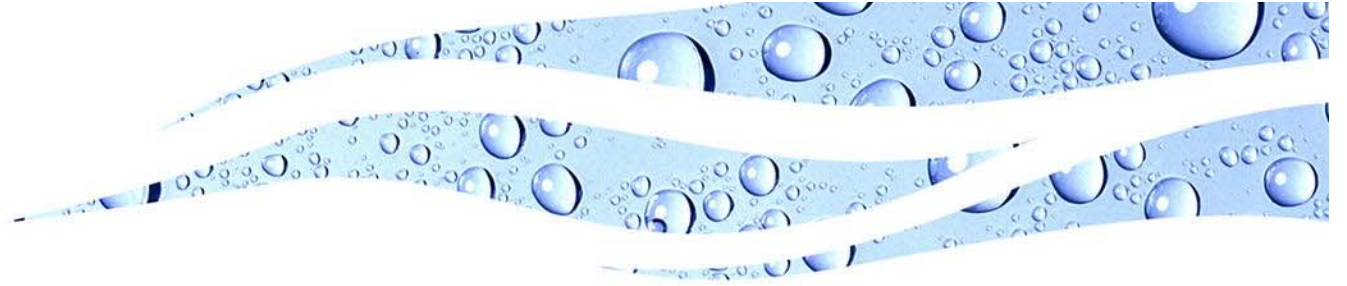




Utility and Laboratory Preparedness Tools from EPA's Water Laboratory Alliance Team: Know Your Options

Yasmin Termeh-Zonoozi , MPH – ORISE Research Participant
August 8, 2019



WLA Background & Implementation



Authority

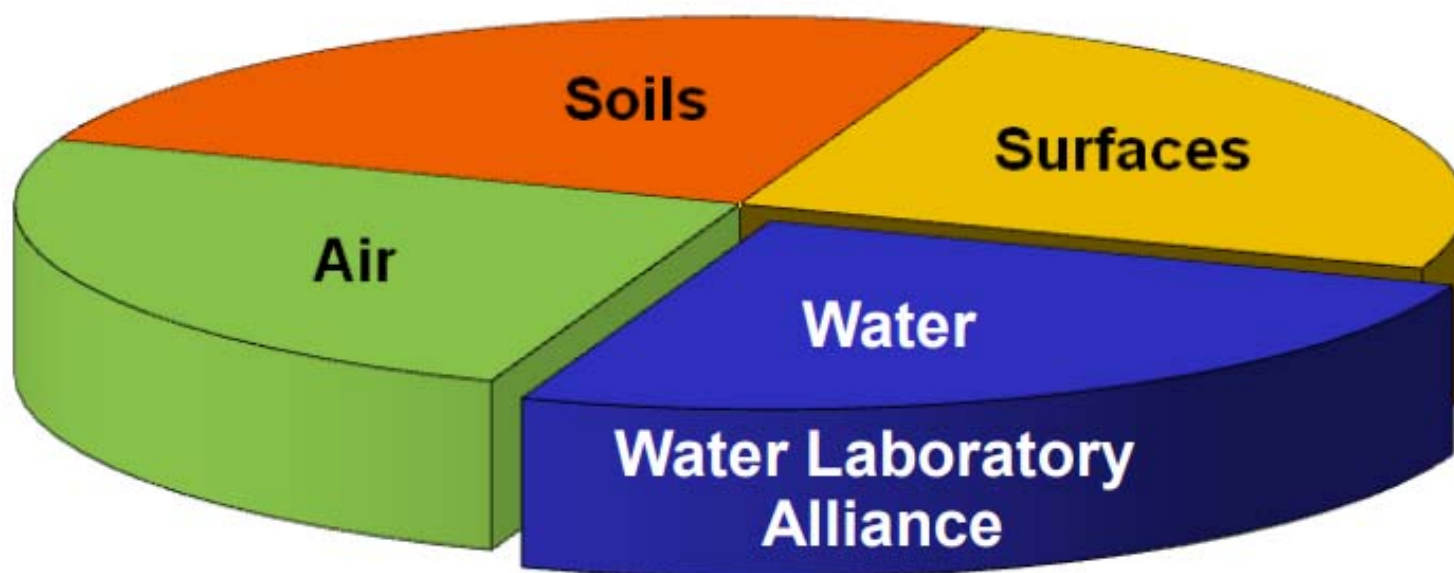
Homeland Security Presidential Directive 9 (HSPD-9) Directs the EPA to:

