

Moloka'a Irrigation Cooperative (MIC)

Consumer Confidence Report 2025 (page 3 amended 5/13/2025)

Please take a moment to read the 2025 Annual Water Quality 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.

Where does my water come from?

From January 2024 through September 2024, the source of MIC's water was groundwater from Moloka'a Well No. 1 (State Well No. 1020-02) owned by the State Department of Land and Natural Resources located in the foothills mauka of Kuhio Highway. Beginning in October 2024, the sole source of water for MIC changed when our new well (State Well No 2-1019-012) began supplying water to the MIC system. Rain falls in the mountains above Moloka'a and filters through the ground before entering the aquifers for these wells. The water from the wells is disinfected with chlorine. MIC is required to monitor the chlorine levels being delivered on a daily basis to assure that proper disinfection is occurring prior to delivering water to our members. Disinfection kills the 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. The amounts of chlorine residual in your drinking water are minute, measured in the tenths of a part per million (ppm).

Additional Information for Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Moloka'a Irrigation Cooperative is responsible for providing high quality drinking water and removal of lead pipes in its system but cannot control the variety of materials used in your home plumbing 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 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 your water system manager, Louisa Wooton, at moloairrigationcoopmgr@gmail.com. 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>.

MIC has no known lead in our water supply lines.

LEAD SERVICE LINE INVENTORY

Per new EPA regulations, 2021 Lead and Copper Rule Revisions, MIC completed the required Lead Service Line Inventory in 2024. Information about the survey can be requested from moloairrigationcoopmgr@gmail.com.

MIC has no lead in our water transmission lines

Additional Information for Copper – Copper in drinking water is usually from copper pipes or from water fixtures containing copper. Copper is an essential nutrient, required by the body in very small amounts. However, EPA has found copper to potentially cause the following health effects when people are exposed to it at levels above the action level. Short periods of exposure can cause gastrointestinal disturbance, including nausea and vomiting. Use of water that exceeds the action level over many years could cause

liver or kidney damage. People with Wilson's disease may be more sensitive than others to the effect of copper contamination and should consult their health care provider.

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).

What contaminants are of concern in my drinking water? Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. 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, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, 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, 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.

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).

Water Quality Data

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. Food & Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. In this table you will find terms and abbreviations that might not be familiar to you. To help you understand these terms better, we have provided the definitions at the end of this report.

MIC NEW SOURCE WATER TESTING

With the operation of our new MIC well, we are required to submit extensive sampling of the water for the first year of service from our well. The first round of testing occurred in October of 2024. The list below includes all contaminants that were tested for in the first round. A summary of the results is listed at the end of the list. Of the analytes that were detected, all were within the acceptable limits established by the Hawaii Department of Health based upon the EPA Drinking Water Equivalent Level.

INORGANIC CHEMICALS - Synthetic Organic Chemicals

1,2-Dibromo-3-Chloropropane (DBCP)	Benzo(a)pyrene	Dinoseb
Ethylene Dibromide (EDB)	Chromium	Nitrate (as N)
Antimony	Carbofuran	Dioxin (2,3,7,8-TCDD)
1,2,3-Trichloropropane (TCP)	Copper	Nitrite (as N)
Arsenic	Chlordane	Diquat
2,4,5-TP	Cyanide	Selenium
Asbestos	Dalapon	Endothall
2,4-D	Fluoride	Thallium
Barium	Di(2-ethylhexyl)adipate	Endrin
Alachlor (Lasso)	Lead	Gamma-BHC (Lindane)
Beryllium	Di(2ethylhexyl)phthalate	Glyphosate
Atrazine	Mercury	Heptachlor
Cadmium	Dieldrin	
Heptachlor Epoxide	Nickel	

ORGANIC CHEMICALS

Hexachlorobenzene	1,2-Dichloroethane (EDC)	
Hexachlorocyclopentadiene	Toxaphene	PFNA
Methoxychlor	1,2-Dichloropropane (DCP)	cis-1,2-Dichloroethylene
Oxamyl (Vydate)	PFOA	HFPO-DA(GenX)
1,1,1-Trichloroethane (TCA)	Benzene	Dichloromethane
Pentachlorophenol	PFOS	PFBS
1,1,2-Trichloroethane	Carbon Tetrachloride (CTC)	Ethylbenzene
Picloram	PFHxS	o-Dichlorobenzene
1,1-Dichloroethylene	Chlorobenzene	p-Dichlorobenzene
1,2,4-Trichlorobenzene	Toluene	trans-1,2-Dichloroethylene
Simazine	Tetrachloroethylene	
Polychlorinated biphenyls (PCBs)	Styrene	

RADIONUCLIDES

Gross alpha particle activity	Radium 226	Uranium
Gross beta particle activity	Radium 228	

