For more information

on the topics listed below, visit our Web site at

www.nwwater.com

- Lateral Maintenance Program
- Where is my water meter?
- What can I do to conserve water?
- What is Automatic Meter Reading (AMR) and how does it work?
- Understanding your bill
- What is backflow?
- Scheduling a tour
- Rate information
- Scholarship program
- Kid Zone
- What is my water hardness?

NWWA

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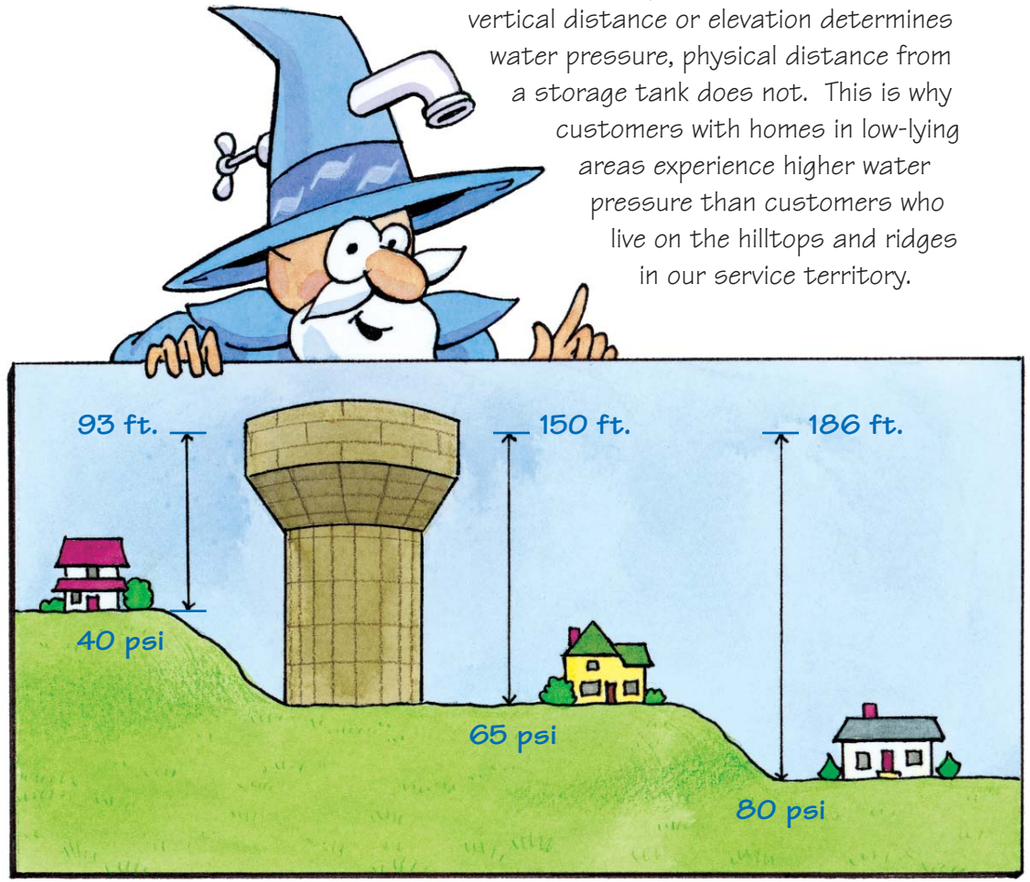
Gravity drives your water system's pressure

The North Wales Water Authority's distribution system is a gravity system. This means that the Authority pumps water from individual sources into the NWWA water tower which maintains an adequate level of pressure throughout our water distribution system. The water pressure experienced at any home within our system is solely determined by the elevation of that home relative to the elevation of our water tower.

Since NWWA relies on the force of gravity to deliver water to our customers, water pressure increases or decreases depending on how far a home is below the level of the water in the storage tank that serves that home. The further a home is below the water level in the tank, the higher the water pressure will be in that home. It is important to remember that vertical distance or elevation determines water pressure, physical distance from a storage tank does not. This is why customers with homes in low-lying areas experience higher water pressure than customers who live on the hilltops and ridges in our service territory.