- “develop *nationwide laboratory networks for . . . water quality* that integrate existing Federal and State laboratory resources, are interconnected, and utilize standardized diagnostic protocols and procedures”
 - EPA Response:
Water Laboratory Alliance

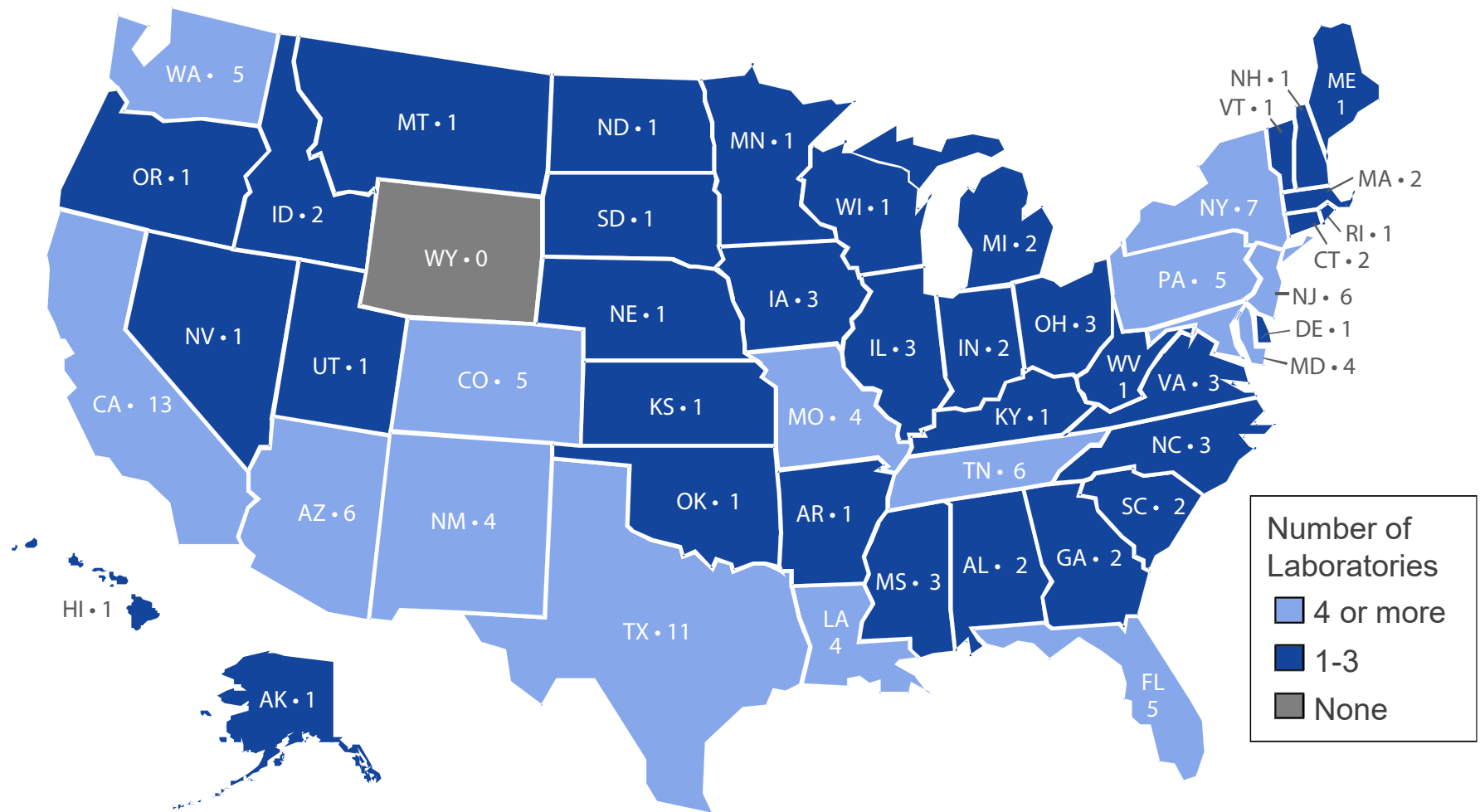


The WLA focuses solely on water and is an integral part of EPA's ERLN

Environmental Response Laboratory Network (ERLN)



