

FSTRA (Newsletter

FEDERAL-STATE TOXICOLOGY RISK ANALYSIS COMMITTEE

What Is FSTRAC?

FSTRAC's mission is to strengthen relationships and cooperation among the EPA, states and Tribes through the exchange of technical information primarily regarding water-related human health and risk assessment and also share information on ecological effects related to water quality criteria. FSTRAC is composed of current representatives from governmental agencies (state, Tribal, federal health and environmental agencies, and other regulatory authorities) and representatives from the Association of State Drinking Water Administrators (ASDWA) and the Association of Clean Water Administrators (ACWA). The goal of FSTRAC is to share information that supports the development of well-rounded, integrated approaches to effects assessment, risk assessment, risk management, risk communication, and standard-setting for drinking water, groundwater, and surface water contaminants. Specific objectives of FSTRAC include:

- To foster cooperation, consistency, and an understanding of goals and problems in human health and ecological risk assessment for contaminants in water.
- To allow the exchange of technical information, including toxicity/exposure data and analysis, and methodologies and assumptions related to the development and implementation of regulations, criteria, advisories, and other toxicity values under the Safe Drinking Water Act and the Clean Water Act, and other state and Tribal rules and policies as applicable.
- To allow the exchange of information on research priorities and results.
- To share science policy concerns regarding water-related human health and ecological risk assessment.

Recent Webinars

FSTRAC holds several webinars each year to share information through presentations and discussions regarding human health risk analysis and water quality issues.

Fall 2024

Health and Ecological Criteria Division Update (presented by Colleen Flaherty, HECD/OST/OW/EPA). Ms. Flaherty described the major accomplishments of the EPA's Office of Science and Technology, Health and Ecological Criteria Division (OST/HECD) since the last FSTRAC Webinar held in April 2024, including publishing the final PFAS aquatic life criteria and benchmarks, the Acute Aquatic Life Screening Value for 6PPD-quinone in Freshwater, and the Standard Operating Procedures (SOP) and Data Evaluation Records (DERs) for Systematic Review of Ecological Toxicity Data in Aquatic Life and Aquatic-Dependent Wildlife. She mentioned that the EPA OST/HECD's priorities for fiscal year (FY) 2025 include finalizing

The purpose of this newsletter is to update Federal-State Toxicology and Risk Analysis Committee (FSTRAC) members on current developments in toxicology, risk analysis, and water quality criteria and standards. This newsletter also provides information on recent FSTRAC webinars and upcoming events. Please share this newsletter with those who may be interested in these topics. If you are interested in joining FSTRAC, please contact the FSTRAC Co-Chairs, Dr. Shamima Akhter (Akhter.Shamima@epa.gov) or Ms. Pamela Wadman (Pamela.Wadman@vermont.gov).

the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)/Clean Water Act (CWA) harmonized approach for pesticides; releasing draft human health criteria for perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS), hexafluoropropylene oxide dimer acid (HFPO-DA), and perfluorobutane sulfonic acid (PFBS); and releasing a draft risk assessment for PFOA and PFOS in biosolids. Ms. Flaherty mentioned that additional OST/HECD priorities for FY 2025 include providing support for aquatic life criteria development efforts (including metals Cooperative Research and Development Agreement [CRADA] bioavailability models and criteria for nickel, lead, zinc, and cobalt), updating the Metals Aquatic Life Criteria and Chemistry (MetALiCC) map to include state water chemistry data, Safe Drinking Water Act (SDWA) processes (including Contaminant Candidate List 6, Regulatory Determination 5, and Six Year Review 4), state-specific nutrient criteria development projects, EPA's National Harmful Algal Blooms (HABs) Program, and biocriteria priorities (including streamlining development and implementation of biological condition gradients).

