

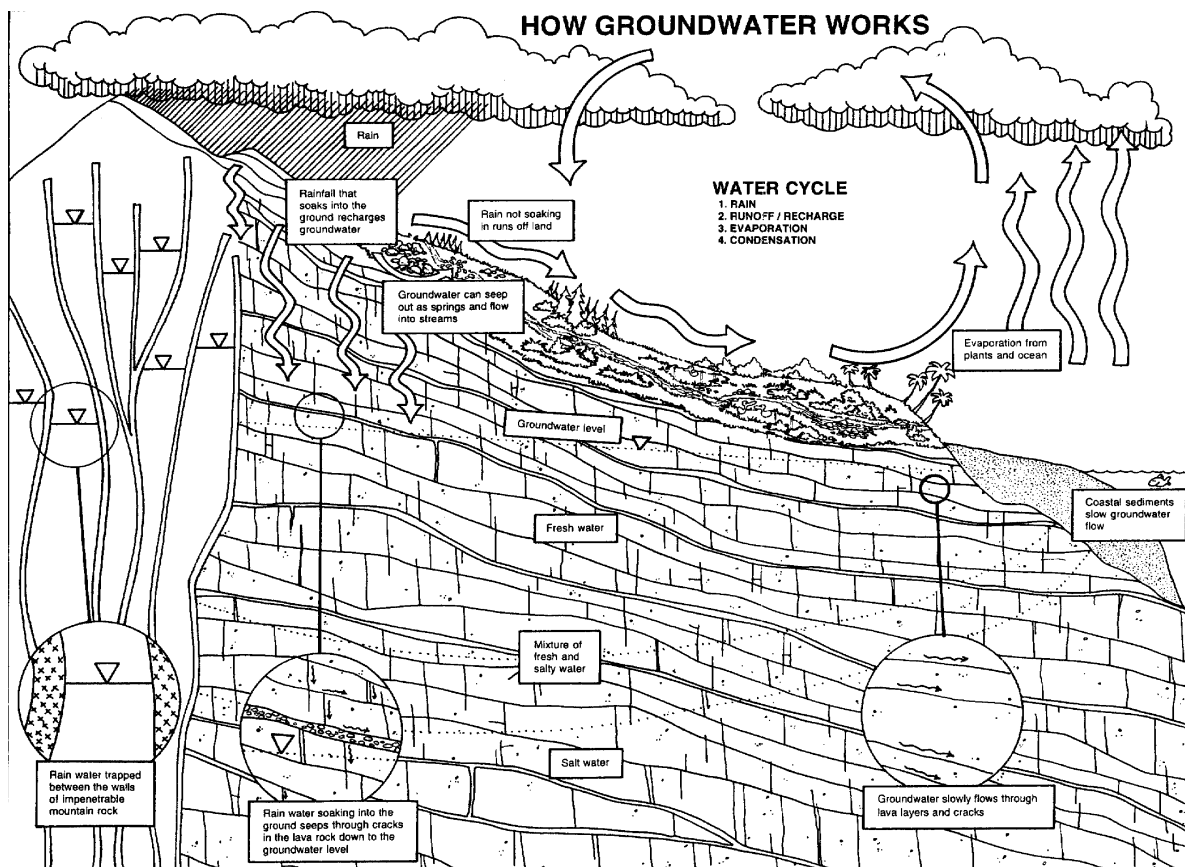
# Princeville Utilities Company, Inc. 2004 Water Quality Report

## Introduction

In 1996, Congress amended the Safe Drinking Water Act. It added a provision requiring that all community water systems deliver to their customers a brief annual water quality report. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources. We are committed to providing you with information because informed customers are our best allies. For more information about your water, call Larry Dill, Manager, at 826-3330.

Princeville Utilities Company, Inc.'s (PUCI's) water system is a community water system owned and operated by Princeville Utilities Company, Inc.

Last year, PUCI conducted tests for thirty three drinking water contaminants. We detected two contaminants, both well below the Department of Health's maximum contaminant level, as shown on the following page. This report is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and State of Hawaii Department of Health (DOH) standards.