WLA Membership: 140 Laboratories

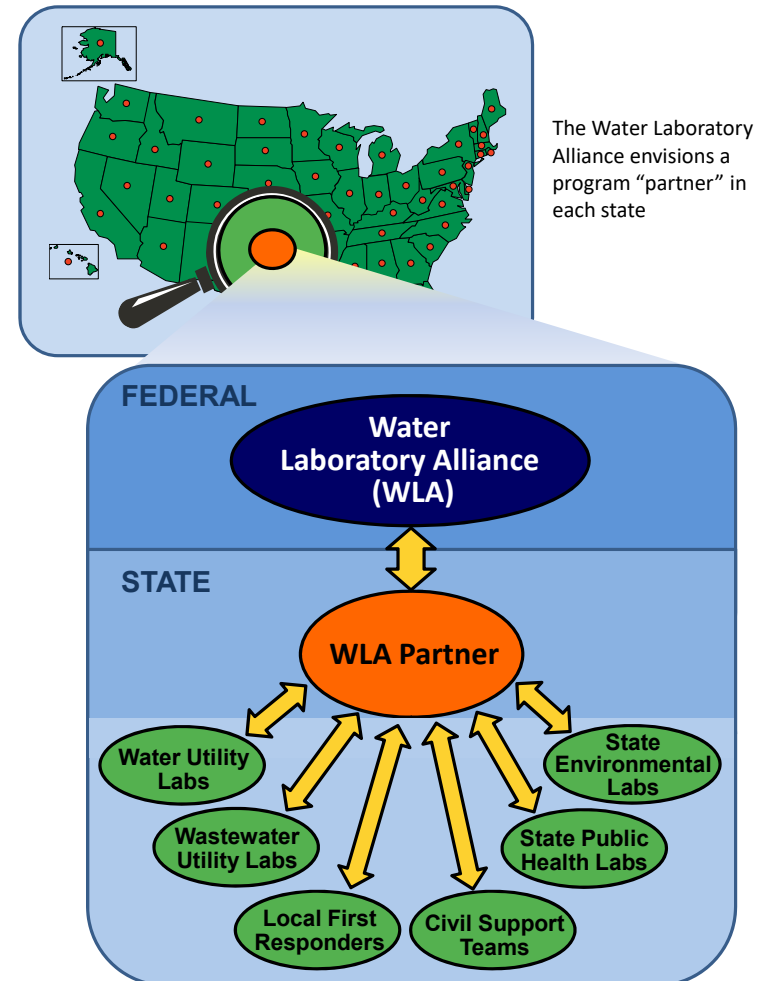


ERLN/WLA Liaisons

ERLN/WLA relies on Liaisons to:

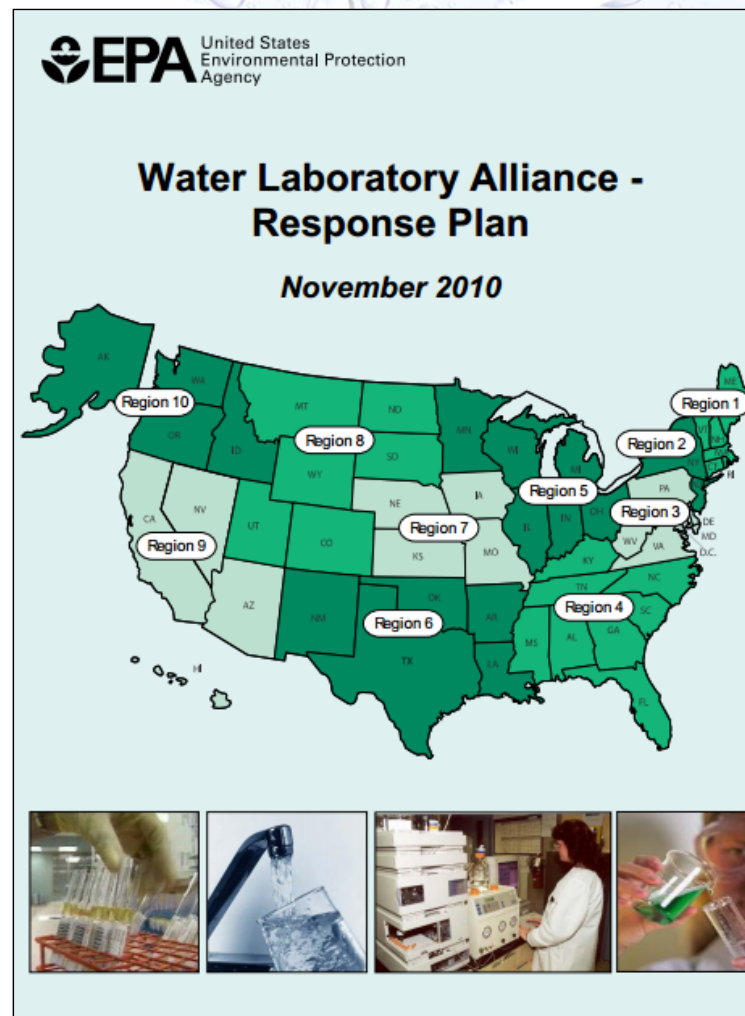
- Evaluate and maximize the use of new tools and resources
- Disseminate WLA information
- Coordinate a relationship between EPA and key stakeholders in each state
- Relay concerns from each state to EPA
- Identify Water Sector and emergency response sector needs

