

# Lānaʻi Potable Water System Report to the Consumer for Calendar Year 2015



## Introduction

This report is being made available to you pursuant to the requirements of the 1996 Amendments to the Federal Safe Drinking Water Act, which requires water systems to provide information to its consumers related to personal health-based decisions regarding their drinking water consumption. The Lānaʻi Water System (system #237) services all of Lānaʻi City, including the Lodge at Kōʻele, the Lānaʻi Airport, and the Kaumālapaʻu Harbor. They are owned and operated by the Lānaʻi Water Company, Inc.

## There were no violations of State or Federal safe drinking water regulations in 2015.

## Water Source Information

In 2015 the Lānaʻi City Water System was supplied by groundwater wells. These wells are ground water sources that draw water from Lānaʻi's high level aquifer, mauka of Lānaʻi City. Although chlorination for ground water wells not under the influence of surface water is not mandated by the EPA and the State of Hawaiʻi Department of Health, Lānaʻi Water Company has chlorinated its water supply in order to comply with EPA's Total Coliform and Groundwater Rules. Our watershed for our wells is located in the central uplands of Lānaʻi and is hydrologically up-gradient (uphill) of major resort, residential and agricultural activities. Hence, the potential for land use activity contaminating consumer drinking water is minimized. The results of the 2015 testing of consumer water were all within the limits prescribed by EPA and the State. A source water assessment was completed in 2006 and updated in 2010 and March 2014 for Lānaʻi by the State Department of Health. Contact Lānaʻi Water Company for further information.

## Important Information Regarding Drinking Water Contaminants and Immune-Compromised Persons

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 Safe Drinking Water Hotline (800-426-4791).

## Definitions of Terms Used in This Report

- *Maximum Containment 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.
- *Action Level or AL*: The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- *Maximum Residual Disinfection Level Goal or MRDLG*: The level of drinking water disinfection below, which there is no expected risk to health. MRDLG's = do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- *Maximum Residual Disinfection Level or MRDL*: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- ppm: parts per million, or milligrams per liter (mg/l)
- ppb: parts per billion, or micrograms per liter (µg/l)

Contaminants Detected in the Lāna'i Water System

This system is required to test for over 87 primary water contaminants and 15 other unregulated contaminants related to taste, odor, or color. The table below lists only those drinking water contaminants that were detected in the water system. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. All the tests results showed the contaminant to be below the amount allowed by the EPA and the State Department of Health. Unless otherwise noted, the data presented in the table are from testing done January 1 thru December 31, 2015. The State allows us to monitor for some contaminants less than once per year because the concentration of the contaminants do not change frequently in our groundwater.

Table of EPA Regulated Contaminants Detected in the Lāna'i Water Systems 2015

Regulated Contaminant	Unit	MCL	MCLG	<u>Highest Detected Contaminant Level</u>	Range of Detected Contaminant Levels	Violation	Likely Source(s) of Contamination
Nitrate (as Nitrogen)	ppm	10	10	0.79	0.51 – 0.79	NO	Erosion of natural deposits.
Beta, Gross	pCi/L	15	0	3.2	ND - 3.2	NO	Erosion of natural deposits
Total Trihalomethanes (TTHM)	ppb	80	NA	15.5	15.5	NO	By-product of drinking water disinfection
Haloacetic Acids (HAA)	ppb	60	NA	2.3	2.3	NO	By-product of drinking water disinfection
Chromium 2014 (every 3 years)	ppb	100	100	2.9	2.9	NO	Erosion of natural deposits.
Total coliform bacteria		1 positive sample/month	0	negative	N/A	NO	Naturally present in the environment
Lead 2015 – at consumers tap	ppb	AL 15	0	90% Percentile Value <u>Non-Detectable</u>	No. of Samples Exceeding Action level 0	NO	Erosion of household plumbing and erosion of natural deposits
Copper 2015 – at consumers tap	ppm	AL 1.3	1.3	90% Percentile Value 0.0126	No. of Samples Exceeding Action level 0	NO	Erosion of household plumbing and erosion of natural deposits

Table of EPA Unregulated Contaminants Tested for in the Lāna'i City Water System

Unregulated Contaminant	Unit	Range of Detected Contaminant Levels	Average Detected Contaminant Value	Violation
Sodium	ppm	21-25	23	NO

(The contaminants listed in this table are considered to be unregulated (do not have MCLs), but are required to be sampled for periodically. Unregulated contaminant monitoring helps the State Department of Health and the EPA where certain contaminants occur and whether it needs to regulate those contaminants.)

