NAPLES, FLORIDA ★ 2022

Annual Water Quality *Report*

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.

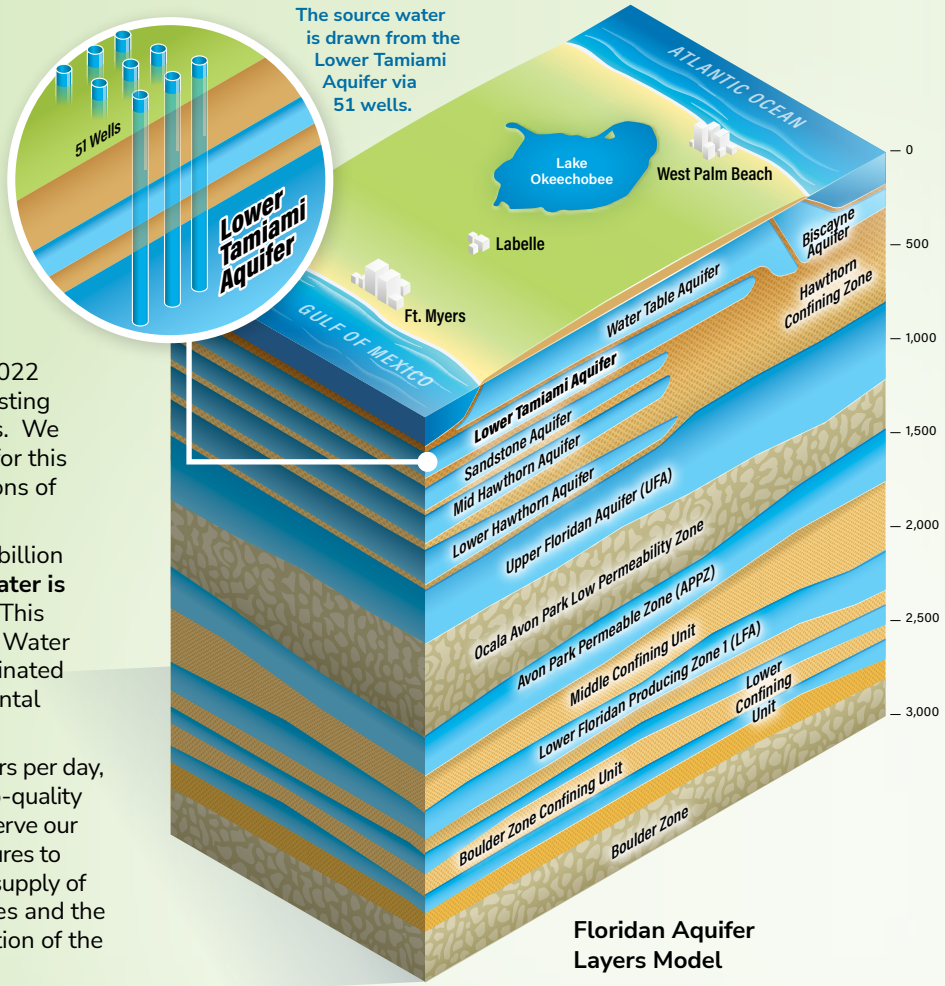
PWSID 5110198

INTRODUCTION AND *Water Resources*

As required by the U.S. Environmental Protection Agency (EPA), the City of Naples Utilities Department is providing this annual report on the quality of its drinking water. The City of Naples has provided quality drinking water since 1945 and routinely monitors for contaminants 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. We are pleased to report that the quality of drinking water for this reporting period has again surpassed the strict regulations of both the State of Florida and the U.S. EPA.

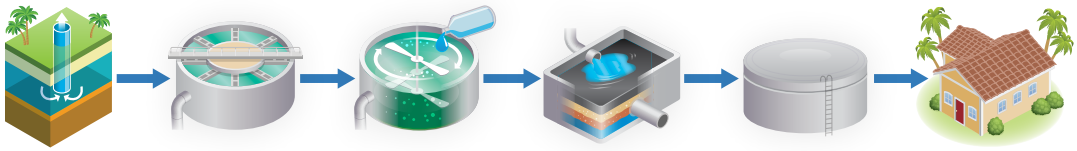
In 2022, the City of Naples provided approximately 5.2 billion gallons of water to our utility customers. **The source water is drawn from the Lower Tamiami Aquifer via 51 wells.** This water is treated to optimum levels at the City of Naples Water Treatment Plant utilizing a lime softening process, chlorinated for disinfection purposes, filtered, and fluoridated for dental health purposes.

