

SEPTEMBER 2025 GROUNDWATER FORUM ONLINE TRAINING

Time (EDT)	9/9/2025		9/10/2025		9/11/2025	
	Getting Down to Business Sharing knowledge, building consistency, and identifying resources and research needs to advance cleanup of contaminated sites		Characterization Focus Defensible site characterization and groundwater monitoring approaches that make effective use of limited resources		Remediation Focus Expediting and optimizing cleanups to address exposures, restore potable aquifers, and return properties to productive reuse	
	Session	Speakers	Session	Speakers	Session	Speakers
12:00-12:15	Day 1 Kickoff (0.25 hr)	Co-chairs	Day 2 Kickoff (0.25 hr)	Co-chairs	Day 3 Kickoff (0.25 hr)	Co-chairs
12:15-12:30	Reflections on Nearly 30 Years of the Groundwater Forum (0.5 hr)	Greg Lyssy	Conceptual Site Models for Contaminated Sites: Why you need one and where to start (1.25 hr, w Visualization Case Study)	Ian Bowen Sarah Roberts	Case Study: Remedial Action Implementation Approaches and Lessons Learned in 17y at Chlorinated Solvents Site (0.5)	Nathan Smith -
12:30-12:45						
12:45-1:00	Workgroup Updates (1.5 hr)	Amanda Bomar Bill Brandon Ayowale Ayodele Jeff Christopher Courtney Allen N. Smith, A. Frandsen Ian Bowen Christopher Kelly			Panel Discussion: Remediation Technologies- What Works? What Doesn't? (0.75 hr)	Klara Crincoli Nate Doyle Luci Dunnington Jon Fields Rick Wilkin
1:00-1:15	Background Case Studies					
1:15-1:30	Modeling MNA					
1:30-1:45	SharePoint/Teams Succession Planning					
1:45-2:00	Technical Support Next Meeting					
2:00-2:15	Break (0.25 hr)		Break (0.25 hr)		Break (0.25 hr)	
2:15-2:30	Better Together: National Technical Resources to Support Groundwater Cleanup (0.75 hr)	Luci Dunnington Jim Grundy Stephanie Ross	The PFAS Matrix: a Tool for Characterization and Remed. of Contaminated Properties (0.5 hr)	Jeff Christopher Christa Leibli	Training on the Monitored Natural Attenuation Checklist (0.5 hr)	Mike McCarroll Lisa Raterink
14:30-14:45						
14:45-15:00			Successful High Resolution Site Characterization of Heavy Non-Aqueous Phase Liquids (1.0 hr)	Randy St. Germain	Training on the Use of Beneficial Use Designation (0.5 hr)	Mike McCarroll Lisa Raterink
15:00-15:15	Panel Discussion: Where Do I Start? (0.75 hr)	Bill Brandon Diana Cutt Alyssa Graveline Chris Kelly			Technical Writing Tips (0.5 hr)	Sheila Briggs-Steuteville
15:15-15:30						
15:30-15:45						
15:45-16:00	Daily Wrap Up (0.25 h)	Co-chairs	Daily Wrap Up (0.25 hr)	Co-chairs	Daily Wrap Up (0.25 hr)	Co-chairs
16:00	Adjourn for the Day		Adjourn for the Day		Adjourn for the Day	

DETAILED AGENDA

DAY 1 - Getting Down to Business, September 9, 2025

Sharing knowledge, building consistency, and identifying resources and research needs to advance cleanup of contaminated sites

Reflections on the Past 30 Years of the Groundwater Forum

Description: An introspective look on how we started, what we have accomplished, where we are now, and where we are going.

Speaker: Greg Lyssy, EPA Region 6

Workgroup Updates

Background

Mission: This workgroup intends to: 1) review and seek ways to improve how background evaluations are conducted; 2) outline new science and emerging thoughts relating to the identification of background conditions; and 3) provide recommended procedures for evaluating background conditions.