EPA Technical Support Materials (TSM): Developing Alternative Recreational Criteria for Waters Contaminated by Predominantly Non-Human Fecal Sources (July Revised Version) (presented by John Ravenscroft, HECD/OST/OW/ **EPA).** EPA developed the TSM for predominantly non-human fecal sources to provide scientifically defensible, equivalently health protective alternative values for *E. coli* and enterococci that reflect the potential risk from predominantly the non-human fecal sources. Mr. Ravenscroft noted that this alternative method was developed because the health data used to support the EPA's 2012 Recreational Water Quality Criteria (RWQC) were collected in waterbodies predominantly impacted by human fecal contamination and that non-human fecal contaminated water can result in lower human health risk compared to human fecal contaminated waters at the same level of the culturable fecal indicator bacteria (FIB) E. coli and enterococci. Mr. Ravenscroft noted that these alternative criteria developed using the TSM would be protective of the recreational designated use. Mr. Ravenscroft noted that the TSM describes a risk-based, multi-step approach for documenting

local conditions, estimating the potential for human illness from recreational exposures in a waterbody using quantitative microbial risk assessment (QMRA), and comparing risk estimates to the RWQC. For additional information, please refer to the EPA's Technical Support Materials: Developing Alternative Recreational Criteria for Waters Contaminated by Predominantly Non-Human Fecal Sources.

Superfund Radiation Risk Assessment Approach to Assess Human Consumption of Homegrown Food and Game and Efforts to Assess Tribal Consumption of Plants and Animals to Improve Assessments (presented by Stuart Walker, OSRTI/EPA). Mr. Walker provided an overview of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Superfund tools for conducting risk assessment at radioactively contaminated sites, the Preliminary Remediation Goals for Radionuclides (PRG) calculator and the Dose Compliance Concentrations (DCC) calculator, and how they are used to protect humans consuming home grown food (produce and animals) and humans consuming recreational game. He noted that the EPA Superfund program has become more involved in remediating uranium mines at sites on Tribal lands and concerns have been raised that existing Superfund calculators do not capture all Tribal food exposures. Mr. Walker indicated that this concern has been echoed at the classes that the EPA has conducted on radiation risk assessment and from panels on "Indigenous Perspectives on Risk Assessment" at the Waste Management Symposium. He described two EPA intern projects that identified numerous Tribal exposure pathways that are not already included in the PRG calculator, consisting of 73 additional produce categories, 64 additional animal product categories, and one ceremonial category. Mr. Walker mentioned that the EPA is currently evaluating these additional produce and animal product categories and that he anticipates that these categories could be included in "site-specific mode" in the PRG/ DCC calculator. He noted that there are future plans to evaluate the inhalation of smoke from ceremonial plants and application of paints and dyes to the skin. For additional information, please refer to the following papers:

- Evaluating Produce Consumption by Native Americans for Risk Assessments
- Evaluating Food Consumption Associated with Fishing and Hunting by Native Americans for Risk Assessments
- Evaluating Tribal Dietary, Lifestyle, and Ceremonial Exposures for Use in EPA Superfund Risk Assessments

Derivation of Water Quality Values for Perfluorohexane Sulfonate (PFHxS) and Perfluorononanoic Acid (PFNA) (presented by Kevin D. Cox, Michigan Department of Environment, Great Lakes, and Energy). Mr. Cox mentioned that Michigan's "Rule 57" Water Quality Values (WQVs) for protecting humans, wildlife, and aquatic life are calculated using a narrative procedure. Mr. Cox mentioned that WQVs are applicable to the Great Lakes, the connecting waters, and all other surface waters of the state (unless site-specific values have been derived). He noted that the human non-cancer WQVs developed for PFHxS were 59 ng/L (drinking water) and 210 ng/L (non-drinking water) and that the human non-cancer WQVs developed for PFNA were 19 ng/L (drinking water) and 30 ng/L (non-drinking water). Mr. Cox mentioned that these WQVs used the same key studies and critical effects that had been used to develop Michigan's drinking water maximum contaminant levels in 2019. He noted that the bioaccumulation factor values used in calculating the WQVs were developed using data from Michigan's Fish Contaminant Monitoring Program and surface water monitoring efforts. Mr. Cox mentioned that limited aquatic toxicity data resulted in development of aquatic life screening values for both PFNA and PFHxS.

