Water problems within your home are never convenient and usually occur at the most inopportune times. Frozen waterlines are no exception. Freezing water expands in the pipe and can cause the pipe to rupture. This can potentially lead to indoor flooding. Protect yourself with a master shut-off valve.

In the event of emergency or even minor waterline repairs, it is extremely beneficial to know both the location of the master shut-off valve for your home and also how to operate it. Everyone in the home should know it’s location and how to operate it. It can save you time, potential property damage, and unnecessary calls to the Water Division.

Most homes have a master shut-off valve installed and new homes are required to have one. It is typically located where the waterline enters your home, most likely in the basement or crawlspace, prior to the water heater. If you have a finished basement and are unable to locate one, it may have been covered by a basement wall.

The master shut-off valve is typically either a gate valve or a ball valve. All homeowners should install master shut-off valves in their homes if one is not currently installed or if the existing valve is not accessible or operational. Check your master shut-off valve regularly to make sure it operates freely. Be sure to leave access to the valve if you are finishing your basement. You never know when it will come in handy and save you from costly property damage.

**WINTER IS APPROACHING**
Eastern Idaho winters can be absolutely frigid. As winter temperatures drop below freezing, frost begins to penetrate into the ground. Waterlines are generally buried between 5-6 feet deep, keeping them below the winter frost line. However, during extended periods of extreme cold, frost has been locally known to penetrate more than 7 feet deep into the ground. Frost penetrations this deep can pose serious problems for buried utilities, especially waterlines.

When frost depths reach buried waterlines, the waterline becomes surrounded in frozen earth, making it possible for water inside the lines to freeze. Smaller diameter lines are more likely to freeze than larger ones. This means that the waterline running from your home or business out to the street is more prone to freezing than the larger water mains in the street.

As water freezes, it expands in size. Freezing water inside of pipes can expand and stop water from flowing to your home or business, or worse yet, cause the waterline to split or rupture.

**PROTECT OUTDOOR WATERLINES**
The best way to protect the waterline that runs from your home or business to the street is to not let it freeze in the first place. Allowing a small amount of cold water to run in your home keeps water flowing through the waterline, which helps prevent the water from freezing. This means that the City is reliant upon you, as home and business owners, to prevent frozen waterlines. Only you have the ability to keep cold weather from freezing your waterline.

**FINDING WHERE IT’S FROZEN**
If it’s winter and you don’t have water to a faucet, you should first make sure that the supply line valves are open. If they are open and you suspect a frozen waterline, try other indoor faucets. If other faucets have water, then the frozen line will be inside. If there is no water to any faucet, check the master shut-off valve and make sure it’s open. If the master shut-off valve is open, your waterline is most likely frozen between the home or business and the street. Contact the Water Division.

**PROTECT INDOOR WATERLINES**
Freezing weather can also present a problem to indoor waterlines. Waterlines that follow exterior walls can be prone to freezing. Non-insulated waterlines in unheated areas such as basements, crawl spaces, and garages can freeze as well. Perhaps the most likely area for a waterline to freeze indoors is where it enters the building through the foundation or basement wall. This can potentially lead to indoor flooding if the frozen waterline bursts.

If you own or manage property that is either vacant, for rent, or for sale, don’t forget to winterize the buildings and sprinkler systems as well. Neglecting them can cost you unnecessary expenses. Included in this brochure are numerous ideas and hints to help home and business owners protect themselves from frozen waterlines. Please note that the contents of this brochure, if followed, **DO NOT** guarantee that waterlines will not freeze, but are merely intended to provide helpful information to home and business owners.

Tips On Preventing Frozen Waterlines and Restoring Water Service

Don’t Let Winter Catch You Off Guard

City of Idaho Falls Water Division
PO Box 50220, Idaho Falls, ID 83405
564 Hemmert Ave., Idaho Falls, ID 83401
Phone: 208-612-8471  Fax: 208-612-8385
Email: ifwater@idahofallsidaho.gov
**TIPS TO PREVENT FROZEN WATERLINES AND RESTORE SERVICE**

**#1: Protect Indoor Waterlines**  
Insulate indoor water lines in unheated areas, along exterior walls, in crawl spaces and garages. In itself this will not prevent a water line from freezing, but it will slow the process down allowing you to take proactive measures to prevent a frozen water line.

**#2: Protect Vacant Property**  
If you are selling or maintaining vacant buildings, be sure to leave some heat on during the winter to prevent frozen water lines. If heat is turned off, be sure to winterize all water lines and fixtures within the vacant building. Just because the water has been shut off doesn’t mean the water lines can’t freeze. Be sure to drain them as well.

**#3: Protect Sprinkler Lines**  
At the end of the irrigation season, winterize your sprinkler system. For the best protection, use an air compressor to blow water out of your system. Be sure to leave the valves of your pressure vacuum breaker (PVB) at 45° angles to the pipe to protect it from freezing. If you’re unsure how to winterize a sprinkler system, contact a professional landscaper to do it for you.

**#4: Protect Outdoor Hoses**  
Disconnect all hoses from hose bibbs on the exterior of your house. Hoses can trap water in the hose bibb causing them to freeze and break. Make sure all hose bibbs are completely drained. Cover them for additional protection. Drain and store all hoses.

**#5: Detecting Frozen Lines**  
If you discover either reduced or no water flow during the middle of winter, call the Water Division (612-8471) to make sure service isn’t temporarily disrupted. If your flow is reduced, allow your cold water to flow. This will help thaw a partially frozen line. If you have no flow to any indoor faucets, your water line **might** be frozen.

**#6: Check Status of Valves**  
Double-check your water valves inside the home to make sure they are completely open and one hasn’t been tampered with. Don’t forget valves near water heaters and water softeners. If all valves are open, your water line is most likely frozen.

**#7: Thawing Frozen Lines**  
Frozen lines usually occur where the water line enters the basement or crawlspace. If you try to thaw it yourself, do not use a torch. Applying too much heat too fast can cause the ice inside the pipe to fracture, much like ice cubes that crack in warm water. This could rupture the pipe and cause flooding. Rather, try using a hair dryer, space heater, or rags soaked in warm water to gradually warm the frozen pipe until a little flow of cold water has been restored at a faucet. Once flow is restored, allow the faucet to run until the frozen section is thawed and full flow is restored before shutting it off. If you are unsure about how to proceed, be sure to contact a licensed plumber for assistance.