2016 CONSUMER CONFIDENCE REPORT



PHOTO: of East Kawela Gulch, By Mickey Pauole

KAWELA PLANTATION HOMEOWNERS ASSOCIATION P.O. Box 28
Kaunakakai, Molokai, HI 96748

2016 CONSUMER CONFIDENCE REPORT

Introduction

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.

Water Source Information

The Kawela Plantation Water system is located at the Eastern side of Kaunakakai, Molokai on the mauka side of the highway. The Kawela Plantation Water System is supplied by two ground water wells. The water is treated by chlorination, to meet the Safe Drinking Water Regulations of the EPA and the State of Hawaii Department of Health. Disinfection is considered to be one of the major public health advances of the 20th century.

Think About Water

It's yours for the asking. 24 hours a day. All you have to do is turn a faucet. But, now think again.

The water you use doesn't come magically from nowhere. It is carefully manufactured-clean, safe and piped directly into your home, a valuable resource that shouldn't be wasted.

Water will eventually recycle itself. But high-quality water that we need and expect in our homes is not an infinite resource. Besides, you're paying for every drop whether it's used or wasted. So conservation can be a boon to your pocketbook, too.

Water conservation is a good way of life. Let's practice it together.

Source Water Assessment

Potential contamination sources common in our protection zone are (fertilizers, pesticides, accidental spills of oil or fuel, failed trans evaporative systems as well as an overabundance of wildlife concentration). KPHA Wells have a low to medium susceptibility to potential contamination. KPHA has also developed management strategies to further protect our sources from contamination. The Source Water Assessment is available for review at the Kawela Plantation Homeowners Association office, during normal business hours. Contact information listed on page 10.

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.
- *Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 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 <u>www.epa.gov/watersense</u> for more information.

Opportunities for Public/Consumer Participation

The owners and residents of the Kawela Plantation subdivision may request copies of all documents utilized in the preparation of this CCR.

For more information please contact:

Kawela Plantation Homeowners Association Attn: Juanita Colon – General Manager PO Box 28—Kaunakakai, HI 96748

Phone: 808-553-4223 Fax: 808-553-3996

e-mail: kawelapha@gmail.com Web: www.kawelapha.com

Kawela Watershed

Kawela Plantation is one of 15 partners, of the East Molokai Watershed Partnership (EMoWP) that protects over 30,000 acres of watershed, including much of north and central Molokai, extending east until the ahupua'a of Pu'u 'O Hoku. The EMoWP has developed strategies in an effort to protect Molokai's hydrological resources and native mauka forests. The health of our mauka watersheds has declined significantly over the last century. The degradation of these watersheds is largely attributable to an influx of habitat altering invasive plant and animal species that have quietly but significantly impacted native forests, the life that inhabits them, and the freshwater they foster.

Photo: Kawela Gulch by Mickey Pauole



Source Water/Wellhead Protection Area

Ground water is one of the most important natural resources available. The residents of the Kawela Plantation subdivision rely on ground water for 100% of our water needs. The water supply is drawn from ground water aquifers located below the land surface within the subdivision. The ground water is recharged by rainfall and surface water percolating down through the soil. Source water protection zones have been identified and delineated to help protect these aquifers and wellhead areas from their vulnerability to contamination from human land use and animal activities.

What you do in and around your home or business can affect the quality of your water. Whether you are cleaning your home, maintaining your yard or changing oil in your car, there are several important ways you can help prevent pollution:

- Use less-toxic alternatives to household chemicals
- Follow package directions on pesticides, fertilizers, and other household chemicals
- Home mechanics can drop off their used oil at no charge at oil recycling collection sites
- Mop up spills immediately with absorbent material and dispose of properly

Ground water is and will continue to be the major source of drinking water for Kawela Plantation residents.

Why are there contaminants 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) 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: 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 storm water 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 storm water runoff, and residential uses; organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are byproducts 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.

Contaminants Detected in the Kawela Plantation Water System

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. This system is required to test for over 80 different drinking water contaminants. The table enclosed lists only those drinking water contaminants that were detected in the water system. At low levels, these substances are general not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

Unless otherwise noted, the data presented in the table are from testing done January 1 – December 31, 2016. The State allows us to monitor for some contaminants less than once per year because the concentration of these contaminants do not change frequently.

What Can You Do To Protect Your Water Supply From Contamination

Be involved in keeping your water safe from contamination. Every home has potential hazards that threaten to contaminate your drinking water.

A septic system is an on-site structure that treats household waste with a septic tank and soil absorption or trans evaporation system. Failing septic systems can contaminate lakes, creeks, and shallow drinking water supplies. A properly functioning septic system will treat wastewater in a natural and safe way. Routine maintenance of your system will reduce both risks to human health and costs.

The most common way contaminants enter the drinking water system is through cross connections in our piping systems. Backflow from a cross connection can occur when the pressure in the water drops below the line pressure in your home causing a "soda straw" effect called backsiphonage. This effect can draw water from garden hoses, wash basins, boilers, lawn sprinklers, swimming pools, etc., into your homes water supply. You may not even be aware that the water in your home has been contaminated or that someone has been made ill from drinking the water. Backflow contamination can result in illness or even death.

It is easy to protect your water supply from these hazards. Be aware of potential hazards and install appropriate backflow preventers at water outlets.



All lots with water in Kawela Plantation Homeowners Assn. have backflow preventers (BFPs). These BFPs are tested and repaired annually.



