

Water Sector Partnerships with the Food and Agriculture Sector

Water utilities can enhance their communities' response to and recovery from a water service interruption by identifying and establishing partnerships with critical interdependent sectors. Critical infrastructure sectors that



rely on water to provide essential goods and services include food and agriculture, transportation, energy and health care. Drinking water and wastewater utilities should first identify critical water users in their communities. Utilities should then develop working relationships with their critical users to create a mutual understanding of their needs, capabilities, and limitations and to develop realistic expectations of who can do what in the event of an emergency.

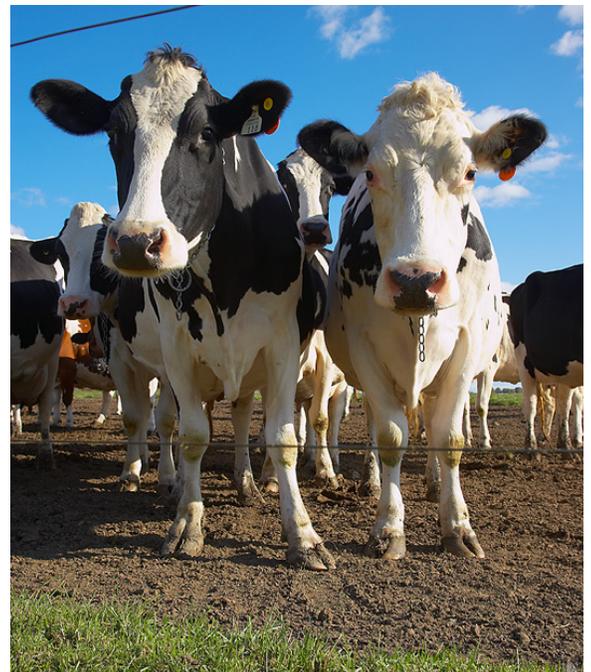
The Food and Agriculture Sector relies on drinking water and wastewater in a variety of ways to ensure food safety and availability at the local, regional and national levels. For example, food processing is a water-intensive industry

that utilizes water as a component in product formulations, as a sanitizing agent, and in some cases as a means to help move a product through the production processes. Effective partnerships between the Water Sector and the Food and Agriculture Sector can enhance preparedness, response, mitigation and recovery actions and minimize the adverse impacts of a water service interruption.

Establishing partnerships is one of the Key Features of an Active and Effective Protective Program. The U.S. Environmental Protection Agency (EPA), in collaboration with the Water Sector, developed the Key Features to strengthen the security and resiliency of drinking water and wastewater systems in the face of natural disasters or other emergencies.

THE KEY FEATURES

1. Integrate protective concepts into organizational culture, leadership and daily operations
2. Identify and support protective program priorities, resources and utility-specific measures
3. Employ protocols for detection of contamination
4. Assess risks and review vulnerability assessments (VAs)
5. Establish facility and information access control
6. Incorporate resiliency concepts into physical infrastructure
7. Prepare, test, and update emergency response and business continuity plans
- 8. Develop partnerships with first responders, managers of critical interdependent infrastructure, other utilities and response organizations**
9. Develop and implement internal and external communication strategies
10. Monitor incidents and threat-level information



Highlighting Partnerships

Water utilities should make it a priority to establish and maintain good working relationships with critical users in the Food and Agriculture Sector, such as food processors, livestock yards and animal feeding operations. These relationships can be reinforced through regular dialog, information sharing, written mutual aid and information-sharing agreements, and joint participation in exercises, drills and roundtable meetings. Through these activities, water utilities can develop a better understanding of how an interruption of water services could impact other sectors, and the Food and Agriculture Sector can develop a better sense of a water utility's capabilities and limitations during an emergency.



When water utilities partner with critical users, they can more quickly notify each other of incidents that could negatively impact each other. For example, contaminated water from a public water system could disrupt livestock feed manufacturing while an accidental discharge of agricultural wastewater could threaten a drinking water system's surface water source.

EPA's Community Based Water Resiliency (CBWR) initiative increases overall community preparedness by raising awareness of Water Sector interdependencies and fostering relationships among local officials, businesses, public health officials and other critical stakeholders at the community level. The CBWR e-Tool is a resource for utilities as well as the Food and Agriculture Sector and is a good starting point for increasing water resiliency. For additional information on CBWR, and to download the CBWR e-Tool, please visit : <http://water.epa.gov/infrastructure/watersecurity/communities>.

EPA has worked with other federal agencies for many years to strengthen partnerships between the Water Sector and the Food and Agriculture Sector. Examples include:

- **Multi-Sector Infrastructure Protection and Threat Workshops:** Co-hosted by EPA, Federal Bureau of Investigation, U.S. Department of Agriculture (USDA), and U.S. Food and Drug Administration (FDA). Participants include drinking water and wastewater utilities, federal, state and local law enforcement; food and agriculture representatives, and public health/healthcare officials.
- **The Food Processor and Water Security and Resiliency Conference:** Held in 2010, in Chicago, Illinois, as a collaborative effort between EPA Region 5 and the Department of Homeland Security (DHS) Protective Security Advisor program for the Great Lakes Region. The conference focused on the food processing industry because food processing is a water-intensive industry and a water service interruption could be extremely disruptive to this sector.
- **Water Emergency Response Tool for Food Processors:** Tool developed by Penn State Cooperative Extension can help food processors and manufacturers be better prepared for water shortage or water contamination emergencies. The tool can be found at: http://www.fsis.usda.gov/Food_Defense_&_Emergency_Response
- **Federal Food and Agriculture Decontamination and Disposal Roles and Responsibilities:** Published in 2005, the document was prepared collaboratively by EPA, USDA, Department of Defense (DoD), Department of Health and Human Services (HHS) and DHS. The report can be found at: http://www.epa.gov/homelandsecurityportal/pdf/Final_Food_and_Ag_CONOPS.pdf

FOR MORE INFORMATION: EPA is committed to ensuring strong working relationships between the Water Sector and other sectors. For more information on EPA's support for developing partnerships and the Key Features of an Active and Effective Protective Program, visit <http://water.epa.gov/infrastructure/watersecurity/features/index.cfm> or email WSD-Outreach@epa.gov.