## Information on Source(s) of Water

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 or bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts or 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to be sure 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 for public health.

The source of PUCI's water is groundwater from three deep wells. The water from these wells is disinfected with chlorine and pumped into two storage tanks for distribution to the Princeville Resort and surrounding areas. The water system serves approximately 1,698 persons through approximately 924 service connections.

**Terms & Abbreviations Used Below:**

Maximum Contaminant Level Goal: (MCLG) is 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: (MCL) 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.

Action Level: (AL) is the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

Ppm: parts per million or milligrams per liter

Ppb: parts per billion or micrograms per liter

pCi/l: picocuries per liter (a measure of radiation)

ND: not detected

**Detected Contaminants**

In order to ensure that tap water that is provided by public and private water systems is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants which may be present in the water. Federal and State laws require testing of your water for many different types of contaminants, including those for which there are no drinking water standards (unregulated contaminants). In our effort to supply our customers with the safest possible product, PUCI's water is chlorinated and monitored daily. The table below lists all the drinking water contaminants that we detected for the 2003 calendar year monitoring period. 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 this table is from testing done between January 1<sup>st</sup> and December 31<sup>st</sup> of 2003. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Contaminant	MCL	MCLG	Level found	Range of Detections	Sample Date	Violation	Typical Source(s)
Chromium	100 ppb	100 ppb	6 ppb	3 ppb - 6 ppb	6/3/03 <sup>a</sup>	No	Erosion of natural deposits
Monobromoacetic acid	60 ug/L	n/a	1.0 ug/L	1.0 ug/L	9/8/04	No	Disinfection byproduct
Sodium	n/a	n/a	13 ppm	12 ppm - 13 ppm	5/28/03	No	
Radium 228	5 pCi/L	n/a	1.12± 0.50 pCi/L	ND - 1.12 ±0.50 pCi/L	11/9/04	No	Decay of natural and man-made deposits

<sup>a</sup>PUCI is required to monitor for chromium on a three year cycle. The current three-year cycle includes the years 2004, 2005, and 2006.

Contaminant	AL	MCLG	Level Found	Number of Sites Exceeding AL	Sample Date	Violation	Typical Source(s)
Copper	1.3 ppm	1.3 ppm	0.18 ppm	0	6/25/2003 <sup>b</sup>	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

<sup>b</sup>PUCI is on a reduced monitoring schedule for lead and copper. Samples are analyzed for lead and copper once every three (3) years.

**Your drinking water has also been tested for the following contaminants:**

<u>Radiological</u>			
Gross Alpha	Gross Beta	Uranium	
<u>Microbiological</u>			
Total Coliform Bacteria			
<u>Inorganics</u>			
Arsenic	Lead	Selenium	Cyanide
Barium	Mercury	Antimony	Asbestos
Cadmium	Nitrate	Thallium	Sulfate
Fluoride	Nitrite	Beryllium	
<u>Volatile Organics</u>			
Benzene	1,1-Dichloroethylene	Tetrachloroethylene	Xylenes (total)
Carbon Tetrachloride	cis-1,2-Dichloroethylene	Toluene	Dichloromethane
Chlorobenzene	trans-1,2-Dichloroethylene	1,1,1-Trichloroethane	1,2,4-Trichlorobenzene
o-Dichlorobenzene	1,2-Dichloropropane (DCP)	Trichloroethylene	1,1,2-Trichloroethane
p-Dichlorobenzene	Ethylbenzene	1,2,3 Trichloropropane (TCP)	
1,2-Dichloroethane	Styrene	Vinyl Chloride	
<u>Synthetic Organics</u>			
Alachlor	Heptachlor Epoxide	Dalapon	Hexachlorobenzene
Atrazine	Lindane	Di(2-ethylhexyl) adipate	Hexachlorocyclopentadiene
Carbofuran	Methoxychlor	Di(2-ethylhexyl)phthalate	Oxamyl
Chlordane	Polychlorinated biphenyls (PCB)	Dinoseb	Pichloram
Dibromochloropropane (DBCP)	Pentachlorophenol	Diquat	Simazine
2,4-D	Toxaphene	Endothall	2,3,7,8-TCDD (Dioxin)
Ethylene Dibromide (EDB)	2, 4, 5-TP	Endrin	
Heptachlor	Benzo(a)pyrene	Glyphosate	
<u>Five Haloacetic Acids</u>			
Monochloroacetic acid			
Dichloroacetic acid			
Trichloroacetic acid			
Monobromoacetic acid			
Dibromoacetic acid			

