



**ENVIRONMENTAL LAW INSTITUTE®**

AN INDEPENDENT, NON-PARTISAN ENVIRONMENTAL EDUCATION AND POLICY RESEARCH CENTER.

**2022 NATIONAL TRAINING WORKSHOP ON  
WATER QUALITY DATA, ASSESSMENT, AND PLANS**

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**BUILDING ON 50 YEARS OF CHANGE, RESILIENCE, AND PROGRESS**

*May 31 – June 3, 2022*

**VIRTUAL TRAINING WORKSHOP AGENDA**

**This project is made possible through a cooperative agreement with the  
United States Environmental Protection Agency**

## PURPOSE OF THE TRAINING WORKSHOP

*To provide state, tribal, and territorial water quality and data program staff with an opportunity, in advance of the 50th anniversary of the Clean Water Act, to learn lessons from each other's experiences and discuss what is ahead*

## WORKSHOP OBJECTIVES

- Learn about and contribute to the **ideas and methods for better integrating environmental justice and climate change considerations** into water quality data management, assessment, TMDLs, and restoration and protection activities
- Learn about opportunities for **accessing and leveraging water quality data**
- Develop **technical skills** in water quality data management, assessment, CWA 303(d) listing, and TMDL development
- Learn about and contribute to the **process for developing** the next iteration of the CWA 303(d) Program Vision
- Receive **updates on research, materials, tools, and legal developments** relevant to the CWA 303(d) Program
- Learn about and contribute to **methods of communicating**, especially regarding water quality progress and climate change
- Learn steps that new and established staff can take to **improve continuity and program resilience** through staff transitions
- Expand and improve **communication among the states, tribes, and territories and with EPA Regions and Headquarters** by enhancing the network of water quality data management, listing, and TMDL professionals

## OUTPUT

A final report summarizing the proceedings of the training workshop, to serve as a reference and assist program personnel in achieving the objectives of the Clean Water Act

**AGENDA**  
(All Times Eastern Daylight)

**Tuesday, May 31**

- 1:00 pm – 1:30 pm      **Welcome**
- 1:30 pm – 3:00 pm      **Session 1: National Updates**  
EPA and state staff will provide overviews of progress made and what is ahead regarding data management tools, Integrated Report submissions, the 2022 CWA 303(d) Program Vision, and incorporating climate change considerations into program work.
- 3:00 pm – 3:30 pm      Break
- 3:30 pm – 5:00 pm      **Session 2: Data and Analysis**  
EPA and state staff will identify different aspects of progress toward more open and available data, including the role of statistical surveys, the value of having published data in consistent formats, updates to EPA-published watershed-based data sets, and ideas for how to improve frameworks on which models rely. Peter Colohan of the Lincoln Institute will close the session with an overview of the Internet of Water.

**Wednesday, June 1**

- 1:00 pm – 2:15 pm      **Session 3: Resilience and Continuity Despite Staff Turnover**  
State and tribal staff will identify ways in which new and established professionals can minimize the impact of staffing transitions, through examples of plans, approaches, and day-to-day activities as well as nationally available resources.
- 2:15 pm – 3:00 pm      **Session 4: Staff Diversity and Culture**  
State and tribal staff will explain the impact and importance of a diverse staff and accepting workplace as well as provide examples of trainings, hiring policies, targeted outreach for internships and jobs, and support for interest- and skill-building in this area of work among a diverse collection of people.
- 3:00 pm – 3:30 pm      Break
- 3:30 pm – 4:30 pm      **Session 5: Environmental Justice and Equity**  
EPA and state staff will provide an overview and specific examples of ways in which CWA 303(d) activities, and water quality restoration and protection generally, are including environmental justice considerations.
- 4:30 pm – 5:30 pm      Virtual Reception

## Thursday, June 2

Various Times

### Regional Breakouts

1:30 pm – 3:00 pm

#### Session 6: Breakouts I

Training workshop participants will attend one of the following webinars. More information about each breakout is available on page 5 below.

