

Drinking Water Protection Program Update

Key Topics

National Drinking Water Advisory Council (NDWAC) | December 6th 2018

Anita Thompkins, Director
Drinking Water Protection Division



Overview

- Agency Health-Based Measure
- Infrastructure
- Collaborative Oversight
- Lead in Schools
- Source Water Protection
- Ground Water Protection





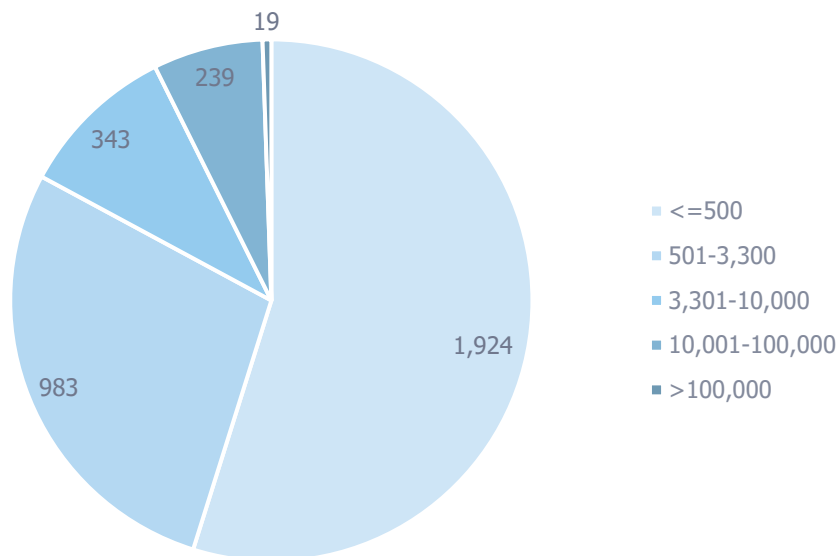
AGENCY HEALTH-BASED MEASURE

Key Data Driven Health-Based Strategic Measure

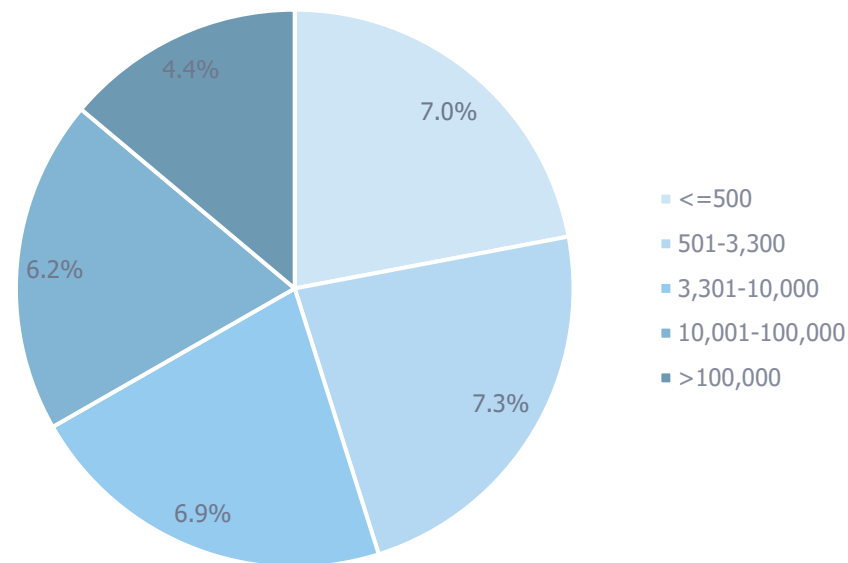


- EPA has set an ambitious goal for reducing the number of community water systems with health-based (HB) violations
- The FY 2022 target of 2,700 systems represents a 25% reduction (from baseline of 3,600 identified in 2017)
- As of October 2017, 3508 CWSs were out of compliance with at least one HB standard in the previous 12 months

