



2022 ANNUAL

DRINKING WATER QUALITY REPORT

BIG CYPRESS SEMINOLE RESERVATION



TRIBAL COMMUNITY
DEVELOPMENT

Prepared by:
**Seminole Tribe of Florida
Public Works Department**

Phone: (954) 894-1060
publicworks@semtribe.com

www.semtribe.com

Electronic version of CCR
can be found here:

[https://tcd.semtribe.com/
services/public-works-
\(transportation\)](https://tcd.semtribe.com/services/public-works-(transportation))

WE ARE
COMMITTED TO
ENSURING THE
QUALITY OF
YOUR WATER.



Big Cypress Operators, from left to right: Michael McHugh, Henry Coreano, Lionel Gros-Ventre

We are pleased to present you this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our continuing goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the effort we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is ground water from wells, which draw from the Biscayne aquifer. The water is pumped to the plant, where it is filtered and processed through low pressure reverse osmosis units. The water is then aerated to remove any dissolved gases. Next, it is disinfected with chlorine to protect against pathogenic (disease causing) bacteria.

We want our valued customers to be informed about their water service. If you have any questions about this report or your water service, please contact Rudy Garcia, Public Works Department, at (863) 634-1705 or Michael Espinoza, at (863) 227-6247.

The Big Cypress Seminole Tribe Public Works Department routinely monitors for contaminants in your drinking water according to Federal laws and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period from January 1, 2022 to December 31, 2022. Data obtained prior to January 1, 2022 and presented in this report are from the most recent testing done in accordance with Federal laws and regulations.

As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

The source of drinking water (both tap and bottled water) includes 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 materials. It can also pick up substances resulting from the presence of animal or human activity.



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Contaminants that may be present in source water include the following:

Microbial contaminants which include viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operation, and wildlife.

Inorganic contaminants including salt and metals that can be naturally occurring or resulting from urban storm water run-off, industrial or domestic wastewater discharge, oil and gas production, mining or farming.

Pesticides and herbicides that may come from a variety of sources including agriculture, urban storm water runoff, and residential uses. Organic chemical contaminants that include synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, as well as gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants may be naturally occurring or result from oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that provide the same protection for public health.

All drinking water, including bottled water, may reasonably be expected to contain at least a small amount 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

In the following table you will find many terms and abbreviations with which you may not be familiar. To better help you understand these terms, we have provided the following definitions.

Parts per million (ppm) or milligrams per liter (mg/l) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/l) - One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

Picocuries per Liter (pCi/l) - Picocuries per liter is a measure of the radioactivity in the water.

Action level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - the "maximum allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal (MCLG) as feasible using the best available treatment technology. MCLs are set at a very stringent level. To understand the possible health effects described



for many regulated constituents, a person would have to drink 2 liters of water at the MCL level, every day for a lifetime, to have a one-in-a-million chance of having the described health effect.

Maximum Contaminant Level Goal - The "goal" (MCLG) is the level of the contaminants in the drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

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 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>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplant, 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 provider. The EPA and the Center for Disease Control and Prevention (CDC) issue guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants which are available from the Safe Drinking Water Hotline. (1-800-426-4791).

Maximum Residual Disinfectant Level or MRDL

The Highest level of a disinfectant allowed in drinking water There is convincing evidence that addition of disinfectant is necessary for 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.

We at the Big Cypress Seminole Reservation work around the clock to provide you with top quality water to every tap. We ask that all our customers help us to protect our water sources, which are at the heart of our community, our way of life, and our children's future.

A MESSAGE FROM THE DIRECTOR

The Seminole Tribe of Florida is pleased to present our annual Consumer Confidence Report (CCR), which provides a detailed overview of the quality and sources of water we deliver to our tribal community. Water is a precious resource on our tribal reservations, and we are continuously developing strategies to safeguard our drinking water supplies, particularly in light of the challenges posed by climate change and sea level rise.

Our commitment to producing safe drinking water that meets Federal EPA standards is unwavering, and we are proud to report that all four of our water treatment plants (Brighton, Immokalee, Big Cypress, and Hollywood) have consistently achieved this goal. As new challenges in drinking water safety emerge, we remain vigilant in protecting our water sources, implementing treatment techniques, promoting water conservation, and educating our community. Our executive leadership and the support of our Tribal Council have been instrumental in our success, and we are grateful for their unwavering support.