Human Health Risk Assessment for 1,4-Dioxane in Drinking Water Summary (presented by Frannie Nilsen, North Carolina Department of Environmental Quality). Dr. Nilsen mentioned that the 1,4-dioxane monitoring results from the EPA's Unregulated Contaminant Monitoring Rule 3 (UCMR 3) led states with high rankings to reevaluate 1,4-dioxane industrial sources, rules related to water quality standards, and discharge limits in affected permits. She noted that the North Carolina Department of Environmental Quality began monitoring across the state and that many sites began monitoring independently. Analysis of

these monitoring results indicates that most North Carolinians outside of the Cape Fear River Basin are not exposed to 1,4-dioxane at concentrations above the UCMR 3 national average but that some within the Cape Fear River Basin are exposed to the third highest drinking water concentrations in the nation. Dr. Nilsen mentioned that the cancer slope factor of 0.1 mg/kg-day provided in the EPA IRIS assessment was derived using the most health protective modeling approach and will provide science-based protection to North Carolinians from exposure to 1,4-dioxane in their drinking water. She noted that a risk characterization using the exposure data and health-based values for the cancer endpoint is described in the 1,4-Dioxane in Drinking Water Legislative Report, and the results indicate that North Carolina's residents are exposed to 1,4-dioxane concentrations that may be two times the national average in drinking water and as much as four times national averages in surface and groundwater. Dr. Nilsen mentioned that regulatory attention focused on reducing concentrations has led to decreased 1,4-dioxane environmental and drinking water exposure in the Cape Fear River Basin and that public outreach efforts regarding 1,4-dioxane exposure in drinking water resulted in many locations in North Carolina decreasing 1,4-dioxane exposure outside of the Cape Fear River Basin.

Per- and Polyfluoroalkyl Substances (PFAS) in Final Treated Solids (Biosolids) from 190 Michigan Wastewater Treatment Plants (presented by Matt Reeves, Western Michigan **University).** Dr. Reeves noted that the purpose of this study was to characterize the concentration, distribution, and variability of PFAS in final treated solids (biosolids) using the results from the analysis of 350 samples collected for the Michigan Department of Environment, Great Lakes, and Energy's Biosolids Studies. He mentioned that the biosolids samples were collected from a geographically diverse range of wastewater treatment plants (WWTPs) serving communities of various sizes and industrial activity. Dr. Reeves noted that the study approach consisted of analyzing PFAS signatures of freshly generated samples of biosolids at the end of the wastewater treatment process. He described the conclusions for this study, including that perfluorooctane sulfonate (PFOS) was the most frequently detected PFAS in biosolids

in 2018–2022 (95% detection) throughout Michigan despite the voluntary manufacturing phase-out in the early 2000s; state-wide variability in biosolids PFAS concentrations was primarily controlled by carboxyl compounds of chain lengths C8–C12, and secondarily controlled by short-chain carboxyls and PFOS; usage of perfluorosulfonic acid (PFSA) replacement compounds contributed to broad variance in biosolids concentrations within Michigan WWTPs; and trends in PFAS enrichment in biosolids for individual PFAS

vary at least three orders-of-magnitude, and generally increase with compound hydrophobicity.

Link, G.W., D.M. Reeves, D.P. Cassidy, and E.S. Coffin. 2024. Per- and polyfluoroalkyl substances (PFAS) in final treated solids (biosolids) from 190 Michigan wastewater treatment plants. *Journal of Hazardous Materials* 463:132734 https://doi.org/10.1016/j. jhazmat.2023.132734.

