



**MACDILL AIR FORCE BASE (AFB)
PWS ID# 6296193
2022 ANNUAL DRINKING WATER
QUALITY REPORT**

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day.

We are committed to ensuring the quality of your water. If you have any questions or concerns about the information provided in this report, please feel free to contact us.

WHERE YOUR WATER COMES FROM

The David L. Tippin Water Treatment Facility (DLTWTF) produces the City of Tampa's Drinking Water and is the sole source of drinking water for MacDill AFB. The primary source of water for the DLTWTF is the Hillsborough River with treatment by: coagulation, flocculation, sedimentation, ozonation, pH adjustment, filtration, disinfection, and fluoridation. The City also purchases water from Tampa Bay Water (TBW) that is produced from groundwater, surface water, and desalinated seawater supplies.

The FGUA uses sodium hypochlorite and ammonium sulfate to form the chloramine compounds that supplement the disinfectant provided by the City of Tampa and required by state and federal regulation. We also use a corrosion control inhibitor to minimize the

leaching of lead and copper from water pipes and plumbing fixtures.

HOW WE ENSURE YOUR DRINKING WATER IS SAFE

The FGUA's MacDill AFB Water System routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2022. Data obtained before January 1, 2022, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

As authorized and approved by the EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from one year to another. As a result, some of our data may be more than one year old.

HOW TO READ THE TABLE

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

Action level (AL) – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Location Running Annual Average (LRAA) - the average of sample results taken at a particular monitoring location during the previous four calendar quarters.

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.

Maximum contaminant 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 residual disinfectant level or MRDL – the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

Maximum residual disinfectant level goal or MRDLG – 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.

ppm – parts per million or milligrams per liter is one part by weight of analyte to one million parts by weight of the water sample.

ppb – parts per billion or micrograms per liter is one part by weight of analyte to one billion parts by weight of the water sample.

Level 1 Assessment: A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system

ADDITIONAL HEALTH INFORMATION

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, 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.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. To ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the number of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protections 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 the 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 at 1-800-426-4791**

HOW TO REACH US

If you have any questions about this report or concerning your water utility, please contact the FGUA's MacDill AFB Utility Operations Center at

(813) 828-3984 or visit the web at

<http://www.fgua.com>

The FGUA office at MacDill AFB is open from 7:30 AM until 4:00 PM, Monday through Friday. The FGUA encourages its customers to become involved in decisions that may affect the quality of their drinking water. Customers interested in becoming involved may attend regularly scheduled meetings of the FGUA Board of Directors. These meetings are advertised in your local newspaper and also on the FGUA's website.

SOURCE WATER ASSESSMENT PLAN

In 2022, the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment for the City of Tampa Water Department. These assessments are updated every year. The 2022 assessment identified thirteen potential sources of contamination in the vicinity of the city's system with susceptibility levels ranging from low to moderate. The assessment results are available on the FDEP Source Water Assessment and Protection Program website: <https://prodapps.dep.state.fl.us/swapp/>

2022 WATER QUALITY SUMMARY TABLE – FGUA MacDill AFB, PWS ID NO. 6296193

STAGE 1 DISINFECTANTS AND DISINFECTION BY-PRODUCTS							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec 2022	N	2.3	0.6 - 4.0	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes

For chloramines, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.

STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	Mar, Jun, Sept, Dec 2022	N	26.06 LRAA Highest Site # 4	13.3-35.6	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	Mar, Jun, Sept, Dec 2022	N	57.1 LRAA Highest Site # 3	24.7-46.3	NA	MCL = 80	By-product of drinking water disinfection

For haloacetic acids or TTHM, the level detected is the highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations.

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90 th Percentile Result	Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	July, August 2020	N	0.70	1	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	July, August 2020	N	4.90	1	0	15	Corrosion of household plumbing systems; erosion of natural deposits

The level detected is the highest level detected over a 12 month sampling period for all sites collected.

Microbiological Contaminants

Contaminant	Dates of sampling (mo/yr)	MCL Violation Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely source of contamination
<i>E. coli</i>	09/2022	N	1	0	Routine and repeat samples are total coliform positive and either is <i>E. coli</i> positive or system fails to take repeat samples following <i>E. coli</i> positive routine sample or system fails to analyze total coliform positive repeat sample for <i>E. coli</i>	Human and animal fecal waste

NOTES

- A. During the past year, we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. In addition, we were required to take 1 corrective actions and we completed all of these actions.
- B. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The FGUA's MacDill AFB Water System 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>.
- C. Copper is an essential nutrient, but some people who drink water in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor. Copper in drinking water is normally associated with plumbing components (e.g., copper piping in the building's plumbing system or in the tap fixtures themselves) and can be corrected by flushing the tap before using the water. In May 2017, the FGUA initiated corrosion control treatment as recommended by a Corrosion Control Study performed by the Florida Rural Water Association and approved by the Hillsborough County Health Department. The treatment involves the addition of a corrosion inhibitor (polyphosphate) at prescribed and monitored concentrations into drinking water. Water quality data collected since 2017 indicate the treatment has been effective in reducing copper concentrations in drinking water.
- D. Please DO NOT FLUSH your unused/unwanted medications down toilets or sink drains. For more information, please go to <http://www.dep.state.fl.us/waste/categories/medications/pages/disposal.htm>
- E. We work hard to provide top-quality water to every tap and ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

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Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely Source of Contamination
E. coli**	Sept. 2022	N	1	0	Routine and repeat sample samples are total coliform positive and either is E.coli positive or system fails to take repeat samples following E. coli positive routine sample or system fails to analyze total coliform positive repeat sample for E. coli.	Human and animal fecal waste

** E. coli: The total number of EC + positive samples taken to comply with the RTCR must be reported, even if they are not MCL violations.

A PWS will receive an E. coli MCL violation when there is any combination of an E. coli positive (EC+) samples result with a routine/repeat TC+ or EC+ sample result. E. coli MCL violations occur with the following sample result combinations.

Routine EC+ and Repeat TC+

Routine EC+ and Repeat, any missing sample

Routine EC+ and Repeat EC+

Routine TC+ and Repeat EC+

Routine TC+ and Repeat TC+ (but no E.coli analysis)

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Turbidity

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	Daily: Jan – Dec 2022	No	0.37	99.5%	N/A	TT	Soil runoff

The result in the lowest monthly percentage column is the lowest monthly percentage of samples reported in the Monthly Operating Report meeting the required turbidity limits. Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system. High turbidity can hinder the effectiveness of disinfectant.

Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	May 2022	No	0.260	0.260	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production wastes
Barium (ppm)	May 2022	No	0.011	0.011	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	May 2022	No	1.0	1.0	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Nitrate (as Nitrogen) (ppm)	May 2022	No	0.40	0.40	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	May 2022	No	45	45	N/A	160	Salt water intrusion, leaching from soil

Results in the level detected column are the highest detected level at any sampling point. *The Florida Department of Environmental Protection (FDEP) has set the drinking water standard for sodium at 160 parts per million (ppm) to protect individuals who are susceptible to sodium sensitive hypertension or diseases that cause difficulty in regulation body fluid volume. Sodium is monitored so that individuals who have been placed on sodium (salt) restricted diets may take into account the sodium in their drinking water. Drinking water contributes only a small fraction (less than 10 percent) to the overall sodium intake. If you have been placed on a sodium-restricted diet, please inform your physician that our water contains 45 mg/L of sodium.