WLA Communication Flow

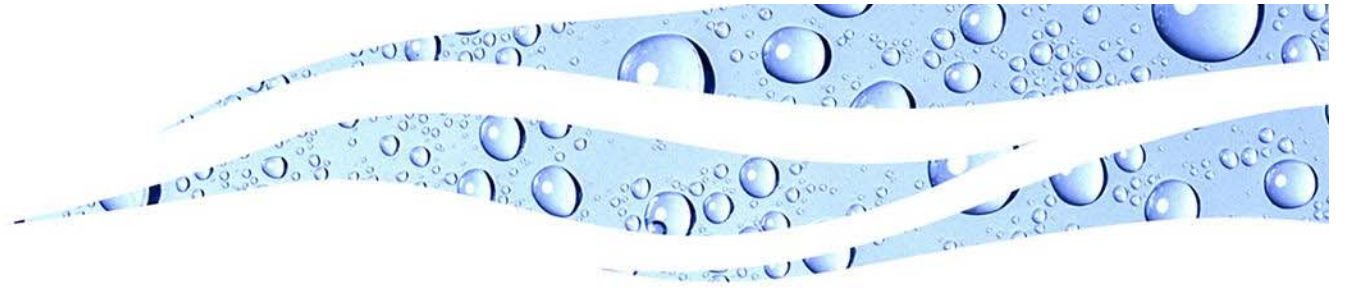


Water Laboratory Alliance Response Plan (WLA-RP)

- Establishes a comprehensive, national approach to laboratory response to intentional or unintentional water contamination incidents
- Can be used to coordinate laboratory response for multi-regional and smaller scale incidents
- Provides guidance on communication, sample analyses and data reporting issues



<https://www.epa.gov/waterlabnetwork/water-laboratory-alliance-response-plan>



EPA Resources

The WLA has developed tools and resources to aid in an analytical response:

- WLA Analytical Preparedness Full-Scale Exercise (AP-FSE) Toolkit
- Analytical Preparedness Self-Assessment (APS)
- Water Contaminant Information Tool (WCIT)
- Laboratory Compendium
- Sampling Guidance for Unknown Contaminants
- Continuity of Operations Plan (COOP) Template
- Accessing Laboratory Support



WLA Analytical Preparedness Full-Scale Exercise (AP-FSE) Toolkit

 U.S. Environmental Protection Agency (EPA)
WATER LABORATORY ALLIANCE (WLA)

Office of Water (4608-T) EPA 810-B-20-001 | August 2018

Home	Welcome & Overview	Introduction	Step 1: Initiate	Step 2: Participants	Step 3: Objectives	Step 4: Scenario	Step 5: Schedule
	Step 6: Documentation	Step 7: Training	Step 8: Exercise	Step 9: Hot Wash	Step 10: Follow-Up	Resources	Glossary