Information from the EPA, States and Tribes Developing Guidance for Specific Chemicals

Criteria Values

EPA Releases Final PFAS Aquatic Life Criteria and Benchmarks

The EPA completed another commitment in its PFAS Strategic Roadmap, finalizing science-based water quality criteria and benchmarks for 10 PFAS that will help states and Tribes protect fish and other aquatic life from these chemicals. These water quality criteria and benchmarks are not regulatory, nor do they automatically become part of a state's water quality standards. States and Tribes can consider using them to develop water quality standards which inform the implementation of other Clean Water Act programs, like wastewater discharge permits.

The EPA's final perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) freshwater aquatic-life criteria recommendations, published under Clean Water Act Section 304(a)(1), are based on the latest scientific knowledge about protecting freshwater fish and other organisms from the effects of short-term and long-term exposure to PFOA or PFOS. The best available science indicates that PFOA and PFOS levels in the environment appear to be significantly below levels that would affect aquatic life, except in areas where there is known contamination such as Superfund sites.

The agency derived benchmarks to protect aquatic life from short-term exposures to eight individual PFAS in freshwaters (perfluorobutanoic acid [PFBA],

perfluorohexanoic acid [PFHxA], perfluorononanoic acid [PFNA], perfluorodecanoic acid [PFDA], perfluorobutanesulfonic acid [PFBS], perfluorohexanesulfonic acid [PFHxS], hexadecafluoro-2-decenoic acid [8:2 FTUCA], and pentadecafluorodecanoic acid [7:3 FTCA]). The agency also developed aquatic life benchmarks for short-term exposure to PFOA and PFOS in saltwater environments. Like criteria, aquatic life benchmarks are the highest science-based concentrations that would allow fish and other aquatic species to live, grow, and reproduce. However, the EPA develops these informational numeric benchmarks under Clean Water Act Section 304(a)(2) when there are limited high quality toxicity data available and data gaps exist for several families of aquatic organisms.

View the EPA's final PFAS aquatic life criteria and benchmarks.

Acute 6PPD-q and 6PPD Aquatic Life Screening Values for Freshwater

The EPA's Office of Water (OW) developed acute aquatic life screening values for two widely distributed rubber-tire associated compounds, N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine-quinone (6PPD-q) and N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD). The screening values are based on the latest scientific knowledge about the short-term (acute) toxicity of 6PPD-q and 6PPD to aquatic organisms, including sensitive species

like coho salmon, in freshwaters of the United States. While data limitations do not allow the EPA to derive recommended 6PPD-q and 6PPD water quality criteria for fresh or estuarine and marine waters that follow the EPA's Guidelines methods at this time, the agency has derived screening values using the best available toxicity data. For additional information, refer to the following EPA webpage: https://www.epa.gov/wqc/aquatic-life-criteria-and-methods-toxics#acute.

Risk Assessment

Drinking Water

EPA's Unregulated Contaminant Monitoring Rule (UCMR): Sixth Quarterly Release of Nationwide Data on 29 PFAS and Lithium, Future Rule Development, and Data Finders

- On October 28th, the EPA published the sixth set of drinking water data collected at public water systems (PWSs) for 29 PFAS and lithium under the fifth UCMR (UCMR 5). Over 1.1 million analytical results are available for 7,237 PWSs to date, representing approximately 55% of the total results expected. The UCMR 5 data will ensure science-based decision-making and help the EPA better understand national-level exposure to the 29 PFAS and lithium, where and to what extent PFAS co-occur with each other, and if communities are disproportionately impacted by these contaminants in drinking water. The agency will continue to publish results quarterly via the UCMR 5 Data Finder, UCMR 5 Data Summary, and data text files until completion of data reporting in 2026. The UCMR 5 resources and website with answers to common questions also reflect that six of the 29 PFAS for which monitoring data are being collected are part of the EPA's April 2024 final National Primary Drinking Water Regulation (NPDWR). PWSs will be required to comply with the PFAS NPDWR Maximum Contaminant Levels starting in April 2029.
- Development for the next UCMR cycle (UCMR 6) is underway, with an anticipated proposed rule publication by late 2025, final rule publication by late 2026, and monitoring timeframe from 2027 to 2031. In early 2024, the EPA published a *Federal Register* notice regarding the status of drinking water analytical methods and hosted a related webinar to discuss potential UCMR 6 monitoring