- ATTAINS: A Training on Entering Actions (beginner to intermediate)
- General Data Management Tips (intermediate)
- How to Manage GIS Data
- How Tribes Can Use the CWA to Protect Their Water Resources
- Litigation on CWA 303(d) Listing and TMDLs
- Climate Change and TMDLs: Theory and Practice
- An Introduction to Long-Term Planning and Prioritization Tools

3:00 pm – 3:30 pm

Break

3:30 pm – 5:00 pm

#### Session 7: Breakouts II

Training workshop participants will attend one of the following webinars. More information about each breakout is available on page 6 below.

- ATTAINS and How's My Waterway: A Secret Sauce Training (intermediate to advanced)
- The Basics of Assessment
- How Continuous Monitoring Data Are Being Used in Assessments
- State-Tribal Collaboration in Solving Water Quality Problems
- Modeling Approaches for Considering Climate Change
- Evaluating the Effectiveness of TMDLs and Other Restoration Plans

Various Times

### Regional Breakouts

## Friday, June 3

1:00 pm – 2:30 pm

#### Session 8: Breakouts III

Training workshop participants will attend one of the following webinars. More information about each breakout is available on page 7 below.

- Water Quality Exchange (WQX) Ladders (beginner to intermediate)
- Deeper Dive on Web Services (advanced)
- Automation Tools in Support of Assessments: Data Harmonization
- Pursuing Treatment in the Same Manner as a State (TAS) Authority for CWA 303(d)
- The Draft CWA 303(d) Vision: Materials and Trainings for Implementation
- TMDL Revisions: Examples and Lessons
- Communicating about Climate Change: Breaking It Down to Basics in the Water Quality Context

2:30 pm – 3:00 pm

Break

3:00 pm – 4:30 pm

**Session 9: Communicating Success**

A preview of NEIWPC’s forthcoming project to capture success stories will be followed by state examples of communicating progress and accomplishments in water quality and opportunities for communicating success through How’s My Waterway.

4:30 pm – 5:00 pm

**Wrap-Up and Send Off**

## The Details of the Session 6 Breakouts (Thursday, June 2, 1:30 pm – 3:00 pm EDT)

- **ATTAINS: A Training on Entering Actions** (beginner to intermediate) – GoToWebinar platform  
*Description:* This training is meant for individuals responsible for entering Action data (e.g., TMDLs, 4b plans, other restoration or protection plans) in ATTAINS; it will focus on how to enter an Action into ATTAINS, including how to get credit under the CWA 303(d) measure and how to associate the Actions with assessments, to put an assessment unit/parameter combination into EPA Category 4(a), 4(b), or 5(a), depending on the type of Action.  
*Structure:* Presentation and Demonstration with Q&A  
*Facilitators/Presenters:* Selena Medrano, EPA R6; Wendy Reid, EPA HQ
- **General Data Management Tips** (intermediate) – GoToWebinar platform  
*Description:* This training will cover best practices for working with water quality assessment data and how to manage them in tools such as Microsoft Access.  
*Structure:* Demonstration with Q&A  
*Facilitators/Presenters:* Adam Griggs, EPA HQ; Laura Shumway, EPA HQ; Dwane Young, EPA HQ
- **How to Manage GIS Data** – Zoom platform  
*Description:* This breakout is meant for individuals responsible for managing GIS data for assessment units in ATTAINS; it will include demonstrations on how to create assessment unit geometries from the National Hydrography Dataset (NHD) as well as a discussion on how states, tribes, and territories currently manage their GIS data.  
*Structure:* Demonstration and facilitated discussion  
*Facilitators/Presenters:* Jesse Boorman-Padgett, EPA HQ; Shelly Thawley, EPA HQ
- **How Tribes Can Use the CWA to Protect Their Water Resources** – GoToWebinar platform  
*Description:* An overview of authorities, resources, and initiatives stemming from the Clean Water Act that can aid tribes in the protection of their waters, including but not limited to Treatment in the Same Manner as a State (TAS), will be followed by a panel of staff from different tribes relaying their experiences with those authorities, resources, and initiatives.  
*Structure:* Presentation followed by panel discussion and Q&A  
*Facilitators/Presenters:* Seth Book, Skokomish Tribe; Kari Hedin, Fond du Lac Band; Kerstien McMurl, Iowa Tribe of Oklahoma; Kimberly Miller, Morongo Band of Mission Indians; Rachel Vaughn, Southern Ute Indian Tribe; Jim Havard, EPA HQ
- **Litigation on CWA 303(d) Listing and TMDLs** – GoToWebinar platform  
*Description:* This breakout will provide a summary of recent and pending federal TMDL and listing litigation and the potential impacts of recent decisions.  
*Structure:* Presentation with Q&A  
*Facilitators/Presenters:* Rosaura Conde, EPA HQ; Tom Glazer, EPA HQ; Alec Mullee, EPA HQ; Elise M. O'Dea, EPA HQ; Andrea Priest, EPA HQ
- **Climate Change and TMDLs: Theory and Practice** – Zoom platform  
*Description:* EPA is evaluating how the potential impacts of climate change can be incorporated within TMDLs; examples from practice will tee up discussion about whether/how climate change considerations could be incorporated into the calculation of loading capacity, the margin of safety, and implementation plans.  
*Structure:* Presentations with facilitated discussion  
*Facilitators/Presenters:* Molly Rippke, MI; James Hogan, EPA HQ; Adam Schempp, ELI
- **An Introduction to Long-Term Planning and Prioritization Tools** – GoToWebinar platform  
*Description:* This breakout will provide overviews of the Recovery Potential Screening Tool and StreamCat Data, what they offer, how they work, and how they can be used for long-term planning and prioritization.  
*Structure:* Presentations with Q&A  
*Facilitators/Presenters:* Emily Cira, EPA HQ; Ryan Hill, EPA ORD; Luisa Riato, ORISE Fellow at EPA ORD; Marc Weber, EPA ORD; Kim Oldenburg, Cadmus; Andy Somor, Cadmus

