



Treasure Island Water System

2015 Consumer Confidence & Water Use Efficiency Report

Our Drinking Water Quality Is Safe

The Treasure Island Country Club Water System Team is pleased to provide you with this year's annual water quality report. We are committed to keeping you, as customers of the Treasure Island Country Club Water System, Grapeview, Washington (Public Water System ID 891508), informed about water quality and the water system.

The Water System Team routinely monitors for contaminants in your drinking water according to federal and state laws. This report summarizes our monitoring for 2014. Our drinking water is safe and meets federal and state requirements. For details, see the section "Water Quality Summary."

Drinking Water Source Information

Treasure Island water is not treated. Areas around the wells are water supply protection areas, as is the entire island. Our water comes from three deep wells:

- Well #1, located near the bridge, draws water from an aquifer 165 feet deep.
- Well #2, north end, draws water from an aquifer 227 feet deep.
- Well #3, south end, draws water from an aquifer 190 feet deep.

All groundwater is susceptible to potential contamination from various sources. To help protect our wells, we created a Wellhead Protection Plan, which assesses the potential for groundwater contamination of the water system. No known potential contaminant sources were identified. Ratings for our wells range from moderate to low in terms of the amount of protection they need from pesticides and other contaminants. For more information contact a member of the Water System Team.

Ratings are important, but they don't protect the wells or groundwater by themselves. As users of the land over the groundwater and around the Island's wells, we are ALL responsible for protecting our water quality. To avoid chemical treatment, please continue to be careful about what you spill or spread on the ground and flush into septic systems.

Water Quality Health Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants.

To ensure that tap water is safe to drink, the Department of Health and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Additional Information on Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Treasure Island Country Club Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Definitions

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

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

ppm is parts per million (equivalent to one penny in \$10,000).

ppb is parts per billion (equivalent to one penny in \$10,000,000).

ND means not detected.

pCi/l (picocuries per liter) is a measurement of radiation.

Water Quality Summary

Your drinking water is regularly tested in accordance with federal and state regulations for compounds in the water source and distribution system. All results meet productive standards set by federal and state agencies.

The water quality information presented in the table is from the most recent round of testing done during the last five years according to the regulations. The data shown were collected during the years noted:

Compound and Year Tested	Highest Level Allowed EPA's MCL	Highest Level Detected	Ranges of Levels Detected	Ideal Goals EPA's MCLG	Potential Sources	Meets Standard
Total coliform 2014	Coliform presence in < 5% of monthly samples ¹	35% of monthly samples	0% to 35% of monthly samples	0	Naturally occurs in environment	No ²
Nitrate 2014	10 ppm	< 0.1 ppm	All samples were < 0.1 ppm	10 ppm	Fertilizer, septic tanks, sewage, natural deposits	Yes
Gross Alpha 2009-2010	15 pCi/l	0.5 pCi/l	ND to 0.5 pCi/l	0	Natural deposits	Yes
Radium 228 2009-2010	5 pCi/l	0.6 pCi/l	ND to 0.6 pCi/l	0	Natural deposits	Yes
Lead 2012	Action level = 15 ppb	3 ppb	0 of 5 homes > action level	0 ppb	Household plumbing	Yes
Copper 2012	Action level = 1300 ppb	61 ppb	0 of 5 homes > action level	0 ppb	Household plumbing	Yes

1 Normally we take one total coliform sample per month.

2 We did not meet the standard for September and October. For all other months we met the standard.

In September and October total coliform bacteria were detected in some of the water samples. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. The failed samples were further tested to see if other bacteria of greater concern, such as fecal coliform or *E. coli*, were present. **None of these bacteria were found.**

When the MCL for coliform bacteria was exceeded, our certified water distribution manager, Skip Beahm, began working closely with the coliform monitoring specialist in the state Department of Health. A notice was mailed to all members and also posted at well houses #2 and #3 explaining that while the violation was non-acute, the coliform specialist recommended that Treasure Island chlorinate the water tank and water mains.

Chlorination occurred on October 20th. Measurements of the residual amount of chlorine in the water system were taken weekly. By early December there was no measurable chlorine in the water.

The water system tested negative for coliform bacteria in November and December. Multiple samples were taken each month. Normal coliform testing (one sample per month) resumed in January 2015.

The Washington Department of Health reduced the monitoring requirements for the groups shown below because the source is not at risk of contamination. The last samples collected for these contaminants were taken during the year listed and were found to meet all applicable standards:

- Herbicides (2010)
- General Pesticides (2010)
- Volatile Organic Contaminants (2010)

The Department of Health also reduced the monitoring requirements for Dioxin, Endothall, EDB and other soil fumigants, Glyphosphate, Insecticides, and Diquat because the source is not at risk of contamination. We have never been required to test for these groups.