Speaker: Amanda Bomar, EPA Region 6

Case Studies

Mission: The Case Studies Workgroup of the USEPA Groundwater Forum seeks to provide an active forum for exemplary case studies from our individual and collective work in the fields of groundwater assessment and remediation and related technical areas. We believe that in-depth examination of specific problems and projects provides an ideal and necessary means of validating existing technical supports as well as illustrating practical limitations to current theories, methods, and practices. Strict adherence to the scientific method requires honest assessment of successes as well as failures and we intend to examine both. Such circumspection provides a means of identifying formulas for future successes, as well as fundamental common problems which suggest the need for further work, new research, improved technologies, and updated methodologies. Careful evaluation of case studies may even provide impetus for advances in theoretical understanding. Based on our substantial combined experience base, we understand fundamentally that technology in and of itself is often insufficient to solve practical real-world problems, and that a solid understanding of factors required to implement various technologies under specific scenarios and particular geologic environments is equally important to successes in the realm of groundwater science and engineering. In this larger context, we endeavor to promote and develop instructive site-specific case studies to closely examine a myriad of groundwater-related issues (science, technology, methods, technical issues, etc.) based on technically defensible data at real sites. These efforts will serve to produce better and more sustainable outcomes in the practice of evaluating and remediating groundwater contamination for the benefit of the American public. Lastly, we believe it is incumbent on all members of a technical forum such as the USEPA Groundwater Forum to make individual efforts to identify and communicate important examples from their own experience. We strongly believe that technically defensible positions require more than just opinions formed by general experience, and we seek to enhance the overall credibility of the forum as well as that of our individual members via universal participation in building a sound technical foundation for our collective work (i.e., a living and growing series of case studies).

Speaker: Bill Brandon, OLEM ORCR

Modeling

Mission: Our mission is to promote best practices, guidelines, and reviews of groundwater and contaminant transport models to ensure transparent, consistent, and defensible decision-making by incorporating uncertainty analysis in remediating contaminated aquifers at the Superfund and RCRA sites.

Speaker: Ayowale Ayodele, PhD, EPA Region 3

Monitored Natural Attenuation

Mission: This workgroup intends to: 1) review and seek ways to improve the 1999 EPA guidance on the use of Monitored Natural Attenuation (MNA) in groundwater remedial actions; 2) outline new science and emerging thoughts relating to the implementation of MNA for contaminated groundwater; and 3) provide recommended procedures for evaluating the use and effectiveness of the MNA remedial approach. This MNA Workgroup has retained John Wilson to mine a SEMS database of MNA sites for key messages. The overarching work products for this work group will include the development of fact sheets and/or guidelines for using groundwater statistical tools for site evaluation, as well best practices in reviewing groundwater flow and contaminant transport models.

Speaker: Jeff Christopher, EPA Region 3

SharePoint/Teams

Mission: This workgroup intends to update and seek ways to improve the Groundwater Forum (GWF) SharePoint and Teams™ page. Improvements are anticipated to include: 1) combining content into a centralized location within a unified and merged Teams/SharePoint site; 2) creating a file structure that allows for easy identification of information; 3) allowing for archiving/library storage of information; 4) providing GWF Work Groups a location to collaborate; and 3) creating a user friendly interface that GWF members are familiar with and increases the functionality of the organization. The strategy to accomplish these goals will include developing a plan and using a tiered rollout that will allow for updates to improve functionality.

Speaker: Courtney Allen, EPA Region 6

Succession Planning

Mission: Recognizing that the GWF has many new members and that many of the GWF experts are nearing retirement, there is a need to transfer knowledge and know-how to newer and incoming GWF members. It is recognized that long-term staff development and knowledge-sharing among GWF members, regardless of career stage, is a necessary endeavor. The Succession Planning Work Group has three fundamental goals/functions: (1) determining what information needs to be handed off/shared, (2) determining what informational or educational aims/aspirations/gaps/goals exist for new and seasoned GWF members alike, and (3) facilitating knowledge transfer within the GWF. Development of a plan to transition knowledge within the group will also aid an ongoing environment of collaborative learning and growth. Both technical knowledge (key trainings, case studies, policy, guidance, technologies, etc.) and knowledge of how to get things done at EPA (e.g., EPA structure and functions, internal resources [equipment/staff, technical support], funding sources, and networking [e.g. White Mesa example]) needs to be captured. The Succession Planning work group will solicit this “wisdom” and strive to organize it in the form of an accessible, organized, searchable library (e.g., database, index/table of contents) of technical resources and practice areas, and work with GWF members to understand learning style preferences and develop approaches that facilitate knowledge transfer within the group (mentoring or discussion groups, live and recorded presentations, “just in time” technical capability overview briefs, technical support contract information, new staff development/training plans, etc.).

