Community-Based Water Resiliency (CBWR): An Integral Part of Holistic Water Resource Planning

Ground Water Protection Council

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Considering the Consequences of Failure
A Day Without Water…

- Drinking water
- Sewage disposal and sanitation
- Firefighting
- Hospitals and dialysis services
- Energy
- Banking
- Manufacturing
- Food processing and services
- Transportation
Criminal and Terrorist Acts

Natural Disasters

Aging Water Infrastructure

Failures in Interdependent Sectors
Your Day is Going From Bad to Worse…

What are YOU going to do?

- People are panicking
- Department of Public Health issues a “Boil Water” notice
- Mayor holds a press conference and tells residents “Do Not Drink” the water
- Calls to 911 centers are skyrocketing
- Bottled water is gone from the shelves and Hinkley and Schmitt’s line is busy
What if Things Were Different?

• What if you were personally prepared?

• What if your community was resilient?

• What if your community was ready for a water service interruption?
Community Based Water Resiliency...

...No Water?

...No Problem!
Welcome

Using EPA’s Community-Based Water Resiliency (CBWR) tool, you’ll find this an easy and interesting way to assess your community’s current resiliency and learn more about Water Sector dependencies. Preparing for a water service interruption can help your community foster the relationships, and gather the resources, needed in advance to avert potential crises.

If this is your first time using the CBWR tool, we recommend you start with the Self Assessment. You’ll need about 15 - 20 minutes to complete the assessment and afterwards you’ll receive a tailored summary report with recommendations on tools and resources that can help your community enhance its water resiliency.

Let’s Get Started

If you’ve already completed the Self Assessment, or are looking for a specific water resiliency tool, you can go directly to the CBWR Toolbox.
CBWR Self Assessment

Please select stakeholder group to begin the self assessment

- Water Utility
- Healthcare and Public Health
- State / Tribal Primacy
- Emergency Services
- Local Official / Community Partner
## My Goals

<table>
<thead>
<tr>
<th>My goals in completing this assessment are:</th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Not very important</th>
<th>Not at all important</th>
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<tbody>
<tr>
<td>Gain a better understanding of Water Sector interdependencies</td>
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<td>Enhance collaboration with the Water Sector and other critical infrastructure sectors</td>
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<td>Build a business case for designing and implementing a Community-Based Water Resiliency Program in my community</td>
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<td>Identify recommended actions to reduce risks and enhance resiliency in the face of a water service disruption</td>
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<td>Obtain funding for infrastructure enhancement</td>
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<td>Identify sources of water preparedness training for myself and/or my staff</td>
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<td>Raise awareness in my community</td>
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**Other** *(provide or suggest additional goals by submitting an e-mail)*
Collaboration with Drinking Water and Wastewater Utilities

Has your organization collaborated with local drinking and/or wastewater utilities to prepare for a water service interruption?

- [ ] Yes
- [x] No

[Back] [Next]
Public Notification

Great! Knowing how your utility issues public notification can ensure that consistent messages are being released to the public by all officials involved in the incident. By delivering clear, concise, and consistent messages, public officials can help ensure greater public confidence in the community's ability to deliver safe and reliable water services.

For additional information, please check out the following tools and resources:

Tools and Resources

- Revised Public Notification Handbook
  This handbook provides guidance to States, public water systems, and the general public concerning how EPA interprets its public notification regulations.

Coordination with Water Utility

Notification methods vary from jurisdiction to jurisdiction. In smaller communities, a phone call from the on-scene incident commander to a utility representative may suffice. Large communities have included utilities in 911 dispatch center notification lists. The earlier a utility representative is notified of an incident that may affect their drinking or wastewater treatment process, the sooner the utility can institute actions protective of public health and the environment. This, in turn, helps your community to be more resilient during emergencies and disasters.

Local Emergency Planning Committee

You indicated that you don't know if your drinking water and wastewater utility participates in your local emergency planning committee (LEPC). Having a representative from the utility on your LEPC can be mutually beneficial because the utility can be one of the most knowledgeable entities regarding chemicals and chemical safety. They can also be one of the larger chemical users in your community, and it would benefit you to include them on the LEPC. Consider inviting your local drinking water and wastewater utilities to an upcoming meeting.

