ENVIRONMENTAL LAW INSTITUTE®

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2019 NATIONAL WATER QUALITY DATA MANAGEMENT TRAINING WORKSHOP

EFFECTIVELY MANAGING AND COMMUNICATING DATA

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

TRAINING WORKSHOP AGENDA

PURPOSE OF THE TRAINING WORKSHOP

To equip state, territorial, and tribal staff—along with their EPA counterparts—with the knowledge, contacts, and tools necessary to collect, manage, and analyze data more efficiently and effectively; to improve the reporting process and the impact of other communications with partners and the public; and ultimately to better aid water quality restoration and protection

TRAINING WORKSHOP OBJECTIVES

- Acquire a **working knowledge of Water Quality Framework programs**.
- Learn about and discuss **new and improved tools and data systems** to manage and report water quality data.
- Develop **technical skills** in information management, including with geospatial data.
- Learn **techniques and strategies for communicating** water quality information.
- Learn how to **disseminate the information** covered to colleagues at home.
- Understand how to **manage data for programmatic needs**.
- Enhance the **network of water quality data management professionals** by expanding and improving communication among the states and territories and with EPA.

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
                        Rachel Carson 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 Training Workshop for CWA 303(d) Listing & TMDL Staff

10:00 am – 10:30 am	Morning Break

10:30 am – 10:45 am

Introduction
Auditorium

Overview and Objectives for the Training Workshop
Dwane Young, EPA HQ

10:45 am – 12:30 pm

Session #2
Data Tools
Auditorium

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Angie Reed, Penobscot Nation
Nevada's WART: Assessment and Reporting Made Easy
Seth Alm, Nevada
A Demonstration of a Free Tool that Takes Data from the Water Quality Portal and Generates Files you can Load to ATTAINS in Less than 15 Minutes *Jason Jones, Arizona*

Session #2 Outcomes:

- *Participants will be more familiar with innovative data management and processing tools, including the benefits they offer and challenges with adoption and implementation.*
- *Participants will have new ideas for tools and approaches to employ in their respective jurisdictions.*

12:30 pm – 1:30 pm

Lunch
Commons Dining Room

1:30 pm – 3:00 pm

Session #3
Data Management Breakouts
Breakout Rooms, Various Locations

This session will consist of three breakouts, two on web services and one on Microsoft Access and data management. Each participant is assigned to a training based on his/her topic preference expressed prior to the training workshop.

Session #3 Outcome:

- *Participants will be more adept at using key tools for managing and communicating water quality data.*

3:00 pm – 3:30 pm

Afternoon Break

* Session held jointly with the 2019 National Training Workshop for CWA 303(d) Listing & TMDL Staff

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

| 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 |

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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 and Promotion of Assessments
- Water Quality Portal Data Discovery and Data Analysis Tools
- Measures

> Sessions #4, #5, and #6 Outcomes:
>
> - *Participants will have new skills in communication, engagement, and/or data management.*
> - *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 nine regional meetings, one for each EPA region except for Region 8, each with the state, tribal, territorial, and EPA participants from the region. Participants from Region 8 will participate in 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 program implementation.*

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3:00 pm – 3:30 pm	Afternoon Break
3:30 pm – 5:00 pm	Office Hours and Afternoon Activities
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*

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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

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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