Your drinking water currently meets the EPA's standard for arsenic. However, it does contain low levels of arsenic. 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 diseases are due to factors other than exposure to arsenic. The EPA's standard balances the current understanding of arsenic's health effects against the costs of removing arsenic from drinking water.










The Importance of Fixing Leaks

Even small leaks add up to a lot of water over time. The chart at right shows how much water flows through a leak the size of the circle indicated.

When this water flows through your meter, TICC is paying to pump this water – extra wear on the pumps and the cost of electricity to run the pumps.

Help preserve our water system and repair leaks on your service lines.

Unrepaired Leaks Can Be Costly Water Loss in Gallons at 50 psi

Leak this Size	Loss per Day	Loss per Month	Loss per Year
	120	3,600	43,200
	380	10,800	129,600
	693	20,790	249,480
	1,200	36,000	432,000
	1,920	57,600	691,200
	3,096	92,880	1,114,560
	4,296	128,880	1,546,560
	6,640	199,200	2,390,400
	6,984	209,520	2,514,240

Drinking Water - It's Worth Saving

Office of Drinking Water
1-800-521-6323
<http://www.doh.wa.gov/ehp/dw/>



How to Check Your Meter for Leaks

1. Locate your water meter. It is usually found in a small plastic or concrete box near your road property line.
2. If you need help locating your water meter, contact a member of the Water System Team (listed on the last page of this report).
3. Turn off all water at the house and in the yard, including water-using appliances in the home.
4. Remember to shut off all indoor and outdoor faucets.
5. Check in the center of the meter dial for the leak indicator. If it is rotating at all, you may have a leak that may require immediate attention.
6. If the leak indicator is not moving, check and record the current meter reading.
7. Wait at least 15 minutes before checking your meter again.
8. Do not use any water while you are waiting.
9. Read the water meter again. If the reading has changed, then you may have a leak that may require immediate attention.

Water Use Efficiency

Water use efficiency is a “proactive approach” to protect public health and water supplies. Droughts, climate change, growth demands, and fewer granted water rights may lead to future long-term water disruptions due to declining water supplies. The Treasure Island Water System Water Use Efficiency (WUE) plan is to complete installation of water meters by the end of this calendar year. Washington State Office of Drinking Water, Water Use Efficiency has given us until January of 2017 to complete water meter installations. We are ahead of schedule.

At the end of 2014, your Water System Team had installed meters at 184 of the 224 service connections (82 percent).

The next three years following the completion of meter installations will be used to establish a 3-Year Rolling Average DSL by comparing the amount of water pumped from the ground to the amount of water consumed.

Water Use Efficiency Definitions

Authorized Consumption (AC) – Volume of water used by consumers as shown through meter readings, fire-fighting, system flushing, and tank cleaning.

Distribution System Leakage (DSL) – All water that is not authorized consumption, such as water lost from the system through leaking pipes, illegal water use, malfunctioning meters, or meter reading errors.

Water Use Efficiency Goals

- Goal: Install service meters by 2017.
- Goal: As service meters are installed, work with customers to identify and repair customer leaks.
- Goal: Reduce peak month production by 1 percent by 2017.

The Treasure Island Water System's WUE goals were set in a public meeting held on May 21, 2011, at the Grapeview Fire Hall. Goals must be re-established every 6 years, which, for us, will be in 2017.

Drinking Water Week Is May 3 to 9, 2015

In encouraging everyone to celebrate Drinking Water Week this year, the American Water Works Association again poses this simple but important question: "What do you know about H₂O?" For more information see their web site:

<http://www.awwa.org/>.

Water Use It Wisely

Water saving tip #83: Adjust your lawn mower to the height of 1.5 to 2 inches. Taller grass shades roots and holds soil moisture better than short grass.

For more tips see the Water Use It Wisely web site: <http://www.wateruseitwisely.com>.

Customer Views Are Welcome

If you have questions about this report or the water system, contact a member of the Water System Team:

- Larry Grumme, Water Commissioner, TICC Board, 360-275-2190
- Skip Beahm, Water Distribution Manager III, 360-602-0197
- Daryl Axelson, Water System Operations Manager, 360-275-7975
- Rod Wilkinson, Water Quality Analyst/Administrative Secretary, 360-373-7491

To learn more, attend the Board meetings or the annual membership meeting in July. Or visit our web page: <http://www.treasureislandcountryclub.org/water.html>.