



ENVIRONMENTAL LAW INSTITUTE®

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

2024 NATIONAL TRAINING WORKSHOP ON WATER QUALITY ASSESSMENT AND PLANS

MAXIMIZING CWA PROGRAMS TO ACHIEVE WATER QUALITY GOALS

National Conservation Training Center
Shepherdstown, West Virginia
June 4-6, 2024

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 staff with an opportunity to learn about and further develop effective approaches to identifying impaired waters and restoring and protecting water quality, with a particular emphasis on collaboration across CWA programs

WORKSHOP OBJECTIVES

- Expand and improve connections among State, Tribal, and Territorial staff and with EPA Regional and Headquarters staff, enhancing the network of assessment, listing, TMDL, and other water quality professionals
- Prompt more unified water quality assessment, restoration, and protection efforts across CWA programs, especially between CWA 303(d) programs and water quality standards, permitting, and nonpoint source programs
- Learn about and share approaches to various aspects of water quality assessment and TMDL development and implementation
- Learn about and contribute to approaches to protection planning
- Develop technical skills using data tools
- Learn about and share methods for better considering the effects of climate change and advancing environmental justice in water quality assessment, restoration, and protection
- Receive updates on research, materials, tools, and legal developments relevant to the CWA 303(d) Program

OUTPUTS

- A final report summarizing the proceedings of the training workshop, to serve as a reference and assist program personnel in achieving programmatic requirements
- A companion website for this training workshop that contains the materials, presentation slides, and participant list for use during the event and as a reference afterwards

AGENDA
(All Times Eastern Daylight)

Monday, June 3

Arrival, Check-In, and Registration

- 2:00 pm – 8:00 pm NCTC Check-In and Training Workshop Registration (Open)
Main Lodge
- 5:30 pm – 7:30 pm Dinner (Open)
Commons/Headwaters Lodge Dining Room
- 8:00 pm – 9:00 pm Informal Welcome
Murie Lodge, Lounge Area

Tuesday, June 4

Training Workshop Day 1

- 6:30 am – 9:00 am Breakfast (Open)
Commons/Headwaters Lodge Dining Room
- 9:00 am – 10:00 am **Welcome**
Auditorium
- Greeting
 Adam Schempp, ELI
- Introduction
 Jim Havard, EPA HQ
- Keynote Address
 Benita Best-Wong, EPA HQ
- Overview of the Agenda
 Adam Schempp, ELI
- 10:00 am – 10:30 am Morning Break
- 10:30 am – 12:00 pm **Session 1**
Breakouts I
Breakout Rooms, Various Locations
- This session consists of six breakouts, each focusing on a different topic. In-person participants are registered for specific breakouts based on their topic preferences expressed prior to the training workshop.
- Emerging Contaminants and Toxics: Using Narrative Criteria in Assessments and Restoration Plans
 - Approaches to Monitoring, Assessment, and Plans in a Changing Climate

Breakouts I (Cont.)

- Incorporating Environmental Justice Considerations into TMDL Development
- Tribal Water Quality Assessment: Methods and Tools
- Participatory Science and Planning for External Data
- How to Use EPA's Tools for Automated Data Analysis (TADA) R Shiny Application to Retrieve, Wrangle, and Harmonize Water Quality Portal Data

12:00 pm – 1:30 pm

Lunch

Commons/Headwaters Lodge Dining Room

1:30 pm – 3:00 pm

Session 2

Breakouts II

Breakout Rooms, Various Locations

This session consists of six breakouts, each focusing on a different topic. In-person participants are registered for specific breakouts based on their topic preferences expressed prior to the training workshop.

