...Water, Our Most Precious Resource...

You may also access your 2024 Hilo Water Quality Report online at:

https://www.hawaiidws.org/CCRHilo2024.pdf

Where does my water come from?

The sources of water for the Hilo Water System are Pana'ewa Well Nos. 1, 2 and 3, Pi'ihonua Well Nos. A, B, and C, Saddle Road Well "A", and the UH Hilo Well (all of which are groundwater sources). These source(s) may change depending on the supply and demand.

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.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Shutting off water while brushing your teeth, washing your hair, and shaving could save up to 500 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.
- 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!

For more information,
go to
https://www.hawaiidws.org
& follow the conservation links
or visit
https://www.epa.gov/watersense

Source Water Assessment Program

In 2004, the preliminary source water assessment report was released. The purpose of the source water assessment report is to enable the public and decision-makers to make well-founded decisions for the protection and preservation of our drinking water. The source water assessment report identifies the potential contaminating activities for each source of water.
In the report, Hilo Water System sources are potentially vulnerable to contaminants associated with the following activities: roads, septic tanks, cesspools, sewer lines, injection wells, residential parcel, cultivated agriculture, and sugarcane. Note: the list of potential contaminating activities has not necessarily been associated with anything found in the water. For more information, please contact Kawika Uyehara, P.E., at 808-961-8670.

How can I get involved?

The Water Board meets the fourth Tuesday of every month. Call for the time and location of the meeting.

You Can Contact Us at the Following Numbers:

Administration/Finance/General	(808) 961-8050
Billing/Customer Service	(808) 961-8060
Engineering	(808) 961-8070
Emergencies & Field Operations	(808) 961-8790
Water Quality	(808) 961-8670

The Department of Water Supply is an equal opportunity provider and employer

2024 Hilo Water System Annual Water Quality Report

COUNTY OF HAWAI'I

Department of Water Supply

What is the purpose of the Water Quality Report?

List of Abbreviations:

CCR..... Consumer Confidence Report
CDC ..... Center for Disease Control & Prevention
EPA ..... Environmental Protection Agency
HDWS..... Hawai'i Department of Water Supply

What is the purpose of the Water Quality Report?

The EPA is responsible for making sure that public water supplies within the United States are safe. In 1974, Congress passed the Safe Drinking Water Act in order to protect the nation's public drinking water supply. This law gives the EPA authority to set the standards for drinking water quality (to determine what levels of contaminants are safe to have in the water) and to oversee the states and water suppliers who implement these standards.

The EPA requires community water systems to deliver a CCR, also known as an annual drinking Water Quality Report, to their customers. These reports provide information to customers about their drinking water quality for the past year. All water quality reports must contain certain content elements and must be made available each year by July 1st for the preceding year.

The EPA determines what levels of contaminants are safe to have in the water, and the water quality report will show customers how the levels of contaminants in their water source compare to the EPA standard.

The water system must provide the EPA standard in the data table for each regulated contaminant detected. The customer can then compare the level of contaminants in their water to the EPA standard.

Is my water safe?

Yes it is. Last year, as in years past, our tap water met all U.S. EPA and State drinking water health standards. HDWS vigilantly safeguards its water supplies and once again we are proud to report that we have complied with all drinking water standards.

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 EPA Safe Drinking Water Hotline 1-(800) 426-4791. If you have any questions regarding this Water Quality Report, please call Kawika Uyehara, P.E., at (808) 961-8670.

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 at 1-(800) 426-4791.

Sources of drinking water

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 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 ensure that tap water is safe to drink, the 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.

Water Quality Report Online

This year, you are likely reading the report online, rather than the traditional paper copy sent by mail. The EPA recently changed the requirements to allow utilities to communicate this important information digitally.