## The Details of the Session 7 Breakouts (Thursday, June 2, 3:30 pm – 5:00 pm EDT)

- **ATTAINS and How's My Waterway: A Secret Sauce Training** (intermediate to advanced) – GoToWebinar platform  
*Description:* This training is meant for individuals responsible for entering and/or reviewing data in ATTAINS; it will cover various tips and tricks for navigating ATTAINS and How's My Waterway, dealing with common problems, and generally making the life of an ATTAINS user a little easier.  
*Structure:* Demonstration with Q&A  
*Facilitators/Presenters:* Jesse Boorman-Padgett, EPA HQ; Dwane Young, EPA HQ
- **The Basics of Assessment** – Zoom platform  
*Description:* This interactive breakout will cover considerations for analyzing data such as QA, how to find readily available data to supplement analysis, and how to compare data against criteria.  
*Structure:* Presentation and interactive exercises with Q&A  
*Facilitators/Presenters:* Selena Medrano, EPA R6; Laura Shumway, EPA HQ
- **How Continuous Monitoring Data Are Being Used in Assessments** – GoToWebinar platform  
*Description:* This breakout will provide examples of state practices, methodologies, and protocols (including data management and QA/QC) for using continuous monitoring data in water quality assessments.  
*Structure:* Presentations with Q&A  
*Facilitators/Presenters:* Biswarup (Roop) Guha, NJ; Mark Hoger, PA; Meredith Zeigler, NM; Cristina Mullin, EPA HQ
- **State-Tribal Collaboration in Solving Water Quality Problems** – Zoom platform  
*Description:* Examples of how states and tribes have worked together on different water quality objectives and means used to accomplish them will lead into a facilitated discussion on approaches and lessons.  
*Structure:* Presentations with Q&A and facilitated discussion  
*Facilitators/Presenters:* Shane Bowe, Red Lake Band; Oliver Grah, Nooksack Indian Tribe; Kari Hedin, Fond du Lac Band
- **Modeling Approaches for Considering Climate Change** – GoToWebinar platform  
*Description:* This breakout will provide examples of methods and considerations for addressing climate change and its effects in modeling for water quality analyses.  
*Structure:* Presentations with Q&A  
*Facilitators/Presenters:* James Kardouni, WA; Kevin Kirsch, WI; Lew Linker, EPA CBO; Jasper Hobbs, ACWA
- **Evaluating the Effectiveness of TMDLs and Other Restoration Plans** – GoToWebinar platform  
*Description:* This breakout will provide an overview, with examples, of approaches to evaluating the effectiveness of water quality restoration plans, as well as available materials and other resources on the subject.  
*Structure:* Presentations with Q&A  
*Facilitators/Presenters:* Angie Brown, IN; Scott Collyard, WA; Ben Rau, WA; Emily Cira, EPA HQ; Cyd Curtis, EPA HQ; Adam Schempp, ELI

