



ENVIRONMENTAL LAW INSTITUTE®

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

2019 NATIONAL TRAINING WORKSHOP FOR CWA 303(d) LISTING & TMDL STAFF

ADVANCING THE PROGRAM AND COMMUNICATING THE RESULTS

National Conservation Training Center
Shepherdstown, West Virginia
May 29 - 31, 2019

TRAINING WORKSHOP AGENDA

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

PURPOSE OF THE TRAINING WORKSHOP

To provide an opportunity for staff from state and territorial Clean Water Act Section 303(d) listing and TMDL programs and tribal water quality programs to learn and discuss lessons from implementing tools and training, and from communicating and engaging with partners and stakeholders

WORKSHOP OBJECTIVES

- Learn about state, tribal, and territorial **approaches to common challenges** in the CWA 303(d) Program.
- Learn about **tools, frameworks, and strategies for communicating** water quality information.
- Learn **techniques for engaging** stakeholders in planning and implementation efforts.
- Learn how states are **incorporating new sources of data** into CWA 303(d) Program functions and products.
- Receive **updates on research, products, and legal developments** relevant to the CWA 303(d) Program.
- Enhance the **network of listing and TMDL professionals** by expanding and improving communication among the states, tribes, and territories and with EPA regions and headquarters.

OUTPUT

A final report summarizing presentations and discussions from the training workshop. The report will include a summary of individual input from workshop participants and may serve as a reference for program personnel implementing their responsibilities consistent with the Vision.

AGENDA

Tuesday, May 28

Arrival, Check-In, and Registration

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

Wednesday, May 29

Training Workshop Day 1

- 6:30 am – 8:30 am Breakfast
Commons Dining Room
- 8:30 am – 9:30 am **Welcome***
Auditorium
- Greeting
Adam Schempp, ELI
Sandra Nichols Thiam, ELI
- Opening Remarks
John Goodin, EPA HQ
- Introduction
Jim Havard, EPA HQ
Dwane Young, EPA HQ
- 9:30 am – 10:00 am **Session #1**
How's My Waterway?*
Auditorium
- What's New?**
Kiki Schneider, EPA HQ

Session #1 Outcomes:

- *Participants will have received updates to How's My Waterway, including the new responsive web design for mobile devices.*
- *Participants will be more familiar with the app and future plans regarding it.*

* Session held jointly with the 2019 National Water Quality Data Management Training Workshop

10:00 am – 10:30 am Morning Break

10:30 am – 12:00 pm **Session #2**
Breakouts
Breakout Rooms, Various Locations

This session will consist of five breakouts, each focusing on a different topic. Each participant is registered for a training based on his/her topic preference expressed prior to the training workshop.

- “Freshman Orientation”
- Litigation
- Bacteria
- Nutrients – Narrative
- Nutrients – Numeric

Session #2 Outcomes:

- *Participants who are newer to the CWA 303(d) Program or otherwise less familiar with it will have learned about its core responsibilities and procedures.*
- *More experienced participants will have learned more about key aspects of successful CWA 303(d) Program implementation.*

12:00 pm – 1:00 pm Lunch
Commons Dining Room

1:00 pm – 2:00 pm **Session #3a**
Citizen Science in Practice
Auditorium

The Value of Citizen Volunteer Data

James Beckley, VA

Colorado River Watch – Citizen Science Data Used in Decision Making

Holly Brown, CO

The Water Data Collaborative: Empowering Community Water Science

Adam Griggs, River Network

Session #3a Outcomes:

- *Participants will be more familiar with methods for identifying and effectively engaging citizen scientists, means of ensuring that the data are usable, and various purposes for which citizen science data have been used.*
- *Participants will have learned about new and emerging tools for citizen scientists and data program stewards that simplify data transfer and management.*

2:00 pm – 3:00 pm

Session #3b
“Alternatives”
Auditorium

Panelists

Chuck Berger, LA
Barbara Kickham, MA
Bill Brown, PA
Ben Rau, WA

Facilitated Discussion

Session #3b Outcome:

- *Participants will have learned how other jurisdictions decide whether to pursue an “alternative” and what factors have notably affected the success of development and implementation.*

Potential Discussion Questions:

- Why have you pursued “alternatives,” and through what process or in what instances have you decided to do so?
- What responses have you received from outside groups regarding “alternatives” (positive or negative)?
- What are some of the biggest challenges you have faced in developing and implementing “alternatives”? How did you overcome them?
- While the goal of any 5-alt is restoration of the relevant standard (just like a TMDL), “success” can come in stages and take many forms. How has “success” been defined in some of your “alternatives,” and what successes have been achieved?
- What have been critical elements of successful “alternative” development and/or implementation, in what circumstances?

3:00 pm – 3:30 pm

Afternoon Break

3:30 pm – 5:00 pm

Session #4
Concurrent Trainings I*
Breakout Rooms, Various Locations

This session will consist of seven distinct trainings. Each participant is registered for a training based on his/her topic preference expressed prior to the training workshop.