Speakers: Nathan Smith, EPA Region 8, and Angela Frandsen, EPA Region 8

Technical Support

Mission: The overall objective of this Groundwater Forum work group is to promote better groundwater technical support for Superfund sites, RCRA sites, and Brownfield sites, as well as any other contaminated site. Groundwater technical support primarily includes groundwater hydrology, groundwater remediation, and site characterization.

Speaker: Ian Bowen, EPA Region 8

Next Meeting

Mission: GWF meetings provide a unique venue for forum members to discuss guidance, policy, case studies, and best practices for the role of hydrogeologists at EPA. The information discussed and shared at Forum meetings allows EPA hydrogeologists and RPMs to more efficiently locate the information and people needed to successfully support their sites.

Speaker: Chris Kelly, EPA Region 1

Better Together: National Technical Resources to Support Groundwater Cleanup

Description: Learn about the national experts, tools, training, and other resources available through EPA headquarters, laboratories, and response centers to support the innovative and effective characterization and cleanup of contaminated groundwater sites.

Speakers: Luci Dunnington, EPA OSRTI; Jim Grundy, PhD, EPA ERT; Stephanie Ross, EPA ORD

Panel Discussion: Where Do I Start?

Description: Join a panel of geologists and hydrologists of varying backgrounds as they discuss how they orient themselves to their sites and work to advance the project despite challenges. The discussion will highlight issues at sites in different parts of the Superfund pipeline. The panelists will provide guidance on project approaches, share lessons learned, and reflect on navigating delicate situations.

Panel Members: Bill Brandon, ORCR; Diana Cutt, EPA OSRTI; Alysia Graveline, EPA Region 5; Chris Kelly, EPA Region 1

DAY 2 - Characterization Focus, September 10, 2025

Defensible site characterization and groundwater monitoring approaches that make effective use of limited resources

Conceptual Site Models for Contaminated Sites: Why you need one and where to start

Description: This training course is tailored to technical specialists and hydrogeologists who play a crucial role in the development and optimization of Conceptual Site Models (CSMs) for contaminated sites. Drawing from the Smart Scoping for Environmental Investigations Technical Guide, the course offers an in-depth exploration of how CSMs can be leveraged to understand complex site conditions, guide remediation strategies, and achieve cleanup goals efficiently. Participants will learn best practices to develop and maintain CSMs as dynamic, "living" representations that evolve throughout the project life cycle, ensuring robust communication and collaboration among technical stakeholders. The course will also feature best practices related to 3D visualization and analysis and geologic modeling. These best practices include developing objectives for the 3DVA effort, identifying data needs, and planning strategic communication of the CSM to stakeholders.

Through a combination of lectures and case studies, attendees will gain specialized skills to:

- Integrate complex geological, hydrological, and contaminant data into comprehensive CSMs.
- Use 3D Visualization and analysis to interrogate site data and communicate within site teams and stakeholders.
- Use CSMs to facilitate technical communication and decision-making processes among stakeholders.
- Identify data gaps and optimize remedy design and implementation based on technical insights.
- Regularly update CSMs as part of systematic planning activities, ensuring alignment with project objectives.

Targeted at technical specialists and hydrogeologists, this course will empower participants to harness their expertise in developing and refining CSMs, driving informed decision-making and successful environmental outcomes at Superfund sites. Join us to enhance your technical capabilities and contribute to the effective management of complex environmental projects.