Customers are still able to request a paper copy and can do so by the following methods. (Please provide us with your account number, phone number, mailing or email address, and water system name so that we can provide you with the correct report.):

- Call us at (808) 961-8670
- Email us at dws@hawaiidws.org
- Write to us at:
  Department of Water Supply/Micro Lab
  889 Leilani Street
  Hilo, HI 96720

Lead and drinking water

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. HDWS is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time.

You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure that the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period.

If you are concerned about lead in your water and wish to have your water tested, contact private laboratories that are certified by the State for doing drinking water analyses. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

Sodium in drinking water

There is no State or Federal maximum contaminant level for sodium. Monitoring for sodium is performed primarily to gather information for the consumers, the Safe Drinking Water Branch, and HDWS.

The EPA Drinking Water Advisory recommends that the sodium concentration in drinking water not exceed a range of 30 to 60 ppm because of the possible adverse effects on taste at higher concentrations. For persons on a sodium-restricted diet, sodium concentrations greater than 120 ppm could be problematic.

If you are on a sodium-restricted diet, you should consult your physician about the level of sodium in the drinking water.

2024 Hilo System Water Quality Data Tables

The table below lists the drinking water contaminants that we detected during the calendar year of this report. The presence of 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 in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Regulated Contaminant Data Tables

Regulated Contaminants

Contaminants (units)	MCL	MCLG	Level Found	Range of Detections	Sample Date	Violation	Typical Source of Contaminant
Radioactive Contaminants							
Beta/photon emitters (pCi/L)	50	0	3.00	none	2021	No	Decay of natural and manmade products. The EPA considers 50 pCi/L to be the level of concern for Beta particles. The MCL for Beta particles is 4 mrem/year.
Inorganic Contaminants							
Nitrate (ppm)	10	10	0.39	ND - 0.39	2024	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Fluoride (ppm)	4	4	0.20	ND - 0.20	2024	No	Erosion of natural deposits.

Per- and Polyfluoroalkyl Substances (PFAS)

Contaminants (units)	MCL	MCLG	Level Found	Range of Detections	Sample Date	Violation	Typical Source of Contaminant
perfluorooctanoic acid (PFOA) (ppt)	4	0	ND	none	2024	No	Discharge from manufacturing and industrial chemical facilities; use of certain consumer products, occupational exposures, and certain firefighting activities.
perfluorooctanesulfonic acid (PFOS) (ppt)	4	0	ND	none	2024	No	
perfluorohexanesulfonic acid (PFHxS)(ppt)	10	10	ND	none	2024	No	
perfluorononanoic acid (PFNA) (ppt)	10	10	ND	none	2024	No	
hexafluoropropylene oxide dimer acid (HFPO DA; commonly known as GenX chemicals) (ppt)	10	10	ND	none	2024	No	
perfluorobutanesulfonic acid (PFBS)	No Individual MCL	No Individual MCLG	ND	none	2024	No	

Although PFAS were not detected, monitoring data is being reported for informational purposes.

Lead and Copper Rule Compliance

			Hilo Water System - June 2022				
Contaminant (units)	AL	MCLG	90th Percentile	# of sites > AL	Range of Detections	Violation	Typical Source of Contaminant
Lead (ppb)	15	0	ND	0/34	ND - ND	No	Corrosion of household plumbing systems; erosion of natural deposits.
Copper (ppm)	1.3	1.3	<0.05	0/34	ND - 0.114	No	Corrosion of household plumbing systems; erosion of natural deposits.

The lead sampling data for our water system can be made available upon request by contacting DWS at (808) 961-8670.
DWS recently completed inspections of randomly selected customers' water service lines, and no lead or "galvanized requiring replacement" service lines were identified.
Specific inventory results can be made available upon request by contacting DWS at lcrr@hawaiidws.org or (808) 961-8070, ext. 3.

Key definitions of terms used in this report

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

•**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** = 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.

•**mrem/yr** = One thousandth of a rem (millirem) per year. A millirem is a dose of energy to the body.

•**ND** = Not Detected: If a contaminant is not measured at or above its minimum detection limit, it is reported as Not Detected - detection limits are available upon request.