CWSs with HB Violation, FY 2017

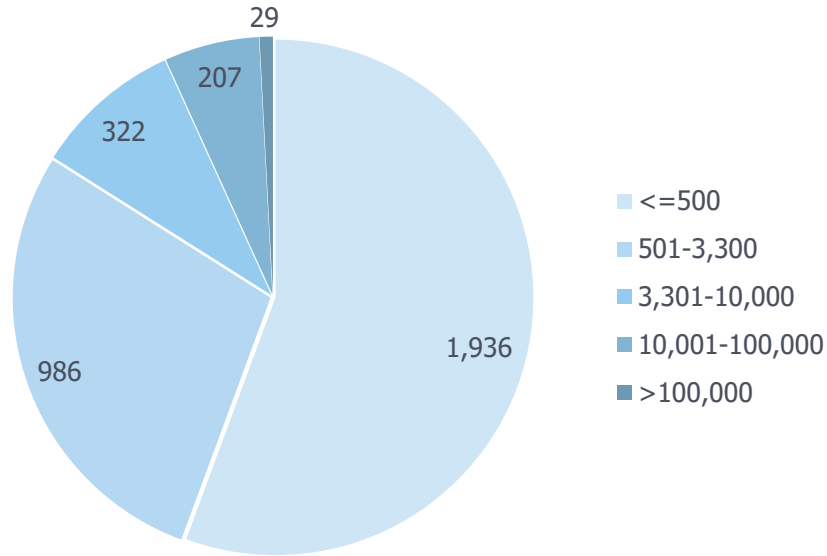


% CWSs w/HB Violation by System Size, FY 2017

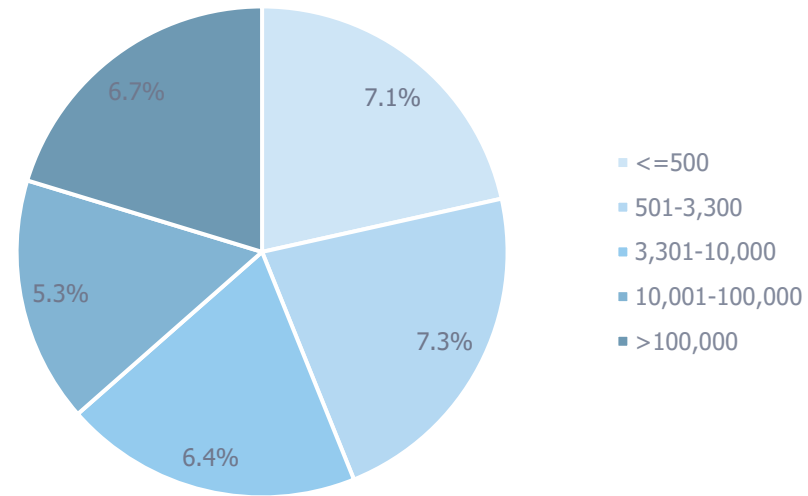


Population Category	Number of Community Water Systems	Population Served by CWS	CWSs w/HB Violation	% CWSs w/HB Violation by System Size
<=500	27,535	4,627,120	1,924	7.0%
501-3,300	13,405	19,252,089	983	7.3%
3,301-10,000	5,002	29,288,281	343	6.9%
10,001-100,000	3,886	111,503,116	239	6.2%
>100,000	431	142,221,107	19	4.4%
Grand Total	50,259	306,891,713	3,508	7%

CWSs with HB Violation, FY 2018



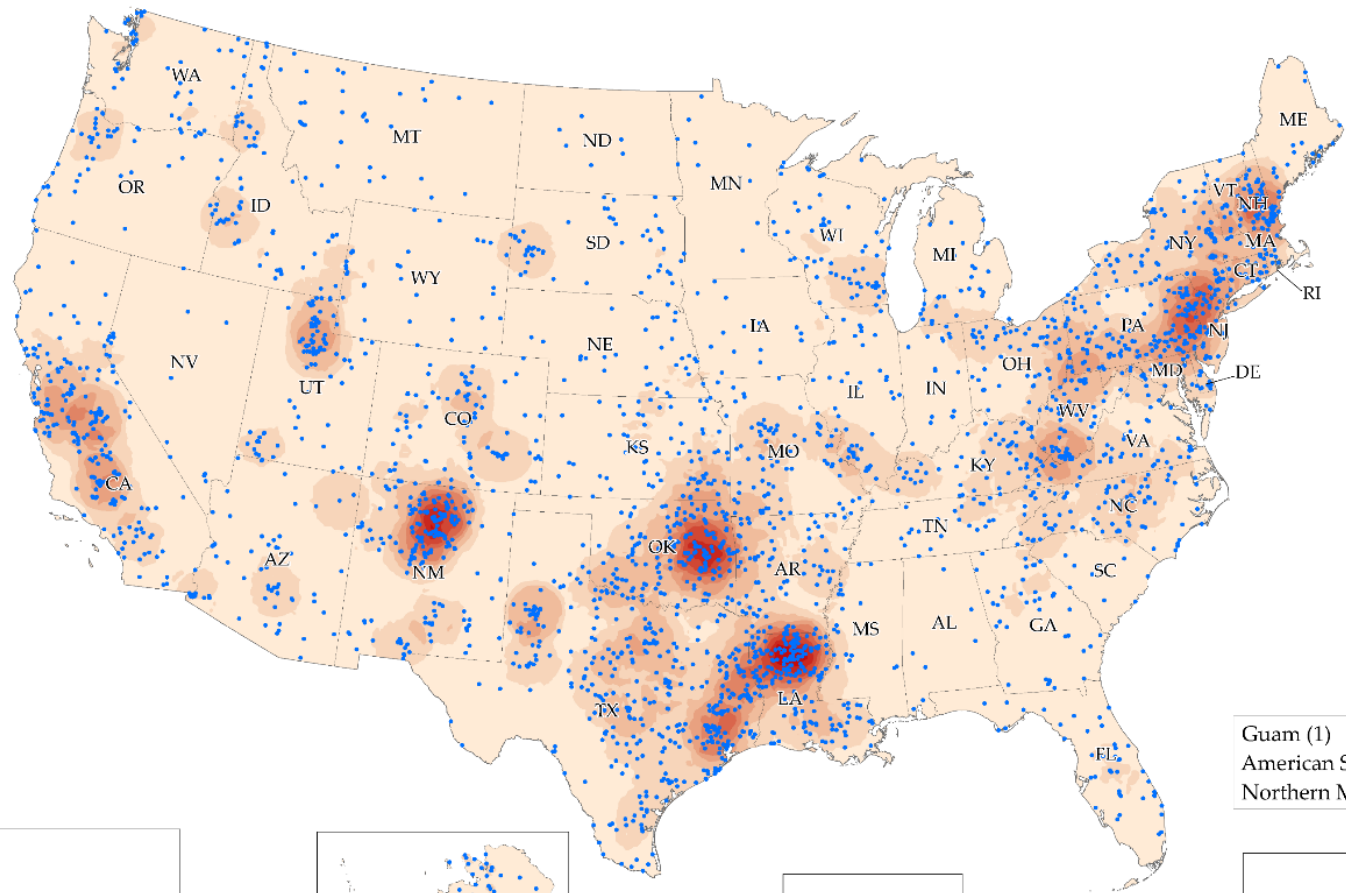
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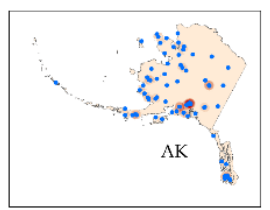
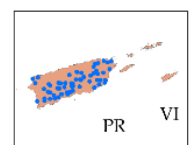
Population Category	Number of Community Water Systems	Population Served by CWS	CWSs w/HB Violation	% CWSs w/HB Violation by System Size
<=500	27,393	4,614,148	1,936	7.1%
501-3,300	13,415	19,309,630	986	7.3%
3,301-10,000	4,995	29,357,305	322	6.4%
10,001-100,000	3,894	112,269,140	207	5.3%
>100,000	435	144,894,800	29	6.7%
Grand Total	50,132	310,445,023	3,480	6.9%

Community Water Systems with Health-Based Violations for FY18

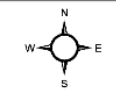
3,480 systems



Guam (1)
American Samoa (10)
Northern Mariana Islands (1)



SFDW Data Pull 2018Q3
Map produced on 10-31-18
North_America_Equidistant_Conic



Legend

- Community Water Systems

Relative Density of Systems

Low Density High Density

Community Water Systems with Health-Based Violations For Fiscal Year 2018 (3,480 Systems)