ANALYTES DETECTED 2024

Client Sample ID: Moloa'a Irrigation New Source Lab Sample ID: 380-116822-1

Analyte Result

1,2,3-Trichloropropane .10 ug/l	Alkalinity 69 mg/L (Bicarbonate Alkalinity as CaCO3)
Calcium 8.9 mg/L	Specific Conductance 290 umhos/cm
Barium 6.8 ug/L	Chlorine, Total Residual 0.12
Chromium 2.0 ug/L	Fluoride 0.056 mg/L
Copper 24 ug/L	pH 7.7

Client Lab Sample ID: Moloa'a Irrigation New Source 380-118944-1

Turbidity 0.10 NTU

Client Sample ID: Moloa'a Irrigation New Source Lab Sample ID: 380-118944-2

Nitrate as N Result 1.5 mg/l

2ND QUARTER MIC NEW SOURCE WATER TESTING 2025

MIC recently submitted our second required testing samples in April of 2025. Complete results for all of these samples are pending.

PFAS TESTING BY SAFE DRINKING WATER BRANCH OF THE DEPARTMENT OF HEALTH MARCH 2025

Drinking water systems in the USA are now required to perform testing for Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (PFAS). For the first round of testing, the Department of Health furnished personnel and testing supplies to do the testing for MIC. Testing was done for twenty-five separate PFAS analytes. No PFAS were detected in this first round of testing.

“PFAS exposure over a long period of time can cause cancer and other illnesses that decrease quality of life or result in death. PFAS exposure during critical life stages such as pregnancy or early childhood can also result in adverse health impacts.”

2022 TRI-ENNIAL LEAD AND COPPER TESTING

MIC is required to test for Lead and Copper on a triennial schedule. MIC completed the most recent required testing for Lead and Copper in September of 2022. None of the samples exceeded the Action Level for either Lead or Copper.

Contaminants (units)	MCL	MCLG	90 th Percentile Value	# of samples above AL	Likely source of contamination	Violation
Lead (ppb)	AL = 10	0	ND* (2022)	0	Corrosion of house plumbing systems; erosion of natural deposits	No
Copper (ppm)	AL = 1.3	1.3	0.037 (2022)	0	Corrosion of house plumbing systems; erosion of natural deposits	No

The lead sampling data for our water system is publicly available upon request. To obtain a copy or review the inventory, please contact Louisa Wooton, DSO & General Manager (808)828-0095.

2022 TRI-ENNIAL DISINFECTION BY-PRODUCTS TESTING

MIC is also required to test for Disinfection By-Products (DBP) in our water on a triennial schedule. DBP includes Trihalomethanes and Haloacetic Acids. MIC completed testing for DBP in August of 2022. The results were that our water did not exceed the Maximum Contaminant Level (MCL) for these contaminants.

MONTHLY MICROBIOLOGY TESTING

MIC is required to perform monthly testing for coliform bacteria in our water. Monthly Microbiological Testing of the water in 2024 resulted in **NO DETECTION** of Total Coliform.

Water System Improvement Plans and Projects

WATER TANK REPAIR FUNDED BY DRINKING WATER STATE REVOLVING FUND (EPA)

The contract for repairing our water tank was awarded to Ladd Construction and work is well underway. In order to complete the repair, Maui Water Tanks installed three temporary water tanks that will be used for water storage during

the repair. Ladd Construction has installed a booster pump to pressurize the system while our tank is being repaired. Pittsburgh Tank and Tower will be the subcontractor for repairing the old tank and that work is scheduled for the summer of 2025. This is a major project to correct the significant deficiency in our system due to the condition of the 1970 era steel tank.

MISSION CONTROL

With the completion of our well, MIC also installed new SCADA reporting via Mission Control. SCADA, which stands for Supervisory Control and Data Acquisition, is a computer-based system used to monitor, control, and optimize industrial processes like water systems. Mission Control allows our operators to view real-time information of the well operation and water tank level on-line.

METER REPLACEMENTS AND UPGRADES FUNDED BY HAWAI'I COMMUNITY FOUNDATION
WAI MA'OLI PROJECT

Ladd Construction completed meter upgrades in 2024 for all of the two-inch (2") meters in the MIC system. Measurements over the years had proven that these meters were under-reporting. Consequently, this resulted in an on-going non-revenue water percentage. This project has lowered the percentage of non-revenue water to < 5% on a monthly average compared to as much as 15% - 18% in prior years.

Cross Connection Program (Backflow Prevention)

All connections in the MIC system are required to have Backflow Prevention devices installed and tested annually. The 2024 Cross Connection Testing Program was completed in September of 2024.

GLOSSARY OF TERMS

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 MCLGs as feasible using the best available treatment technology.
ND	Not Detectable
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 disinfectant 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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