- approaches, contaminants being considered, and laboratory approval.
- Data from past UCMR monitoring cycles (UCMR 1-4) can be easily searched for and downloaded using the EPA's UCMR Archival Data Finder or accessed via standardized data text files.

Six-Year Review 4 of Drinking Water Standards

In July 2024, the EPA announced the results of the fourth cycle of its Six-Year Review of existing national primary drinking water regulations (NPDWRs). Based on the agency's review of existing NPDWRs, the EPA determined that there are no additional candidates identified for regulatory revision. The Safe Drinking Water Act (SDWA) requires the EPA to conduct a review every six years of existing NPDWRs and determine which, if any, are appropriate for revision. The purpose of the review is to evaluate available information for regulated contaminants to determine if any new information on health effects, treatment technologies, analytical methods, occurrence, exposure, implementation, and/or other factors provides a basis to support a regulatory revision that would improve or strengthen public health protection.

The EPA did not include in this Six-Year Review cycle the recently promulgated per-and polyfluoroalkyl substances (PFAS) regulations. The PFAS regulations, promulgated in April 2024, established six new NPDWRs. The EPA anticipates that once the PFAS regulations go into effect and sufficient information regarding compliance monitoring becomes available, those NPDWRs will be subject to a more detailed regulatory review under a future Six-Year Review cycle.

For additional information, refer to the following EPA webpage: https://www.epa.gov/dwsixyearreview/six-year-review-4-drinking-water-standards#overview.

MDH's CEC Initiative Annual Meeting

The Minnesota Department of Health's Contaminants of Emerging Concern (CEC) Initiative held its Annual Meeting on September 19, 2024. Topics included the CEC Initiative's current and future strategies for evaluating data-poor PFAS for toxicity, a plan to formally integrate New Approach Methodologies (NAMs) into

the CEC Initiative's toolbox, an automated workflow for evaluating exposure potential, and a workflow for prioritizing chemicals for evaluation using an exposure-forward paradigm. Materials from the meeting will be shared here: https://www.health.state.mn.us/communities/environment/risk/guidance/dwec/index.html.

Publications

Standard Operating Procedures (SOP) and Data Evaluation Records (DERs) for Systematic Review of Ecological Toxicity Data in Aquatic Life and Aquatic-Dependent Wildlife

The EPA's Office of Water (OW) is sharing its existing SOP and DERs for systematic review of ecological toxicity data for aquatic life and aquatic-dependent wildlife. The SOP and DERs provide information on the systematic review and documentation process OW uses with ecological effect studies when developing Ambient Water Quality Criteria and other values for the protection of aquatic life and aquatic-dependent wildlife. The SOP is generally consistent with procedures developed by the EPA's Office of Chemical Safety and Pollution Prevention and supports a common approach to chemical toxicity data evaluation. For additional information, refer to the following EPA webpage: https://www.epa.gov/wqc/aquatic-life-criteria-and-methods-toxics#sop.

Water Reuse

The EPA Water Reuse Program publishes monthly and quarterly newsletters to share progress under the National Water Reuse Action Plan (WRAP) and highlight reuse activities across the water sector. Topics covered in the October 2024 quarterly newsletter included:

- The CDC publishes a recycled water webpage that presents an overview of recycled water practices in the U.S. and summarizes associated treatment processes and research on potable reuse safety.
- The University of Southern California ReWater Center releases third Potable Water Reuse Report featuring interviews with members of the international potable reuse community.