- Using Stressor Identification When There Are No Applicable Numeric Criteria: Experiences and Lessons
- Spikes in Pollutants During Wet Periods: Challenges and Strategies for Monitoring, Assessment, and Plans
- “A Plan by Any Name...”: Coordination Between the CWA 303(d) and Nonpoint Source Programs
- “An Ounce of Prevention Is Worth a Pound of Cure”
- Continuous Monitoring: Tools and Approaches
- How to Use EPA's Tools for Automated Data Analysis (TADA) R Package and Other Packages to Retrieve, Wrangle, and Harmonize Water Quality Portal Data (for R Users)

3:00 pm – 3:30 pm

Afternoon Break

3:30 pm – 5:00 pm

Session 3

Litigation on Assessment/Listing and TMDLs

Auditorium

*Jim Havard, EPA HQ
Elise O’Dea, EPA OGC
Andrea Priest, EPA OGC*

5:30 pm – 7:00 pm

Dinner (Open)

Commons/Headwaters Lodge Dining Room

7:00 pm – 10:00 pm

Campfire and Scavenger Hunt

6:30 am – 8:30 am Breakfast (Open)
Commons/Headwaters Lodge Dining Room

8:30 am – 10:00 am **Regional Coffee Chats (Open)**
Breakout Rooms, Various Locations

This session consists of ten separate opportunities, one for each EPA Region, for State, Tribal, and Territorial participants to talk with EPA regional staff or just to meet and catch up with counterparts from other jurisdictions in the region.

Region 1: <i>104 Instructional East</i>	Region 6: <i>112 Instructional East</i>
Region 2: <i>152 Instructional West</i>	Region 7: <i>102 Instructional East</i>
Region 3: <i>201 Instructional East</i>	Region 8: <i>101 Instructional East</i>
Region 4: <i>Gallery (in Commons)</i>	Region 9: <i>107 Instructional East</i>
Region 5: <i>103 Instructional East</i>	Region 10: <i>158 Instructional West</i>

10:00 am – 10:30 am Morning Break

10:30 am – 11:30 am **Session 4**
Topic-Driven Conversational Roundtables
Breakout Rooms, Various Locations

This session consists of 17 facilitated discussions in small groups on various topics. Participants are assigned to specific tables based on their topic preferences expressed prior to the training workshop.

11:30 am – 1:00 pm Lunch
Commons/Headwaters Lodge Dining Room

1:00 pm – 2:30 pm **Session 5**
Breakouts III
Breakout Rooms, Various Locations

This session consists of six breakouts, each focusing on a different topic. In-person participants are registered for specific breakouts based on their topic preferences expressed prior to the training workshop.

- Environmental Justice in Monitoring and Assessment
- The Recovery Potential Screening (RPS) Tool: Recent Developments and Various Uses
- Developing TMDLs in Ways That Lead to More Seamless Collaboration and Implementation
- Program Resilience and Continuity Despite Staff Changes: Processes, Procedures, and Available Resources

Breakouts III (Cont.)

- How to Answer Common Questions with Available Data Tools
- Build Automated Data Dashboards, Maps, and Apps Using the Water Quality Portal’s NEW WQX 3.0 Services

2:30 pm – 3:00 pm

Afternoon Break

3:00 pm – 4:00 pm

Office Hours

Data Tools Office Hours (Open)

Drop in for help from EPA staff on:

- ATTAINS: Assessment Total Maximum Daily Load (TMDL) Tracking and Implementation System
- HMW: How’s My Waterway
- NHD/NHDPlus: National Hydrography Dataset or NHDPlus

G30 Instructional East

Drop in for help from EPA staff on:

- Tools for Automated Data Analysis (TADA)
- Water Quality Portal (WQP)
- Water Quality eXchange (WQX)

G24 Instructional East

Recovery Potential Screening (RPS) Tool (Open)

Drop in to learn more about the RPS Tool, get help from EPA staff on using it, and get a sneak peek at the new Web RPS Tool.