Remember These Two Simple Rules

- 1) Never submerge a free running hose in water and never leave a hose submerged in standing water without "proper" backsiphonage protection.
- 2) Never use a hose to spray toxic chemicals without "proper" backsiphonage protection.

Protect your family and neighbors from these potential hazards by protecting your water supply from backflow contamination.

For more information on how you can protect your home from cross connection contamination, contact your local water purveyor.

Aloha Kakou!

In this year's Consumer Confidence Report (CCR) we have included a message from the General Manager.

Some may wonder "What is a CCR and should I care?"

The CCR is a reporting requirement that all water utilities must do under EPA regulations. The CCR is a "snapshot" report of the health of your water system. And yes, you should care. If there were any violations that occurred in the reporting year you would find it in the CCR. CCR is a tool for us to deliver important information about the health of our system to our consumers.

I am pleased to say that Kawela has met all federal and state requirements in the operations and maintenance of a public utility. And we continue to be a model small water system in the State of Hawaii, providing safe, reliable drinking water to our members and their families this cannot be accomplished without the great support of our team.

As a highlight for 2016, Team Kawela took top honors in the Top Operators competition (Top Ops) at the Annual Pacific Water Conference co-sponsored by the American Water Works Association-HI section (AWWA-HI) and the Hawaii Water Environment Association (HWEA). This competition is the "Jeopardy" of the water industry, operators compete against other teams from across the state to test their knowledge and skill set. Equally as impressive was our placing first runner up in the 2016 Best Tasting Water in Hawaii Contest sponsored by Hawaii Rural Water Association.

Thank you to our hard-working team for all that they have done and accomplished over years.

I leave you with this Chinese Proverb "When you drink the water, remember the spring"



2016 Top ops competition winners

Hawaii best water competition. KPHA runner up



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Annual System Flushing

We conduct an annual flushing program of our water distribution system to help ensure continued high-quality water service. Flushing the water system entails sending a rapid flow of water through the water mains. As part of the flushing program, fire hydrants are checked and operated to help ensure fire protection in the community.

Flushing of the water distribution system is performed every year primarily to remove sediment in pipes. These sediments, which do not pose a health concern, are comprised mostly of minerals which have accumulated over time in the pipes. An annual flushing program helps to keep fresh and clear water throughout the distribution system.



Troy setting up diffuser to Hydrant and then showing why we do Annual flushing of KPHA-Water System



Penny checkii if the v ter is clean.



Koa, setting up hydrant for flushing.



Bozo doing the paperwork, and calculations involved with the flushing program.

Verifying clean water.



Lead and Copper in Your Drinking Water. Are you at Risk?

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. KPHA PWS 248 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.

Important Information Regarding Drinking Water Contaminants and Immuno-Compromised Persons

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Is My Water Safe?

YES!. Kawela Plantation Homeowners Association makes the quality of your drinking water its number one priority. To maintain our commitment to you, we routinely collect and test water samples, checking purity and identifying potential problems. We monitor your drinking water according to EPA regulations to ensure that it meets all state and federal standards.

Our goal is to provide you with a safe and dependable supply of drinking water.

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. KPHA vigilantly safeguards its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.

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Definitions of Terms Used in This Report

Maximum Contaminant Level Goal or "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 or "MCL": 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.

Treatment Technique or "TT": A required process intended to reduce the level of a contaminant in drinking water.

Action Level or "AL": The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Variances and Exemptions: State or EPA permission not to meet an MCL or treatment technique under certain conditions.

Maximum Residual Disinfection Level Goal or "MRDLG": The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Monitored Not Regulated or "MNR"

State Assigned Maximum Permissible Level or "MPL"

The Lead and Copper values are 90th Percentile Values: The highest concentration of lead or copper in tap water that is exceeded by 10 percent of the sites sampled during a monitoring period. This value is compared to the lead or copper action level (AL) to determine whether an AL has been exceeded.



Term	Definition					
ppm	ppm: parts per million or milligrams per liter (mg/L)					
ppb	ppb: parts per billion, or micrograms per liter (µg/L)					
NA	NA: not applicable					
NR	NR: Monitoring not required, but recommended					

2016 Water Quality Data Table

Contaminants	MRDLO	<u>MRI</u>	OL Water	r Low	<u>High</u>	<u>Date</u>	Violation	Typical Source		
Disinfectants & Disinfectant By-Products										
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)										
Haloacetic Acids (HAA5) (ppb)	NA	60	1.7	NA		2016	No	By-product of drinking water chlorination		
TTHMs [Total Trihalomethanes] (ppb)	NA	80	12.5	NA		2016	No	By-product of drinking water disinfection		
Inorganic Contaminants										
Nitrate [measured as Nitrogen] (ppm)	10	10	0.60	NA		2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits		
			Your	Sample	# Sai	mples	Exceeds			
<u>Contaminants</u>	MCLG	AL	<u>Water</u>	<u>Date</u>	Exce A	eding L	<u>AL</u>	Typical Source		
Inorganic Contaminants										
Copper - action level at consumer taps (ppm)	1.3	1.3	0.164	2016	(0	No	Corrosion of household plumbing systems; Erosion of natural deposits		
Lead - action level at consumer taps (ppb)	0	15	<5	2016	(0	No	Corrosion of household plumbing systems; Erosion of natural deposits		
Contaminant	MCL	MCLG	Your Wat	er Date	Rar Det	nge of ection	Violation	Typical Source		
Beta particle (pCi/L)	50+	0	4.4	2016	١	ND	No	Erosion of natural deposits		

2016 WATER QUALITY MONITORING RESULTS compiled by: KPHA