For additional information on LEPCs, please check out the following tools and resources:

Tools and Resources

- Local Emergency Planning Committee (LEPC) Database
  Local Emergency Planning Committees (LEPCs) work to understand chemical hazards in the community, develop emergency plans in case of an accidental release, and look for ways to prevent chemical accidents.
Products

CBWR Electronic Tool

- Stakeholder specific modules (5)
  - Water Utilities
  - Healthcare and Public Health
  - Emergency Services
  - State/Tribal Primacy Agencies
  - Local Officials / Concerned Citizens

- Toolbox > 400 resources
- User-specific, detailed summary reports

Outreach Materials

- Interdependencies fact sheets (3)
  - Healthcare & Public Health
  - General Interdependencies
  - Emergency Services

- Tri-fold overview brochure
- Poster (hard copy & interactive web version)
Did you know...

- All businesses rely on the availability of water, either directly or indirectly for the products or services they need for their operations.
- Businesses with thorough disaster preparedness plans generally have less damage, less economic loss, and less down time following a disaster. (FEMA)
- One of the benchmarks of a community’s recovery after a disaster is the number of businesses back in operation (FEMA)

Please visit the U.S. Environmental Protection Agency’s Community-Based Water Resilience (CBWR) initiative website at: http://water.epa.gov/infrastructure/watersecurity/communities/index.cfm
Tools of Water Security Planning

**PREVENTION**
- Best Security Practices
- Sector Metrics
- Physical Protection
- Backflow Prevention
- Cyber Security
- Vulnerability Assessment Tools
- Baseline Threat Document

**DETECTION**
- Information Tools: WCIT, Lab Compendium
- Water Lab Alliance
- Water Security Initiative
- Modeling
- EDS/Sensor Testing
- Method Validation

**RECOVERY**
- Mutual Aid Agreements
- Decontamination Strategy
- Mobile Treatment Units
- Consequence Analysis

**OVERARCHING**
- Community-Based Water Resiliency
- Climate-Ready Water Utilities

**RESPONSE**
- Contaminant Response Training
- Response Plan Guidance
- Response Protocol Toolbox
- Pandemic Flu Guidance
- ICS/First Responder Training
- ESF-3 work under the NRF
Community-Based Water Resiliency Addresses The “What if…?”

• Brings utilities together with:
  – City/county managers
  – Public works officials
  – Emergency responders
  – Members of the public

• Increases community preparedness at the community level by:
  – Increasing understanding of critical interdependencies
  – Highlighting multiple benefits of preparedness and security practices
  – Improving integration of Water Sector into community emergency preparedness and response efforts

Communities, as a whole, are more resilient in the event of a water service interruption
Benefits to Communities

• Empowers local utilities and community leaders to enhance overall resiliency of their communities

• Fosters reliable up-front collaborative partnerships between utilities and other entities responsible for maintaining critical infrastructures

• Raises overall awareness of critical interdependencies and strengthens preparedness and response to all-hazards emergencies

Water service interruptions can have serious economic, environmental, psychological, and public health consequences on a community. Resilient communities can significantly reduce these risks at negligible cost.
Free WaterISAC Pro Subscription

How to Subscribe: To receive a 12-month WaterISAC Pro subscription for free, visit the WaterISAC website [http://www.waterisac.org](http://www.waterisac.org).

No payment information or future commitment is required.

Benefits of WaterISAC

- All-hazards information to help utility managers and staff make security and emergency management planning decisions.
- Information about contamination, and threats to water infrastructure to help protect critical infrastructure and respond to natural disasters, accidents and other threats.
- Networking features that enable subscribers from across the country to communicate and share knowledge with one another.
- Confidential security incident reporting, allowing WaterISAC’s intelligence analysts to spot possible trends of criminal or terrorist activity.

WaterISAC
Water Security Network

Water Information Sharing and Analysis Center (WaterISAC) is a secure, web-based clearinghouse that helps drinking water and wastewater utilities prepare for emergencies.