Speakers: Ian Bowen, EPA Region 8; Sarah Roberts, EPA Region 8

Groundwater Model Defensibility in Regulatory Submissions: Requirements and Red Flags

Description: This presentation offers a concise framework for assessing groundwater flow and contaminant transport models in the realm of regulatory decision-making. These models serve as essential tools in environmental decision-making, especially when evaluating remedial alternatives/designs, conducting risk assessments, and formulating long-term site management strategies. Models submitted for regulatory review often do not satisfy defensibility standards regarding conceptual site model (CSM), realistic hydraulic/transport parameters, calibration/validation, and uncertainty documentation. This brief presentation highlights the crucial requirement and red flags in the construction of groundwater flow and transport models that may lead to rejection or conditional acceptance by the regulators.

Speaker: Ayowale Ayodele, PhD, EPA Region 3

The PFAS Matrix: a Tool for Characterization and Remediation of Contaminated Properties

Description: The PFAS Matrix, a tool originating from the TSP Groundwater Forum, is being prepared and made available to promote defensible approaches, consistency, and assist in decision-making efforts related to PFAS site assessments, site characterization, remedial actions, and associated activities. This presentation will focus on the concept, development, and build-out of the PFAS Matrix and include a request to contribute to the review of content and build-out of portions of the matrix relating to remedial technologies.

Speakers: Jeff Christopher, EPA Region 3; Christa Leibli, EPA Region 8

Successful HRSC of Heavy NAPLs

Description: Heavy (PAH-rich) NAPLs such as creosote, coal tar, bunker and heavy crude fluoresce in ways that are entirely unexpected. Couple this counter-intuitive fluorescence with mineral and organic fluorescence whose brightness rivals that of NAPLs, and you're left with a data set that requires careful and purposeful vetting prior to being considered representative of the target NAPL. The purpose of this presentation is to provide the audience with methods proven to overcome this often-ignored challenge that investigators must plan for when preparing to conduct fluorescence-based HRSC of heavy NAPL sites. The course will cover spectral properties of heavy NAPLs and natural fluorophores, pre-mobilization selection and vetting of sensor behavior on-site fluorescence logging and real-time interpretation, post-HRSC sampling and validation, processing of the uncorrected HRSC data set, appreciating the final data set, and a short case study.

Speaker: Randy St. Germain, Dakota Technologies, Inc.

DAY 3 - Remediation Focus, September 11, 2025

Expediting and optimizing cleanups to address exposures, restore potable aquifers, and return properties to productive reuse

Case Study: Remedial Action Implementation Approaches and Lessons Learned from 17 Years of Cleanup at a Chlorinated Solvents Groundwater Site

Description: The Bountiful/Woods Cross Operable Unit 1 Superfund Site is a large chlorinated solvent groundwater site near Salt Lake City that includes a residual DNAPL source area and dilute plume that stretches over a mile downgradient. The Site entered the remedial action phase in 2008. Since then, hundreds of wells have been installed, multiple amendment injections have been performed, ongoing characterization led to considerable refinement of the conceptual site model, and multiple remedial approaches have been implemented, resulting in significant improvement in groundwater contaminant concentrations. The presentation will provide an overview of the remedial action implementation, sharing different approaches used throughout the process, optimizations performed, as well as lessons learned that can be applied to similar sites.

Speaker: Nathan Smith, EPA Region 8

Panel Discussion: Remediation Technologies - What Works? What Doesn't?

Description: This panel, consisting of EPA groundwater experts from the regions, laboratories, and headquarters, brings considerable expertise in applying groundwater remediation technologies to tackle diverse contaminant classes and conceptual site models. Participate in an engaging discussion on current trends and best practices for groundwater remedy selection, design, and implementation. As the panelists explore remedial approaches from containment to active treatment to monitored natural attenuation, they will provide valuable insights and share lessons learned to help you navigate and overcome the characterization, compatibility, and pilot testing pitfalls that often hinder successful groundwater remediation efforts.

