

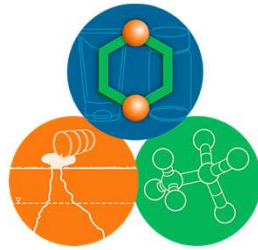
Turning the Tide on Microplastics and More



Responding to State Research Needs



PFAS



1,4-Dioxane



**Harmful
Cyanobacterial
Blooms**



**Contaminants of
Emerging Concern**



**Climate
Workgroup**



Microplastics



**6PPD & 6PPD-
quinone**



**Reuse of Solid Mining
Waste**



Ethylene Oxide (EtO)

Microplastics Websites

Technical Guidance Document

Microplastics Outreach Toolkit



<https://mp-1.itrcweb.org>

Microplastics Outreach Toolkit

itrcweb.org

Tired of seeing plastic pollution?

Reduce Plastics in the Environment

Refuse
Refuse Single-use Plastics

Reduce
Reduce Single-use Products

Reuse
Reuse Plastics As You Can

Remove
Remove Plastic Litter

What Can You Do?
I Can Do Something to Reduce Plastics in the Environment

Refuse Single-use Plastics
Reduce Single-use Products
Reuse Plastics As You Can
Remove Plastic Litter

Recycle What is Left
Rethink Clothing Choices

QR Code

Microplastics: The Basics You Need to Know

What are Microplastics?
Microplastics are plastic particles that are greater than 1 nanometer (nm) and less than 5 millimeters (smaller than a strand of DNA, and up to the diameter of a straw). This definition includes nanoplastics, which range from 1 nm to 1000 nm.

What are Sources of Microplastics?
Microplastics may be intentionally added to consumer products (like body wash/cosmetics, toothpaste, etc.), may be released during product use and care (synthetic clothes, tires, paint, etc.), may be released during plastic manufacturing, and may result from the breakdown of larger plastics into smaller pieces.

How Do Microplastics Get into the Environment?
Microplastics can enter the environment when:

- Consumer products, such as tires, cigarette butts, paint, and synthetic clothing, break down.
- Wastewater discharges or are spilled into surface water bodies.
- Rain and stormwater collect microplastics from the ground and carry them into waterbodies.
- Plastic pollution in the ocean breaks down.

Why Should You Care?
Microplastics can be ingested and inhaled. They can carry pollutants and harmful chemicals which can lead to potential adverse effects in animals, plants, and humans. Microplastics have been detected in several human tissues including lungs, placenta, blood, and breast milk although the health effects remain uncertain.

What Can You Do?

- Purchase non-plastic alternatives.
- Replace single-use products—water bottles, bags, straws, etc. with reusable versions.
- Buy sustainable, synthetic-free clothing such as cotton, linen, etc.
- Check for ingredients such as polyethylene and polypropylene in personal care products.
- Recycle or dispose of plastics correctly.
- Spread the word and support initiatives about the importance of reducing plastics.

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Microplastics are Everywhere

Microplastics can be smaller than a strand of DNA, or as large as the diameter of a straw

Microplastics come from the breakdown of larger plastic and from industrial sources

Microplastics come from tires, paint, cigarette butts, cosmetics, and clothing

Microplastics are found in lakes, oceans, streams, soil, air, and groundwater

Microplastics are found in the water we drink, air we breathe, and the food we eat.

Microplastics are in creatures, great and small, even newborn babies

Microplastics carry pollutants into the human or animal body

Microplastics adversely affect animal health and may also affect human health

Microplastics refuse, rethink, reduce, reuse, recycle, and remove them

QR Code

Microplastics are in Creatures GREAT and small

QR Code

Microplastics are in Creatures GREAT and small

QR Code

Introducing the ITRC Microplastics Guidance

What is ITRC? ITRC is the Interstate Technology and Regulatory Council (ITRC) is a partnership of state, local, and tribal governments, and the U.S. Environmental Protection Agency (EPA) to address complex environmental issues.

What is the guidance? The guidance provides a framework for assessing and managing microplastic risks in various settings, including water bodies, land, and air.

Why is this important? Microplastics are a growing environmental concern, and this guidance helps stakeholders understand the risks and take action to reduce them.

How to use the guidance? The guidance is organized into sections for different media (water, land, air) and provides practical steps for risk assessment and management.

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Use Comparable Units for Microplastics Data Reporting

Standardization is Lacking
An increasing number of microplastics studies are being conducted and published. It is important to use a common system of measurement to allow scientists to share, report, and compare results of research and assessments. This fact sheet summarizes the challenges and necessity of using comparable units for microplastics data reporting.

Standardization is Lacking
A universally standardized method of reporting results from laboratory analyses of microplastics does not currently exist. However, a microplastics reporting guidelines checklist has been published and is available in Cooper et al. (2020).

Number of Microplastics Reported per Year of Study

Concentration Metric: Per liter Per kg Per m³

Year: 2014, 2015, 2016, 2017, 2018, 2019, 2020

Source: Cooper et al. (2020)

The Interstate Technology and Regulatory Council (ITRC) is a state-led environmental justice research center providing solutions, best management practices, resources, and training to state, tribal, local, and federal agencies to improve environmental health and quality regulatory decision-making to protect human health and the environment. www.itrcweb.org/

ERIS ENVIRONMENTAL RESEARCH INSTITUTE OF THE STATES

Team Experience



<https://itrcweb.org/membership/details>

ITRC Training & Outreach Opportunities

REGISTER NOW

PFAS BEYOND THE BASICS: TREATMENT TECHNOLOGIES

Thursday, June 13, 2024
1:00 PM - 3:00 PM EST

Learn about:
Media, sources, & pathways that require intervention & treatment
Application of field-implemented PFAS remediation technologies
Promising developing PFAS technologies
Application of integral remedial strategies