Analytical Preparedness

FULL-SCALE

Exercise Toolkit

CLICK HERE TO CONTINUE TO
WELCOME and OVERVIEW

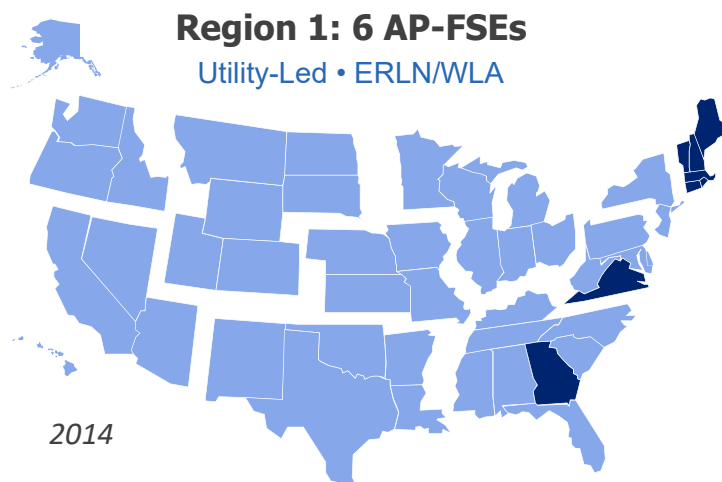
The Analytical Preparedness Full-Scale Exercise (AP-FSE) Toolkit provides the necessary guidance and examples for organizations to plan and conduct their own exercise.



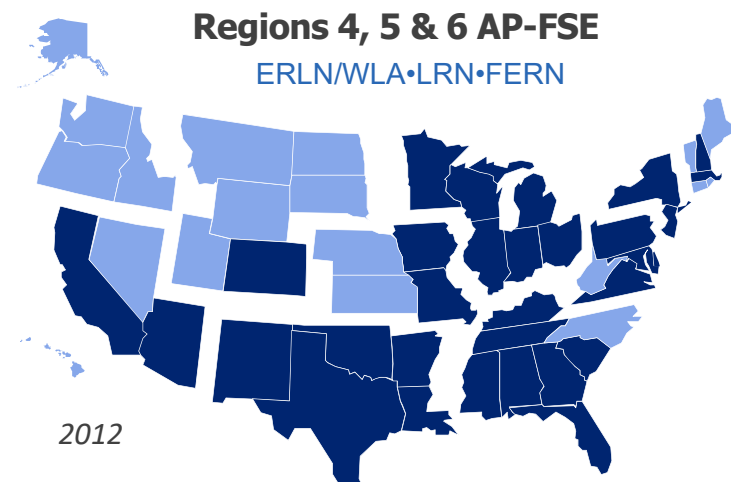
https://www.epa.gov/sites/production/files/2018-09/documents/ap_fse_toolkit_0.pdf

Examples of WLA Analytical Preparedness Full-Scale Exercises (AP-FSEs)

EPA conducts AP-FSEs in multi-regional and utility-led formats to increase use of WLA-RP best practices and enhance communication in the Water Sector.



6 Simultaneous Utility-Led Exercises
8 States
7 State Laboratories
7 Commercial Laboratories
1 Wastewater Laboratory
2 Concurrent Scenarios: Chemical Pesticide and *Salmonella* (Biological)
~170 Water samples analyzed for chemical or biological contaminants



30 States **5** Federal Agencies: CDC, EPA, FDA, NOAA and USDA
40 State Laboratories **5** Federal Laboratories
2 Commercial Laboratories **2** Mobile Laboratories
2 Non-profit and Academic Laboratories
4 Concurrent scenarios: Chemical Pesticides, CWA, CWA Degradation Products, Select Agent (Biological), Non-select Agent (Biological)
>7,000 Multi-media samples analyzed for chemical or biological contaminants

WLA Analytical Preparedness Self-Assessment (APS)

Purpose: Increase stakeholder preparedness to respond to analytical needs arising from water contamination events by enhancing awareness of EPA water security tools and resources

- Easy-to-use starting place to assess preparedness for water contamination incidents
- APS is a Toolbox that:
 - Provides a customized checklist of recommendations to improve preparedness
 - Identifies and guides users to existing analytical preparedness tools and resources

