Emergency Preparedness

How well did your system survive this winter?
The winter of 2016–2017 was an unusual one in Idaho. Record snowfall and flooding kept all of our Wastewater and Drinking Water Specialists busy repairing damages and trying to avoid further destruction. At this point, nobody wants to think about more snow, rain, floods, power outages, this summer’s fires, or other emergencies that could happen. However, taking steps now to prepare for future events might be the best way to reduce damage, cost, and stress for you and your staff. Are you prepared for any future emergencies? What can your wastewater or drinking water system do to be prepared for extreme events?

1. Join the IdWARN!
The Idaho Water and Wastewater Agency Response Network, or IdWARN, is a response network designed specifically to help utilities respond to emergency situations. IdWARN is free and voluntary. The members are your fellow wastewater and drinking water utilities. By becoming a member of IdWARN, you will be able to receive assistance from other utilities in the form of equipment or workers to help you respond to crisis situations that might threaten the operation of your systems. Visit www.idwarn.org or contact IRWA today to learn more about IdWARN and how to join!

2. Ensure your utility is included in your County or Tribe Emergency Response Plan.
Are you attending your LEPC meetings (Local Emergency Planning Committee)? Each county and tribe in Idaho has an LEPC. Under the Emergency Planning and Community Right-to-Know Act, LEPCs are charged with four primary responsibilities. 1) Write emergency plans; 2) establish procedures to warn and, if necessary, evacuate the public in case of an emergency; 3) provide citizens and local governments with information about hazardous chemicals and accidental releases of chemicals in their communities; 4) assist in public communication regarding emergencies.

Your utility should be sending a representative to the LEPC meetings in your county or tribe. By participating with your LEPC, you can make them aware of any challenges your wastewater or drinking water system may face in emergency preparedness and work with them to gain assistance. You will also want to be sure that your utility is considered during disasters. A lot of time public utilities fly under the radar. Your County Emergency Coordinators need to be sure they are addressing the needs of the utilities within their boundaries in the County or Tribe Emergency Plan. This may require you to bring it to their attention; do not just assume your system will be taken care of.

The County LEPCs are governed by the Idaho Office of Emergency Management (formerly the Bureau of Homeland Security). Each year the Idaho Office of Emergency Management (IOEM) applies for grant money to address emergencies. Grant money is dispersed to the counties, where it is put to use obtaining equipment and working to protect, prepare for, prevent, and respond to disasters. In order to be

Figures 1 and 2. The small community of East Hope suffered a major storm in May of 2008 that completely blocked their surface water intake. If your system was unable to distribute water to its customers, what would you do?
eligible for some of this grant money, your utility needs to participate in the County LEPC meetings! Contact your County or Tribe Emergency Manager to find out when the next meeting is.

3. Fill out and submit a damage assessment form.
Many counties and tribes had disaster declarations over this past winter. This means they could be receiving federal assistance to recover from the storms. In order for your utility to get a piece of the pie, you must inform your County or Tribe Emergency Manager of any damages and the associated cost of repair work. Contact your County Office of Emergency Management to obtain the hazard assessment forms.

4. Enroll yourself and your staff in ICS and NIMS training.
ICS stands for “Incident Command Structure.” ICS exists so that multiple parties can respond to emergencies in an organized, unified manner despite jurisdictional boundaries. If your utility is not familiar with ICS, it might find itself left out of the loophole during emergency response events, even those that affect the utility! How could that happen?

If County Emergency Response is activated, they will be following the ICS protocol. An Incident Commander will be appointed to take charge of the incident. Safety officers, public information officers, logistics teams, and more will all be appointed under the unified command structure. You need to know how this works so that you can participate in the response efforts under the command structure. Your fellow responders, most likely whom you will be working with during an emergency, will be following the ICS protocol. Therefore it is important for you and your staff to be familiar with it.

NIMS stands for “National Incident Management System.” It is similar to ICS but on a national level. ICS and NIMS training can be completed online, usually with no cost. There are a number of ICS courses. If you have never taken ICS training, you should start with the 100 and 200 courses and move up as you feel comfortable and have time. NIMS training starts with the 700 course (usually referred to as IS 700 if you are doing a Google search). FEMA offers these courses on their website. If you have questions on how to enroll in the training, ask your IRWA Circuit Rider.

5. Ensure your system is properly mapped.
Do you know where each shut-off valve is? How about manholes? Fire hydrants? Would you know how to find them under a few feet of snow? A few feet of water? What if a bad flood submerged landmarks, or a bad storm took out your street signs? If there is damage to telemetry equipment, as might happen during a wind storm, your SCADA system could go down. Having accurate and accessible maps of your wastewater and drinking water system will become crucial during certain emergencies. GIS will assist you in identifying points of failure in your system.

Of course, while the emergency is going on is not the time you want to realize that you’re missing the maps you need. Ensure that you have accurate and accessible maps for your drinking water and wastewater infrastructure before disaster strikes. Both paper and electronic copies are key. Rest assured, if you only have electronic maps, the next emergency you face will be when your power is out and you can’t turn on your computer. Redundancy is very important.