**UNREGULATED CONTAMINANTS**

Aldicarb (Temik)	Chloromethane (Methyl chloride)	Naphthalene
Aldicarb sulfone	2-Chlorotoluene (o-Chlorotoluene)	1-Phenylpropane
Aldicarb sulfoxide	3-Chlorotoluene (m-Chlorotoluene)	Prometryn
Aldrin	4-Chlorotoluene (p-Chlorotoluene)	Propachlor
Bromobenzene (Monobromobenzene)	Dibromochloromethane (Chlorodibromomethane)	1,1,1,2-Tetrachloroethane
Bromochloromethane (Chlorobromomethane)	Dibromomethane (Methylene bromide)	1,2,3-Trichlorobenzene
Bromodichloromethane (Dichlorobromomethane)	Dicamba	Methomyl
Bromoform (Tribromomethane)	1,3-Dichlorobenzene	Propoxur
Bromomethane (Methyl bromide)	1,3-Dichloropropane	Methiocarb
Butachlor	2,2-Dichloropropane	1,1-Dichloroethane
Carbaryl	Dieldrin	trans-1,3-Dichloropropene
Chlorodibromomethane (Dibromochloromethane)	Hexachlorobutadiene	cis-1,3-Dichloropropene
Chloroethane (Ethyl chloride)	Metolachlor	1,1,2,2-Tetrachloroethane
Chloroform (Trichloromethane)	Metribuzin	1,1-Dichloropropene

To date, these contaminants have not been detected in your drinking water system. All drinking water analyses have been performed in accordance with federal and state drinking water requirements.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

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 Safe Drinking Water Hotline (800-426-4791). 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).

#### **Information on Violations of National Primary Drinking Water Rule (NPDWR)**

There have been no system violations nor any individual sampling deficiencies found in PUCI's Coliform/Bacteriological, the chemical, or the lead and copper monitoring programs.

EPA's brochure, "Water on Tap", a consumer's guide to the nation's drinking water, provides answers to frequently asked questions and also stresses the need for all of us to be responsible for water quality and protecting the resource from potential contamination. The U.S. Environmental Protection Agency and the Hawaii State Department of Health encourages consumers to become involved citizens and participate in maintaining high quality drinking water. For more information on how to become more involved with water protection, call EPA's hotline at 800-426-4701.

PUCI violated a drinking water standard in 2004. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

We are required to monitor our drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. In the period 2000 to 2003, we did not monitor for radionuclides and therefore cannot be sure of the radiological quality of our drinking water during that time.

Monitoring for radionuclides was performed for all previous required periods and testing of our water has been done this year. We will continue to perform the radionuclide testing as required.

Because no radiation was detected prior to the unmonitored period and remained undetected after the unmonitored period, the water in your system meets the standards set for radiological contamination and was likely to have done so during the unmonitored period.