MEET OUR TRAINERS:

Rich Evans
GES

Nathan Hagelin
WSP

Ted Tyler
Cardno

Emily Pulcher
Burns & McDonnell

Andrew Safulko
Brown & Caldwell

Cliff Shierk
MNPollution Control Agency

ITRC WEBINAR TRAINING
★★★★★

RESULTS

10,213 → **+20**
Participants Trained Classes Offered

Number of Participants Trained Per Year
2019 - June 2024

Year	Participants Trained
2019	~10,000
2020	~10,000
2021	~10,500
2022	~10,000
2023	~10,500
2024	~10,500

2024
MID YEAR TRAINING SUMMARY

AT THE MID-YEAR MARK, ITRC IS ON TRACK TO HAVE ITS BIGGEST ANNUAL TRAINING ATTENDANCE EVER!



<https://clu-in.org/training/>



[@itrc-environment](https://twitter.com/itrc-environment)



<https://itrcweb.org/events/calendar>

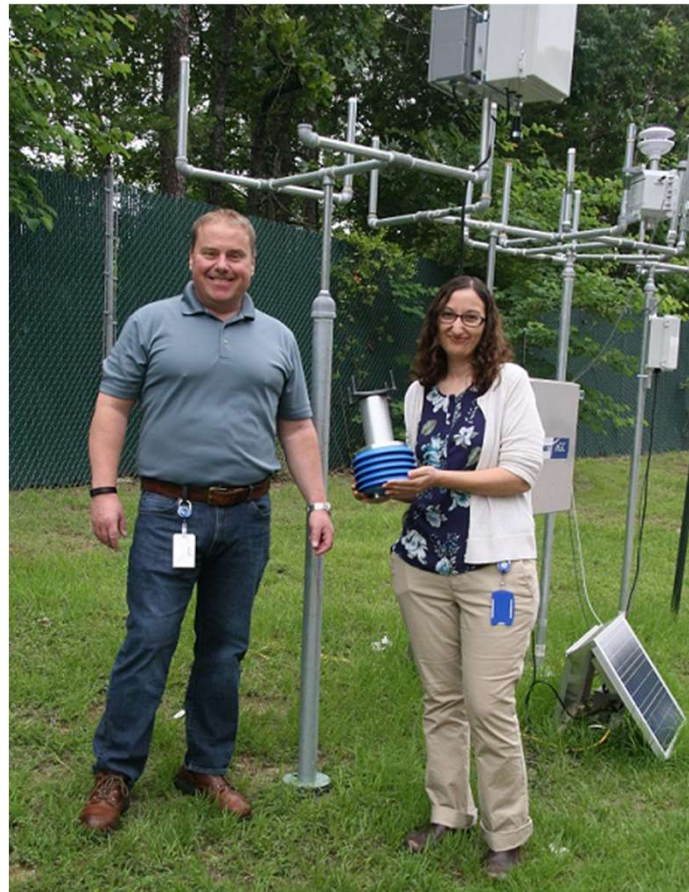


Harmful Algal Blooms Forecasting



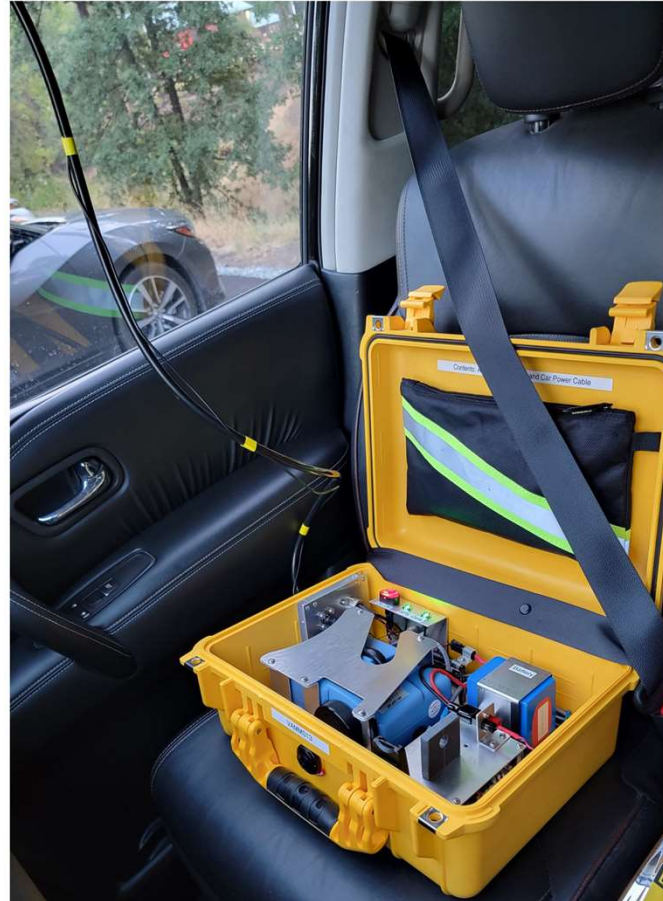


Next Generation Emission Measurements





WSMART: Wildfire Smoke Air Monitoring Response Technology



Resources

ERIS Website – www.eristates.org

- Includes calendar of upcoming trainings and webinars offered by ITRC, ORD, and others.

ITRC Website – www.itrcweb.org

- Guidance documents, trainings, and current teams

ORD Research to Support States Website - <https://www.epa.gov/research-states>

- [CyAN app](#)
- [CyanoHABs Forecasting Research](#)
- [WSMART Loan Program](#)
- [Next Generation Emission Measurement Research for Fugitive Air Pollution](#)



ERIS Survey