## The Details of the Session 8 Breakouts (Friday, June 3, 1:00 pm – 2:30 pm EDT)

- **Water Quality Exchange (WQX) Ladders** (beginner to intermediate) – Zoom platform  
*Description:* This breakout will cover practical methods to get more data submitted through WQX and how to find resources to better support data sharing.  
*Structure:* Presentation with Q&A and facilitated discussion  
*Facilitators/Presenters:* Jason Jones, AZ; Meghan Smart, AZ; Adam Griggs, EPA HQ
- **Deeper Dive on Web Services** (advanced) – GoToWebinar platform  
*Description:* This training is meant for ATTAINS users who are familiar with web services; it will cover the different types of ATTAINS services available and how to use them to pull data and create maps.  
*Structure:* Demonstration with Q&A  
*Facilitators/Presenters:* Jesse Boorman-Padgett, EPA HQ; Dwane Young, EPA HQ
- **Automation Tools in Support of Assessments: Data Harmonization** – GoToWebinar platform  
*Description:* This breakout will provide a general overview of the scope of automation tools already being developed and used across the country to support assessments, and EPA’s vision to develop open source tools to support assessments, followed by a deeper dive into the new automated Water Quality Exchange (WQX) QA/QC service for data submissions and how EPA’s draft R package, Tools for Automated Data Assessment (TADA), can be used to support automated Water Quality Portal (WQP) data discovery and harmonization.  
*Structure:* Presentation with Q&A  
*Facilitators/Presenters:* Kevin Christian, EPA HQ; Cristina Mullin, EPA HQ; Shelly Thawley, EPA HQ
- **Pursuing Treatment in the Same Manner as a State (TAS) Authority for CWA 303(d)** – Zoom platform  
*Description:* This breakout will explain the basics of obtaining CWA 303(d) TAS, identify reasons for doing it and what to expect, and provide an opportunity to discuss potential challenges to and strategies for exercising CWA 303(d) TAS authority.  
*Structure:* Presentation with facilitated discussion  
*Facilitators/Presenters:* Kayla Bowe, Red Lake Band; Shane Bowe, Red Lake Band; Kari Hedin, Fond du Lac Band; Jim Havard, EPA HQ; Dylan Laird, EPA HQ
- **The Draft CWA 303(d) Vision: Materials and Trainings for Implementation** – Zoom platform  
*Description:* The discussions in this breakout will identify materials and trainings that can help implementation, especially for the focus areas of climate change, environmental justice, and tribal engagement.  
*Structure:* Facilitated discussion  
*Facilitators:* Rich Cochran, TN; Rosaura Conde, EPA HQ; Teagan Rostock, EPA HQ; Jasper Hobbs, ACWA
- **TMDL Revisions: Examples and Lessons** – GoToWebinar platform  
*Description:* This breakout will explore selected state experiences with TMDL revisions, from the reasons for wanting to modify TMDLs to the processes, results, and takeaways.  
*Structure:* Presentations with Q&A  
*Facilitators/Presenters:* Jim Bloom, OR; Ansel Bubel, FL; Mike Kruse, MO; Chris Hunter, EPA HQ
- **Communicating about Climate Change: Breaking It Down to Basics in the Water Quality Context** – Zoom platform  
*Description:* Climate change can be an unwieldy, intimidating, and polarizing issue, but one that has significant impacts on water quality; this breakout will explore how the specific impacts can create communication opportunities and more productively define the challenges ahead.  
*Structure:* Facilitated discussion  
*Facilitators:* Kristy Fortman, EPA R8; Adam Schempp, ELI