- Engaging Your Public in Water Planning Part I
- Water Words that Work
- “How-To” Develop a Story Map
- Introduction to the IR Process
- Water Quality Portal Data Discovery and Data Analysis Tools
- WATERS GeoViewer
- Processing Benthic Macroinvertebrate Data in R

* Session held jointly with the 2019 National Water Quality Data Management Training Workshop

- 5:30 pm – 6:00 pm Video Recording: the Watershed Branch is developing a video that captures the value of the CWA 303(d) Vision. Please stop by the lounge in Commons (near the base of the stairs to the dining room) to share your thoughts on how the Vision has worked and/or ideas about how to make it more effective.
- 5:30 pm – 7:00 pm Dinner
Commons Dining Room
- 7:00 pm – 10:00 pm Bonfire

Thursday, May 30

Training Workshop Day 2

- 6:30 am – 8:30 am Breakfast
Commons Dining Room
- 8:30 am – 10:00 am **Session #5**
Concurrent Trainings II*
Breakout Rooms, Various Locations
- This session will consist of seven distinct trainings. Each participant is registered for a training based on his/her topic preference expressed prior to the training workshop.
- Engaging Your Public in Water Planning Part I
 - Storytelling
 - Interactive Mapping
 - CWA 303(d) TAS
 - ATTAINS User Interface 1: Assessment Units and Assessments
 - Open Source Discussion
 - Hands-On with How's My Waterway
- 10:00 am – 10:30 am Morning Break
- 10:30 am – 12:00 pm **Session #6**
Concurrent Trainings III*
Breakout Rooms, Various Locations
- This session will consist of seven distinct trainings. Each participant is registered for a training based on his/her topic preference expressed prior to the training workshop.
- Engaging Your Public in Water Planning Part II
 - “How-To” Develop Web Maps Using Open-Source Software
 - Mobile Data Entry
 - Tribal Data, Shared Waters, and the IR
 - ATTAINS User Interface 2: Actions & Promotion of Assessments
 - Water Quality Portal Data Discovery and Data Analysis Tools
 - Measures

* Session held jointly with the 2019 National Water Quality Data Management Training Workshop

Sessions #4, #5, and #6 Outcomes:

- *Participants will have new skills in communication, engagement, and/or data management.*
- *Participants will be more familiar with certain aspects of the CWA 303(d) Program and its implementation.*
- *Participants will have learned of useful resources and have gained valuable contacts.*

12:00 pm – 1:15 pm

Lunch
Commons Dining Room

1:15 pm – 3:00 pm

Session #7
Regional Meetings and Additional Trainings
Breakout Rooms, Various Locations

This session will consist of five regional meetings, one for each of EPA Regions 3, 5, 6, 9, and 10, each with the state, tribal, territorial, and EPA participants from that region. Participants from EPA Regions 1, 2, 4, 7, and 8 will participate in the regional data meeting or one of the following trainings based on their respective preferences expressed prior to the training workshop:

- Engaging Your Public in Water Planning Part II
- Stressor ID for Biological Impairments
- Measures

Session #7 Outcomes:

- *Participants will be more familiar with the needs, challenges, and views of others in their respective regions.*
- *Participants will have resolved, or at least advanced conversation on, issues important to the states, tribes, and territories of the region.*
- *Participants will have learned more about key aspects of successful CWA 303(d) Program implementation or new skills in communication and engagement.*

3:00 pm – 3:30 pm

Afternoon Break

3:30 pm – 5:00 pm

Afternoon Activities and Data Management Office Hours

5:30 pm – 6:00 pm

Video Recording: another chance to contribute to this video, sharing your thoughts on how the Vision has worked and/or ideas about how to make it more effective (at the lounge in Commons, near the base of the stairs to the dining room)

5:30 pm – 7:00 pm Dinner
Commons Dining Room

7:00 pm – 8:00 pm **Informal Evening Sessions I**

- *Feedback on the New Design of How's My Waterway*
Rachel Carson Lodge, Lounge Area
- *Vision 2022*
Murie Lodge, Lounge Area

8:00 pm – 9:00 pm **Informal Evening Sessions II**

- *Climate and the CWA 303(d) Program*
Aldo Leopold Lodge, Lounge Area
- *Water Quality Trading and the CWA 303(d) Program*
Ding Darling Lodge, Lounge Area

Friday, May 31

Training Workshop Day 3

6:30 am – 8:30 am Breakfast
Commons Dining Room

8:30 am – 10:00 am **Session #8**
Continuous Monitoring/Sensors – Using, Managing, and Interpreting Temporally Dense Data Sets*
Auditorium

Introduction

Bill Richardson, EPA R3

New Approaches for Sharing Continuous Monitoring Data

Dwane Young, EPA HQ

Pennsylvania's Continuous Physiochemical Assessment Method

Mark Hoger, PA

Tools to Tame the Continuous Data Beast: Examples from the Regional Monitoring Networks

Britta Bierwagen, EPA HQ

Session #8 Outcomes:

- *Participants will be more familiar with the benefits of continuous monitoring; challenges to storing, managing, and using the data; and strategies for overcoming those challenges.*
- *Participants will have learned about recent and ongoing tool development and pilots regarding continuous monitoring.*

* Session held jointly with the 2019 National Water Quality Data Management Training Workshop

10:00 am – 10:30 am Morning Break

10:30 am – 11:30 am **Session #9**
Creative Ways to Visualize Complex Data*
Auditorium

Thomas McCall, Infographics.com

Session #9 Outcomes:

- *Participants will have a better understanding of alternatives to basic pie, bar, and line formats for visualizing data.*
- *Participants will have gained ideas for attention-grabbing, easy-to-understand graphics that could be developed from their data.*

11:30 am – 12:00 pm **Training Workshop Wrap-Up***
Auditorium

Summary and Next Steps

Dwane Young, EPA HQ
Jim Havard, EPA HQ
Adam Schempp, ELI

Send-Off Remarks

Allen Bonini, IA

12:00 pm Lunch
Commons Dining Room

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