



ENVIRONMENTAL LAW INSTITUTE®

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

THE NATIONAL WATER QUALITY DATA MANAGEMENT TRAINING WORKSHOP

IMPLEMENTING THE WATER QUALITY FRAMEWORK AND THE NEW ATTAINS

National Conservation Training Center
Shepherdstown, West Virginia
May 31 – June 2, 2017

TRAINING WORKSHOP AGENDA

**Made possible through a cooperative agreement with the
United States Environmental Protection Agency**

PURPOSE OF THE TRAINING WORKSHOP

To equip state and territorial staff—along with their federal counterparts—with the knowledge, contacts, and tools necessary to manage water quality assessment decision data, including the geospatial data for the ATTAINS system, and transition to electronic reporting for Integrated Reports.

WORKSHOP OBJECTIVES

- Learn about and discuss **new and improved tools and data systems** to manage and report water quality data.
- Learn how to **use ATTAINS** for the 2018 Integrated Reporting cycle.
- Improve **technical skills** in information management, including geospatial data.
- Better understand how to **use NHD and NHDPlus**, and the benefits of doing so.
- Be prepared to **disseminate the information** learned to colleagues at home.
- Enhance the **network of water quality data management professionals** by expanding and improving communication among the states and territories and with EPA.

AGENDA

Tuesday, May 30

Arrival, Check-In, and Registration

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

6:30 am – 8:15 am Breakfast
Commons Dining Room

8:30 am – 9:00 am **Welcome**
Auditorium

Greeting

Adam Schempp, ELI

Opening Remarks

*John Goodin, EPA HQ
Alex Dunn, ECOS*

9:00 am – 10:00 am **Session #1**
Water Quality Framework
Auditorium

EPA staff will highlight key aspects of the Water Quality Framework and a timeframe for its roll-out, then demonstrate functions of the new ATTAINS, particularly with regard to Integrated Reporting and performance measures.

Dwane Young, EPA HQ

Session #1 Outcomes:

- *Participants will better understand the changes that have been made to the Water Quality Framework, and the next phase of implementation under this effort.*
- *Participants will be familiar with how the Integrated Reporting process and performance measures will work in the new ATTAINS.*
- *Participants will know what developments in water quality data management tools are on the horizon.*

10:00 am – 10:20 am Morning Break
Gymnasium

10:30 am – 11:15 am **Session #2**
Introductions and Training Workshop Overview
Gymnasium

All instructors and participants will briefly introduce themselves, after which EPA staff will provide a synopsis of the training workshop.

Shera Reems, EPA HQ

Session #2 Outcome:

- *Participants will know the goals and objectives of the training workshop.*

11:15 am – 12:15 pm

Session #3

Managing Information: The Broader Data Process

Gymnasium

EPA staff will provide an overview of water quality data systems, how they can link together, and the importance of those linkages. State staff will provide examples of integrated data management, including challenges and benefits. The session will conclude with a facilitated discussion.

Managing Information: The NEW Data Process

Laura Shumway, EPA HQ

New Mexico's Data Integration and Automation Journey

Lynette Guevara, NM

New Jersey's Integrated Assessment Process

Jack Pflaumer, NJ

Session #3 Outcome:

- *Participants will know more about effective approaches to managing information and how common challenges have been addressed.*

12:15 pm – 1:00 pm

Lunch

Commons Dining Room

1:15 pm – 2:15 pm

Session #4

Data Management Tools

Gymnasium

This session will be a “lightning round” of introductions to state-developed water quality data management tools.

**Wisconsin's Web-Mapping Tools, Surface Water Data Viewer,
and Water Condition Viewer**

Matt Rehwald, WI

Overview of the Watershed Data Portal

Timothy Pricer, VT

Putting Tools for Data Visualization at Assessors' Fingertips

Ken Edwardson, NH

Overview of the Sediment and Habitat Management Tool

William Puknat, MT

**Overview of the Water Quality Analysis Reporter to Inform
Water Quality Assessment Decisions**

Mary Barnett, AR

**Using Business Objects and Web Intelligence to Inform Water
Quality Assessment Decisions**

Robert Voss, MO

**Overview of the Arizona Assessment Calculator to Inform Water
Quality Assessment Decisions**

Jason Jones, AZ

Session #4 Outcomes:

- *Participants will know of more tools for managing water quality data, the technology used to develop them, and from whom to get more information about them.*
- *Participants will be familiar with water quality data management tools that are under development and potential enhancements to existing tools.*

2:15 pm – 3:00 pm

Session #5

A Focus on Geospatial Hydrologic Frameworks

Gymnasium

EPA and USGS staff will detail the benefits of applying geospatial hydrologic frameworks, such as NHD and NHDPlus, including display of surface water features, linking data to the stream network and catchments, navigating the network upstream and downstream, watershed delineation and characterization, and modeling. The presentations also will describe procedures for submitting improvements to NHD and NHDPlus.