Program Collaboration

- DWSRF
- Source Water Protection / CWA coordination
- Enforcement and Compliance
- Other Federal Agencies
- State, Tribes and Regions

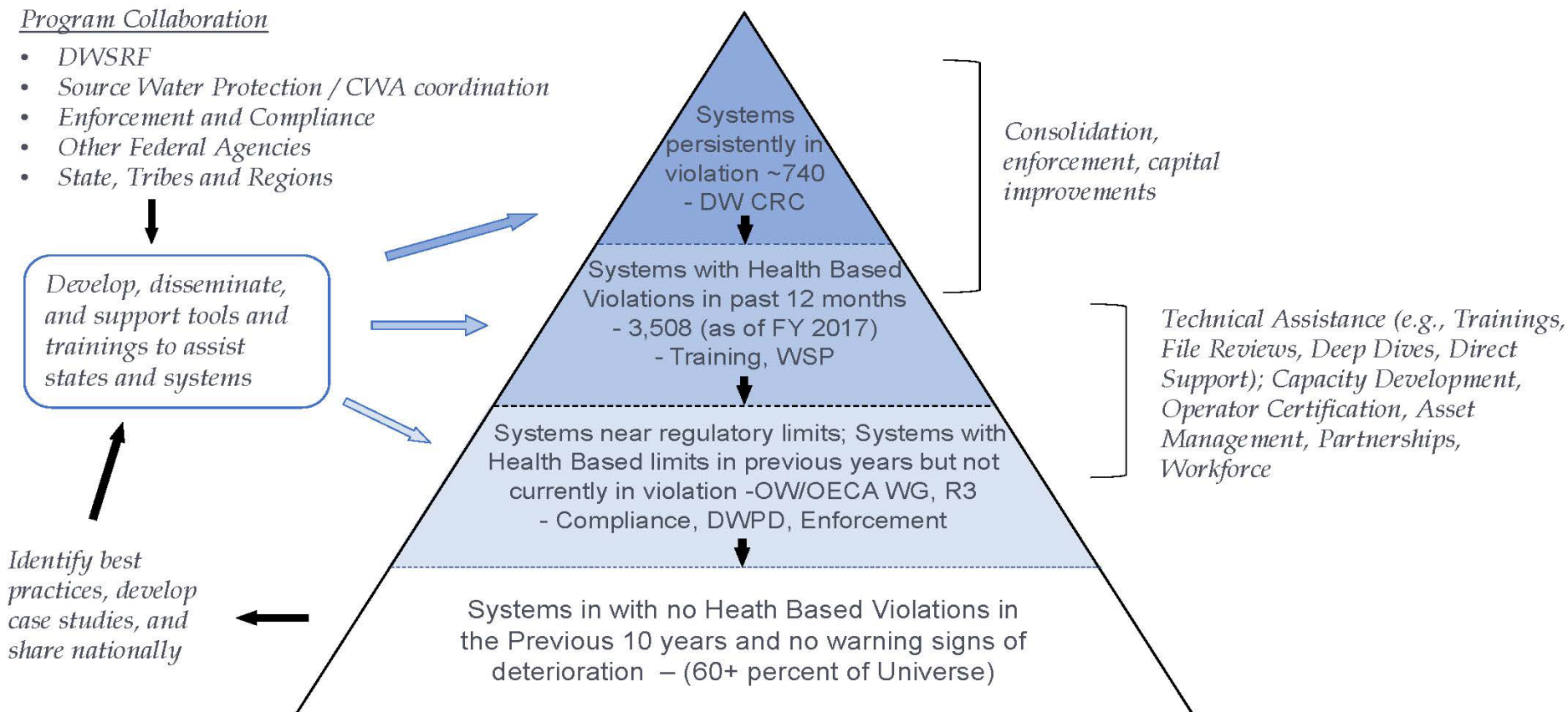


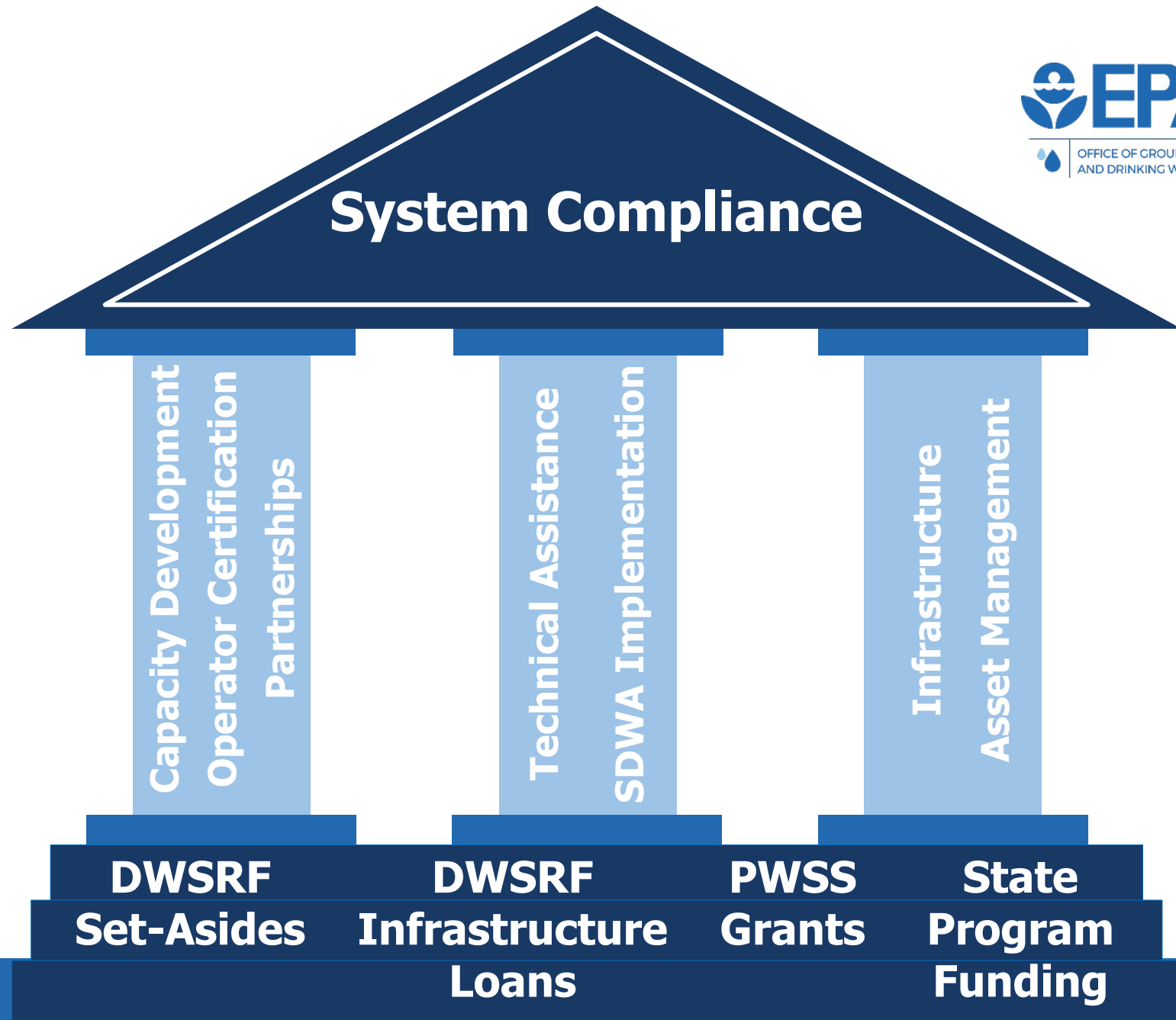
Figure 1. Schematic diagram illustrating the general process for Goals 2 and 3 whereby best practices and tools will be identified from those CWS and primacy agencies that are achieving compliance and shared with those CWSs that are either vulnerable or are out of compliance.