107 Instructional East

Story Map Building (Open)

Dustin Shull of Pennsylvania will lead a brief tutorial on developing Story Maps and answer questions

103 Instructional East

5:30 pm – 7:00 pm

Dinner (Open)

Commons/Headwaters Lodge Dining Room

7:30 pm – 8:30 pm

Informal Evening Events

- Do’s and Don’ts in Communications with Counterparts in Other CWA Programs: Keys to Working Together Effectively
Rachel Carson Lodge, Lounge Area
- Challenges and Approaches to Effective Hybrid Work
Ding Darling Lodge, Lounge Area
- How Can We Help? Informing the Future Efforts of ACWA, NEIWPC, and ELI

Murie Lodge, Lounge Area

Thursday, June 6

Training Workshop Day 3

6:30 am – 8:30 am Breakfast (Open)
Commons/Headwaters Lodge Dining Room

8:30 am – 9:00 am **What's Next**
Auditorium

The Year Ahead

Jim Havard, EPA HQ
Livia Graham, NEIWPC
Jasper Hobbs, ACWA

Cross-Program Coordination Introduction

Rosaura Conde, EPA HQ
Doris Ihejirika, EPA HQ
Menchu Martinez, EPA HQ
Ward Scott, ACWA

9:00 am – 10:00 am **Session 6**
CWA 303(d) Prioritization Frameworks and Cross-Program
Coordination
Auditorium

Planning Across CWA Programs

Rosaura Conde, EPA HQ
Traci Iott, CT

Prioritization Frameworks Under the CWA 303(d) Vision

Teagan Rostock, EPA HQ

Think Statewide - Act Locally (Implementing Michigan's Vision
1.0)

Molly Rippke, MI

An Aspirational Vision to Include Everyone

Mindy Neil, WV

10:00 am – 10:30 am Morning Break

10:30 am – 11:30 am **Session 7**
Cross-Program Coordination for Restoration and Protection Plan
Implementation
Auditorium

Panelists

Steve Mrazik, OR
Kayla Bowe, Red Lake Nation
Kevin Kirsch, WI
Ron Steg, WY

Discussion Questions for Session 7

1. What **points of intersection** among Clean Water Act programs stand out to you as important in effective development and implementation of restoration/protection plans?
2. In light of resource constraints, what **efficiencies** across programs have aided in the effective implementation of plans?
3. How has the structure, process, content, or communication of the plan helped in the **transition** from development to implementation?
4. What have you found to be important in getting the data needed to **evaluate** the progress (and ultimately success) of plan implementation?

11:30 am – 11:45 am

Overarching Remarks

Auditorium

*Steve Winnett, EPA RI
Tom Stiles, KS*

11:45 am

Lunch

Commons/Headwaters Lodge Dining Room

1:00 pm

Departure of Shuttle Bus for Dulles Airport

Ding Darling Lodge, Parking Lot

The Details of the Session 1 Breakouts (Tuesday, June 4, 10:30am – 12:00pm EDT)

Emerging Contaminants and Toxics: Using Narrative Criteria in Assessments and Restoration Plans

Description: This breakout will use brief presentations to tee up discussion about three different stages of using narrative criteria for emerging contaminants and toxics: translating the narrative criteria, water quality monitoring and assessment, and TMDL development.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitators/Presenters: Traci Iott, CT; Dustin Shull, PA; Anne Schlegel, VA

Approaches to Monitoring, Assessment, and Plans in a Changing Climate

Description: Presentations on lessons from the Regional Monitoring Networks; opportunities presented by wildlife cameras to monitor streams, lakes, and wetlands; and insights from the 2024 IR Memo and EPA's forthcoming white paper on TMDLs and climate change will lead into discussion about adapting the work of these programs to the effects of a changing climate.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitators/Presenters: Britta Bierwagen, EPA HQ; Kristy Fortman, EPA R8; Jim Havard, EPA HQ; Teagan Rostock, EPA HQ

Incorporating Environmental Justice Considerations into TMDL Development

Description: An overview of how environmental justice considerations can be incorporated into TMDLs will set the stage for a couple of examples and discussion about challenges and opportunities.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitator: Miranda Chien-Hale, EPA HQ

Presenters: Barbara Bennett, CO; Jane Sawyers, RI; Olivia Lopez, EPA R1; Steve Winnett, EPA R1

Tribal Water Quality Assessment: Methods and Tools

Description: Through presentations and discussion, this breakout will cover several aspects of Tribal water quality assessment experiences, lessons, and opportunities: developing an assessment methodology, using ATTAINS, and how to better make use of data collected with 106 grant funding.

