- Install a NSF/ANSI 53 Standard filter certified to remove lead and other heavy metals.
- Regularly clean faucet aerators to remove any accumulated debris.
- Use cold water for drinking, cooking, and preparing baby formula.
- Consider replacing lead pipes in your home with non-lead alternatives.

PFAS COMPOUNDS

- Use NSF/ANSI Standard 53 or 58 certified filters such as reverse osmosis systems or granular activated carbon filters specifically certified for PFAS removal.
- Use bottled or filtered water when necessary for drinking and cooking.

NEXT STEPS

- Test results and an explanation will be sent via email within about 3 weeks.
- A post-study survey will accompany the test results to gather feedback on the study process and experience. Rest assured, your personal information will NOT be shared.
- If you have any questions or concerns, please feel free to reach out to Rebecca Malpass (rebecca@nolawater.org) or Teya Fontenette (teya@nolawater.org).

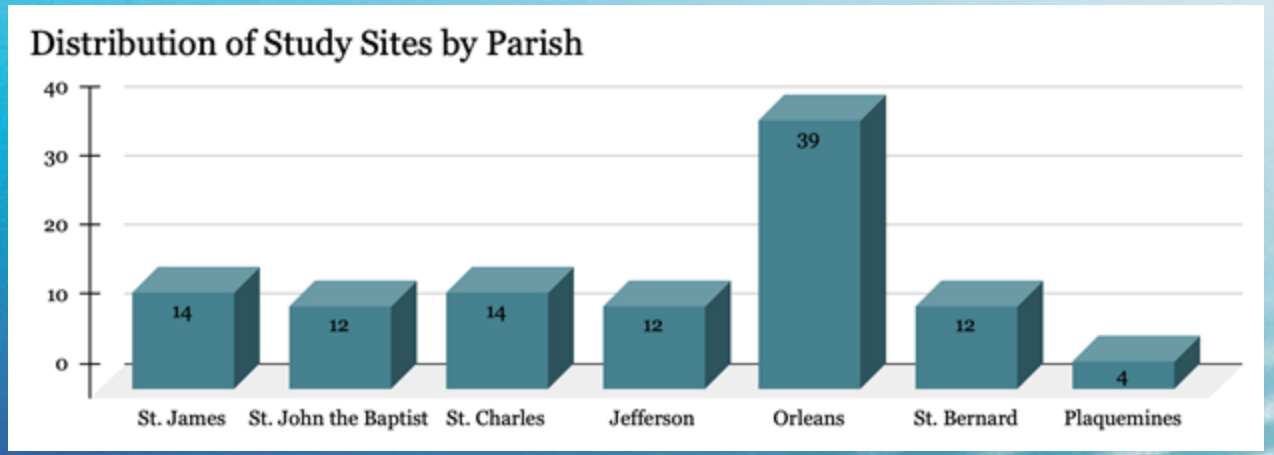
NOLAWATER.ORG/TAP-WATER-TESTING-IN-CANCER-ALLEY

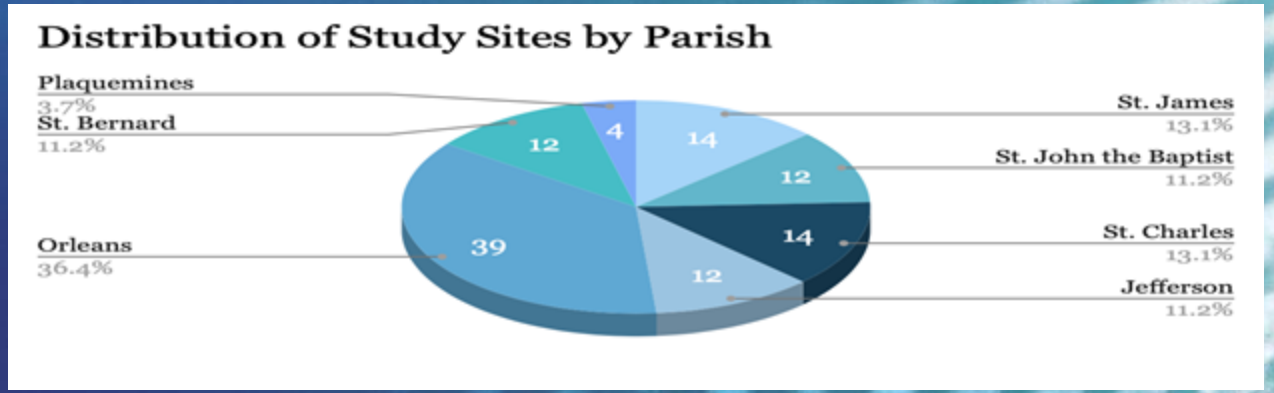
Results… Coming Soon!