The screenshot shows the EPA website header with the EPA logo and navigation links: Environmental Topics, Laws & Regulations, and About EPA. A search bar is on the right. Below the header, there's a section for 'Related Topics' with a link to 'Drinking Water and Wastewater Laboratory Networks'. The main heading is 'WLA Analytical Preparedness Self-Assessment'. Under 'Introduction', a welcome message states the purpose of the APS. Below this, six circular icons represent different stakeholder groups: WLA Member and Non-member laboratories, Drinking Water Utilities and Wastewater Utilities, Emergency Managers, On-Scene Coordinators and First Responders, State/Local Government Officials, Public Health Officials, and Other. A paragraph explains that users select answers from dropdown lists to generate a customized recommendation list. A note at the bottom states the exercise takes about 25 minutes and includes a progress bar. A 'NEXT SECTION' button is in the bottom right corner.

EPA United States Environmental Protection Agency

Environmental Topics Laws & Regulations About EPA Search EPA.gov

Related Topics: [Drinking Water and Wastewater Laboratory Networks](#) CONTACT US SHARE

WLA Analytical Preparedness Self-Assessment

Introduction

Welcome to the Water Laboratory Alliance (WLA) Analytical Preparedness Self-Assessment (APS). The APS aims to increase stakeholder preparedness to respond to analytical needs arising from water contamination events by enhancing awareness of EPA water security tools and resources. The following stakeholders will particularly benefit from taking this analytical preparedness self-assessment:

- WLA Member and Non-member laboratories
- Drinking Water Utilities and Wastewater Utilities
- Emergency Managers, On-Scene Coordinators and First Responders
- State/Local Government Officials
- Public Health Officials
- Other

To complete the APS, select the most appropriate answer for your organization from each dropdown list. The APS will generate a series of customized recommendations to enhance your organization's preparedness. The final recommendation list may be printed using your browser's print function.

Please note this exercise will take approximately 25 minutes to complete. Use the progress bar in the top right to track your progress toward completion. You will be able to export your answers to a Word document at the end. If you close out of your browser during the process, your selections will not be saved.

NEXT SECTION

<https://www.epa.gov/waterlabnetwork/wla-analytical-preparedness-self-assessment>

Water Contamination Information Tool (WCIT)

- Released in 2005
- Describes 810 contaminants that pose a serious threat if accidentally or intentionally introduced into water systems
- Data are reviewed by experts and regularly updated
- Data are specific to the needs of drinking water and wastewater systems
- Includes contaminant-specific Public Information Officer reports



<https://www.epa.gov/waterlabnetwork/access-water-contaminant-information-tool>

Laboratory Compendium



EPA's Compendium of Environmental Testing Laboratories (Laboratory Compendium)

- Environmental Response Laboratory Network (ERLN) tool housed on a secure web-based server
- An online database of nationwide environmental laboratories available to:
 - EPA, Federal, State and local emergency responders
 - Laboratory personnel
 - Water utilities
- Contains records of laboratories with the capability and capacity to analyze a variety of agents:
 - Chemical, biological and radiochemical

<https://cfext.epa.gov/cetl>

The WLA has developed tools and resources to aid in an analytical response:

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- Technical and leadership staff from state and local laboratories, utilities, state and municipal governments, emergency managers and EPA
- Tabletop exercise will focus on analytical preparedness to respond to a water contamination incident
 - Hands-on experience with EPA resources
 - WLA Response Plan best practices



