



Developing Emergency Response Plans with the Drinking Water State Revolving Fund

Communities may use the Drinking Water State Revolving Fund (DWSRF) to prepare for emergencies at their drinking water systems.

BACKGROUND

Drinking water emergencies can result from both natural hazards (e.g., hurricanes, tornadoes, earthquakes) and man-made hazards (e.g., oil spill near water intake). Regardless of the emergency's cause, preparation and up-to-date emergency response plans (ERP) will help to mitigate any potential impacts to drinking water systems. Some examples of negative impacts can include flooding, equipment damage, power loss, and contamination.

An ERP describes strategies, resources, plans, and procedures that water systems can use to prepare for and respond to an incident. A template and instructions for creating an ERP can be found [here](#). In 2018, America's Water Infrastructure Act (AWIA) was signed into law, requiring community drinking water systems serving more than 3,300 people to develop or update risk and resilience assessments (RRAs) and ERPs. This law specifies the components that the RRAs and ERPs must address, as well as establishes deadlines by which water systems must certify to the U.S. Environmental Protection Agency (EPA) completion of the risk assessment and ERP. One of the most important steps a water system can take to prepare for emergencies is to update their ERP, as

well as evaluate critical functions and how those would be covered in a disaster or pandemic situation.

DWSRF ASSISTANCE

The DWSRF can provide financial assistance to publicly-owned and privately-owned community water systems and non-profit non-community water systems for drinking water infrastructure projects. Projects must either facilitate the system's compliance with national primary drinking water regulations or significantly further the health protection objectives of the Safe Drinking Water Act (SDWA).

Each of the 50 states and Puerto Rico operates its own DWSRF program. They receive annual capitalization grants from EPA, which they use to provide low-interest loans and other types of assistance to water systems. Repayments of DWSRF loans begin up to 18 months after project completion, with loan terms up to 30 years for most communities, or up to 40 years for disadvantaged communities.

Additional EPA Water Emergency Response Resources:

Emergency Response Website:
<https://www.epa.gov/waterutilityresponse>

Additionally, states may use a portion of their capitalization grant from EPA as “set-asides” to help communities build the technical, managerial, and financial capacities of their systems. With an emphasis on small systems, these funds help ensure sustainable infrastructure and public health investments.

EMERGENCY RESPONSE PLANS

DWSRF set-aside funding can be used to both develop and update ERPs. Each ERP should include information on conducting a risk and resilience assessment, identifying state regulatory requirements, identifying and integrating local plans, coordinating with Local Emergency Planning Committees and response partners, as well as planning for resources necessary in the event of a disaster. DWSRF set-aside funding can also be used for conducting exercises involving emergency response.

EXERCISES

Discussion-based exercises (e.g., tabletop, seminars) are designed to bring together key personnel to discuss hypothetical scenarios in an informal setting, often preceding an orientation training and review of applicable plans and procedures. Operations-based exercises (field or full-scale) are conducted in a manner that is intended to mirror a real incident. Personnel perform actions as if a real incident has occurred. DWSRF set-aside funding can be used for the preparation and participation in water system level exercises (discussion or operations-based), development of water system emergency response guidance manuals, exercise materials, and coordination with emergency management agencies during emergencies. Guidance for conducting exercises for drinking water utilities can be found [here](#).

PLANNING AND ASSESSMENT

In general, the DWSRF can fund any planning or assessment action that can help mitigate or

significantly lessen the impact of a malevolent act or natural hazard on drinking water systems. Some of these actions could include developing vulnerability assessments, adaption plans, extreme weather mitigation plans, or cyber security implementation plans. In addition, funding can be used to identify key dependencies and interdependencies, develop business continuity plans, map potential cascading effects from infrastructure disruption, or establish predictive tools.

ADDITIONAL SET-ASIDE ACTIVITIES

States can also use their set-aside funds for the facilitation of emergency preparedness training for drinking water program emergency response teams or contracting with a technical assistance provider for assistance to systems during emergencies including coordination with emergency management agencies. Set-aside funding can be used for implementing state activities related to the adoption, implementation, and improvement of the Public Water System Supervision primacy agency capabilities for responding to emergencies, such as providing technical assistance to water systems related to massive flooding, severe drought, or intentional breach of water systems’ facilities or computer systems.

APPLY FOR FUNDING

Water systems receive DWSRF assistance directly from state agencies. Each state has its own application procedure. Contact information for each state is posted at: <https://www.epa.gov/dwsrf/statedwsrf-website-and-contacts>.



For more information, visit: [epa.gov/dwsrf](https://www.epa.gov/dwsrf)



Drinking Water State Revolving Fund Case Studies: Emergency Response Planning in Action

How communities are using the Drinking Water State Revolving Fund to address development of emergency response plans for their drinking water systems.

TABLETOP EXERCISE IN MAINE

In 2016, the Maine Rural Water Association received \$80,000 (from the 15% Local Assistance Set-Aside) to collaborate with DWSRF program staff, the County Emergency Management Agency, the Maine Emergency Management Agency, and the Maine Department of Environmental Protection to host an emergency response tabletop exercise involving a rolled tanker truck with contamination impacts to a nearby river. The exercise identified information gaps in the mock response and a practical framework for mitigating these risks and vulnerabilities. The exercise participants agreed that communication and coordination between the water system personnel, emergency responders and communities on both sides of the river could use further work. The state plans to conduct more tabletop exercises with other communities in the future.

EMERGENCY RESPONSE PLANS IN OREGON

Oregon uses their 15% Local Assistance Set-Aside funding to assist public water systems with preparing a written document establishing procedures and actions to minimize the impact or potential impact of a natural disaster, accident or intentional act, and return the system to normal operating conditions.

WARN PROGRAM IN MAINE

MEWARN is a statewide Water and Wastewater Agency Response Network (WARN) of utilities helping utilities to prepare for the next natural or man-made emergency, organize response according to established guidelines, and share personnel and equipment statewide. MEWARN received \$20,000 from Maine's 15% Local Assistance Set-Aside to support their emergency preparedness efforts.