- **Current PFAS maximum contaminant levels (in parts per trillion):**
  - PFOS: 4 PPT
  - PFOA: 4 PPT
  - GenX Chemicals: 10 PPT

- **Current heavy metal maximum contaminant levels (in parts per billion):**
  - Lead: 10 PPB
  - Copper: 1,300 PPB
  - Mercury: 2 PPB
  - Arsenic: 10 PPB
  - Antimony: 10 PPB
  - Manganese: 50 PPB

Results… Coming Soon!





Moving Forward

- Although there were few exceedances, PFAS was detected at numerous sites
- Federal, state, and local agencies and utilities must continue to monitor the appearance of PFAS is water systems across the country
- The Water Collaborative remains a resource for education, outreach, and advocacy
- Collaboration between residents, organizations, utilities, and government agencies to address contamination is key

THANK YOU!

Kennedy Moore
State Policy Coordinator
Kennedy@nolawater.org

- **Bachelor's Degree in Environmental Science**
  - **Grambling State University** (May, 2023)
- **Master's Degree in Marine Conservation**
  - **University of Miami** (December, 2024)

CHOLLAS
BLUE GREEN
VISION

Groundwork San Diego: Community Science

Javier Cardenas

GROUNDWORK
San Diego Chollas Creek

The Groundwork Network

- **Affiliated network of 21 place-based and community-centered environmental nonprofits**
- **Values**
  - Shared leadership/decision making
  - Meet people where they are
  - People-centeredness
- **Community science as a process of knowing across the network**

Community Science

Dual Process: Data collection and Dialogue

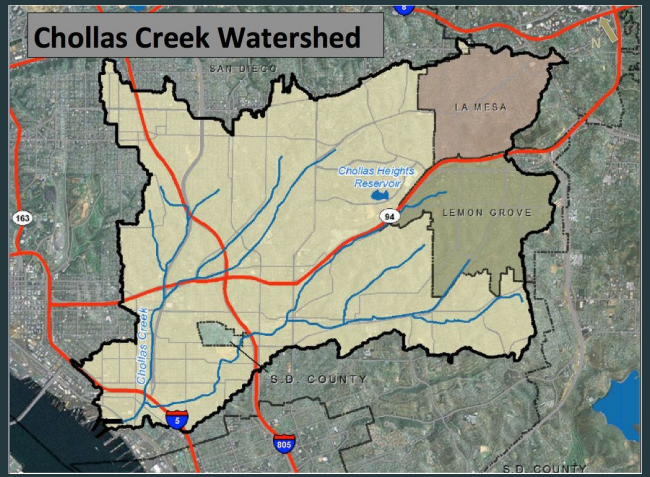
Empowering non-experts

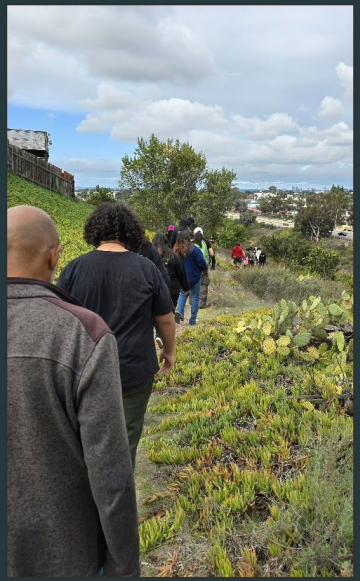
Continuous learning and adaptations

Partnerships and Support

What we do in the Program

- Started with Energy Monitoring
- Expanded to Indoor Air Quality
- Now gathering Outdoor Air Quality





Challenges & Learning in Community Science

- Community members are non-experts
- Logistical issues
- Device learning curve
- Data collection errors

Case Studies

Earthlab Outdoor Walk

The Cooking Experiment

MLK Parade with the Green Team

Earthlab Outdoor Walk
Indoor vs Outdoor Air Quality

- Community members walked between indoor and outdoor spaces while monitoring the air quality
- Air Quality was better indoors compared to outdoors
- Data showed higher pollution levels outside due to environmental factors

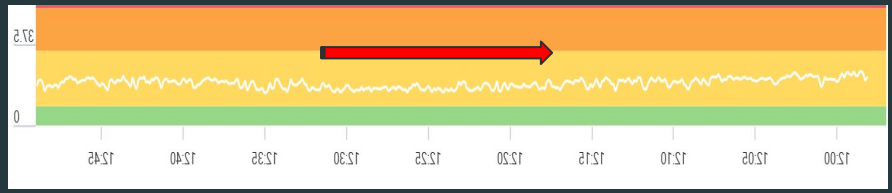
The Cooking Experiment

A family used the Airbeam 3 to monitor the air while cooking

- Comparison of gas stove vs crockpot
- Found that the crock pot led to significantly better indoor air quality

