

# WHERE DOES YOUR WATER COME FROM?

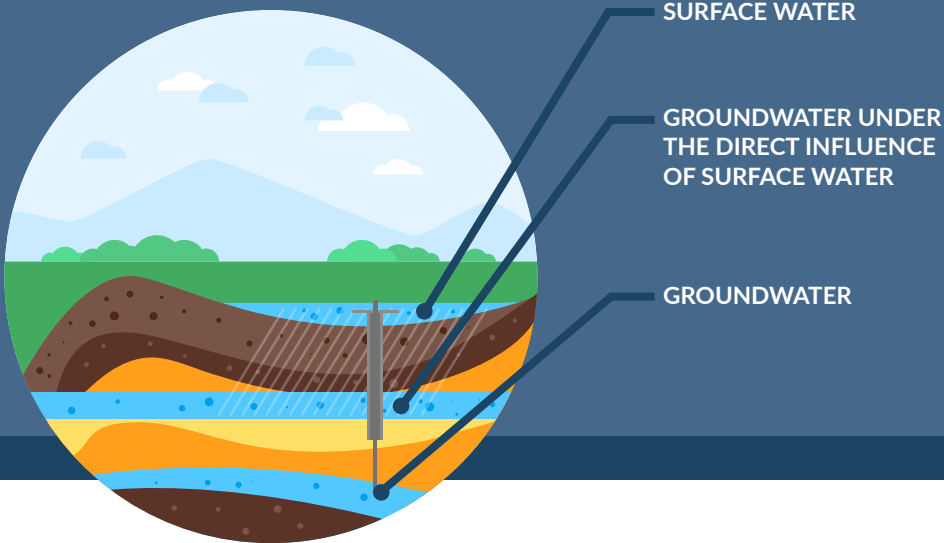
Water absorbs rust, iron, odours, dust and decaying matter just to mention a few! You can live with these minerals and the cost and headaches that go along with them or enjoy the benefits of a Great Lakes Water Solutions custom built water treatment system. After all, water is something you and your family use everyday and GLWS Signature Series Problem Water Treatment Systems are the answer to your unique concerns.

## WATER SOURCES

Water is generally classified into two groups: surface water and groundwater.

Surface water is just what the name implies; it is water found in a river, lake or other surface cavity. Surface water is exposed to many different contaminants, such as animal waste, pesticides, insecticides, industrial waste, algae and other organic materials. Even surface water found in the most pristine mountain streams can be contaminated by wild animal waste, dead animals upstream or other decay.

Groundwater is water contained in or by a subsurface layer of soil or rock and must be pumped out by drilling or digging a well. There are many sources recharging the supply of groundwater, including rain that soaks into the ground, rivers that disappear underground and melting snow. Because of the many sources of recharge, groundwater may contain any or all the contaminants found in surface water as well as the dissolved minerals it picks up underground.



## YOUR FAMILY DESERVES GREAT SAFE WATER

## INTRODUCING THE SIGNATURE SERIES PROBLEM WATER TREATMENT SYSTEM



# BROWN WATER OR STAINING

Water is a natural solvent, so as it travels through the ground it dissolves the minerals with which it comes in contact. Iron is the fourth most abundant element in the earth's crust which means it is present in many private water sources in Ontario. Iron typically appears in well water in two common forms.

- Ferric Iron “Red-Water Iron”: That lovely orangey-red water is Ferric Iron. Ferric Iron is clear well water that has been exposed to oxygen and oxidized to form a visible rust, giving the water a reddish color.
- Ferrous Iron “Clear-Water Iron”: This form of iron cannot be seen in the water because it is soluble or can be dissolved in water. Ferrous Iron often comes from deeper wells or water sources.

Great Lakes Water Solutions specializes in custom building water treatment systems for each individual client. We have a wide range of medias that allow us to customize our systems for your unique needs. We take into consideration required flowrates, characteristics of your well, the type and amount of minerals present in your water and much more. We have over 30 years experience with problem water and are recognized experts in this field. Our team has the perfect solution for your needs and as always, we make water GREAT!

# GLWS CUSTOM BUILDS

The Signature Series electronic control valve meters water consumption and automatically initiates the regeneration cycle only when needed. The “brains” of the Signature Series adjust to your lifestyle and changing water usage, minimizing system salt and water consumption, while monitoring and recording system performance, including:

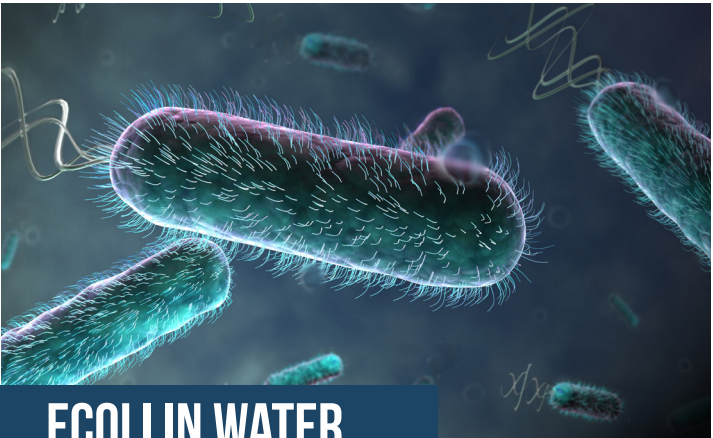
- LCD display with multi-language programming
- Programmable flow units (Gallon, Litre, m3)
- Programmable cycle steps
- Automatic regeneration based on water usage
- Water usage history data (1 day, 7 days, 8 weeks)



IRON STAINING

# ULTRAVIOLET LIGHT

Ultraviolet light (UV) technology has proved beneficial for many years and is continuously rising in popularity for water treatment. Ensuring your drinking water is free of any harmful bacteria or viruses is crucial to avoid potentially critical health threats. There are several ways to treat contaminated water, but the most common are ultraviolet and chlorination. Both require micro filtration to improve inactivation of microorganisms and remove particulates, including parasites. Chemical free UV is the simplest to manage and maintain and with routine service, will give you peace of mind for years to come. GLWS recommends that you have a UV system installed to protect you and your family and we take great satisfaction in providing you with the best solution for your needs. Whether you're in a residential, commercial, industrial or regulatory setting we have the appropriate system for you.



ECOLI IN WATER

# WATERBORNE BACTERIA, VIRUSES & YOUR HEALTH

There are various types of bacteria and viruses categorized as pathogens. Pathogens are disease-causing organisms that can be found in untreated or inadequately treated water from your well. Coliforms and E. coli are two of the common waterborne bacteria that could be in your water.

- Coliforms are bacteria naturally present in the environment and considered indicators that other possibly harmful bacteria may be present.
- E. coli and fecal coliform are bacteria whose presence may indicate water contaminated by human or animal waste, causing short-term health effects including cramps, nausea, diarrhea, headaches and more. The elderly, very young and those with weakened immune systems are especially susceptible and at much greater risk.