INFRASTRUCTURE

System Compliance

DWSRF and PWSS
Programs Work Hand-
in-Hand to Ensure
Public Health Protection
and SDWA Compliance

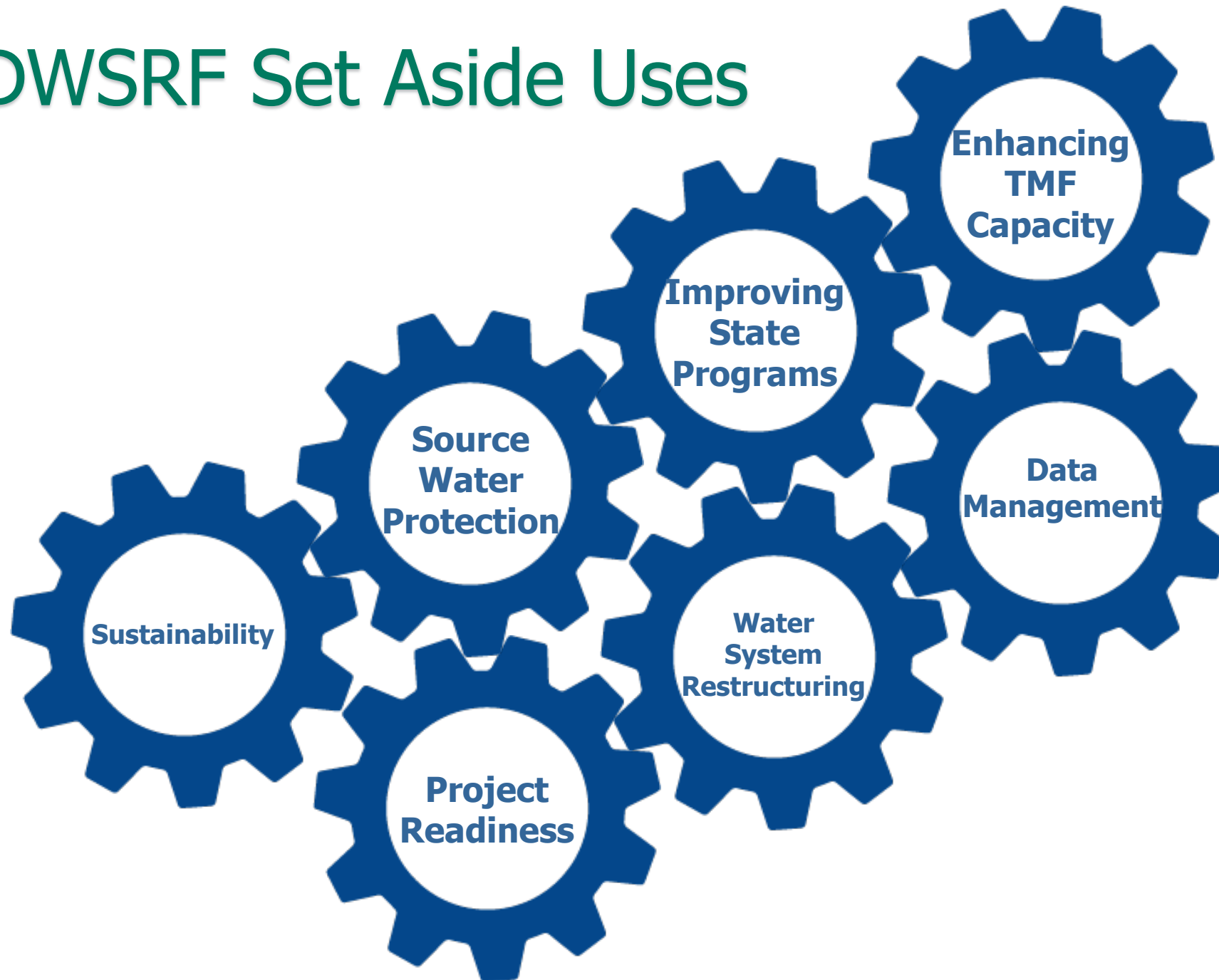


Priority for Use of DWSRF Funds

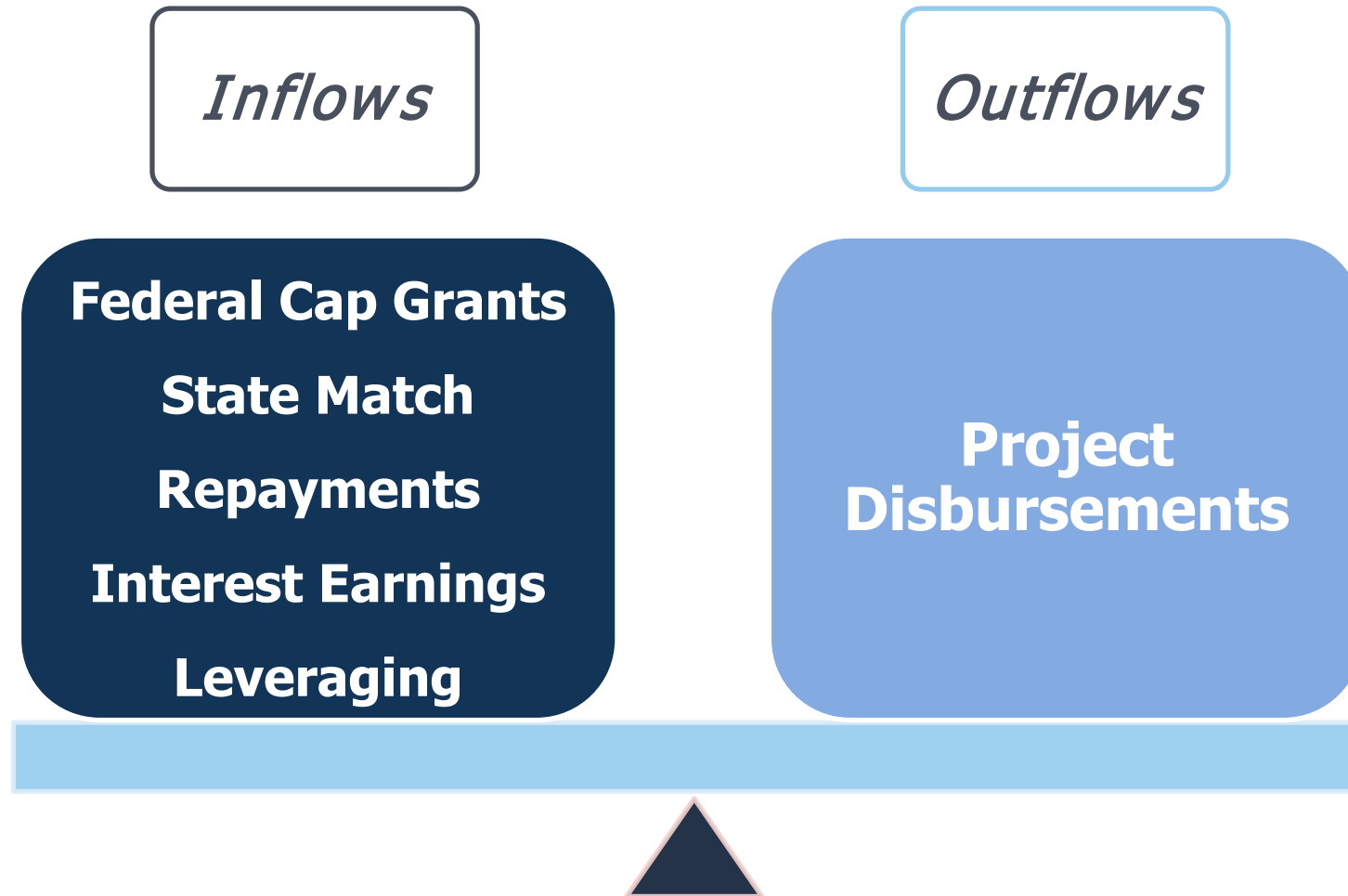
- The state **PWSS program** sets priorities for the DWSRF program.
- SDWA requires that infrastructure projects be prioritized for projects that
 - Address the most serious **risk to human health**.
 - Are necessary to ensure **compliance**.
 - Assist systems **most in need** on a per household basis according to State affordability criteria.

Not all drinking water problems can be fixed
with new or improved infrastructure.

DWSRF Set Aside Uses



Keeping the Revolving Funds Revolving



Bridge Under Construction

Opening by 2022

Financial Forecasting

- Cash flow modeling
- Maximize utilization of funds from all sources

DWSRF Flexibilities Bridge

- Flexible loan terms and rates
- Funding for non-infrastructure needs via set-asides: CapDev, OpCert, SWP