Panel Members: Klara Crincoli, EPA ORCR; Nate Doyle, EPA Region 3; Luci Dunnington, EPA OSRTI; Jon Fields, EPA OSRTI; Rick Wilkin, EPA ORD

Introduction to Technical Impracticability Waivers

Description: Section 121(d)(2) of CERCLA states that a remedy selected under CERCLA must meet a degree of cleanup that complies with applicable or relevant and appropriate requirements (ARARs). Section 121(d)(4) of CERCLA furthermore describes circumstances when selection of a CERCLA remedy may be made that does not meet ARARs, which is also described in Section 300.430(f)(C) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), the implementing regulations for CERCLA. One specific type of ARAR waiver within this section of CERCLA is technical impracticability (TI), arising from 121(d)(4)(C) of CERCLA which states that "compliance with such requirements is technically impracticable from an engineering perspective." The foundation and basics of TI waivers will be discussed, as well as an overview of the TI evaluation process, EPA guidance, and case examples. Applicability of TI waivers to RCRA Hazardous Waste Cleanup (formerly Corrective Action) facilities will also be briefly discussed.

Speaker: Randy Brown, EPA Region 7

Training on Use of the Monitored Natural Attenuation Checklist

Description: In April 2025 the OSRTI groundwater team in the Science Policy Branch released the *Recommended Summary Checklist for a Superfund Monitored Natural Attenuation Evaluation for Groundwater*. This checklist identifies criteria to assist in the potential selection and subsequent performance evaluation of a monitored natural attenuation (MNA) remedy for groundwater at Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List sites and Superfund Alternative (SA) approach sites. It covers a broad spectrum of contaminant classes including organics, inorganics, and radionuclides.

Speakers: Lisa Raterink, EPA OSRTI, and Michael McCarroll, EPA OSRTI

Training on Use of Groundwater Beneficial Use Designation

Description: In September 2024 the OSRTI groundwater team in the Science Policy Branch released the Beneficial Use Designation for Groundwater at Superfund Sites, which includes a flowchart for use in groundwater classification. The purpose of this document is to facilitate the evaluation and selection of beneficial use designations for groundwater at Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List and Superfund alternative approach sites.

Speakers: Lisa Raterink, EPA OSRTI, and Michael McCarroll, EPA OSRTI

Technical Writing Tips

Description: Lessons learned in crafting effective communications.

Speaker: Sheila Briggs-Steuteville, EPA Region 3

SPEAKER BIOS

Courtney Allen started with EPA Region 6 in August 2023 as a Project Manager in the RCRA-Hazardous Waste Cleanup Section of LCRD. Prior to EPA, Courtney was an Environmental Investigator for the Texas Commission on Environmental Quality with focuses in Industrial Hazardous Waste, Municipal Solid Waste, Public Water Supply (both groundwater and surface water), and Emergency Response. Outside of her work with the EPA, she is a subpar runner, boardgame nerd/collector, and lover of books.

Ayowale Ayodele, Ph.D., P.G. has been a hydrogeologist in Region 3 Superfund & Emergency Management Division, Hydrologic Support Section, for nearly a decade. Prior to joining EPA, he worked as a field geologist in the oil and gas sector. He holds both BS and MS degrees in geology, as well as a Ph.D. in environmental engineering.

Amanda Bomar is a human health and ecological risk assessor in region 6 Superfund and Emergency Management Division. She joined EPA after completing a Master of Science in Watershed Hydrology from LSU and a BS in Ocean and Coastal Resources from Texas A&M University at Galveston. Previous hydrogeology experience includes stable isotope catchment hydrology in fine-grained floodplains, researching nutrient enrichment at wastewater treatment wetlands, and stable isotope analysis of ocean masses. Short-lived adjunct professor of environmental science at Dallas College and part-time bartender, Amanda currently leads the background workgroup.

Ian Bowen is a hydrogeologist for USEPA Region 8 where he supports multiple programs related to groundwater protection and contaminant fate and transport. Ian holds a B.S. in Chemistry and a M.S. in Geology from the University of Kansas and has been with USEPA since 2015. Ian has extensive experience characterizing and remediating complex groundwater sites throughout the nation. His skills include data analysis, study design, facilitation, systematic project planning, site strategy development, and contract scoping. Ian believes high quality characterization leads to improved Conceptual Site Models and remedial decisions. Outside of work, he enjoys elk hunting, traveling, and spending time with his family.

