

## WINTERIZING YOUR HOME PLUMBING AT BLUE RIDGE SHORES

The following are suggestions to help you winterize your home plumbing. They are for homes where the heat is not left on during the winter months. There is no guarantee that by following these suggestions you will not have a frozen/burst pipe or appliance in your system. These suggestions, however, will keep you from having an unexpectedly large water bill due to a pipe freezing, bursting and running unrestricted amounts of water through your water meter. For maximum effectiveness, all suggestions in this section are to be performed in the order as stated. The times stated to "winterize" and "dewinterize" your home are for this area and may not apply to other areas where you may own property.

Time to winterize - from Nov. 15 to Dec.1 (Thanksgiving).

Time to dewinterize - from March 25 to April 15 (Easter).

Turn the power off to your hot water heater or "HWH":

Electric HWH - Turn off circuit breaker or remove fuses.

Gas HWH - Turn off thermostat and set "on-pilot-off" control to "off".

Turn water off at water meter located near the street and your property line. Note: May be done with an 8" crescent wrench or a water meter key available at the BRPOA/RU office for purchase or on loan. The valve head is rectangular and the long part of the rectangle will be across the pipe when off, i.e., ¼ turn. Also see meter instruction sheet available at the BRPOA/RU office or on the RU website.

Open all faucets including outside faucets and leave them open. Note: water will drain from them for some time. Close main house water shut off valve in house. This valve is located near the area where your underground water service from the meter enters the house.

Protect HWH: Attach a garden hose to the drain valve of the HWH located near the bottom of the tank. Open valve (counter clockwise) and drain all water from the tank. This is a slow process and can take an hour or more. When the HWH is drained, remove the garden hose and turn off the drain valve. Note: remember, water "won't run uphill", the drain hose must be on a "downhill" grade the entire length of the hose.

Protect Outside Faucets: Open inside shutoff valves to outside faucets. Remove all hoses from outside faucets. Open outside faucets and leave open until spring. If your outside faucet is protected by a Back Flow Prevention Device or "BFPF", it must be deactivated so that water can drain from the pipe and faucet. Reactivate the BFPD in the spring and check for leaks.

**Protect Washing Machine:** Disconnect hot and cold water hoses from washing machine and be sure washing machine shutoff valves are open. Catch trapped water in hoses in a small bucket or pan. Leave hoses disconnected until spring. Lower washing machine drain hose to floor over same bucket/pan to drain water from washing machine pump. Raise drain hose as high as possible and pour one cup of permanent antifreeze into drain hose. Continue to hold drain hose high to allow antifreeze to run into washing machine pump (about one minute). Replace drain hose to its original position.

**Protect Dishwasher:** Remove lower front panel and kick plate from dishwasher. Disconnect drain hose from dishwasher (near motor) and catch water in a shallow pan or pie pan. Disconnect water line from dishwasher and catch trapped water in the same pan. Reconnect both drain and water lines. Leave bottom panels open so that you can check for leaks in the spring and then reinstall both bottom panels.

**Protect Ice maker:** Disconnect water line at icemaker shutoff valve. Disconnect water line from icemaker at back of refrigerator. Place a plastic straw over one end of the water line and blow air through it until only air comes out the other end. Reconnect both ends of water line. Check for leaks in the spring.

**Protect Furnace Humidifier:** Disconnect water line at the humidifier shutoff valve. Disconnect water line at the humidifier. Place a plastic straw over one end of the water line and blow air through it until only air comes out the other end. Reconnect both ends of water line. Check for leaks in the spring.

**Protect Instant Hot Water at Kitchen Sink:** Unplug instant hot or turn off circuit breaker. Disconnect water line from instant hot. Disconnect instant hot water line at shutoff valve. Place a plastic straw over one end of the water line and blow air through it until only air comes out the other end. Since an instant hot can hold up to one gallon of water, it is necessary to remove it from the sink and turn it upside down to drain. Replace instant hot in sink and reconnect both ends of water line. Check for leaks in the spring.

**Protect Kitchen Faucet:** Some kitchen faucets have a spray hose attachment and some have a spout that can be pulled out and used as a spray attachment; both are protected the same way: remove the spray head and retaining collar from the hose. Push the hose through to the under sink area and catch the water trapped in the hose in a bucket. Push the hose back through to the top side of sink and reinstall retaining collar and spray head. Check for leaks in the spring.

**Protect Hand Held Shower Head:** Remove hand held showerhead from bracket. Extend head straight down towards bottom of tub/shower. Activate showerhead as you would when using it. Water trapped in hose will run out into tub/shower drain. Deactivate head and return to holder. Check for leaks in the spring.

Protect Toilets: Flush toilet and hold handle down for 30 seconds after flush to help empty tank. Sponge out all remaining water in tank. Dip or sponge out water in toilet bowl until 2-1/2 to 3" remain in bowl. This will prevent sewer gas from escaping into your house. This gas is not harmful; it just smells bad. Pour one cup of permanent antifreeze into the toilet bowl and stir it around briefly. Pour one cup of permanent antifreeze down the over flow/refill tube in the tank. This tube is about 3/4 inch in diameter and extends from the bottom of the tank to just above the tank water level. You should see some antifreeze run out under the rim of the toilet bowl.

Protect All Drains: Laundry tub, laundry standpipe, bathroom sink, kitchen sink, bathtub, shower and floor drains – pour one cup of permanent antifreeze into each of these drains.

