# West Beach Road Association - 2004 Water Quality Report

West Beach Road Association presents herein our annual Water Quality Report (known as a "Consumer Confidence Report"), as required by the Federal Safe Drinking Water Act (SDWA). West Beach Road 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.

## WATER SOURCE

Our system pumps groundwater from the Island County aquifer, and transmits the water to the pump house. The water is filtered at the treatment plant, to reduce the levels of iron and manganese in your system. The reservoir was again cleaned in May; it is our intent to continue with this annual schedule. 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) 2412503 or (360) 6785336).

## 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:

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

<u>inorganic contaminants</u>, 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.

<u>Pesticides and Herbicides</u>, 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.

<u>Organic Chemical Contaminant</u>, 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.

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

## WATER QUALITY TABLE

## **Table of Definitions**

<u>Maximum Contaminant Level Goal</u> (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.

<u>Maximum Contaminant Level</u> (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.

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

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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/I	10	10		Runoff - fertilizers, natural deposits, septic tanks	No
Inorganic Chemicals	April	Var.	Var.	Var.	See below	Runoff - fertilizers, natural deposits, septic tanks	No
Volatile Organic Compounds	September	Var.	Var.	Var.	None Detected	Runoff - fertilizers, natural deposits, septic tanks	No
Radium 228	April	pCi/l	N/A	N/A	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 currently meet's EPA's revised drinking water standards for arsenic. However, it does contain low levels of arsenic, compared to the state MCL of 10 ppb. There is a small chance that some people who drink water containing low levels of arsenic for many years could develop circulatory disease, cancer, or other health problems. Most types of cancer and circulatory disease are due to factors other than exposure to arsenic. The EPA's standard balances the current understanding of arsenic's health effects against the cost of removing arsenic from drinking water.

## **Inorganic Chemicals Report**

A test for various inorganic chemicals was conducted in April. All test results were below the state regulated MCL's and most chemicals were not even detected. Sodium levels were 35 mg/L; if you would like information about any other specific results, please contact King Water Company.

## EXPLANATION OF VIOLATIONS

### We are Pleased to report that there were no violations in 2004.

## 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 EP A 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.

The treatment system we have should remove the majority of iron and manganese present in our system. King Water periodically tests the water for iron and manganese, to ensure that the treatment system is working properly.

### **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:

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Contaminant	Test Date	Unit	MCL	MCLG	Result	Source
Chloride	Aug. & April	Mg/l	250	250	62 & 60	Salt water or natural deposits
Conductivity	Aug. & April	μmhos /cm	700	700	820 & 770	

## **Drought and Drinking Water Facts**

Have you wondered about the low rainfall this last winter and the potential for a drought this summer - what, if any, will be the effect on the Island aquifers? The answer is always the same - "it depends"!

For those with water sources that depend somewhat on surface water - spring fed cisterns or shallow wells, you should always conserve water, keep a close watch on usage and for leaks. If your well is over 100 feet deep then there is unlikely to be a short term effect. It takes many years for rainfall to seep down into the aquifers - maybe 5, 10 or more years, depending on depth and type of sub soil. As a result, rainfall fluctuations from year to year tend to level out. However, there is a bigger risk.

Long, hot dry weather tends to cause increased water usage and this can damage your aquifer - it is much better to take 10,000 gallons a day, for example, each day of the year than to take 2,000 gallons a day half the time and 18,000 gallons per day for the other half- even thought the same amount of water is taken. But this is exactly what happens in the majority of the systems. This is why the State, we and others in the industry always encourage water conservation throughout the year .

### 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).