The staff at the City's Water Treatment Plant work 24 hours per day, seven days per week, to ensure that customers receive top-quality water. Our customers support our utility system and preserve our future water supply by taking prudent conservation measures to ensure that precious water is not wasted. The long-term supply of quality water depends on effective conservation practices and the development of alternative water supplies for the irrigation of the tropical landscape enjoyed by most utility customers.



Floridan Aquifer Layers Model

HOW IS OUR *Water Treated?*



City of Naples 2022 Monitoring Results for Contaminants in Drinking Water

MICROBIOLOGICAL CONTAMINANTS

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.) [1]	MCL Violation Y/N	Highest Monthly Percentage	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	Monthly	No	.025	0	For systems collecting at least 40 samples per month: presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment

INORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected [2]	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	06/20	No	0.0039	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	06/20	No	0.89	NA	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
Nitrite (ppm)	05/22	No	0.01	NA	NA	NA	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	06/20	No	36.40	NA	NA	160	Salt water intrusion, leaching from soil

SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected [2]	Range of Results	MCLG	MCL	Likely Source of Contamination
Hexachlorocyclopentadiene (ppb)	4/20 - 9/20	No	.081	0.02 - 0.081	50	50	Discharge from chemical factories
Diquat (ppb)	4/20	No	0.20	NA	20	20	Discharge from chemical factories

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 [3]	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines [5] (ppm)	01/22 – 12/22	No	3.00	1.0-5.0	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	02/22, 05/22	No	24.0	20.0-24.0	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	02/22, 05/22	No	27.0	25.0-27.0	NA	MCL = 80	By-product of drinking water disinfection

SECONDARY CONTAMINANTS

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected [2]	Range of Results	MCLG	MCL	Likely Source of Contamination
Color (color units)	02/20, 04/20 07/20, 10/20	No	15	5-15	NA	15	Naturally occurring organics
Chloride (ppm)	06/20	No	56.0	NA	NA	250	Natural occurrence from soil leaching
Sulfate (ppm)	06/20	No	22.2	NA	NA	250	Natural occurrence from soil leaching
Zinc (ppm)	06/20	No	.03200	NA	NA	5	Natural occurrence from soil leaching

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	09/20	No	0.0480	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [4] (tap water) (ppb)	09/20	No	2.2	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

RADIOACTIVE CONTAMINANTS

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected [2]	Range of Results	MCLG	MCL	Likely Source of Contamination
Combined Uranium (pCi/L)	06/20	No	0.195	NA	0	20	Erosion of natural deposits

HARDNESS OF YOUR WATER

General guidelines for classification of the hardness of water are: 0 to 60 mg/L (milligrams per liter) of hardness is classified as soft water; 61 to 120 mg/L as moderately hard water; 121 to 180 mg/L as hard water; and more than 180 mg/L as very hard water. The range of hardness delivered to your home by The City of Naples Utilities Division in 2022 was 43 mg/L to 95 mg/L, with an average of 64.5 mg/L, or 2.98 grains per gallon to 5.55 grains per gallon with an average of 3.77 grains per gallon.

NOTES

1 Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

2 Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, volatile organic contaminants, secondary contaminants and other contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

3 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. For HAA5 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 highest result 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, including Initial Distribution System Evaluation (IDSE) results as well as Stage 1 compliance results.

4 Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

5 Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort and anemia.

UNREGULATED CONTAMINANTS

City of Naples has been monitoring for Unregulated Contaminants (UC) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UC. At present, no health standards (for example, maximum contaminant levels) have been established for UC. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule (UCMR), please call the Safe Drinking Water Hotline at (800) 426-4791.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.) [1]	Level Detected	Range of Results
HAA5 (ppb)	5/19 & 11/19	28.2	17.1 – 28.2
HAA6Br (ppb)	5/19 & 11/19	7.9	5.4 – 7.9
HAA9 (ppb)	5/19 & 11/19	33.8	22.1 – 33.8
***Bromide** (ppm)	5/19 & 11/19	0.240	0.227 - 0.240
***Total Organic Carbon (TOC)** (ppm)	5/19 & 11/19	10.10	8.47 – 10.10

* These samples were taken at a source water influent location representing untreated water entering the water treatment plant.

DEFINITIONS

The following are definitions to the terms and abbreviations included in the Monitoring Results table above:

Maximum Contaminant Level (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 (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 Goal (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.