Our staff members are the backbone of our water treatment operations, and their dedication to producing high-quality drinking water has been key to our success. Through their diligent work and commitment to best management practices, they have played a critical role in ensuring that all four of our water treatment plants consistently meet or exceed Federal EPA standards. Their expertise and attention to detail have been instrumental in maintaining the high quality of our drinking water. We owe this success to our diligent plant operators, supporting staff members, and the leadership of our tribe, who have demonstrated their commitment to improving and protecting our water resources.

Implementing sustainable practices and ongoing education for staff is crucial in the water treatment industry. With the ever-increasing demand for clean water, it is essential that we use sustainable methods that can provide high-quality water while minimizing the impact on the environment. By continuously improving our treatment processes, we have increased efficiency, reduced waste, and lowered costs. Additionally, through ongoing education, we have been able to stay up-to-date with the latest developments in the industry, allowing us to adopt new technologies and methods that further promote sustainability, allowing us recognition with several awards for our efforts.

We thank you for taking the time to read our annual water quality report, and we look forward to another year of providing safe, reliable, and quality drinking water to our tribal community and its visitors.

Please share your thoughts or concerns with us about the information contained in this report.

Phone: (954) 894-1060

E-mail: publicworks@semtribe.com

Emran Rahaman
Director of Public Works,
Seminole Tribe of Florida



WATER CONSERVATION TIPS

In the Bathroom

- Take short showers instead of baths.
- Turn off the water to brush teeth, shave and soap up in the shower. Fill the sink to shave.
- Repair leaky toilets.
- Install a toilet dam, faucet aerators and low-flow showerheads.

In the Kitchen

- When cooking, peel and clean vegetables in a large bowl of water instead of under running water.
- Only run the dishwasher when it's full.
- Only use the garbage disposal when necessary (composting is a great alternative).
- Install faucet aerators.

For Every Room in the House With Plumbing

- Repair leaky faucets, indoors and out.

- Consider replacing old equipment (like toilets, dishwashers and laundry machines).

Laundry

- Run full loads of laundry.
- When purchasing a new washing machine, buy a water saving model that can be adjusted to the load size.

Outdoors

- Only water the lawn when necessary. If you water your lawn and garden, only do it once a week, if rainfall isn't sufficient. Avoid watering on windy and hot days. Water the lawn and garden in the morning or late in the evening to maximize the amount of water which reaches the plant roots (otherwise most of the water will evaporate).
- Always use a broom to clean walkways, driveways, decks and porches, rather than hosing off these areas.

TEST RESULT TABLE

INORGANIC CONTAMINANTS							
Contaminant and Unit of Measurement	Dates of sampling (Mo/yr.)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination	
Fluoride (ppm)	08/21	N	0.83	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	
Sodium (ppm)	08/21	N	38.0	NA	160	Salt water intrusion, leaching from soil	
Barium (ppm)	08/21	N	0.00042	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Nichel (ppb)	08/20	N	0.65	NA	100	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits	
DISINFECTANT/DISINFECTION BY-PRODUCT (D/DBP) CONTAMINANTS							
Contaminant and Unit of Measurement	Dates of sampling (Mo/yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm) (LRAA)	01/22 - 12/22	N	1.15	0.21 - 1.60	4	4	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	07/22	N	2.70	2.2 - 2.7	N/A	60	By-product of drinking water disinfection
TTHM's Total Trihalomethanes (ppb)	07/22	N	13.0	2.3 - 13.0	N/A	80	By-product of drinking water disinfection
LEAD AND COPPER (TAP WATER)							
Contaminant and Unit of Measurement	Dates of sampling (Mo/yr.)	AL exceeding Y/N	90 th Percentile Results	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Lead (tap water) (ppm)	07/22	N	0.00036	0	0	0.015	Corrosion of household plumbing systems; erosion of natural deposits
Copper (tap water) (ppm)	07/22	N	0.079	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
RADIOACTIVE 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
Radium 226 + 228 or combined radium (pCi/L)	08/21	N	1.11	1.11	0	5	Erosion of natural deposits

COMMUNITY OUTREACH

The Public Works Department regularly contributes to the monthly Seminole Tribune, the official newspaper of the Seminole Tribe. Current events, educational information, and upcoming projects are just a few of the typical topics that we cover.

Educational Plant Tours – The Public Works Department conducts regular tours of our facilities, from school field trips to adult education and outreach. These tours are offered by our knowledgeable staff and present a clear and detailed understanding of plant operations. This multi-generational outreach is unique to the Seminole Tribe because the adult “elder” populations are the gate-keepers and mentors for future generations. This is an opportunity to empower them with the knowledge of the value our Department offers to the community.

