



Be Prepared! The Connecticut Department of Public Health (CT DPH) Drinking Water Section (DWS) recommends that public water systems (PWS) across the State take precautions against the potential for severe natural disasters and emergency events, such as a major hurricane. The following are suggestions for PWS that the Association of State Drinking Water Administrators (ASDWA) recognizes as lessons learned in Louisiana and Mississippi where PWS's were devastated by Hurricane Katrina.

## Plan Ahead!

**Public water system operators must know where State officials will be located in the area after the storm and what their roles are.**

- Expect any/all communications to be down for at least 3 days after the storm.
- This is a good opportunity to collect immediate needs from your systems to forward to appropriate state and federal officials.

**Ensure state DWS staff knows the public water system's plan of action after the storm.**

- How often they should communicate - (once or twice daily, as needed, etc)
- Satellite phones to state personnel located in the field (engineers, environmental inspectors, etc) may be the only means of communication.

**Review your current system's [Emergency Response Plan](#) and ensure that emergency equipment is operational.**

**Obtain mapping of the water systems and streets and ensure that they are up to date.**

- GPS with accurate latitude and longitude can be priceless. This holds true if persons unfamiliar with the area and PWS locations will be assisting during a disaster.

**Stock supplies for deploying personnel:**

- Supplies may take days to get to the hardest hit areas. Make sure anyone that goes to the harder hit areas has adequate supplies and protection.
- Bottled water, toilet paper, food, sleeping bags, laptops, battery, powered radios, to name a few.
- Pack anti-diarrhea and pain relieving medication in your first aid supplies.



**RV's are always good to have in these areas after a storm like Katrina**

**Ensure that all outside resources are aware of your needs:**

- Keep rural water, RCAP, utility organizations abreast of how they can be best utilized in this situation.
- Many chemical feed pumps were destroyed or damaged after Katrina.
- Coordinate with the National Emergency Resource Registry and other resources for immediate use as needed.

**Locate Military installations. These facilities were some of the best locations to rebound after Katrina.**

- Most have medical detachments or hospitals with water.
- Laboratory capabilities are a plus. Some installations (Navy, Marines, & Army) also have preventive medicine field units that are capable of testing bacteriological samples. Locating them before the storm as potential emergency assistance for testing may turn out to be useful.

**The Storms Coming, Get Your System Ready!**

**Fill or top-off all water storage. This serves multiple purposes as:**

- It will assist in maintaining fully pressurized lines during the storm.
- For gravity fed system, it could make as much water as possible available to generators in the event of power outages.
- It will weigh down many elevated tanks and hydropneumatic tanks that may be affected by heavy winds and flooding damage.
- If pressure can be maintained, hydropneumatic tanks that are normally 1/3rd to 1/2 full of air could consider water logging the tanks to maximize weight and stability. (Keep in mind most will need to utilize compressors to re-establish tanks.)

**Sand-bag well houses and treatment sheds.**

- Sandbagging may help prevent flooding of the building provided the surge does not exceed the level of the bagging.



**Cover and protect circuitry and control panels:**

- Many panels, even though they are considered weatherproof, are not designed to handle torrential downpours or flooding. In Katrina, heavy winds often drove the rain at angles, or ripped panel doors off exposing inside wiring and switches.
- At a minimum, wrapping plastic around a panel may help to minimize water damage: duct taping the plastic may help seal out excess rain. (Be sure to remove wrapping after the storm so moisture does not settle inside the panels due to condensation.)

**Valve off areas more prone to high surge flooding just before the storm arrives. Many buildings and homes were destroyed which allowed for water loss until the valves could be cleared of debris to operate.**

**Stage vehicles and heavy equipment far away from the area affected by the storm. Some utilities lost all their equipment and vehicles. Moving them to higher ground or distant locations may protect them and make them available for immediate use after the storm.**

- Secure existing chlorine/disinfectant supplies and have access or plan for immediate re-supply. Many chlorine gas cylinders were washed or blown away. SAFETY NOTE: Buildings housing gas cylinders should be entered with caution. Emergency personnel properly equipped with SCBA and/or proper training should be first to enter.
- Mark gas cylinders for later tracking should they get washed or blown away in the storm. This will help emergency response teams during the clean-up in identifying whether cylinders are still missing.
- Chlorine containers or other chemical mix-tanks may become flooded by surge water or even rain after roof-wind damage. Re-supply will help to get the system operating sooner.
- For flooding from sewage or other unknown waters and debris materials, chlorine is normally the disinfectant of choice.

**Bacteriological and disinfectant residual monitoring:**

- Have proper chlorine monitoring equipment available to check point of entry and distribution.
- Have enough bacteriological sample collection containers for an adequate number of samples for BW lifting determinations. (i.e., a week's worth of sampling)