WLA Training Opportunities: Live Events



**WLA Response
Plan Tabletop
Exercise (TTX)**



**Continuity of
Operations (COOP)
Template**



**Analytical
Preparedness
Full-Scale
Exercise Toolkit**



**Sampling
Guidance for
Unknown
Contaminants**

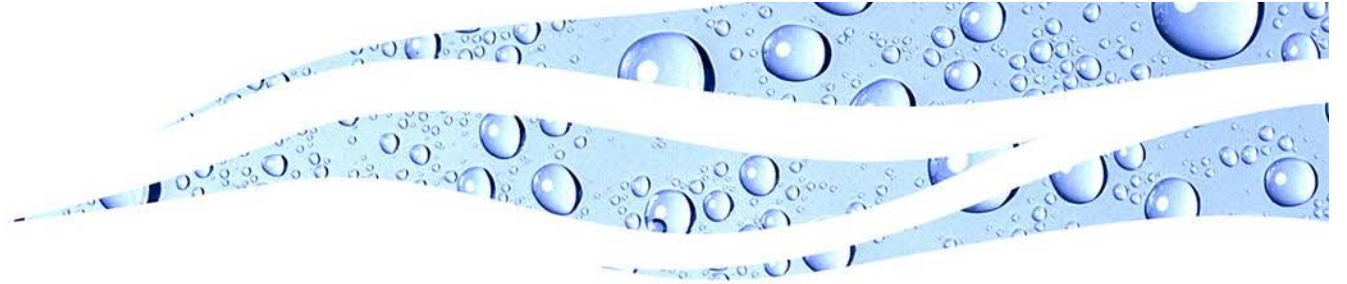


**Water Contaminant
Information Tool
(WCIT)**



**Decontamination
Strategies**

To learn more these training opportunities and how to register, please visit
<https://www.eventbrite.com/o/epa-office-of-water-water-security-division-water-laboratory-alliance-8453004715>
or email the WLA Team at WLA@epa.gov



How can WLA benefit your organization?

Preparedness is Key!

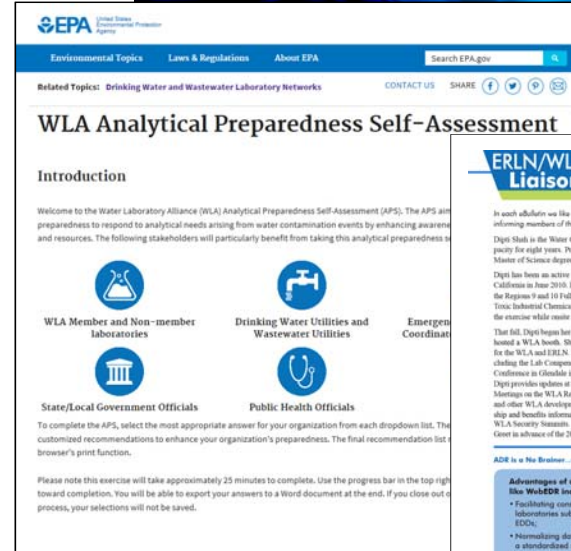
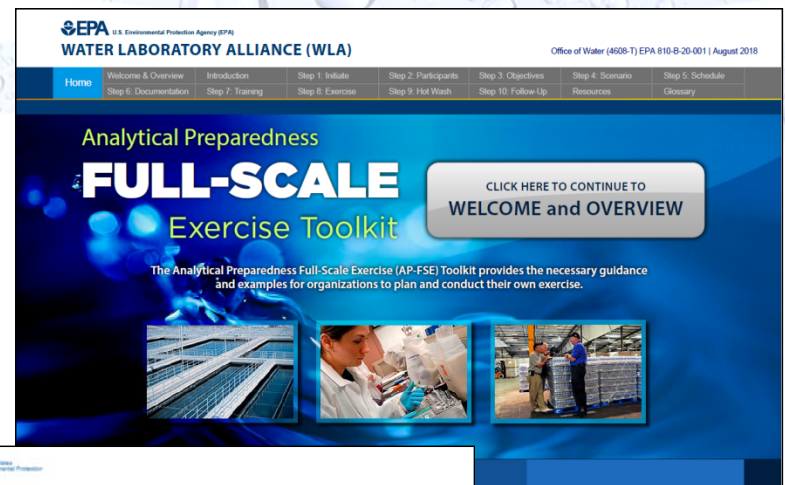
Use WLA resources to:

- Build and strengthen relationships among utilities, laboratories and other response partners
- Identify critical resource gaps to be addressed prior to an actual contamination event
- Practice implementing plans and procedures for emergency response
- Build laboratory capacity by providing labs an opportunity to use a wide variety of analytical methods



Action Items

- Complete the Analytical Preparedness Self Assessment for your organization
- Participate in the next AP-FSE
- Become a WLA Liaison
- Have multiple staff sign up for WCIT
- Prepare sampling kits for unknowns in advance
- Participate in a webcast or take advantage of online training
- Share information on EPA tools and resources with your colleagues
- Update your Laboratory Compendium profile



Contact Information

For more information on the **Water Laboratory Alliance**,
please contact:



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<https://www.epa.gov/waterlabnetwork>