•**pCi/l** = Picocuries per liter.

•**ppm** = Parts per million. One ppm corresponds to a single penny in $10,000 or one minute in two years.

•**ppb** = Parts per billion. One ppb corresponds to a single penny in $10,000,000 or about one minute in two thousand years.

•**ppt** = Parts per trillion. One ppt corresponds to a single penny in $10,000,000,000 or about one minute in 2,000,000 years.

2024 Hilo System Water Quality Data Tables (continued)

Unregulated Contaminant Data Tables

Sodium (Not Regulated by State or Federal Government)							
			Hilo Water System				
Contaminants (units)	MCL	MCLG	Level Found	Range of Detections	Sample Date	Violation	Typical Source of Contaminant
Inorganic Contaminants							
Sodium (ppm)	none	none	8.9	5.5 - 8.9	2023	No	Erosion of natural deposits.

UCMR4 - Unregulated Contaminant Monitoring Rule [UCMR] (Not Regulated by State or Federal Government)					
	Hilo Water System				
Contaminants (units)	Level Found	Range of Detections	Sample Date	Violation	Typical Source of Contaminant
Unregulated Contaminants (Indicator)					
Bromide (ppb)	12.0	ND - 12.0	2020	No	Naturally occurring element.

Unregulated Contaminant Monitoring Rule (UCMR)

The 1996 Safe Drinking Water Act (SDWA) amendments require that once every five years the EPA issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). UCMR4 was published on December 20, 2016 and is the fourth list of contaminants. These contaminants do not have health-based standards, MCLs, or MCLGs set under the Safe Drinking Water Act (SDWA).

UCMR benefits public health and the environment by providing the Environmental Protection Agency (EPA) and other interested parties with scientifically valid data on the occurrence of these contaminants in the drinking water. This data set is one of the primary sources of occurrence and exposure information the EPA uses to develop future regulatory decisions and actions to protect public health.

UCMR4 monitoring includes Disinfection-by-Products (DBPs) such as brominated haloacetic acids (HAAs). HAAs are formed during water treatment and distribution, through reactions between disinfectants and DBP precursors. DBPs are currently regulated under the Stage 1 and Stage 2 Disinfectants Byproducts Rules. However, under UCMR4, the EPA is gathering data for further understanding on how DBPS are formed.

By definition, HAAs are chemical compounds that contain chlorine and bromine. They are formed when the chlorine used to treat drinking water reacts with naturally occurring organic matter in water.

A precursor is defined as a substance from which another is formed. The DBP precursor, Bromide was collected along with the DBPs to evaluate and understand the potential relationship between this “indicator” and groups of UCMR4 contaminants, HAAs. Collecting data on Bromide may help the EPA understand brominated HAA formation and treatment strategies for HAA control.

In 2020, the DBP precursor Bromide was detected as reported in the table above. However, the HAA groups of contaminants were not detected in any of the samples taken.

2024 Hilo System Water Quality Data Tables (continued)

Unregulated Contaminant Data Tables

UCMR5 - Unregulated Contaminant Monitoring Rule [UCMR] (Not Regulated by State or Federal Government)				
	Hilo Water System			
Contaminants	**Level Found**	**Sample Date**	**Violation**	**Typical Source of Contaminant**
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND	2024	No	Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in many household products including nonstick cookware (e.g., Teflon), stain repellants (e.g., Scotchgard), and waterproofing (e.g., GORE-TEX). They are also used in industrial applications such as in firefighting foams and electronics production. There are thousands of PFAS chemicals, and they persist in the environment. Two well-known PFAS chemicals are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). These were phased out of production in the United States and replaced by hexafluoropropylene oxide-dimer acid (commonly known as GenX), perfluorobutane sulfonic acid (PFBS) and others.
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	ND	2024	No	
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	ND	2024	No	
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	ND	2024	No	
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2024	No	
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND	2024	No	
hexafluoropropylene oxide dimer acid (HFPO DA)	ND	2024	No	
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	2024	No	
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND	2024	No	
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2024	No	
perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2024	No	
perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2024	No	
perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2024	No	