- The EPA awards \$9 million in research grants to address knowledge gaps in antimicrobial resistance.
- New WRAP actions:
 - o Identify Opportunities to Support the Mississippi River Basin States in Advancing Water Reuse
 - o Integrating Equitable Outcomes into Water Reuse Projects

Refer to the October 2024 WRAP quarterly update for additional information and sign up for water reuse newsletters here.

MDH's PFAS and Infant Formula Study

The Minnesota Department of Health conducted a small study investigating potential PFAS contamination in powdered infant formula. MDH scientists tested 17 formulas for various PFAS and found a detectable level of PFOS in one formula. An exposure analysis indicates the single PFOS detection in powdered infant formula is not a major source of PFOS relative to other sources, and a subsequent risk assessment comparing various formula-fed infant scenarios to the Minnesota Department of Health's 2024 PFOS reference serum concentration (2.6 ng/mL) concludes that PFAS from powdered formula likely does not pose a significant risk to infants. The publication is open access and available here: https://www.oaepublish.com/articles/jeea.2024.08.

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Upcoming Events and Conferences

Upcoming FSTRAC Webinar

The next FSTRAC Webinar is scheduled for spring 2025. Additional details, including the date of the next FSTRAC Webinar, will be provided to FSTRAC members in the coming weeks.

Public Comment Period for the Addition of Certain Per- and Polyfluoroalkyl Substances (PFAS) to the Toxics Release Inventory (TRI)

The EPA is proposing to add 16 individually listed per- and polyfluoroalkyl substances (PFAS) and 15 PFAS categories to the Toxics Release Inventory (TRI) list of toxic chemicals subject to reporting under the Emergency Planning and Community Right-to-Know Act (EPCRA) and the Pollution Prevention

Act (PPA) to comply with the National Defense Authorization Act for Fiscal Year 2020 (NDAA). The EPA also addresses how PFAS categories should be treated. Separately, the EPA discusses what events may trigger the automatic addition of a PFAS to the TRI pursuant to the NDAA. The 60-day public comment period ends on December 9, 2024. Written comments should be submitted to docket (EPA-HQ-OPPT-2023-0538-0002) via Regulations.gov. For more information, including how to submit comments, visit the Federal Register.

The Toxicology Forum

The Toxicology Forum is pleased to announce that registration for the 2025 Winter Meeting has begun! The winter meeting is being held on February 11–13 at the Embassy Suites Brier Center in Raleigh, North Carolina.

In addition to a robust agenda crafted to foster understanding through dialogue, The Forum meetings include dedicated times for breakfast, lunch, breaks, and receptions to support unparalleled networking and discussion with attendees in an intimate atmosphere not available at larger professional conferences.

We invite you to start planning your attendance today! Click on the links below to register for the meeting and reserve your hotel room.

- Register Today
- Hotel Reservations

SETAC North America Annual Meeting – Society of Environmental Toxicology and Chemistry

SETAC will be holding its 46th annual North America meeting on November 16–20, 2025 in Portland, Oregon. Additional information is provided on the SETAC website: https://www.setac.org/discover-events/ems-event-calendar/setac-north-america-46th-annual-meeting.html.

SOT Annual Meeting – Society of Toxicology

SOT will be holding its 64th annual meeting on March 16–20, 2025 in Orlando, Florida. Additional

information is provided on the SOT website: https://www.toxicology.org/events/am/AM2025/index.asp.

SRA Annual Meeting – Society for Risk Analysis

SRA will be holding its 2024 annual meeting in Austin, Texas from December 8–12, 2024. Additional information is provided on the SRA website: https://www.sra.org/events-webinars/annual-meeting/.

ASM - American Society for Microbiology

ASM Microbe will be holding its annual meeting in Los Angeles, California, on June 19–23, 2025. Additional information is provided on the ASM website: https://asm.org/events/asm-microbe/home.