Bill Brandon has been working as a geoscientist for over 30 years. His broad experience has focused on waste site characterization and remediation. Providing technical support to develop robust conceptual site models has been a central element of his career. He has been on the forefront of a range of innovations affecting the remediation practice related to characterization and monitoring technologies, including developing simple, effective, and low-cost approaches for evaluating the groundwater-surface water interface. He has a B.S. in geology from Vanderbilt University and an M.S. in geology from the University of Montana and has been employed as a technical support hydrogeologist with U.S. EPA Region 1 and ORCR since 1994.

Sheila Briggs-Steuteville is a Branch Chief in Region 3's Office of Regional Counsel. Ms. Briggs-Steuteville provides support for Region 3's RCRA Corrective Action and Superfund Programs. Ms. Briggs-Steuteville earned a B.A. in 1987 from Bryn Mawr College in Bryn Mawr, Pennsylvania, with a major in Geology. Upon graduation, Ms. Briggs-Steuteville began working with Region 3's Hazardous Waste Management Division as a Site Inspector. In 1992, after receiving her J.D. from Temple University School of Law, she joined the law firm of Dechert, Price and Rhoads in Philadelphia. She joined Region 3's Office of Regional Counsel in 1995.

Randy Brown, P.G., is the Region 7 Applied Sciences Branch (ASB) Supervisor in the Laboratory Sciences and Applied Science Division and the Region 7 TI Coordinator. Prior to becoming Branch Supervisor Randy was a hydrogeologist in ASB for several years working primarily on CERCLA, RCRA Corrective Action and CCR sites/facilities. Prior to coming to ASB, Randy was a Federal On-Scene Coordinator in the Region 7 Superfund program for several years. Prior to coming to EPA Randy was the Site Assessment and Emergency Response Chief for the Kansas Department of Health and Environment (KDHE) for over 20 years as well as a state Remedial Project Manager. Prior to KDHE Randy was a geologist and state on-scene coordinator for the Missouri Department of Natural Resources, worked in consulting as a geologist and geophysicist, a brief stint teaching high school, and was a geophysical research assistant at the Kansas Geological Survey in addition to some oil field experience. Randy has a degree in Geology/Geophysics from the University of Kansas and is a licensed professional geologist in Kansas.

Klara Crincoli is environmental chemist and joined ORCR's Cleanup Programs Branch in 2024. Klara has been serving as a technical lead for addressing per- and polyfluoroalkyl substances (PFAS), legacy pesticides and chemical vapor intrusion at RCRA hazardous waste cleanups and is the project lead for the national RCRA Optimization program. She pursued several post-doctoral opportunities as a researcher, including at EPA's Office of Research and Development in Ada, OK, with emphasis on development and optimization of treatment approaches for contaminated groundwater and soil. Klara holds Ph.D. in chemistry from Leipzig University, Germany and master's degree in environmental chemistry and technology from University of Chemistry and Technology Prague, Czech Republic.

Diana Cutt has held various positions in EPA over the past 27 years, including hydrogeologist for Region 2 SEMD, the ORD Superfund and Technology Liaison for EPA Region 2, and a supervisor (on detail) in ORD and OLEM. She has worked on wide range of issues with ORD, the Regions, OLEM, States, and other organizations to meet the real-world needs of the Superfund program, with the ultimate goal of achieving site restoration in an effective and efficient way. Diana has experience assessing contaminant fate and transport, evaluating groundwater remedies and remediation feasibility studies, and conducting field work/oversight at Superfund sites in all stages of the pipeline and in varied geologic environment. Some recent projects that she championed and coordinated include the development of tools and approaches to more effectively assess per- and polyfluoroalkyl substances (PFAS) in the environment.