Marketing/ Demand

- Understand system needs
- Have ongoing outreach plan

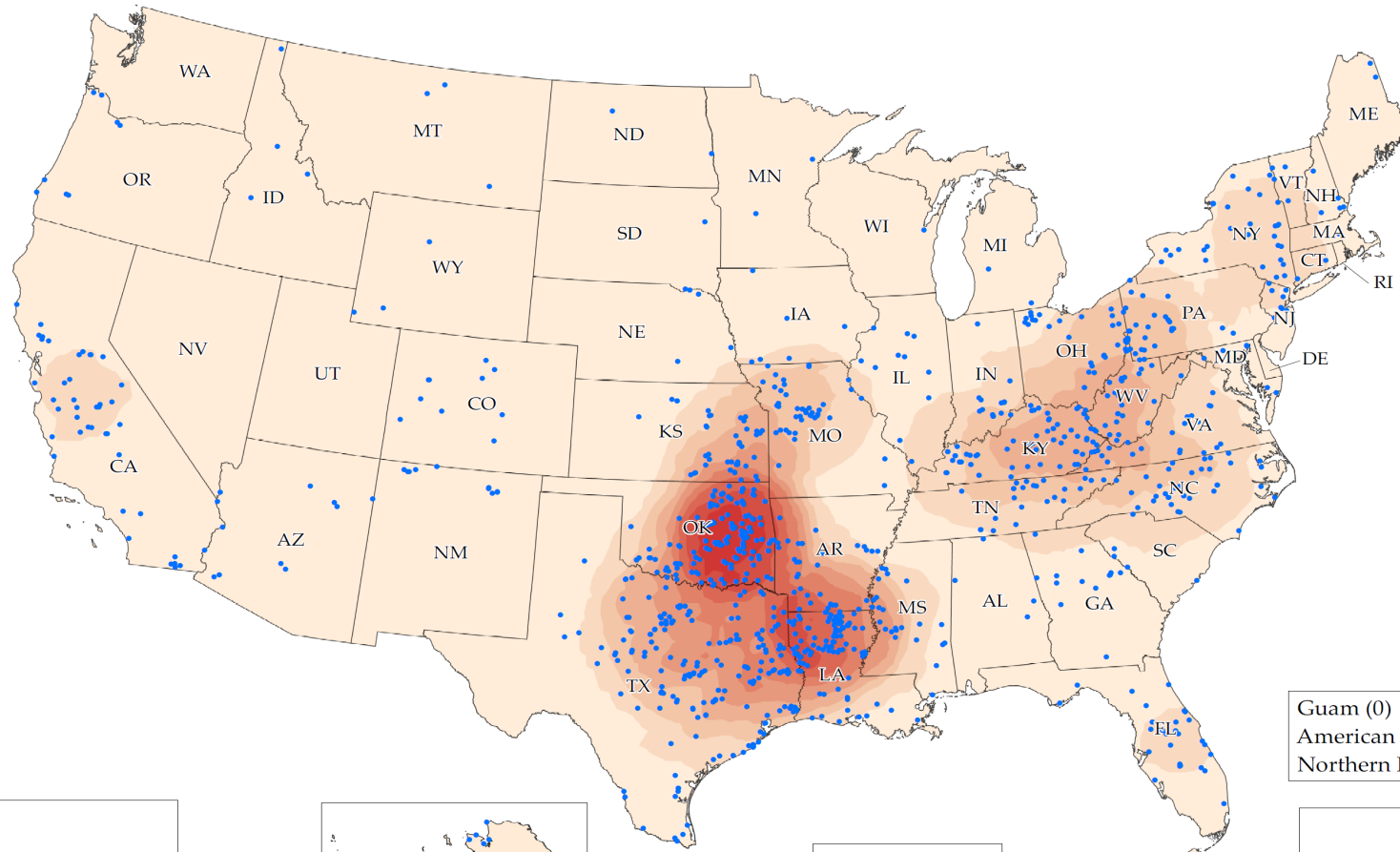


**COLLABORATIVE OVERSIGHT –
DEEP DIVE ON STAGE 2 AND
CONSECUTIVE SYSTEMS**

Collaborative Oversight – Stage 2 Deep Dive



- In an effort to support the HB Measure, EPA initiated a Deep Dive –Stage 2.
 - EPA is working jointly with our state partners to evaluate Stage 2 compliance challenge and share lessons learned and best practices among primacy agencies.
- The rule with the largest number of systems in violation – Stage 2
 - Roughly 30% of the HB violation are associated with Stage 2
 - And more than half of these violations are from consecutive water systems.
- The Stage 2 DBPR can pose challenges to consecutive water systems as they have little control over the treatment processes of the water they receive, yet they must comply with MCLs for total trihalomethanes (TTHM) and haloacetic acids (HAA5).

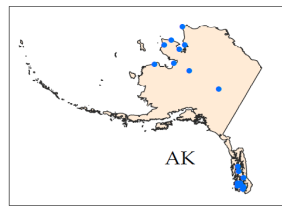


Legend

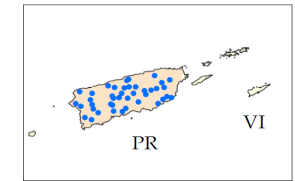
- Community Water Systems

Relative Density of Systems

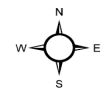
Low Density High Density



Guam (0)
 American Samoa (1)
 Northern Mariana Islands (0)



Map produced on 2-20-18
 North_America_Equidistant_Conic



**Community Water Systems with Health-Based Violations
 For Stage 2 DBPs - Fiscal Year 2017 (1,188 Systems)**

Collaborative Oversight – Stage 2 Deep Dive

Next Steps:

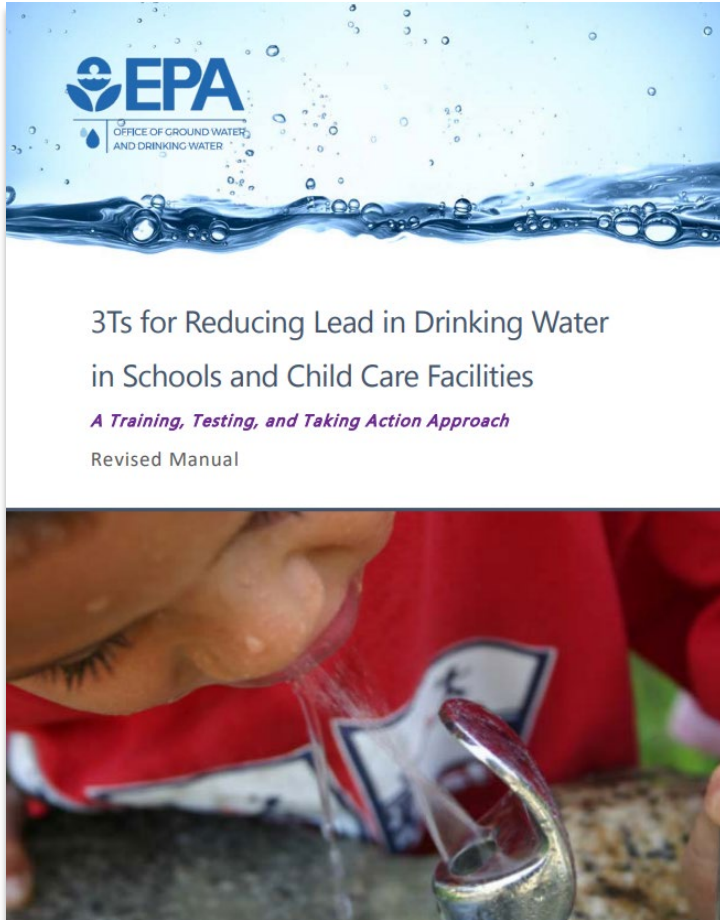
- We are in the process of conducting outreach to all states, via ASDWA, on limited set of questions related to Stage 2 compliance approaches to capture any additional best practices
- Plan to generate a final report by March 2019 that incorporates the national data analysis, lessons learned from the state site visits and compile the existing resources and training.
- Develop website that provides highlights of deep dive analysis and links to all relevant EPA guidance materials
- Results of this effort will be integrated as part of EPA's future training and outreach efforts.



LEAD IN SCHOOLS – 3TS



Revised 3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities



- **Training** school and child care officials to raise awareness of the 3Ts program and summarize the potential causes and health effects of lead in drinking water.
- **Testing** drinking water in schools and child care facilities to identify potential lead problems.
- **Taking action** to reduce lead in drinking water.

← New 3Ts Manual

3Ts 7-Module Toolkit →

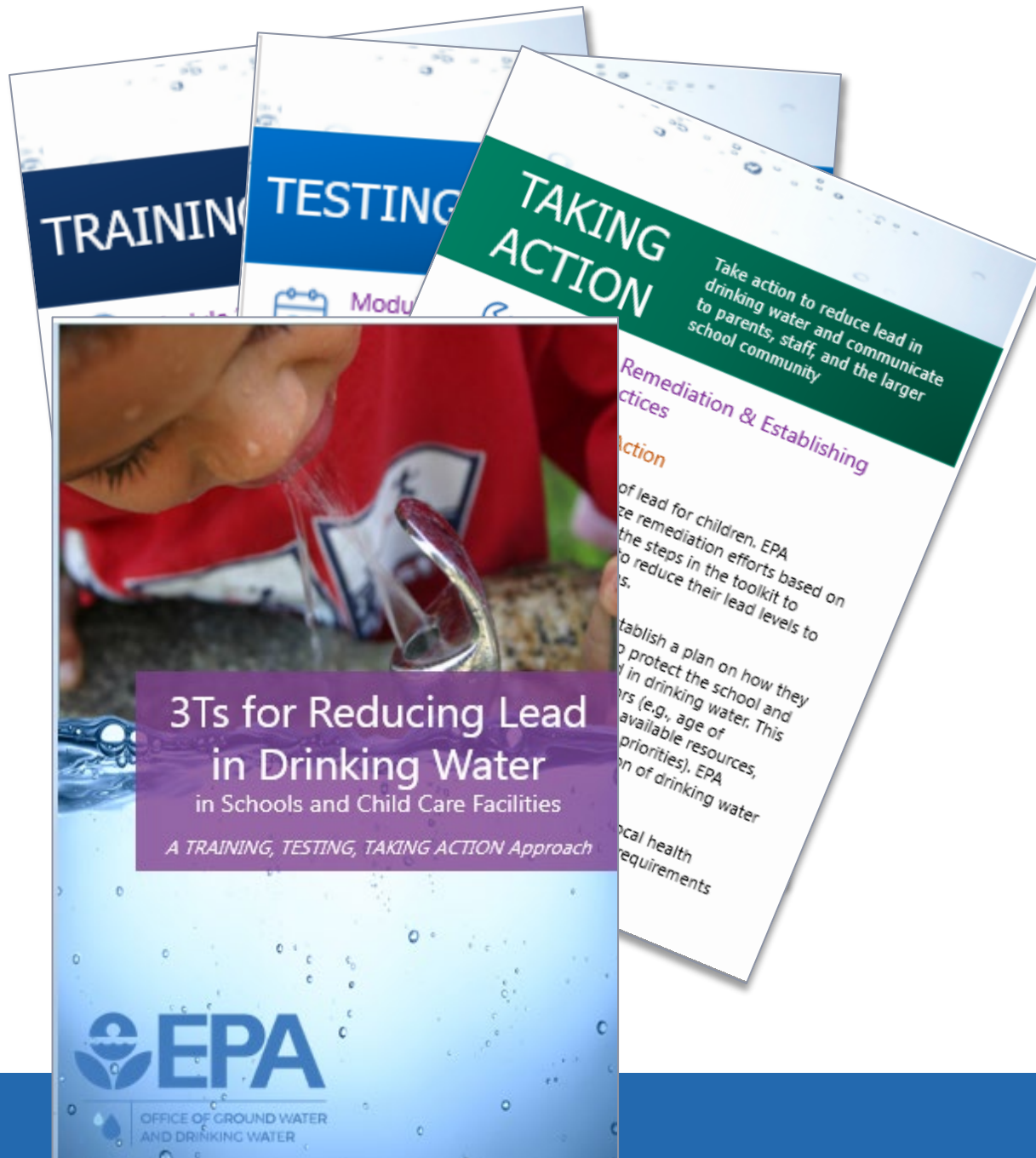
3Ts Toolkit	
	Module 1: Communicating the 3Ts
	Module 2: Learning About Lead in Drinking Water
	Module 3: Planning Your 3Ts Program
	Module 4: Developing a Sampling Plan
	Module 5: Conducting Sampling and Interpreting Results
	Module 6: Remediation and Establishing Routine Practices
	Module 7: Recordkeeping
Download the 3Ts Manual	



3Ts Highlights

These three brochures contain a snap shot of the 3Ts. They can be printed on legal paper, and we will be making a web version. They include:

- 3Ts for Reducing Lead in Drinking Water Highlights
- Training Brochure
- Testing Brochure
- Taking Action Brochure





SOURCE WATER PROTECTION

Source Water Protection Integration and Collaboration



- Cross Program and EPA Office Coordination
 - Cross Division Collaborations
 - Regional Offices and State Water Programs
 - Clean Water Act/Safe Drinking Water Act Coordination

