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

<table>
<thead>
<tr>
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<th>CWSs w/HB Violation</th>
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</tr>
</thead>
<tbody>
<tr>
<td>&lt;=500</td>
<td>27,393</td>
<td>4,614,148</td>
<td>1,936</td>
<td>7.1%</td>
</tr>
<tr>
<td>501-3,300</td>
<td>13,415</td>
<td>19,309,630</td>
<td>986</td>
<td>7.3%</td>
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<tr>
<td>3,301-10,000</td>
<td>4,995</td>
<td>29,357,305</td>
<td>322</td>
<td>6.4%</td>
</tr>
<tr>
<td>10,001-100,000</td>
<td>3,894</td>
<td>112,269,140</td>
<td>207</td>
<td>5.3%</td>
</tr>
<tr>
<td>&gt;100,000</td>
<td>435</td>
<td>144,894,800</td>
<td>29</td>
<td>6.7%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>50,132</strong></td>
<td><strong>310,445,023</strong></td>
<td><strong>3,480</strong></td>
<td><strong>6.9%</strong></td>
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</table>
Community Water Systems with Health-Based Violations for FY18
3,480 systems
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
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

- Water System Restructuring
- Data Management
- Improving State Programs
- Enhancing TMF Capacity
- Source Water Protection
- Sustainability
- Project Readiness
- Water System Restructuring
Keeping the Revolving Funds Revolving

**Inflows**

- Federal Cap Grants
- State Match
- Repayments
- Interest Earnings
- Leveraging

**Outflows**

**Project Disbursements**
Bridge Under Construction  
*Opening by 2022*

**Financial Forecasting**
- Cash flow modeling
- Maximize utilization of funds from all sources

**Marketing/Demand**
- Understand system needs
- Have ongoing outreach plan

**DWSRF Flexibilities Bridge**
- Flexible loan terms and rates
- Funding for non-infrastructure needs via set-asides: CapDev, OpCert, SWP
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).
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
NEW! 3Ts Highlights

These three brochures contain a snapshot 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