Tatyana DiMascio, USGS

Tommy Dewald, EPA HQ

Session #5 Outcomes:

- *Participants will better understand the history of NHD and NHDPlus.*
- *Participants will better understand the benefits of linking assessment data to NHD or NHDPlus.*
- *Participants will be more familiar with data stewardship of NHD and NHDPlus and how to submit improvements to the data.*
- *Participants will know of more tools for working with NHD and NHDPlus.*

3:00 pm – 3:20 pm

Afternoon Break
Instructional East

3:30 pm – 5:30 pm

Session #6
Geospatial Aspects of Information Management
Various Computer Labs

EPA staff will discuss geospatial concepts related to Assessment Units, including table relationships, using Join versus Relates in ArcMap, and connecting monitoring data to Assessment Units. This session also will identify best practices in managing, maintaining, and editing the geospatial component of Assessment Unit data. This session will include several hands-on exercises.

Session #6 Outcomes:

- *Participants will become familiar with the types of database table relationships and how they can be used in ArcGIS.*
- *Participants will better understand how to manage water quality geospatial information so it aligns with the corresponding programmatic tabular assessment information.*

5:30 pm – 7:30 pm

Dinner
Commons Dining Room

8:00 pm – 10:00 pm

Bonfire

6:30 am – 8:15 am Breakfast
Commons Dining Room

8:30 am – 10:00 am **Session #7**
Submitting Data to ATTAINS I
Various Computer Labs

EPA staff will lead hands-on instruction in working with the new ATTAINS interface, specifically regarding:

- Administrative tools
- The creation of an assessment unit
- Batch upload of assessment units

Session #7 Outcomes:

- *Participants will know how to log in to the new ATTAINS interface.*
- *Participants will know how to use the administrative tools and reports generated through ATTAINS to support their Integrated Reporting process.*
- *Participants will know how to define Assessment Units in the new system, by directly entering them or using the batch upload capability in the new interface.*

10:00 am – 10:20 am Morning Break
Instructional East

10:30 am – 12:30 pm **Session #8**
Submitting Data to ATTAINS II
Various Computer Labs

EPA staff will continue the hands-on instruction in working with the new ATTAINS interface, specifically regarding:

- Entering an assessment conclusion
- Batch upload of assessment information
- Creating an action

Also, this session will include information about how the Exchange Network flow works with the new ATTAINS.

Session #8 Outcomes:

- *Participants will know how to submit water quality assessment decisions in the new system, by directly entering them or using the batch upload capability in the new interface.*
- *Participants will be able to manually load an action into ATTAINS.*
- *Participants will better understand how the Exchange Network flow works with the new ATTAINS.*

12:30 pm – 1:15 pm

Lunch
Commons Dining Room

1:30 pm – 3:00 pm

Session #9
The Integrated Reporting Process in ATTAINS
Various Computer Labs

This session will continue the hands-on instruction in working with the new ATTAINS interface, specifically how to develop and submit an Integrated Report, the process for reviewing Integrated Reports, and how to make corrections based on review. The session will conclude with a facilitated discussion.

Session #9 Outcomes:

- *Participants will be able to develop and submit Integrated Reports in ATTAINS.*
- *Participants will be able to run and export data from Integrated Reports for the purpose of QA/QC.*

3:00 pm – 3:20 pm

Afternoon Break
Instructional East

3:30 pm – 5:30 pm
(variable durations)

Small Group Trainings

- *Recovery Potential Screening tool (with Preliminary Healthy Watersheds Assessment data)*
154 Instructional West
- *USGS Water Balance Model Futures database and web portal*
109 Instructional East
- *Water Quality Portal Data Retrieval and Analysis tools*
G24 Instructional East & G30 Instructional East
- *Causal Assessment, Stressor Identification, and CADDIS*
Auditorium

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

7:30 pm – 8:30 pm **Informal Evening Sessions**

- *Building and Supporting a Network of Modelers*
Ding Darling Lodge, Lounge Area
- *Telling the Water Story: Feedback Session on the New Public Website*
Rachel Carson Lodge, Lounge Area

Friday, June 2

Training Workshop Day 3

6:30 am – 8:15 am Breakfast
Commons Dining Room

8:30 am – 9:30 am **Session #10**
Study Hall
Various Computer Labs

Participants will work with, ask questions about, and get assistance with tools and systems covered in the prior two days.

Session #10 Outcome:

- *Participants will be more familiar with and comfortable with using data tools and systems that they will employ in their work.*

9:30 am – 9:50 am Morning Break
Instructional East

10:00 am – 11:00 am **Session #11**
Breakouts by Region
Gymnasium

This session will consist of ten breakout groups, one for each region, each with the state, territorial, and EPA participants from that region.

Session #11 Outcomes:

- *Participants will better understand 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 and territories of the region related to data management.*

11:10 am – 11:40 am **Session #12**
Take-Home Messages
Gymnasium

EPA staff will provide suggestions and lead a discussion regarding communication about the Water Quality Framework and ATTAINS.

Dwane Young, EPA HQ

Session #12 Outcomes:

- *Participants will know more about how common communication challenges have been addressed.*
- *Participants will be better prepared to explain the new ATTAINS and other products to their managers and their colleagues.*

11:40 am – 12:00 pm

Training Workshop Wrap-Up
Gymnasium

Summary and Next Steps

Dwane Young, EPA HQ

Send-Off Remarks

Lynette Guevara, NM

12:00 pm

Lunch
Commons Dining Room