2024 Hilo System Water Quality Data Tables (continued)

Unregulated Contaminant Data Tables

UCMR5 - Unregulated Contaminant Monitoring Rule [UCMR] (continued) (Not Regulated by State or Federal Government)				
	Hilo Water System			
Contaminants	**Level Found**	**Sample Date**	**Violation**	**Typical Source of Contaminant**
perfluorobutanesulfonic acid (PFBS)	ND	2024	No	Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in many household products including nonstick cookware (e.g., Teflon), stain repellants (e.g., Scotchgard), and waterproofing (e.g., GORE-TEX). They are also used in industrial applications such as in firefighting foams and electronics production. There are thousands of PFAS chemicals, and they persist in the environment. Two well-known PFAS chemicals are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). These were phased out of production in the United States and replaced by hexafluoropropylene oxide-dimer acid (commonly known as GenX), perfluorobutane sulfonic acid (PFBS) and others.
perfluorobutanoic acid (PFBA)	ND	2024	No	
perfluorodecanoic acid (PFDA)	ND	2024	No	
perfluorododecanoic acid (PFDoA)	ND	2024	No	
perfluoroheptanesulfonic acid (PFHpS)	ND	2024	No	
perfluoroheptanoic acid (PFHpA)	ND	2024	No	
perfluorohexanesulfonic acid (PFHxS)	ND	2024	No	
perfluorohexanoic acid (PFHxA)	ND	2024	No	
perfluorononanoic acid (PFNA)	ND	2024	No	
perfluorooctanesulfonic acid (PFOS)	ND	2024	No	
perfluorooctanoic acid (PFOA)	ND	2024	No	
perfluoropentanesulfonic acid (PFPeS)	ND	2024	No	
perfluoropentanoic acid (PFPeA)	ND	2024	No	

2024 Hilo System Water Quality Data Tables (continued)

Unregulated Contaminant Data Tables

UCMR5 - Unregulated Contaminant Monitoring Rule [UCMR] (continued) (Not Regulated by State or Federal Government)				
	Hilo Water System			
Contaminants	Level Found	Sample Date	Violation	Typical Source of Contaminant
perfluorotetradecanoic acid (PFTA)	ND	2024	No	Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in many household products including nonstick cookware (e.g., Teflon), stain repellants (e.g., Scotchgard), and waterproofing (e.g., GORE-TEX). They are also used in industrial applications such as in firefighting foams and electronics production. There are thousands of PFAS chemicals, and they persist in the environment. Two well-known PFAS chemicals are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). These were phased out of production in the United States and replaced by hexafluoropropylene oxide-dimer acid (commonly known as GenX), perfluorobutane sulfonic acid (PFBS) and others.
perfluorotridecanoic acid (PFTrDA)	ND	2024	No	
perfluoroundecanoic acid (PFUnA)	ND	2024	No	
Lithium	ND	2024	No	Naturally occuring element found in rocks, soil and water.

Unregulated Contaminant Monitoring Rule (UCMR)

The Safe Drinking Water Act (SDWA) requires that once every five years the EPA issue a list of unregulated contaminants to be monitored by public water systems (PWSs).

The fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was published on December 27, 2021, and water sampling will occur between 2023 and 2025. Consistent with the EPA's PFAS Strategic Roadmap, UCMR 5 will provide new data that will improve the agency's understanding of the frequency that 29 per- and polyfluoroalkyl substances (PFAS) and lithium are found in the nation's drinking water systems, and at what levels. The monitoring data on PFAS and lithium will help the EPA make determinations about future regulations and other actions to protect public health under SDWA.

Additional information on PFAS from the U.S. EPA can be found at https://www.epa.gov/pfas

More information on the UCMR program can be found at https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule