

2024 Consumer Confidence Report Napu'u Water Inc.

by
BIG ISLAND WATER SERVICE, LLC
Rick Strojny, DSO-4
Certified Distribution System Operator Grade 4



"Water is H₂O, hydrogen two parts, oxygen one, but there is also a third thing, that makes it water and nobody knows what that is."

- D. H. Lawrence

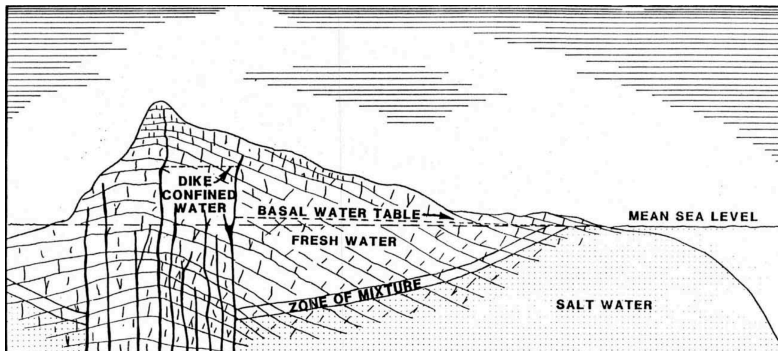
Is My Water Safe?

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.

Do I need to take special precautions?



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 healthcare 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).



Where does my water come from?

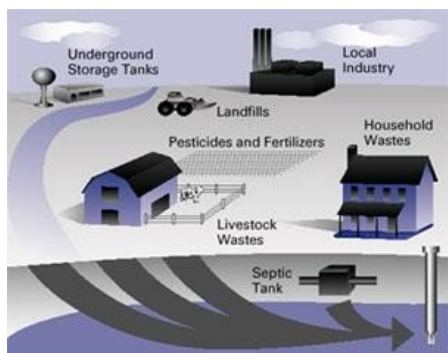
Napu'u Water Inc. (NWI) provides for Pu'u Lani Ranch's needs, Pu'u ana hulu's community, and Pu'u Wa'a Wa'a Ranch. NWI. owns and operates two deep groundwater wells at the Pu'u Lani Ranch subdivision and Pu'u Wa'a Wa'a Ranch that access the Kiholo aquifer. NWI's water flows perhaps from both Mauna Loa and Mauna Kea. The Kiholo aquifer is recharged through rainfall as water percolates through the porous rock. It seems bizarre, but the island's groundwater sits atop underground seawater. That's because freshwater is less

dense than saltwater; rain soaks into the island and forms a floating freshwater lens atop the layer of ocean water. In proportion, the freshwater lens is something like an iceberg: for every foot of water above sea level, there are 40 feet below it. NWI's submersible pumps pump the freshwater up approximately 2,500 ft from sea level to the wellheads. Water is then chlorinated for disinfection and is either used immediately by the community or stored in a 100,000-gallon storage tank and smaller tanks totaling 42,500 gallons for future higher-demand periods.

Source water assessment and its availability

NWI's drinking water is monitored and tested by the operator for the system, Big Island Water Service, and additionally tested by independent certified laboratories and the Hawai'i Department of Health for all contaminants established by the Safe Drinking Water Act. In 2022, NWI completed an EPA-mandated three-year Phase II and Phase V compliance test. No contaminants or results of any significance were detected in these extensive tests. A Hawaii Source Water Assessment Report was accomplished in November 2006 for NWI. This report is available for owners by contacting the NWI Board of Directors.

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 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 protections for public health.

How can I get involved?

The NWI's Board of Directors meets regularly and welcomes your participation. The meeting dates are available to you on the NWI website, www.napuuwater.com, or by contacting the administrator/coordinator for NWI at 808-325-2314 or admin@napuuwater.com. In addition, the NWI annual meeting held in the last quarter of the year is an excellent time to meet the Board of Directors and learn about the status of your water company.

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectants to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century. NWI has not had any Microbial contamination or violations in its history.

Water Conservation Tips

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 compared 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 shower head. 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.
- 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. Water plants only when necessary.
- Visit www.epa.gov/watersense for more information.

Did You Know?

Congress enacted the Safe Drinking Water Act (SDWA) in 1974 and amended and reauthorized it in 1986, 1996, and 2016. It is the main federal law that ensures the quality of American's drinking water. The SDWA authorizes the U.S. Environmental Protection Agency (EPA) to set national standards for drinking water to protect against health effects from exposure to naturally occurring and man-made contaminants.

Federal drinking water regulations apply to approximately 152,700 privately and publicly owned water systems that provide water for human consumption to at least 15 service connections or that regularly serve at least 25 people. These systems are called Public Water Systems (PWS).

The EPA delegates monitoring and enforcement of the rules and regulations to each state and their appointed agency, which in Hawaii is the Department of Health (DoH), Safe Drinking Water Branch (SDWB). It doesn't matter how big or small a water system is, all PWSs have relatively the same requirements from the EPA and DoH/SDWB regarding water testing, reporting, sanitary requirements, and adherence to regulations.

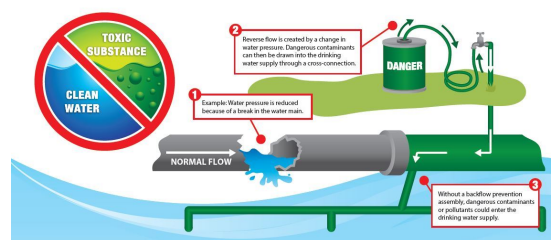
In Hawaii, although the quality of drinking water is regulated and monitored by the DoH/SDWB, the water resources, i.e. groundwater and its related pumping and sustainable yield management, and surface water is managed by the Commission of Water Resource Management (CWRM), which is part of the Department of Land and Natural Resources.

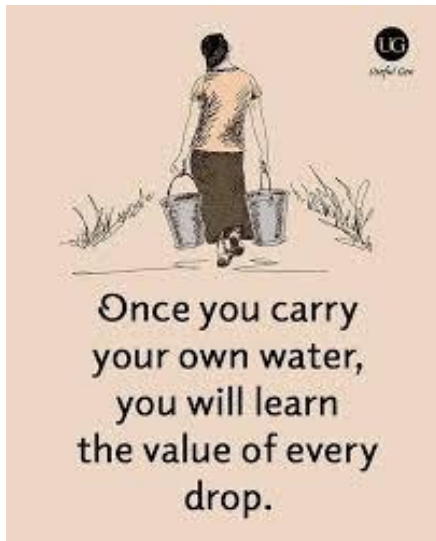
EPA has drinking water regulations for more than 90 contaminants. The general categories are 1) Physical (e.g. sediment or organic material suspended in water, 2) Chemical (e.g. naturally occurring or man-made chemicals) 3) Biological (e.g. microbes like bacteria, viruses, etc) 4) Radiological (e.g. unstable atoms emitting ionizing radiation like cesium, plutonium, uranium)

Cross Connection Control

In response to requirements, recommendations, and guidance from the USEPA and Hawaii Department of Health Safe Drinking Water Branch, NWI instituted a proactive Cross Connection Control Program with the Backflow Prevention Assembly installation initiative. NWI encourages all members/customers to proactively be aware of potential cross-connections that may occur (e.g. hoses left in pools/hot tubs, faulty irrigation system sprinklers that may let in surface water and contaminants).

Proper installation, inspection, and maintenance of backflow prevention devices can reduce and eliminate the chance of contamination of NWI's distribution system, protecting our clean and safe drinking water.





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.
- Properly maintain your septic system to reduce the leaching of inadequately filtered water into water sources
- Dispose of chemicals properly; take used motor oil to a recycling center.

Additional Information for Lead

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. Napa's Water Inc. 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 exposure. Follow the instructions provided with the filter to insure 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 lines for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Napa's Water Inc. , Tracie Makaiwi, Administrator at (808) 325-2314. 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>.

Pure Water is the World's First and Foremost Medicine – Slovakian Proverb

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally 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. 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 vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table, you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below in the table.

" One day, someone showed me a glass of water that was half full. And he said, "Is it half full or half empty?" So I drank the water. No more problem." — Alejandro Jodorowsky

Unit Descriptions	
ppm	ppm: parts per million or milligrams per liter (mg/L)
ppb	ppb: parts per billion or micrograms per liter (ug/L)
NA	NA:Not Applicable
ND	ND: Not Detected
pCi/L	pCi/L: Picocuries per liter

Contaminants Inorganic	MCLG or MRDLG	MCL, TT, or MRDL	Highest Detect In Your Water	Range Low-High	Sample Date	Violation	Typical Source
Fluoride (ppm)	4	4	0.83	0.67-0.83	2024	No	Erosion of natural deposits; Discharge from fertilizer
Nitrate (measured as Nitrogen) (ppm)	10	10	1.3	0.53-1.3	2024	No	Runoff from fertilizer use;Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (measured as Nitrogen) (ppm)	1	1	ND	ND	2024	No	Runoff from fertilizer use;Leaching from septic tanks, sewage; Erosion of natural deposits
Chromium (ppb)	100	100	3.33	2.61-3.33	2022	No	Erosion of natural deposits
Sulfate (ppm)	250	250	49	25-49	2024	No	Erosion of natural deposits

Contaminants units	AL	MCLG	90th Per-centile	Range of Detection	#of sites exceeding AL	Violation	Typical Source
July 1 - December 31, 2024							
Copper (ppm)	1.3	1.3	0	ND - ND	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - (ppb)	10	0	0	ND - ND	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

For lead and copper: the 90th percentile concentration of the most recent round(s) of sampling, the number of sampling sites exceeding the action level, and the range of tap sampling results is reported. To obtain a copy, please contact the NWI administrator at admin@napuuwater.com

Preliminary PFAS testing has been done by **SDWB** at **NWI's wells**. There have been **NO DETECTIONS** of **PFAS's**

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range Low-High	Sample Date	Violation	Typical Source
Disinfectant By-Products							
There is evidence that the addition of a disinfectant is necessary for control of microbial contaminants							
Haloacetic Acids (HAA5) (ppb)	NA	60	2.4	NA	2022	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	4.8	NA	2022	No	By-product of drinking water chlorination

Important Drinking Water Definitions	
Term	Definition
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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfection level. 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.

For more information please contact:

Rick Strojny, DSO-4

71-1699 Puu Napoo Dr #56

Kailua Kona, HI 96740

(808) 640-2799

Email: bigislandws@gmail.com



We are over 60 percent water by weight. We're just a big ball of... blob of water, with enough organic thickener added so we don't dribble away on the floor.

David Suzuki, Canadian Scientist