**The following contaminants were tested for following DOH protocol and only those noted in the charts above had a detectable amount, the balance of the contaminants below had result of non-detectable. If you have an electronic copy you may click on the links below to get more information.**

[Acrylamide](#), [Alachlor](#), [Alpha Photon Emitters \(Radionuclides\)](#), [Antimony](#), [Arsenic](#), [Asbestos](#), [Atrazine](#), [Barium](#), [Benzene](#), [Benzo\(a\)pyrene](#), [Beryllium](#), [Beta Photon, Emitters \(Radionuclides\)](#), [Bromate \(Disinfection Byproduct\)](#), [Cadmium](#), [Carbofuran](#), [Carbon Tetrachloride](#), [Chloramine \(Disinfectant\)](#), [Chlorine\(Disinfectant\)](#), [Chlorine dioxide \(Disinfectant\)](#), [Chlorite \(Disinfection Byproducts\)](#), [Chlordane](#), [Chlorobenzene](#), [Chromium](#), [Copper](#), [Cryptosporidium \(Pathogen\)](#), [Cyanide](#), [2,4-Dichlorophenoxyacetic Acid](#), [Dalapon](#), [1,2-Dibromo-3-chloropropane \(DBCP\)](#), [o-dichlorobenzene](#), [p-Dichlorobenzene](#), [1,2-Dichloroethane](#), [1,1-Dichloroethylene](#), [cis-1,2-Dichloroethylene](#), [trans-1,2-Dichloroethylene](#), [Dichloromethane](#), [1,2-Dichloropropane](#), [Di\(2-ethylhexyl\) adipate](#), [Di\(2-ethylhexyl\) phthalate](#), [Dinoseb](#), [Dioxin \(2,3,7,8-TCDD\)](#), [Diquat](#), [Endothall](#), [Endrin](#), [Epichlorohydrin](#), [Ethylbenzene](#), [Ethylene dibromide](#), [Fecal Coliform \(and \*Escherichia coli\*, \*E. coli\*\(Indicators\)](#), [Fecal indicators \(\*Enterococci\* or coliphage\)\(Indicators\)](#), [Fluoride](#), [Giardia lamblia \(Pathogen\)](#), [Glyphosate](#), [Haloacetic acids \(HAA5\) \(Disinfection Byproducts\)](#), [Heptachlor](#), [Heptachlor Epoxide](#), [Hexachlorobenzene](#), [Hexachlorocyclopentadiene](#), [Lead](#), [Legionella \(Pathogen\)](#), [Lindane](#), [Mercury](#), [Methoxychlor](#), [Nitrate](#), [Nitrite](#), [Oxymal](#), [Pentachlorophenol](#), [Picloram](#), [Polychlorinated biphenyls \(PCBs\)](#), [Radium 226 and Radium 228 \(Radionuclides\)](#), [Selenium](#), [Simazine](#), [Styrene](#), [Tetrachloroethylene](#), [Thallium](#), [Toluene](#), [Total Coliforms \(including fecal coliform and \*E. Coli\*\)\(Indicators\)](#), [Total Trihalomethanes \(TTHMs\) \(Disinfection Byproducts\)](#), [Toxaphene](#), [2,4,5-TP Silvex](#), [1,2,4-Trichlorobenzene](#), [1,1,1-Trichloroethane](#), [1,1,2-Trichloroethane](#), [Trichloroethylene](#), [Turbidity \(Indicator\)](#), [Uranium \(Radionuclides\)](#), [Vinyl Chloride](#), [Viruses \(enteric\)](#), [Xylenes](#)

#### General Information Relating to Drinking Water Contaminants and Health Risks

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, such as viruses and bacteria, which 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- Lead, if present at elevated levels can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with services lines and home plumbing. The Lāna'i Water Company 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>.

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. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 Safe Drinking Water Hotline (800-426-4791).

Additional Information

For additional information concerning this report contact: Director of Utilities, Pulama Lanai, P.O. Box 630310, Lāna'i City, Hawaii 96763, Telephone: (808) 565-3352. You can get a copy of this CCR at [www.lanaiwaterco.com](http://www.lanaiwaterco.com)

We welcome your input and participation in the decision-making process that affects the quality of the drinking water supplied to you. Should you desire to provide input or have pertinent comments regarding the systems, please contact the Lanai Water Company.

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