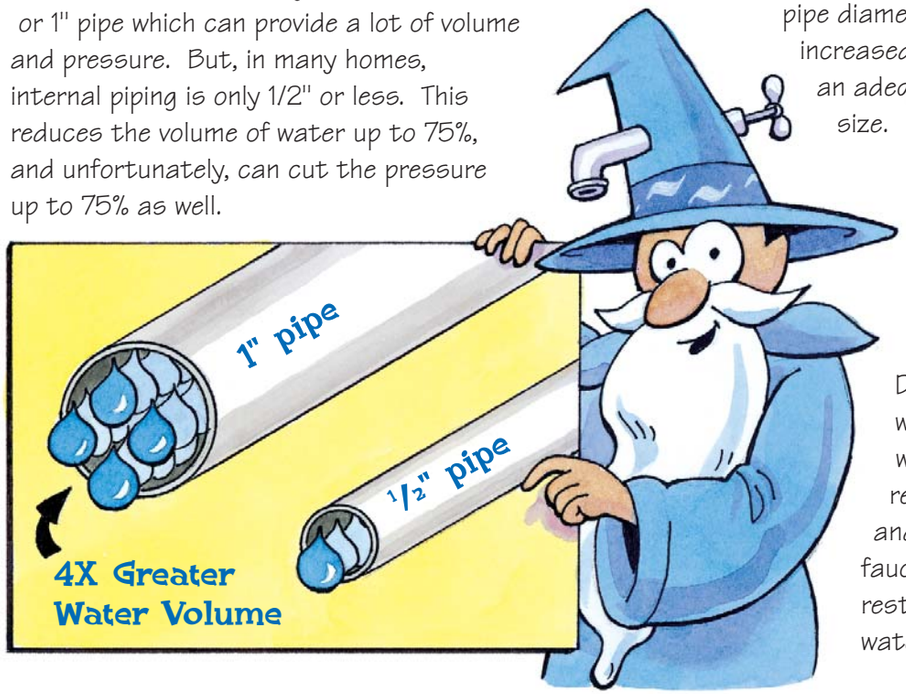
NWWA Guide to Water Pressure Solutions

Low volume water problems

Most low-pressure problems are created in the home. In such cases, the home has adequate water service pressure but pressure at fixtures drops off dramatically when another fixture is turned on. This situation is most commonly encountered when someone flushes a toilet when another person is in the shower. Usually the problem is that the water volume is lowered or restricted therefore reducing the amount of water that comes out of the fixture. Here are some common causes of low water volume. You may have a combination of these problems.

1. Internal plumbing pipes are too small

NWWA water arrives at your home in a 3/4" or 1" pipe which can provide a lot of volume and pressure. But, in many homes, internal piping is only 1/2" or less. This reduces the volume of water up to 75%, and unfortunately, can cut the pressure up to 75% as well.



Long runs of smaller piping reduce the volume of water that can pass through piping, regardless of supply pressure. This is the most common cause of reduced pressure we see in homes in our area.

2. Small pipes and long way to go

In addition to smaller pipes (see #1), the problem is worse when water has to go up more floors or travel long distances. This often happens when an additional bathroom and fixtures are added to an older home, but the smaller pipe size is not upgraded. If you're planning to remodel, be sure to have the water pipe diameter increased to an adequate size.

3. Devices that can effect the volume

Devices such as water softeners, water filters, flow restricting fixtures and decorative faucets can further restrict the volume of water flow in a home.

4. Pipe "arteries" are getting clogged

Rust and minerals can build up in older, galvanized plumbing and restrict the flow of water.

5. High on a hill

If your home is at a higher elevation, your water pressure may be below average. If it is below 40 pounds per square inch, a plumber can offer tips for increasing the volume of water to your fixtures.

What you can do

You may have one or a combination of problems. Our best advice is to talk to a reputable plumber. Use this brochure as a starting point and discuss each scenario. Usually your plumber can recommend solutions that can enhance your water volume.

Here's a glossary of terms that may help:

Water pressure: the force of water pushing on a unit area, usually measured in pounds per square inch (psi).

Static water pressure: water pressure, measured in psi, at the service line when there isn't any water running.

Residual water pressure: water pressure at the service line when faucets are running.

Water volume: the amount of water that a pipe can hold. A 1/4" pipe can only deliver a certain amount of water per minute regardless of water pressure.

Down in the valley

Believe it our not, some people have too much pressure. If your home is in a low lying area, water pressure may be higher than average. And if it's higher than 70 psi, you should have a plumber install a pressure-reducing valve.