



## Preventing and Thawing Frozen Water Services

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1. Determine the location of the frozen pipe. This can be done using touch by running your hand along accessible water pipes in the home and feeling for extremely cold spots. If a cold portion of pipe is encountered, thaw it gently, preferably using a hair dryer. DO NOT use a propane torch, as it could cause a rupture of the water line.
2. Check the temperature of water, if you suspect it is about to freeze the line. Do this at a point as close as possible to where water enters the home. If the temperature is close to freezing, run a substantial amount of water until the temperature increases. This could take some time. Showering and washing extra loads of laundry will put the extra water used to good use.
3. If you choose to leave the water in the home trickling, be careful! Leaving the water running at a trickle can help prevent frozen water service lines. Trickling water can sometimes lead to frozen sewer service lines. In the past, water and sewer lines were installed in close proximity to each other and often at the same depth. Trickling water in a sewer line can cool to the point of freezing if the sewer line is cold. This could lead to the sewer service freezing shut and causing a sewer backup.
4. If you chose to run the water at a trickle, it is advised to periodically turn the flow of water up to about a garden hose size stream for several minutes. The increased flow of water allows for a better exchange of heat between the water and water service line/ground and also allows the water to assist in heating the sewer system.
5. If the consumer having a freezing water issue is rural customer with a septic system, trickling water should be diverted away from the septic system. Septic systems have a limited capability to accept excess water in deep frost conditions. The trickling water could compromise the on-site septic system, leaving the customer with more problems and expense. If possible, run the trickling water outside with a hose to an acceptable area.
6. Electrically heating water lines, using a welder, only works on metallic lines. It will not work if there is any plastic or PVC piping in the service line. Care should be taken, if using a welder, as they have been known to start fires in adjacent structures. It has also been found the use of welders can increase the speed at which cast iron or ductile iron lines corrode.
7. If the water service line does become frozen, advise the customer to open one or two faucets. This will allow the ice to have room to expand without damaging any other piping.
8. There are companies throughout the state that have the ability to thaw frozen services with a re-circulating thawing unit. If there is no one that offers this service in your area and you choose to assist in thawing the line, contact the North Dakota Rural Water Systems Association and we can guide you through the processes of constructing a thawing unit and its operation.
9. A final consideration should be given to the capacity of the water system that is providing water service to your home or business. The constant trickling of water, by many customers, can sometimes exceed the available water in portions of a water system.

