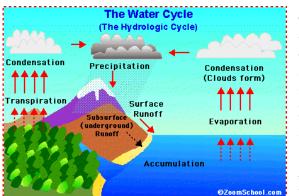


#### Hawaiian Shores Community Association

# Is My Water Safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.



#### **The Water Cycle**

The water cycle or "hydrologic cycle" is the process by which water travels from the earth's surface to the atmosphere and then back to the ground again. It is a constant process with the same water going through the cycle again and again. Nearly all (about 97%) of the water on earth is contained in the oceans. A small amount is locked away in the ice sheets and glaciers. This leaves a very small amount traveling through the water cycle, although it may not always seem this way on rainy days. Water changes form as it goes through this process. As water evaporates, it travels into the air and becomes part of a cloud. The cloud stores this moisture until it falls to earth as precipitation in the form of rain, snow or hail. The rain evaporates and the cycle starts all over. Water keeps moving and changing from a solid to a liquid to a gas, over and

over again. We can see the hydrological cycle at work every day in some part of the world. After rain, runoff is created and travels over the earth's surface, filling lakes and rivers. It also percolates into the earth, where it is stored in underground reservoirs, known as aquifers. In areas of high precipitation, there are usually large bodies of water, such as lakes and oceans. These areas allow more water to evaporate, forming clouds. In mountainous regions, the clouds move up and the water vapor condenses to form precipitation and freezes. Snow falls on the peaks, runoff occurs and the cycle starts over.

# Where Does My Water Come From?

The source of water for the HSCA water system is the Pahoa section of the Kilauea aquifer; currently estimated capable of providing 435 million gallons per day. Our water system draws an average of 100,000 gallons per day from an underground well situated at a depth of 408 feet. The well is equipped with a 75 HP submersible pump that draws approximately 400 gallons per minute into a 100,000 gallon reservoir tank for distribution.

Our drinking water is disinfected with granular calcium hypochlorite (chlorine) using an on-demand injection system, which is monitored daily for proper dosage prior to entering our distribution system. To maintain disinfectant concentrations at DOH recommended levels, monitoring is conducted on a routine basis from established locations throughout the system. The chlorine residual levels are maintained between 0.2 and 1.0 ppm.

The distribution system is comprised of 4 miles of main waterline and approximately 12 miles of lateral service line. The main waterline is routed along the southern boundary of the subdivision running from the wateryard to the ocean. The lateral service lines provide service connections to each property at the rear of the lot.



# What's In My Drinking Water?

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 the water poses a health risk. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection from public health. We treat our water according to EPA regulations and meet all relevant standards.

# **Sources of Drinking Water Contamination**



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: microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural

livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; organic



Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe





to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

# **Do I Need To Take Special Precautions?**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 EPA Safe Drinking Water Hotline (800-426-4791). For further information, visit www.epa.gov/safewater.

**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. HSCA 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

# **Source Water Protection Tips:**

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.



# Water Quality Data

The USEPA and Hawaii DOH require us to test your water on a routine basis to ensure water quality is maintained within established guidelines. The State allows us to monitor some contaminants less than once per year because concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. Unless otherwise noted the table below lists the contaminants that were detected during the 2012 calendar year. The presence of these contaminants in the water does not necessarily indicate the water poses a health risk.

	MCLG	MCL	Level	Ra	nge	Sample		
<u>Contaminants</u>			Found	Low	<u>High</u>	Date	Violation	Typical Source
Haloacetic Acids (ppb)	NA	60	1	NA		2011	No	By-product of drinking water chlorination
Trihalomethanes] (ppb)	NA	80	1.3	NA		2011	No	By-product of drinking water disinfection
Nitrate [measured as Nitrogen] (ppm)	10	10	0.32	NA		2012		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural denosits
Term		Definition						
ppm			ppm: parts per million, or milligrams per liter (mg/L)					
positive samples/month			positive samples/month: Number of samples taken monthly that were found to be positive					
NA			NA: not applicable					
MCLG			MCLG: Maximum Contaminant Level Goal: 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.					
MCL			MCL: Maximum Contaminant Level: 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.					
MPL			MPL: State Assigned Maximum Permissible Level					

#### **Undetected Contaminants**

The following contaminants were monitored for, but not

detected in our water: 1.1.1 – Trichloroethane Dichloromethane 1,1,2 – Trichloroethane Dinoseb 1,1- Dichloroethane Endrin 1.2.4 - Trichlorobenzene Ethvlbenzene 1,2- Dichloroethane Ethylene dibromide Glyphosate cis- 1,2-Dichloroethylene trans-1,2-Dichloroethylene Heptachlor 1,2-Dichloropropane Heptachlor epoxide 2, 4, 5 – TP (Silvex) Hexachlorobenzene 2.4-D Hexachlorocyclopentadiene Alachlor Lead Antimony Lindane Arsenic Mercury Atrazine Methoxychlor Barium Oxamyl Pentachlorophenol Benzene Beryllium Picloram Cadmium Selenium Carbofuran Simazine Carbon Tetrachloride Styrene Tetrachloroethylene Chlordane Chlorobenzene Thallium Chromium Toluene Copper Toxaphene Trichloroethylene Dalapon Dibromochloropropane Vinyl Chloride o-Dichlorobenzene **Xylenes** p- Dichlorobenzene

# **Coliform Testing**

In addition to the other contaminant testing, routine samples of our water are taken to the state laboratory every month for bacteriological testing. Total coliform bacteria are naturally present in the environment and are used as an indicator that other potentially harmful pathogens may be present. Coliform found in samples are a warning of potential problems. Fecal coliform and E coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Neither has been found in our system since we began testing in 1988.

# Lead and Copper

Monitoring for lead and copper is performed every three years. The most recent round of testing was in 2012 and our water system did not exceed action levels. The next round of testing will be conducted in July 2015.

WE ARE PROUD TO REPORT THAT OUR SYSTEM HAS NEVER VIOLATED A MAXIMUM CONTAMINANT LEVEL OR ANY OTHER WATER QUALITY STANDARD

If you have questions or need further information, contact the HSCA office at (808) 965-8140

# **Hawaiian Shores Community Association**

15-2793 Honu St. Pahoa, HI 96778

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 <u>hsca@hawaii.rr.com</u>

#### 2013 Consumer Confidence Report

This report is on the quality of water provided to you from January 1, 2012 thru December 31, 2012. Included are details about your where your water comes from, what it contains and how it compares to Environmental Protection Agency (EPA) and Hawaii Department of Health (DOH) standards. Hawaiian Shores Community Association (HSCA) is committed to providing you with information because informed customers are our best allies.

このレポートには飲料水に関する重要 な情報が記載されています。この英文 を訳してもらうか、またはどなたか英 語が分かる方にたずねてください。

# Water Conservation Tips:

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

# Additional Information and Resources:

A source water assessment was completed in March 2004 by Hawaii Department of Health Safe Drinking Water Branch and the University of Hawaii Water Resources Research Center. Should you wish to obtain a copy of this report you may contact the HSCA Office at 15-2793 Honu Street, Pahoa, HI 96778

More information about contaminant and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791) or the Safe Drinking Water Branch, Hawaii State Department of Health, toll free from the Big Island at 974-4000, ext. 64258.

Websites: EPA <u>www.epa.gov/safewater</u> DOH Safe Drinking Water Branch hawaii.gov/health/environmental/water/sdwb/index.html Commission on Water Resource Management hawaii.gov/dlnr/cwrm HSCA www.hawianshores.org