IRWA’s GIS mapping specialist, Tui Anderson, would be happy to come help develop maps for your system. Figure 3 shows an example of GIS maps with infrastructure components. Contact IRWA today to get started!*

6. Take an inventory of equipment and become friends with your neighbors.
What equipment do you have? What equipment could you use? Do you know where to find equipment that you are lacking? Do you have the tools you need to ensure your equipment is going to be functional when you need it? For example, generators can

Figure 3. Being able to quickly locate shut off valves quickly can save valuable time, damage, and money during an emergency. Does your system have maps?
be the difference between night and day during an emergency, but they require regular maintenance to be reliable. Having spare parts on hand, maintenance equipment to repair generators, backup fuel supplies, spare tires, and a regularly exercised maintenance schedule will prove useful to being able to use your generators when needed. What about fuel supplies? Developing relationships with local fuel suppliers, diesel mechanics, and electricians will also prove useful in a bind.

Taking an accurate inventory of supplies is a good idea. Establish what you need to acquire and set a budget for it. If something is unattainable for your system, as is often the case for small communities, then do some research on systems nearby that have what you need. Neighboring systems or large communities in your county, County Emergency Department, state agencies, local construction businesses or farming operations are all places to consider looking. Remember that you may be able to get grant money for emergency equipment from your County Emergency Department. IdWARN is also a good place to go for help as it allows you to have access to the resources of other wastewater and drinking water systems. Establish a good working relationship with some of your surrounding entities and have their number on hand in case of an emergency.

During the flooding that struck this past winter, several wastewater systems were looking at over-full lagoons. In some towns all the manholes were submerged, so massive amounts of water were pouring into the system. What could be done about this?

Some systems that land apply in the spring were able to obtain special permission from DEQ to set up the sprinklers early. In some instances, this involved coordinating with farmers to bring out equipment early. In other cases, wastewater had to be pumped and trucked to neighboring systems to take advantage of lagoons that weren’t as full. Either way, having working relationships with other groups was important in finding a solution. This is the idea behind the WARN system of emergency response. If you’re not a member, now is a great time to join. To reiterate, IdWARN is completely free of charge.

7. Create an emergency response plan, including a contact list, and exercise it.
Most likely your system has created an Emergency Response Plan (ERP) and Security Vulnerability Assessment (SVA) at some point in the past. While these documents provide a very thorough analysis of potential threats to your system and emergency protocol, there are two elements that must be stressed in order for them to be useful.

The first is that your ERPs must be tested. You should plan on running a table-top exercise or emergency walk-through at least once a year. By acting out a variety of scenarios you will identify elements that are missing from your ERP. Be sure to include both drinking water and wastewater staff, engineers, administrative staff, local emergency responders, and any decision-makers. One way to engage your staff in the training exercise is to have them design it. Let the participants come up with the scenario and guide the discussion. Another way to test out your ERP is to have an external source review it or join the exercise. A third party will be able to view your ERP with unbiased eyes and give suggestions for what might have been overlooked.

The second thing to be conscious of is that ERPs and SVAs are not necessarily helpful when you need to act fast. Having a document of emergency numbers that you can access quickly will serve to reduce damage and stress during an emergency. A key resource to include is where you can obtain potable water if your source becomes contaminated.

Figure 4. Many structures collapsed this winter due to heavier-than-normal snow loads. Shown here is an onion shed in Payette. Does your system have any buildings that could be at risk for collapse during heavy snows? What about your water tower or well house?
Here are some other numbers to include:
• State Communications (1-800-632-8000)
• Safe Drinking Water Hotline (1-800-426-4791)
• Idaho Office of Emergency Management (208-422-3040)
• National Response Center (1-800-424-8802)
• IdWARN emergency number (208-789-0117)
• Idaho DEQ State Office (208-373-0502)
• Regional Health Department
• Local and County Law Enforcement
• Local and County Fire Station
• Transportation Department
• Nearest Hospital/Health Clinic
• Ambulance Service
• Power Company
• Gas Company
• Regional DEQ contact
• County Emergency Response/Management
• County Commissioners
• Neighboring systems after-hours or emergency numbers

The main number you will want to have on hand is the number for Idaho Emergency Medical Services State Communications, or StateComm for short. StateComm is an emergency response network that operates 24 hours a day, 7 days a week, 365 day a year. It acts as a relay point for all emergencies within the state. StateComm provides emergency dispatch and communications for events such as hazardous material releases, public health emergencies, AMBER Alerts, natural disasters, and many other situations. They are the primary dispatch center for 16 emergency agencies located throughout the state. They also monitor some EMS radio frequencies. They are available any time by a phone call or by radio, and they can quickly mobilize assistance to your community by contacting other response groups. To become more familiar with StateComm, visit www.idahoems.org.

*GIS mapping is offered under the IRWA Support Services, LLC and is associated with a small cost.