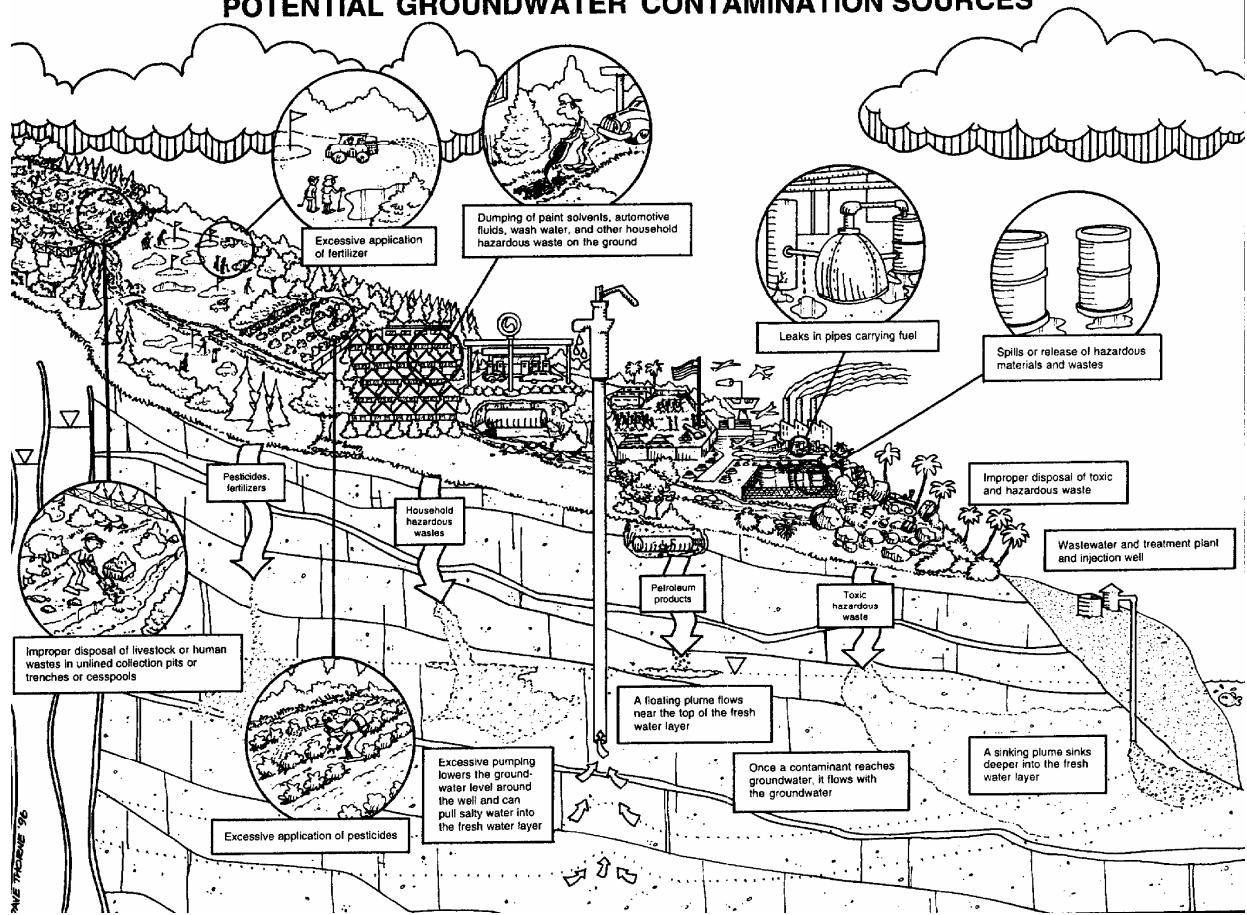
Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or distributing copies as you choose.

For more information, please contact Larry Dill at 808.826.3330.

#### **Source Water Assessment**

A Source Water Assessment Report, intended to enable "well-founded, fair and reasonable decisions for the protection and preservation of Hawai'i's drinking water" was completed in March 2004 by the State of Hawai'i Department of Health and the University of Hawai'i. This Assessment Report is available for viewing at our office. Please contact Larry Dill at 808.826.3330 to make arrangements to view this document.

# POTENTIAL GROUNDWATER CONTAMINATION SOURCES



PRINCEVILLE UTILITIES COMPANY,  
INC.  
P.O. Box 223040  
Princeville, Kauai, Hawaii 96722

WATER  
QUALITY  
REPORT

2004