Visual Inspection: Should a visual inspection of your water piping reveal sagging or drooping lines, it is advisable to blow high pressure air through the line to eliminate any standing water still trapped in the water lines. If the piping is covered or not visible it is recommended that high-pressure air be blown through them as a precautionary measure. The introduction of high-pressure air into the water piping system is a job for a professional. Homes with basements should seek professional help to eliminate trapped water in the lines going to individual fixtures in the basement.

Protect Hot Water or Steam Heat: Should you have hot water or steam heat, it is recommended that you contact a Virginia registered "Class A" plumbing and heating contractor to prepare your system for winter shutdown.

## DEWINTERIZING YOUR HOME PLUMBING AT BLUE RIDGE SHORES

Reconnect all piping left disconnected for the winter. Close all faucets inside and outside. Open meter face cover. Looking under the face cover of the meter you will see one of two types of meters. (1) The "old style meter". This meter has a series of numbers across the upper portion of the meter. At the lower portion of the meter face you will see two red dials about the size of a nickel. Toward the center of the meter face you will see a third dial with no hands, just moving dots; this is the dial to watch. (2) The "new style meter" has a large red hand much like the second hand on a clock; this is the hand to watch.

Turn water on at meter and observe the red hand or dots on the meter dial. The hand or dots should not move after one minute. If the red hand or dots continue to move, **turn water off as you have an underground leak.** When the meter stops moving, turn water on at house water shutoff valve. You will hear water running, i.e., toilets are

filling and the HWH is filling. Go through the house and look for any major leaks. If none are found, go to the faucet nearest the HWH, usually the laundry tub. Open the hot side of the faucet only. This will allow air trapped at the top of the HWH to escape. Keep faucet open until all air has escaped and only water is coming out; this usually takes 2 to 5 minutes. Close the hot side and open the cold side until all air is purged from the line and only water is running. Repeat this process at each faucet. Open outside faucets and repeat process to purge air. Go back to the meter and lay a match over the red hand or observe the dots for 10 minutes. If the red hand does not move from under the match you have placed as a marker or the dots do not move, there are no major leaks. Before turning HWH power source on check faucet nearest HWH again to be sure all air is removed from HWH tank. **Air trapped in tank can burn elements out in as little as 15 seconds.** Turn HWH power source on. It takes approximately one hour for the tank to reheat. Always check all disconnected pipes for any signs of moisture about one hour after water is turned on.

#### HOW TO WINTERIZE YOUR HOUSE IF YOU LEAVE THE HEAT ON OR ARE A FULL TIME RESIDENT

Time to winterize - from Nov. 15 to Dec. 1 (Thanksgiving).

Time to dewinterize - from March 25 to April 15 (Easter).

Remove all outside hoses from your outside spigots. Turn off the water supply to the outside faucets at their individual shutoff valves inside the house (or crawl space). Open all outside spigots and leave open. Water will drain from the outside spigot for as much as one hour. If water continues to come out of outside spigot for longer than one day, you need professional help. If you have a ventilated crawl space, close the vents around the outside of the crawl space. If they are inoperable, cut pieces of heavy cardboard to fit the vent openings and secure to the vent area. Be sure the access way to the crawl space is closed and tightly sealed. Note: It is important that there be little or no air movement through the crawl space during the winter. The vents must be reopened in early spring to prevent condensation and mildew/mold. During severe cold weather when the high temperature doesn't go above 32 degrees F., leave the doors to sink cabinets open to allow some heat to get to those pipes that are located at outside walls.

To dewinterize: Reopen crawl space vents. Close all outside faucets. Open fully all inside shutoff valves for outside faucets. Note: you will hear water running briefly as the pipe fills, 10 to 30 seconds. If water-running noise doesn't stop, turn shutoff valve off and look for leaks. When water noise has stopped, open outside faucets and purge all the air from them.

## HOW TO CHECK YOUR HOME FOR LEAKS

**Underground Leak:** Turn the main house water shutoff valve off (clockwise is off). Go to street and open meter box lid – then open meter lid. Looking under the face cover of the meter you will see one of two types of meters. (1) The “old style meter”. This meter has a series of numbers across the upper portion of the meter. At the lower portion of the meter face you will see two red dials about the size of a nickel. Toward the center of the meter face you will see a third dial with no hands, just moving dots; this is the dial to watch. Or (2) The “new style meter”. This meter has a large red hand much like the second hand on a clock; this is the hand to watch. You will see a red hand or dots on the dial. They should not be moving. Place a marker such as a matchstick directly over the red hand and wait 10 minutes or closely observe the dots for 10 minutes. If the hand is still under the marker you have placed or the dots have not moved, your underground water piping is not leaking. Turn the main house water shutoff valve on (counter clockwise). Note: Be sure the main house water shutoff valve is fully open as a partially opened valve can cause a severe loss of volume in your system.

**In-house Leak:** Check to see that all faucets including outside faucets are closed and that there are no dripping faucets. With the meter and house shutoff valves in the “on” position, repeat the meter reading process as you would for underground leaks. Note: toilets can run water that you can’t see or hear. Remove the tank lid and observe the height of the water. It should always be below the overflow/refill tube. This tube is usually located in the center of the tank. It is approximately  $\frac{3}{4}$ ” in diameter and runs from the bottom of the tank to just above the normal water level of the tank. Mark the water level of the tank with a pencil on the inside of the tank. Wait 10 minutes. The water level should not move from your mark. If it does, you have a leak in the toilet.