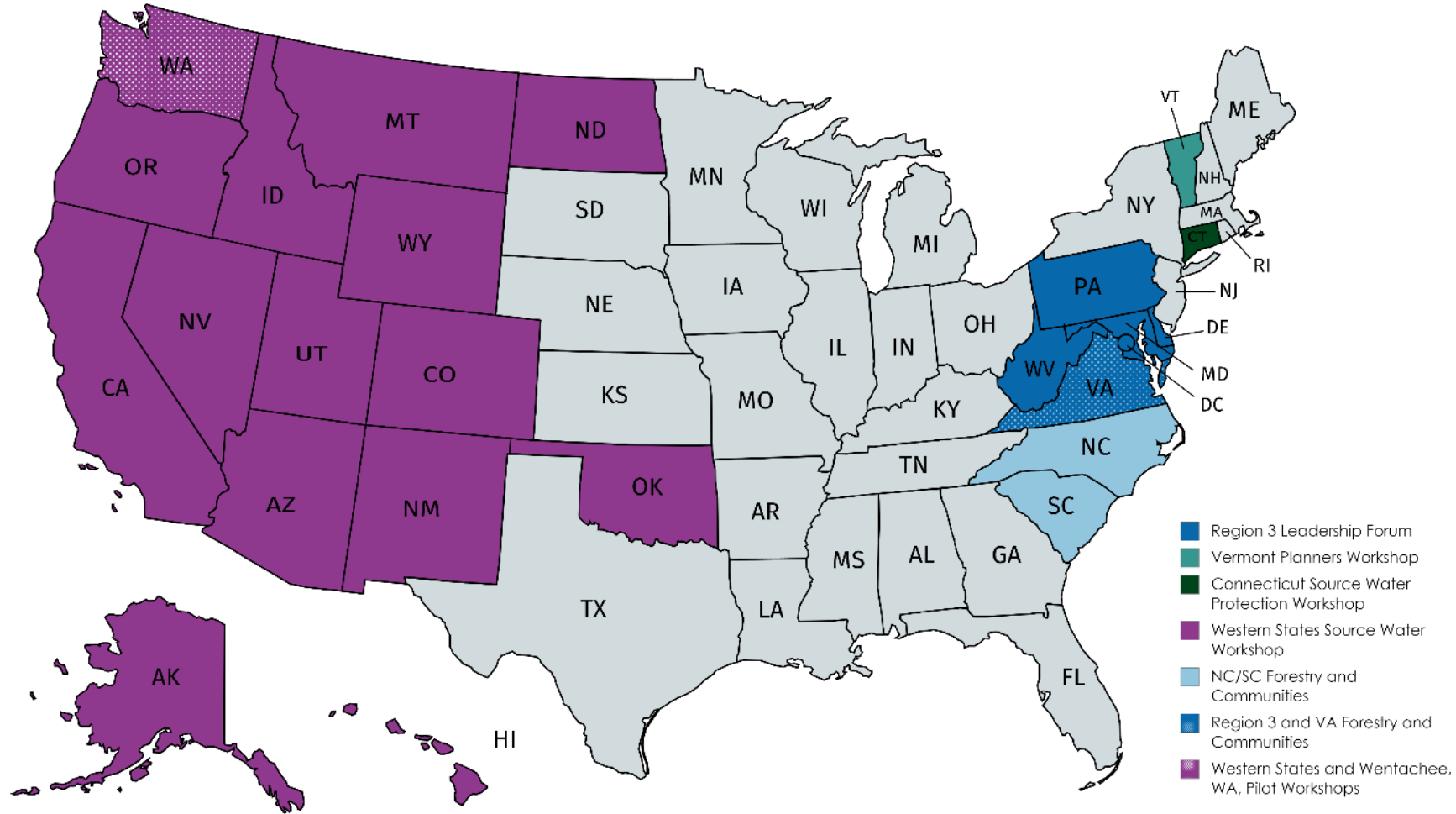


- United States Departments of Agriculture and Interior
 - Natural Resources Conservation Service; United States Forest Service
 - United States Geological Survey



- Source Water Collaborative
 - 27 National organizations united to protect America's drinking water at the source

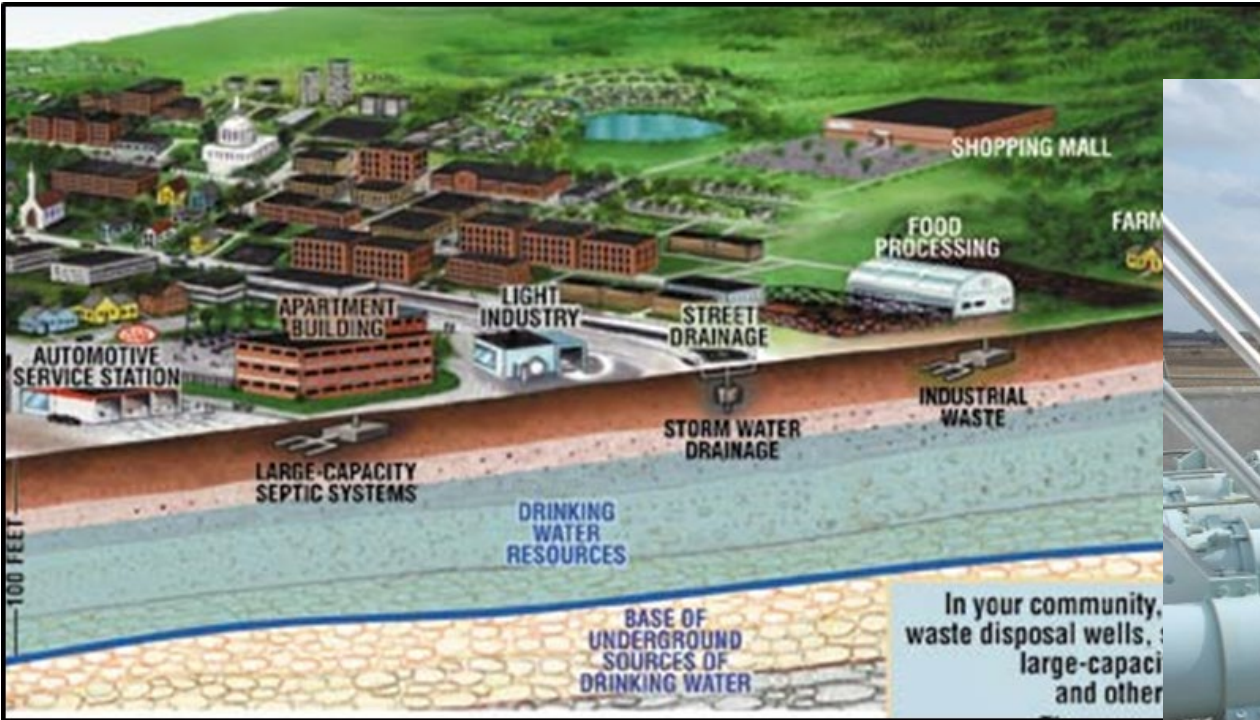
Source Water Protection Workshops





GROUND WATER PROTECTION

Aquifer Storage and Recovery





Produced Water



UIC & the Environmental Lean Management System



- Fulfilling our Core Mission to “Provide Clean and Safe Water”
- Making programmatic decisions that ensure protection of Underground Sources of Drinking Water



- Evaluating and streamlining Program processes, activities and responsibilities
- Identifying innovations and efficiencies



- Developing Standard Work
- Deploying Visual Management Tools



DISCUSSION AND Q/A