

# Water Sustainability

ON YOUR PROPERTY AND IN YOUR COMMUNITY

Groundwater is a community resource - conserve whenever possible: caring for your well protects water for all

There are over 2500 groundwater wells on Salt Spring

Keep trees and soil, wetlands and riparian areas intact to act like a sponge during drought

Estimate your needs - BC water calculator online http://bcwatercalculator.ca/landscape/irrigation

What to do when groundwater is inadequate:

- Harvest rainwater and treat water for non-potable or potable use: <a href="https://tinyurl.com/y5zezapy">https://tinyurl.com/y5zezapy</a>
- Supplement outdoor and/or indoor non-potable uses sourced from rain, groundwater and/or surface water sources\* with paid drinking water delivery

#### PRO TIP:

\*Diversion, storage and use of water from naturally-occurring lakes, creeks, springs and ponds requires a licence in most cases.



# KNOW YOUR WELL Groundwater







New islander? New wellowner?

Introducing you to your water supply





# **TEST YOUR WELL'S GROUNDWATER**

Collect sample following laboratory requirements

# **Bacteriological** – twice annually\* (dry season)

- Total coliforms (0 CFU/100ml)
- Fecal coliforms (0 CFU/100ml) Test wet and dry season

# Geochemical - Every 2 years

- If parameters exceed Canadian Drinking Water Guidelines\*, water treatment may be required.
- Check levels of Arsenic and Manganese to ensure they are below limits for health reasons
- Iron levels may also be measured for aesthetic concerns

Test for conductivity (salinity) if well is 500 m from shoreline:

- See Best Practices for Prevention of Saltwater Intrusion https://tinyurl.com/m4kwuaa7
- Analyze groundwater for chloride (<150 mg/L) and</li> conductivity (<1000 µS/cm)
- Groundwater in the neighbourhood may be impacted by saltwater intrusion

#### Also test when:

- sudden changes taste, colour, appearance
- flooding

### **FAO**

#### Do I require a licence for my groundwater source?

No, if: Well is considered a domestic water supply Yes, if:

- √ livestock, irrigation of an area >1000m²
- ✓ short term rental cottage, business or commercial use

About licensing: https://tinyurl.com/mzjhn45f

#### Do I need to register my groundwater well?

Registering your domestic well will help to acknowledge your rights and protect your water use

It has no cost, and is distinct from licensing. Learn more at the link above.

Check GWELLS https://apps.nrs.gov.bc.ca/gwells/to see if your well is registered. If it is not, submit a registration form here: https://tinyurl.com/gwells-form

#### When do I need to disinfect my well?

After drilling, altering, developing or rehabilitation https://tinyurl.com/2f7r5xkj

## PROTECT WATER QUALITY

This applies to shallow groundwater wells and drilled wells.

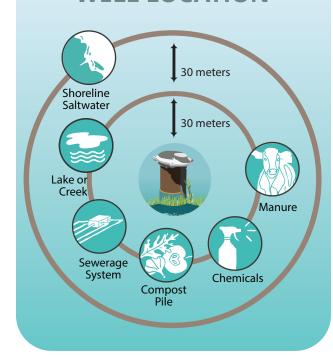
For both new and existing wellowners: **Ensure:** 

- ☐ Well cap is water-tight, vermin- proof
- ☐ Ground slopes away from well, not in a pit

#### For new wellowners:

- ☐ Situate wells a minimum of 30 m upgradient from potential sources of contamination, such as septic field
- ☐ 120 m from cemetary, 300 m from landfill
- ☐ If covered, provide vented pumphouse
- ☐ Well is accessible (for maintenance)

# WELL LOCATION



\*see page 42 2017 Groundwater Protection Handbook https://tinyurl.com/2kbdkbee

# WATER SUSTAINABILITY

Groundwater is a community resource - all surface and groundwater in the Gulf Islands is sourced from rainfall - conserve whenever possible.

Groundwater protection is essential to ensure safe yield during dry spells.

Use non-potable sources for outdoor needs.

More information is available at:

www.ssiwpa.org/groundwaterresources

BC Groundwater Protection Handbook: https://tinyurl.com/43b5jpxc

www.gov.bc.ca/water

If you are a current wellowner or intending to drill a groundwater well, this pamphlet points to some key considerations.

Provincial water information: www.gov.bc.ca/water

Water licensing www.frontcounterbc.gov.bc.ca

Before drilling, refer to "Before you Drill" https://tinyurl.com/water-wells-brochure

Provincial driller and pump installer registry https://apps.nrs.gov.bc.ca/gwells/

BC Groundwater Association Member/Contractor Directory https://www.bcgwa.org/type/drilling-contractor/

Thank you Salt Spring Island Watershed Protection Alliance Steering Committee and SSIWPA Technical Working Group