Maximum Residual Disinfectant Level (MRDL): 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.

Initial Distribution System Evaluation (IDSE): An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of Trihalomethanes (THMs) and Haloacetic Acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

Parts per billion (ppb) or Micrograms per liter (µg/l): One part by weight of analyte to 1 billion parts by weight of the water sample.

Parts per million (ppm) or Milligrams per liter (mg/l): One part by weight of analyte to 1 million parts by weight of the water sample.

pCi/L (picocuries per liter): a measure of radioactivity.

90th Percentile: 90% of samples are equal to or less than the number in the chart.

RAA: Running Annual Average.

NA: Not applicable.

ND: Not detectable at testing limits.

CDC: Centers for Disease Control.

EPA: Environmental Protection Agency

South Florida Water Management District Irrigation Restrictions

The South Florida Water Management District is enforcing mandatory **3-day per week irrigation restrictions** based on odd and even addresses. For more detailed information regarding these water restrictions and modifications to current irrigation restrictions please visit the City of Naples website at www.naplesgov.com/utilities. Irrigation restrictions do not apply for those who irrigate with reclaimed water.

NO irrigation between the hours of 10:00am and 4:00pm

If your address ends in an EVEN number (or a location without an address), you may irrigate only on Tuesdays, Thursdays, and Sundays.

0 2 4 6 8

If your address ends in an ODD number you may irrigate only on Mondays, Wednesdays, and Saturdays.

1 3 5 7 9

FRIDAY is a non-watering day for all SFW water customers

For More Information

If you have any questions about this report or your water utility, please contact staff at the City of Naples Water Treatment Plant at 239-213-3004. We want our valued customers to be informed about their water utility. You are encouraged to attend regular City Council meetings on the first and third Wednesday of each month, at 8:30 AM, in Council Chambers, at 735 Eighth Street South to learn more about the City of Naples' utility operation and other important business of your community. To find out more on this and other matters please visit the City of Naples website at www.naplesgov.com.

Source Water Assessment

In 2022, The Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information concerning potential sources of contamination within the vicinity of our wells. The 2022 assessment results for potential sources of contamination identified twenty one (21) low concern levels for petroleum storage tanks and active injection wells, zero (0) moderate concern levels for petroleum storage tanks, and no high concern levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

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:

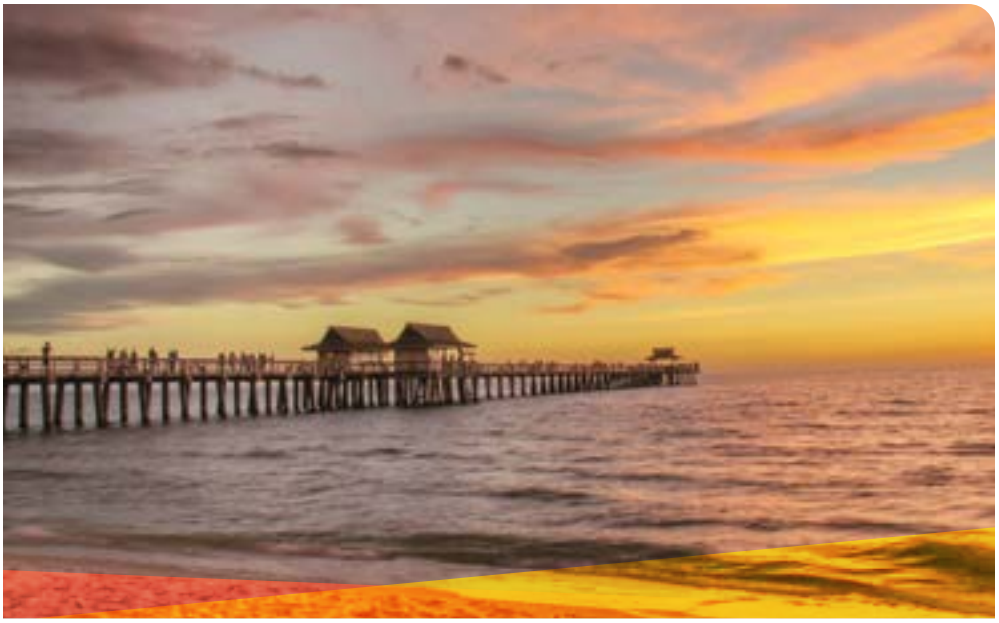
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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 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.



In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limits the amount 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 protection 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.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 City of Naples Water Treatment Plant 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.