



## Emergency Planning

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### Why plan for an emergency?

### What emergencies should we plan for?

### Four Phases of Emergency Management

### Why plan for an emergency?

Because an emergency situation that affects water quality or quantity is unpredictable, an assessment and response plan can guide utilities when disaster does strike.

Planning for water emergencies requires knowledge of potential impacts on water services. Operators need to be able to identify characteristics of each hazard and vulnerable system components.

System managers who want to plan ahead can now use a new tool developed for small systems to assist in planning for and assessing the likelihood of an emergency. The *Emergency Planning Interactive Guide for Small Water Utilities* is a CD ROM, developed by the Mid-West Technology Assistance Center and the Illinois Section of the American Water Works Association (AWWA), that helps to evaluate the potential for specific types of emergencies in public water systems and to develop planned responses and prevention. Users of the guide can enter system-specific information, save it, and print out reports to include in their emergency plans. By using the emergency-planning guide, system managers can easily:

- assign specific responsibilities to people other than their normal assigned duties;
- describe how resources will be protected in an emergency;
- identify resources available within a municipality and create agreements with neighboring communities; and
- identify steps for mitigation during response and recovery.

When the sun shines and the water plant runs smoothly, who would think of preparing for a natural disaster? It's hard to look beyond the day-to-day problems in a utility and plan for unexpected events like floods, landslides, tornadoes, drought, wildfires, or even sabotage. But planning for the unknown is exactly what system managers and operators need to do.

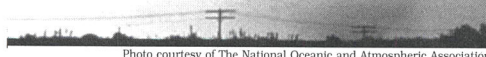


Photo courtesy of The National Oceanic and Atmospheric Association

### What emergencies should systems plan for?

Anticipating unexpected water plant problems is just common sense. A pumping station located next to a river can expect an occasional flood. Utilities that have seen drought conditions before should know they are possible again. But many severe problems may be a little less obvious. Various types of disasters and emergencies include:

**Natural Disasters** are the largest single category of repetitive threats resulting from weather or geological events. They may or may not be predictable and damage can range from minimal to catastrophic. Disasters include floods, thunderstorms, landslides, tornadoes, winter storms, drought, wildfires, earthquakes, and dam failures.

**Technological Disasters** can result from attempts to manipulate the environment. Technological or man-made threats have dramatically expanded along with advances in modern technology. Two examples include hazardous materials and radioactive accidents.

**Sabotage or Terrorism** can be an act of a disgruntled employee or an act of terrorism by a group or individual. Disgruntled employees pose a great risk because of personal knowledge of a water plant's workings and water chemistry. Terrorists may use biological or chemical agents to contaminate food or water because these agents are extremely difficult to detect.

**Pressure Loss or Contamination** can be the result of a major disaster or can happen at any time. Causes of contamination, in addition to major disasters, can include water main breaks,