ASDWA Member Meeting 2025 – Association of State Drinking Water Administrators

ASDWA will host its 2025 Member Meeting in Alexandria, Virginia from March 17–19, 2025. More information will be provided on ASDWA's website: https://www.asdwa.org/event/asdwa-member-meeting-2025/.

ASDWA Annual Conference: 2025 – Association of State Drinking Water Administrators

ASDWA will host its 2025 Annual Conference in Long Beach, California from October 19–22, 2025. More information will be provided on ASDWA's website: https://www.asdwa.org/event/asdwa-annual-conference-2025/.

AWWA Annual Conference and Expo – American Water Works Association

AWWA will host its 2025 Annual Conference and Expo in Denver, Colorado from June 8–11, 2025. More information is provided on AWWA's website: https://ace.awwa.org/.

ECOS – Environmental Council of the States

The ECOS will be holding its 2025 ECOS Spring Meeting in Arlington, Virginia on March 23–26, 2025. Additional information is provided on the ECOS website: https://www.ecos.org/event/2025-ecos-spring-meeting/.

The ECOS will be holding its 2025 ECOS Fall Meeting in Santa Fe, New Mexico on September 2–5, 2025. Additional information is provided on the ECOS website: https://www.ecos.org/event/2025-ecos-fall-meeting/.

ITRC Webinar – Interstate Technology Regulatory Council

ITRC is holding the following training in late 2024:

• December 5: Introduction to Hydrocarbons

Additional information is provided on the ITRC website: https://itrcweb.org/events/calendar.

NACWA Winter Conference – National Association of Clean Water Agencies

NACWA will host its 2025 Winter Meeting in Rancho Mirage, California from January 28–31, 2025. More information will be provided on NACWA's website: https://www.nacwa.org/conferences-events/event-at-a-glance/2025/01/28/nacwa-events/2025-winter-conference.

NACWA 2025 Utility Leadership Conference & 55th Annual Meeting – National Association of Clean Water Agencies

NACWA will host its 2025 Utility Leadership Conference and 55th Annual Meeting in Colorado Springs, Colorado from July 22–25, 2025. More information will be provided on NACWA's website: https://www.nacwa.org/conferences-events/event-at-a-glance/2025/07/22/nacwa-events/2025-utility-leadership-conference-55th-annual-meeting.

NEWMOA Webinars – Northeast Waste Management Officials' Association

NEWMOA is holding the following trainings in late 2024:

- December 5: PFAS: Background Studies
- December 11: PFAS: Investigating Wastewater & Septic Systems as the Source

Additional information is provided on the NEWMOA website: https://www.newmoa.org/event/.

Water Week 2025

Water Week 2025 will be hosted in Washington, DC from April 6–12, 2025. Water Week is supported by a broad group of partner organizations and offers the sector an opportunity to advance policy priorities for clean and safe water. More information will be provided on the Water Week website:

https://www.waterweek.us/.

EPA OGWDW Upcoming Events

EPA Drinking Water Training

EPA OGWDW hosts several trainings and webinars for drinking water professionals, public officials, and anyone interested in gaining knowledge and skills related to compliance with the Safe Drinking Water Act, Building the Capacity of Drinking Water Systems, Drinking Water Grant Opportunities, Water Technical Assistance, and more. The webinars are free of charge and open to the public. Additional information, schedules, and registration can be found on the website here.

EPA ORD Upcoming Events

Upcoming EPA Research Webinars

Registration and additional information is posted to the series-specific websites closer to the scheduled date, but people can sign up for email notifications when registration opens.

- Small Drinking Water Systems Webinar Series:
 - o **December 3, 2024:** Lead Reduction Updates and Lead Service Line Identification and Replacement

- o **January 28, 2025:** Lead Chemistry, Communication, and Local Engagement
- o **February 25, 2025:** Emergency Response: Drinking Water Supply Planning and Treatment Technology Deployment
- o **March 25, 2025:** Disinfection Byproducts: Inorganic Chloramines