Simple actions can have measurable benefits

Gas Stove



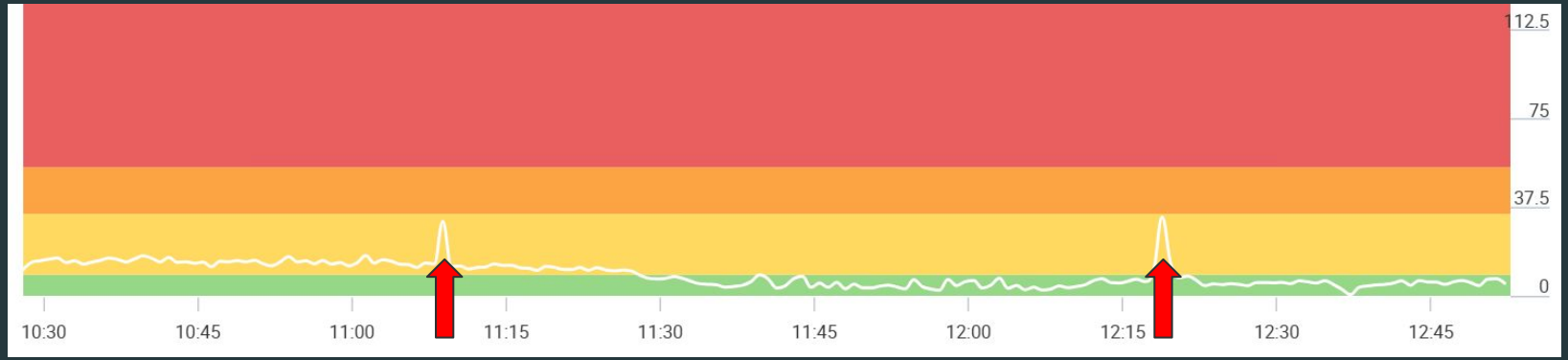
Crock Pot

Green Team Deep Dive - MLK Parade

The MLK Parade is an yearly community event that also offered a unique data collection opportunity.

The high school Green Team conducted air quality sampling across different zones of the park: Food truck area, tabling, activity zones, and hilltop regions

Notable finding: a spike in air quality readings at the food truck station, with possible contextual influence from a distant fire in Otay.



Navigating Rental Constraints

Families living in rental properties face limitations on making major home improvements.

- Inability to upgrade to appliances like eclectic stoves due to rental restrictions
- Adaptation through simple strategies, such as adjusting window use during cooking and cleaning

Resourcefulness can overcome structural limitations

Lessons Learned

Engagement comes in many forms - afterschool programs, Green Team initiatives, and individual contributions

Our journey is one of continuous learning and adaptation based on real-world feedback

The data acts as a catalyst for conversation, leading to practical solutions for better air quality

Strong partnerships are essential!

Thank You!

Reach out if you want to connect!

Javier@groundworksandiego.org

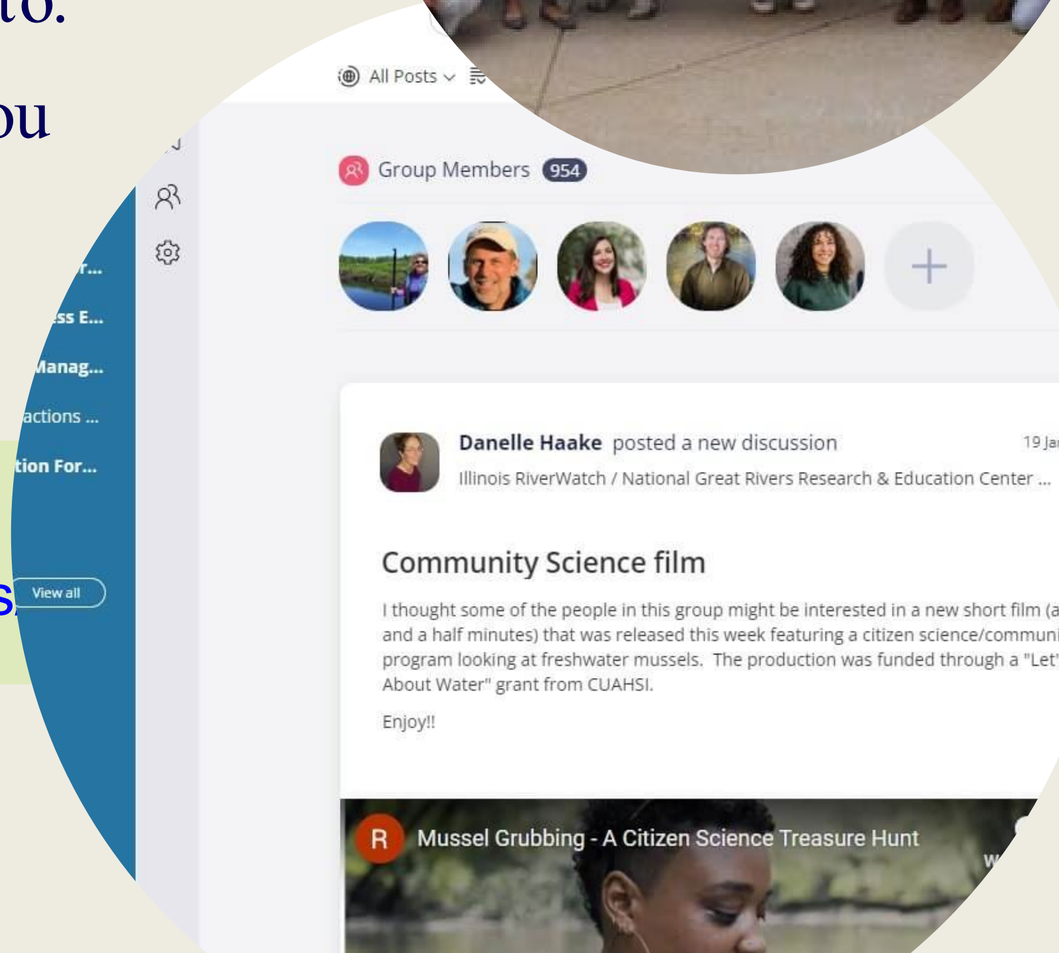
GROUNDWORK
San Diego Chollas Creek
CHANGING PLACES CHANGING LIVES

