



Water distribution systems are divided into **Water Pressure Zones (WPZ)**

Water pressure zones include the following:

WATER MAIN – Supplies water to the service area from a nearby water treatment plant

BOOSTER PUMP STATION – Regulates and stabilizes water pressure through the system (accounting for changes in elevation to ensure adequate and consistent pressure)

ELEVATED WATER STORAGE TANK – Provides backup water storage to support a continual supply at all times

WATER SERVICE LINES – Connect water mains to homes and businesses

VALVES – Enable isolation of portions of the pressure zone and continuation of partial service during water main breaks

All water service system components in the water pressure zone operate together as an efficient system to ensure adequate, consistent and safe water pressure levels are maintained, all water demand is met, and that wear and tear on the system is reduced.

How it Works

- 1 Water main and booster pump station fill Elevated Water Storage Tanks during low-demand hours
- 2 During peak-demand hours, maximum demand may exceed supply of the pump station
- 3 Elevated Water Storage Tanks supply stored water and make up difference to meet demand

Without proper system infrastructure in a water pressure zone:

- Areas of higher elevations could receive insufficient water pressure
- Peak demands may cause low water pressure and insufficient firefighting capacity
- The end user may experience variable water pressures or even water quality issues

