

150 different water systems on island

Township 29 Water Association

2005 Water Quality Report

Township 29 Water Association presents herein our annual Water Quality Report (known as a "Consumer Confidence Report"), as required by the Federal Safe Drinking Water Act (SDWA). Township 29 Water Association is committed to providing you with water that meets or exceeds all state and federal drinking water standards. This report sets out where our water comes from, what the current year tests show about it, and other information that you may wish to know about drinking water.

System inventory
✓ age of pipes - estimate
life expectancy

WATER SOURCE

Our system pumps groundwater from the Island County aquifer, and transmits the water to the pump house. Our water is not treated. If you experience any extended deterioration in water quality please call King Water and they will flush the lines.

King Water Company performs water system management and operations, is responsible for all water testing and ensures compliance with all federal, state and county standards. King Water is a state certified Satellite Management Agency. For more information about this report, or for any questions you may have about your drinking water, please contact Clive Defty at King Water (telephone (888) 241 2503 or (360) 678 5336).

Substances expected to be in Drinking Water

To ensure that tap water meets acceptable drinking standards, the US EPA prescribes regulations limiting the amount of certain contaminants that may be in drinking water. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some of these contaminants. However, their presence does not necessarily mean that the water poses a health risk. Such substances may include:

Microbial contaminants, such as bacteria and viruses, which may come from sewage treatment plants, septic systems agricultural livestock or wildlife. These are tested for monthly.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, mining or farming. These are tested for based on a schedule prescribed by the state Department of Health (DOH); they include nitrates, which are tested for annually.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, storm water runoff and residential uses. These are tested for based on a schedule prescribed by the DOH.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes, gas stations, storm water runoff and septic systems. These are tested for based on a schedule prescribed by the DOH.

Radioactive contaminants, which are usually naturally occurring. These are tested for based on a schedule prescribed by the DOH.

WATER QUALITY TABLE

Table of Definitions

Maximum Contaminant Level Goal (MCLG) - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

Action Level (AL) - the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Emergency plan -
Island could be cut
off from main land for
3 weeks

DOH
Needs to be
Completed by Nov 2008
for loan application
STATE will require an
action plan for group A
System
18 elements to plan
ours is 260 to complete

The information set out below is based on tests conducted during the year. Terms used in the Water Quality Table and in other parts of this report are defined above.

Contaminant	Test Date	Unit	MCL	MCLG	Result	Source	Violation
Bacteria	Monthly	N/A	N/A	N/A	All passed	Naturally present	No
Nitrate	August	Mg/l	10	10	0.6	Runoff - fertilizers, natural deposits, septic tanks	No
Radium 228	April & October	pCi/l	5	5	None Detected	Erosion of natural deposits	No

Nitrates in Water

Nitrates in drinking water at levels above 10 ppm are considered to be a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

Arsenic in Water

Your drinking water was tested for arsenic in 2000 and 2002 and had levels of approximately 24 ppb compared to the state MCL of 10 ppb. The Board is presently considering the treatment options that may be available.

Some people who drink water that contains arsenic over the MCL for many years could experience skin damage or problems with their circulatory system, and many have an increased risk of developing cancer.

EXPLANATION OF VIOLATIONS

We are pleased to report that there were no violations in 2005.

Iron and Manganese

Typical of much of the Island's water, our water contains elevated levels of Iron and Manganese, which are abundant in the rocks and soils in the area. These are secondary contaminants and the US EPA has not set maximum levels for the occurrence in water. Scientific findings suggest that the levels found pose no threat to human health. Manganese and iron are considered to be an aesthetic problem. At sufficient concentrations, iron can adversely affect the taste of water and can leave rust colored stains on laundry, plumbing fixtures and porcelain. Manganese can cause similar problems, has a bitter metallic taste and may leave black "specks" in ice cubes. Manganese can also produce staining and cause water to have a brown or black discoloration.

Conductivity and Chlorides

The system is tested twice a year for conductivity and chlorides; this is to ensure that our water source is not being contaminated by salt water. Levels are set out below:

Contaminant	Test Date	Unit	MCL	MCLG	Result	Source
Chloride	Aug. & April	Mg/l	250	250	120 & 100	Salt water or natural deposits
Conductivity	Aug. & April	Umhos/cm	700	700	810 & 690	

Salt water intrusion

2250 = average level

↑ a few years we are high risk as County gets concerned at > 100

Lead and Copper

Five houses were checked for lead and copper content in the water. Results showed very low levels - lead was hardly detected and copper levels were below 0.74 which is below the state AL of 1.3 ppm.

Repairs and maintenance - Shared responsibilities

It is the responsibility of your water system (the purveyor) to deliver safe drinking water to your property. As a rule, this responsibility stops at the meter or shut off valve - usually located at, or close to, the property line. It is the responsibility of the home owner to know where their shut off valve is located and keep the area clear and readily accessible. There has been a lot of attention given in recent years to have property addresses clearly marked on the street so that the fire department can find your home in an emergency. Unfortunately, not so much attention seems to have been given to water shut off valves!

50,000 gallon reservoir

dropped pump flow from 30 g/min to 20 g/min - ↓ CL+ goal is 10 g/min

156,000 less than last year's conservation 265 gallons per household

Clive is contact
King Water gets many calls each year for home owners who have leaks on their property or in their homes and who cannot find a shut off valve, or find it only to discover that it does not work. On one occasion an entire water system had to be shut down because no valve had been installed to allow for effective isolation of the home. Please take time to locate your shut off valves and keep them clear and in working order; this way, if there is a leak in your home it will be a quick and simple process to switch off the water and minimize any damage to your property.

ADDITIONAL HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. They include immuno-compromised persons such as persons with cancer, those undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, the elderly and infants, who can be particularly at risk from infections. These people should seek advice from their health care providers before drinking any water. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline (800-426-4791).