Nate Doyle joined the EPA as a hydrogeologist for Region 3's Hydrologic Support Section in SEMD in 2015, and has been the Division's Senior Hydrogeologist since 2023. In these roles he provides technical expertise and review for sites in all stages of the Superfund process. He also gives advice and mentorship to other regional hydrogeologist to assure consistency in technical comments, and adherence to the NCP and Agency policy and guidance. In addition to these core duties, he escapes the office whenever possible through secondary duties as a boat operator, scientific diver, and divemaster with the Region 3 Scientific Dive Unit. Prior to joining the EPA, he worked for several environmental contractors servicing contracts for Region 3's Superfund program in Emergency Preparedness (3-years), Removal (1-year) and Remediation (8-years). Nate holds a B.S. in Environmental Science from Mary Washington College, and an M.S. in Applied Geosciences with a concentration in Hydrogeology from the University of Pennsylvania. He is licensed as a P.G. in Delaware.

Lucila (Luci) Dunnington has worked for five years in the EPA Technology Assessment Branch- testing, demonstrating and teaching about innovative technologies in the CERCLA program. Before coming to the EPA she worked as a consultant and environmental engineer specializing in water management and treatment systems. In addition to construction and innovative remediation technologies, she loves mushroom hunting, making her lazy dog go on runs, and playing cello in her community orchestra.

Jon Fields spent his first five years at the EPA as a hydrogeologist applying near-surface geophysics to contaminated sites and providing technical assistance to Regions/States. Technical assistance efforts consisted of reviewing general technical completeness in hydrogeology and thermal remediation by learning from EPA's preeminent expert, Eva Davis, as well as deploying geophysical equipment in the field. Prior to EPA, Jon spent time at the Oklahoma DEQ working in RCRA Permitting. Jon now works in OLEM alongside Luci.

Angela Frandsen is an Environmental Engineer in the Region 8 Helena, Montana Office and is part of the Technical Assistance Branch Hydro/Geo team in the Laboratory Services and Applied Sciences Division where she largely provides technical support on CERCLA sites. Prior to joining EPA, Ms. Frandsen spent over 20 years in environmental consulting with an emphasis and expertise in water quality assessment and impacts to surface water and groundwater, source control, active and "passive" mine water treatment, and cleanup of watersheds at mining-related CERCLA "megsites." She has an M.S. in Environmental Engineering and a B.S. in Chemical Engineering.

Alyssa Graveline has worked for five years at the EPA in Superfund. The first two years she helped removal build a virtual emergency operation system; the last three years she has contributed as a Remedial Project Manager and hydrogeologist technical support hybrid in Region 5. Before coming to the EPA she achieved her Masters studying microplastic transport in unconfined aquifers. Outside of work she loves taking her dog to parks and working on her native shade garden.

Educated as an engineer, **Jim Grundy**, PhD, is a physical scientist with EPA's Environmental Response Team and generally specializes in aquatic environmental chemistry. He assists RPMs on various technical aspects of the Superfund process, from sampling methods and sample design to CSM refinement, RI/FS reviews, and remedy effectiveness monitoring. He loves pulling together data to solve difficult problems and doesn't shy away from doing deep dives into SEMS to really understand a site and find the right information.

Chris Kelly is a Remedial Project Manager in the Massachusetts Superfund Section at EPA Region 1, specializing in complex groundwater investigations and cleanups. Prior to becoming an RPM, Chris served as a technical support hydrogeologist for Region 1's Superfund program, and before joining EPA in 2019 was a private sector consultant and contractor to EPA's Environmental Response Team in Edison, New Jersey. Chris has a B.S. in Geology from Union College in Schenectady, New York and is a Licensed Professional Geologist in that State.

Greg Lyssy is a Senior Project Manager at EPA Region 6 in Dallas where he works in the RCRA Corrective Action Program. He's worked at the EPA for over 35 years on Site clean-up activities at both Private and Federal Facilities in RCRA and Superfund. He's an Environmental Engineer and Geologist for EPA and has been a two-time Co-Chair of EPA's Ground Water Forum. Greg started in the Engineering Forum in 1991 but switched to the GWF in 1996. In addition to our typical COC's, Greg has also been involved with PFAS for the last 15 years. Most of that work has been with the Air Force and Navy, in investigations of releases related to Aqueous Film Forming Foam (AFFF) activities that have occurred at DoD Facilities since the 1970's. He's also an EPA Inspector and has TS and Q clearances.