Structure: Presentations and facilitated discussion

Facilitator: Adam Schempp, ELI

Presenters: Rainee Tetreault, Eastern Band of Cherokee Indians; Kayla Bowe, Red Lake Nation; Seth Book, Skokomish Indian Tribe; Rob Cook, EPA R6

Participatory Science and Planning for External Data

Description: There are many approaches, challenges, and benefits to obtaining and using participatory (volunteer) science data, and this breakout will provide a wide range of insights and examples covering everything from communication, to training, to quality control, to data management tools, to how the data are used.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitators/Presenters: Jennifer Haslbauer, AL; Waverly Reibel, MN; Adam Griggs, EPA HQ

How to Use EPA's Tools for Automated Data Analysis (TADA) R Shiny Application to Retrieve, Wrangle, and Harmonize Water Quality Portal Data

Description: The EPA has developed an R Shiny application to make the retrieval, wrangling, and harmonization of Water Quality Portal Data possible without programming knowledge. This hands-on breakout will start with an overview of the TADA project. Participants then will use the TADA R Shiny application to explore water quality data from multiple organizations such as States, Tribes, and USGS. Breakout content will cater to participants with little to no R/programming experience.

Structure: Demonstrations with hands-on learning and Q&A

Facilitators/Presenters: Hillary Marler, EPA HQ; Jesse Boorman-Padgett, EPA HQ

The Details of the Session 2 Breakouts (Tuesday, June 4, 1:30pm – 3:00pm EDT)

Using Stressor Identification When There Are No Applicable Numeric Criteria: Experiences and Lessons

Description: This breakout will begin with examples of how States have assessed waters and developed TMDLs using narrative criteria and stressor identification, leading to facilitated discussion of results, challenges, lessons, and strategies.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitator: Dustin Shull, PA

Presenters: Abel Haile, IL; Katie McKone and Nick Reif, KY; Bel Martinez da Matta and Becky Monahan, MD; Donna Keclik, EPA R5

Spikes in Pollutants During Wet Periods: Challenges and Strategies for Monitoring, Assessment, and Plans

Description: With extreme weather events becoming more common, this breakout will explore what wet weather data are being collected as well as if/how those data are used in water quality assessment and restoration and protection plans.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitator: Jasper Hobbs, ACWA

Presenters: Sarah Acquah and Eileen Campbell, MN; Cam McNutt, NC; Justin Donahue, WA; Kevin Kirsch, WI

“A Plan by Any Name...”: Coordination Between the CWA 303(d) and Nonpoint Source Programs

Description: This breakout will highlight connections between the CWA 303(d) and Nonpoint Source Programs to strengthen cross-program coordination and provide examples of integrating TMDL and Watershed-Based Plan (9-element plan) prioritization, development, and implementation.

Structure: Panel with facilitated discussion

Facilitators/Presenters: Olivia Tenorio, CNMI; Christine Davis, IL; Jodi Gardberg, UT; Kristy Fortman, EPA R8; Amy King, EPA R8; Cyd Curtis, EPA HQ; Justin Drew, EPA HQ

“An Ounce of Prevention Is Worth a Pound of Cure”

Description: This breakout will provide an overview of water quality protection from the CWA 303(d), Nonpoint Source, and Healthy Watersheds Program perspectives, including through a discussion of protection planning approaches (e.g., TMDLs and watershed plans) and sharing of State examples.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitator: Tess Wilkerson, ELI

Presenters: Traci Iott, CT; Nicole Hall, TX; Miranda Chien-Hale, EPA HQ; Kati Carberry, EPA R10; Steve Epting, EPA HQ; Elise Turrietta, ORISE EPA HQ

Continuous Monitoring: Tools and Approaches

Description: This breakout will highlight the use of game cameras for flow monitoring, WQX continuous data storage options, and the continuous data R package and shiny apps, leading into discussion of challenges and strategies for collecting, storing, and using continuous monitoring data.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitators/Presenters: Britta Bierwagen, EPA HQ; Adam Griggs, EPA HQ

