

Emergency Planning vs Contingency Planning

by Barney Whatley

Source Water Protection Specialist

All Public Water Supplies in the state of Nebraska are required to have an emergency plan which must be updated at least every three years. Emergency plans should consider all emergencies that might occur with a water system and the steps that are needed to correct the problem and get the system back up and providing safe drinking water to its customers. These plans look at electricity loss, storage loss, major main breaks and transmission line breaks, well problems and other emergencies that can occur and affect the system's ability to provide service to its customers. There are usually contact persons listed with their phone numbers, allowing operators to contact these people or companies to get help on the way.

In addition to the emergency plan, source water protection plans need to include a contingency plan, which should look at unusual and major issues that cannot be easily corrected with a phone call. The tornado that went through Pilger and the failure of the Spencer dam are two instances of emergencies that go beyond a standard emergency plan. In Pilger, the majority of the town was destroyed by the tornado, and it was not even easy to know what street, if any, you were standing on. The emergency plan was a great help in getting assets into the town to assist with recovery operations, but there were many things missing, just because they were not considered. Many local people brought in equipment to clear the rubble, but they were not aware that water shutoffs to services were under the rubble, and many of these were damaged during the rubbish removal. This required the curb stops to be dug up and the shutoffs repaired before the service lines could be shut off and water pressure restored.

When the Spencer dam was breached during the March flooding, the transmission line for Boyd County Rural Water District #2 was washed out where it crossed the Niobrara River. This left the system without a source of water, and it became a major undertaking to get the supply restored. Standard emergency plans look at an alternate supply in case of a loss of source, but it was soon evident that trucking water to the system to maintain pressure was not going to be feasible in the long run. Bottled water could be acquired for drinking purposes, but showering, laundry, and other domestic uses could not be handled with bottled water and required more than the system could reasonably truck in.

The solution to this problem was to locate irrigation wells, which were then tested to Title 179 standards and connected to the system to supply water. These wells were frequently tested for coliform bacteria, and notices were issued to use the water for non-drinking purposes only. This action did allow the system to reestablish and maintain pressure in the system, but it would have been quicker to do this if the irrigation wells had been tested in advance to determine their suitability for potable purposes. These are things we will be looking at in future contingency plans to help systems get back under pressure and supplying their customers quicker, even if it is only for non-drinking purposes. Contingency planning cannot necessarily prevent disasters, but it can make recovery quicker and possibly even less expensive.