ONLINE COMMUNITY

Join the Urban Waters Learning Network Community to:

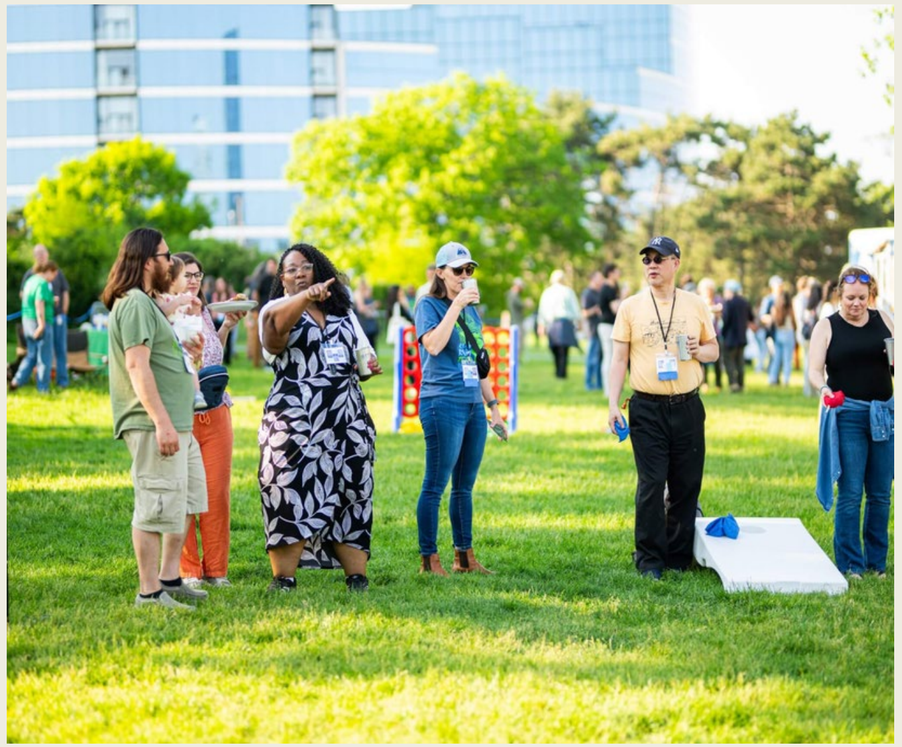
- Connect with peers on topics that matter to you
- Share opportunities and address challenges
- Stay up to date on the latest water news
- Foster partnerships for shared impact

To register and start connecting, visit:
https://community.rivernetwork.org/registrations/groups/741



BEFORE YOU GO

- Tell us what you think – please fill out the evaluation survey
- Join us again for the final session in the series: **Workforce Development & Brownfield Revitalization: The Emerald Trail Stewards Program** (May 6th, 2025, 1pm ET)



SAVE THE DATE!

May 11-14, 2026 in San Antonio, Texas

rivernetwork.org/river-rally

THANK YOU!

This presentation will
be available online

We would love your feedback on this event!
bit.ly/RN-Feedback

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