How to Use EPA's Tools for Automated Data Analysis (TADA) R Package and Other Packages to Retrieve, Wrangle, and Harmonize Water Quality Portal Data (for R Users)

Description: R is one of many open source tools that can vastly improve shareability, transparency, and repeatability in water quality data analyses. This hands-on breakout will begin with an overview of the TADA R package and other useful packages for retrieving, wrangling, and harmonizing Water Quality Portal data from organizations such as States, Tribes, and USGS. Participants then will explore using those packages on a dataset of interest. Breakout content will cater to participants with at least some R/programming experience.

Structure: Demonstrations with hands-on learning and Q&A

Facilitator/Presenter: Hillary Marler, EPA HQ

The Details of the Session 5 Breakouts (Wednesday, June 5, 1:00pm – 2:30pm EDT)

Environmental Justice in Monitoring and Assessment

Description: This breakout will start with an overview of ways in which the Clean Water Act supports incorporating environmental justice considerations into water quality monitoring and various aspects of assessment, followed by an example of a State's holistic EJ strategy of using data in the decision-making of listing, analysis, and implementation, as well as examples of collaborative efforts to empower communities.

Structure: Presentations with Q&A and discussion

Facilitator: Bonita Johnson, EPA R4

Presenters: Yaso Sivaganesh, NJ; Miranda Chien-Hale, EPA HQ; Susan Holdsworth, EPA HQ

The Recovery Potential Screening (RPS) Tool: Recent Developments and Various Uses

Description: This breakout will start with an overview of the RPS tool, including the new web application, leading into examples of ways that States have used the RPS tool.

Structure: Demo and presentations with Q&A and discussion

Facilitators/Presenters: Claire Huang-Lindabury, NJ; Jodi Gardberg, UT; Justin Drew, EPA HQ; Beth Smith, EPA HQ/R4; Andy Somor, Cadmus

Developing TMDLs in Ways That Lead to More Seamless Collaboration and Implementation

Description: This breakout will explore ways in which TMDLs have been developed to better promote collaboration and aid in the implementation of wasteload allocations and load allocations.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitator: Traci Iott, CT

Presenters: Andrea Plevan, MN; Ben Rau, WA; Kevin Kirsch, WI

Program Resilience and Continuity Despite Staff Changes: Processes, Procedures, and Available Resources

Description: ELI recently completed a draft compendium of State, Territorial, and Tribal practices for mitigating the effects of changes in program staffing. This breakout will provide an overview of the types of processes, procedures, and resources addressed in that document with some examples from staff of the jurisdictions implementing them and followed by discussion among all participants of challenges and opportunities.

Structure: Presentations followed by Q&A and facilitated discussion

Facilitators/Presenters: Margaret Aguilar and Louise Pascua, Guam; Christine Davis and Abel Haile, IL; Dustin Shull, PA; Kayla Bowe, Red Lake Nation; Adam Schempp, ELI

How to Answer Common Questions with Available Data Tools

Description: This breakout will cover how to use ATTAINS reports, ATTAINS web services, the new ATTAINS Expert Query search tool, and the ATTAINS geospatial service to answer common questions about the data.

Structure: Demonstration with Q&A

Facilitators/Presenters: Jesse Boorman-Padgett, EPA HQ; Wendy Reid, EPA HQ

Build Automated Data Dashboards, Maps, and Apps Using the Water Quality Portal's NEW WQX 3.0 Services

Description: Hear about the new WQX 3.0 Data Services at the refreshed Water Quality Portal. Learn how these new profiles can help you build automated data applications in the tools you use every day. After exploring the new services, learn how they can be easily ingested by programs like Microsoft Excel (and Power Apps), Arc Online (Maps, Dashboards, Story Maps), Google Products, and more. No coding experience required. Bring your own laptops to take your project home or use the lab computers.

Structure: Demonstrations with hands-on learning

Facilitator/Presenter: Adam Griggs, EPA HQ