The City of Bremerton is pleased to serve you. For more information, please visit www.BremertonWA.gov or call the City of Bremerton Customer Response Line (360) 473-5920, the Kitsap Public Health District (360) 728-2235, Washington State Department of Health (360) 236-3030, or the EPA Safe Drinking Water Hotline 1-800-426-4791.

Fact Sheet: Water Pressure

"What do I do if I think my water pressure is too high (or too low)?"

The water pressure within the City of Bremerton's distribution system can range from about 30 pounds per square inch (psi) to over 100 psi at the customer's water meter. Water pressure at your location depends on the elevation of your property in relation to the elevation of the reservoir that provides water service for your area. Water pressure will change up or down at 0.433 psi per foot of elevation change. The higher your property is, the lower the pressure. Peak water usage and routine water system operations can cause water pressure in the distribution system to fluctuate but these changes should not adversely affect your water service. Other variables that may affect water pressure include plumbing restrictions, point of use treatment devices (cartridge filters, softeners, etc.) and seasonal water demands.

The City cannot adjust the water pressure for specific properties; however, if you have concerns with high pressure or low pressure, there are some steps you can take that may help resolve the issue.

1. Find out what the water pressure is at your home. You can call the Bremerton Customer Response Line at (360) 473-5920 and request a technician to check the water pressure at your location. You can also purchase your own pressure gauge at a home improvement store that can be attached to your outside faucet or hose bib.
2. If your pressure is more than 80 psi, you may want to consider having a pressure reducing valve professionally installed for your property. See section on "High Water Pressure" for additional information.
3. If your pressure is less than 30 psi, please refer to the section below on "Low Water Pressure" to troubleshoot why your pressure is low.

High Water Pressure

You may need a pressure reducing valve (PRV) if your water pressure is more than 80 psi. A PRV will help decrease the water pressure. In accordance with Uniform Plumbing Codes, property owners are responsible for installing and maintaining their own individual PRV devices whenever static water pressure exceeds 80 psi.

Most plumbing professionals recommend a PRV setting be between 35 and 60 psi. If allowed by jurisdictions, PRV settings may be set to achieve psi levels between 55 and 70 in order for all fixtures to have adequate operational pressure. Sustained pressure that exceeds 80 psi may damage on-site plumbing systems and fixtures such as toilets, dishwashers and washing machines. PRVs are to be installed on the customer's side of the water meter outside the water meter box or in the main supply line before the first fixture branch.

If your home water system does not have a PRV, you can purchase them from a licensed plumber, who can install the PRV. If a PRV already exists, it may just need an adjustment to decrease the pressure at the property. If your existing PRV is malfunctioning (pressure drop or spike), it is the property owners responsibility to repair or replace. The City recommends that you consult a licensed plumber for installation, adjustments, and service to your PRV and that the City of Bremerton Design/Construction Standards be followed to ensure proper PRV installation. Call (360) 473-5920 for a copy of the PRV section of the City's standards.

Low Water Pressure

Decreased water pressure usually denotes a plumbing problem. If you're experiencing a decrease in water pressure at your property, the issue is typically within your plumbing system. The following list may help you identify the cause of the low pressure at your property.

- Pressure Reducing Valve – If there is low pressure at every fixture in the home and you have a PRV installed on your home's supply line, you may want to verify that your PRV is set appropriately or that it is still functioning as intended. A PRV that has failed will greatly reduce water pressure and should be repaired or replaced. Most PRVs are bell-shaped devices that can be found installed on the main supply line between your home and water meter. PRVs should be adjusted by a licensed plumber.

- Clogged Aerators - If the low pressure is not affecting every faucet, the problem may just be a clogged or blocked faucet aerator. Check the aerator screens for rust, debris, scale or other particles that may be restricting flow. Simply clean or replace the aerator altogether. If you have white particles in your aerator, you may have a hot water heater dip tube failure – please see the separate fact sheet on this issue.

- Low Pressure in hot water only - If the low pressure is only affecting the hot water at your property, there could be a problem with your water heater. Check the shut-off valve near the water heater and make sure it is fully open. You may need to consult a licensed plumber to evaluate the condition of your water heater and determine if it is affecting your water pressure.

- On-site water shut off valves – Most homes have on site shut off valves, located near fixtures such as water heaters or water filters/softeners. A main shut off valve may be located in the garage, crawl space, outside the foundation, a closet or even in a cabinet. This valve, which may be utilized to make plumbing repairs, allows you to shut off water flow to the house. Make certain that this valve is operational and is in the full open position; a partially closed valve can restrict flow and effect water pressure.

- On-site Leak - Low pressure also can be caused by a water leak somewhere on the property. Please see the brochure, "Homeowner's Guide to Leak Detection" for more information.

- Water Softeners - Bremerton's water is naturally on the soft side so most customers do not need a water softener. If you do have a water softener, you may want to evaluate its necessity. If you have a water softener and are experiencing a sudden lowering of your home's water pressure, you may want to consider having a professional service technician evaluate your water softener's condition. One option is to temporarily put the softener on by-pass and see if pressure increases. If it does, the low pressure is probably caused by the water softener and it may need to be serviced, replaced, or removed.

- Other considerations – Older homes that were originally plumbed with galvanized (steel) water lines may experience a low water pressure or flow issue due to rust build up on the inside of the pipes. This rust can flake off and clog fixtures. Faucet aerators, shower heads, fixture cartridges, supply lines and angle stops (fixture shut off valves) can all be affected by this flaking rust. Steel, copper or plastic water lines that have been kinked, crimped or pinched can reduce pressure as well. If you have low pressure or low flow issues possibly due to any of these sources, you should consult with a licensed plumber.

Private Pressure Adjustment - Bremerton Municipal Code 15.02.070:

Where water supply is not available to a premises because of low pressure during periods of peak demands for water, or where property is situated at such an elevation that it cannot be assured of adequate pressure, the owner may, at his expense, install an auxiliary storage tank or pump to furnish auxiliary supply pressure. The auxiliary system shall be approved by the Department. The Department approval shall be based on the protection of the safety and integrity of the utilities system and not on the adequacy of the private systems design for its intended use. The auxiliary system shall remain the property of the property owner, who will be solely responsible for its maintenance and operation.

In the event local conditions result in high pressure (exceeding eighty (80) psi), a pressure reducing valve may be required and installed at the expense of the owner. The pressure reducing valve shall remain the property of the property owner who will be solely responsible for its maintenance and operation. (Ord. 4454 §1 (in part), 1994; Ord. 4309 §2 (in part), 1991)