Michael McCarroll is a hydrogeologist in EPA's Office of Superfund Remediation and Technology Innovation. He works as part of the groundwater team in the Science Policy Branch responding to technical inquiries and providing guidance on science policy. He has a M.S. in Applied Geoscience from the University of Pennsylvania and a B.S. in Environmental Science from Wilkes University.

Lisa Raterink is a physical scientist in EPA's Office of Superfund Remediation and Technology Innovation. She works as part of the groundwater team in the Science Policy Branch responding to technical inquiries and providing guidance on science policy. She has a M.S. in Geological Sciences from Wright State University and a B.S. in Geology-Chemistry from Grand Valley State University

Sarah Roberts has been a hydrogeologist for EPA for the last 15 years, providing technical support and expertise for statutory work under CERCLA, SDWA, NEPA, RCRA, OPA, and CWA. Her expertise spans from characterization, data analysis, modeling, system evaluation, and conflict resolution. Before EPA she got an MS in Hydrologic Science and Engineering from Colorado School of Mines and outside of EPA she enjoys long days on trails, time with her family, and impromptu dance parties.

Nathan Smith is a physical scientist in the EPA Region 8 Technical Assistance Branch, Hydrogeology team. He joined EPA in January 2023 following 17 years in environmental consulting. He has specialized in contaminated site investigation and cleanup, including numerous groundwater and mine sites, with experience in design, implementation, and management of high-resolution site characterization, CSM development, in situ bioremediation, treatability studies, innovative technologies, and various remediation approaches and optimizations.

Randy St. Germain co-founded Dakota Technologies, Inc. in 1993 to develop state-of-the-art laser-induced fluorescence products and services for high-resolution site characterization of LNAPLs and DNAPLs. Dakota's Ultra-Violet Optical Screening Tool (UVOST®), Tar-specific Green Optical Screening Tool (TarGOST®) and DyeLIF™ have contributed greatly to understanding how non-aqueous phase liquids distribute themselves in the subsurface. Randy has assisted in the interpretation of fluorescence data from over one thousand NAPL release sites. Approximately five hundred of those were heavy NAPL sites, totaling over 112 miles of fluorescence logging data (~19,000 logs).

Randy feels fortunate to have received the National Groundwater Association's Technology Award of Excellence in 2024, but readily admits it was the LIF technology that earned the award. Randy recently contributed to an open access book published by Springer Nature titled *Advances in the Characterization and Remediation of Sites Contaminated with Petroleum Hydrocarbons*. He wrote Chapter 8: High-Resolution Delineation of Petroleum NAPLs to pass along what he's learned from 30 years of characterizing NAPLs in the subsurface.

Stephanie Ross is a hydrogeologist currently working in ORD. She has a BS in Geology and an MS in Hydrology, both from the University of Arizona. She is now the Acting Director of the Groundwater Technical Support Center and the lone remaining Superfund and Technical Liaison nationwide. Outside of EPA Stephanie is a Girl Scout Troop Leader and is beginning the work to switch her backyard into a native plant garden.

Rick Wilkin is the Senior Groundwater Scientist in ORD's Center for Environmental Solutions and Emergency Response. He is an internationally recognized environmental geochemist with expertise in groundwater characterization, contaminant transport & fate, and remediation of impacted groundwater. Dr. Wilkin has led laboratory and field research programs on high-priority topics for EPA, including carbon sequestration, hydraulic fracturing and drinking water, and developing the science around per- and polyfluoroalkyl substances (PFAS) in groundwater. Dr. Wilkin regularly provides technical support to regional and program offices on topics related to groundwater science. He received a Ph.D. in Geosciences from the Pennsylvania State University in 1995 and has been with EPA since 1999. He serves on the editorial boards of the journals *Chemical Geology*, *Geochemical Transactions*, and *Soil Systems*.