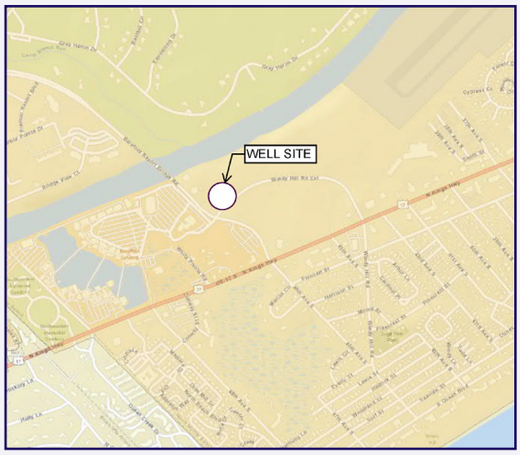
Water Quality Report

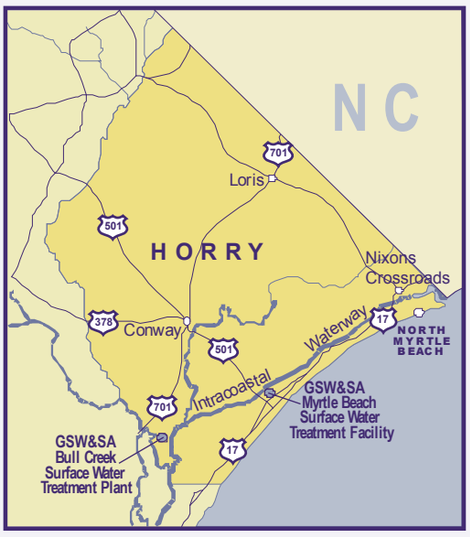
City of North Myrtle Beach www.nmb.us System No. 2610011 July 2021

North Myrtle Beach's water meets or exceeds all drinking water standards!

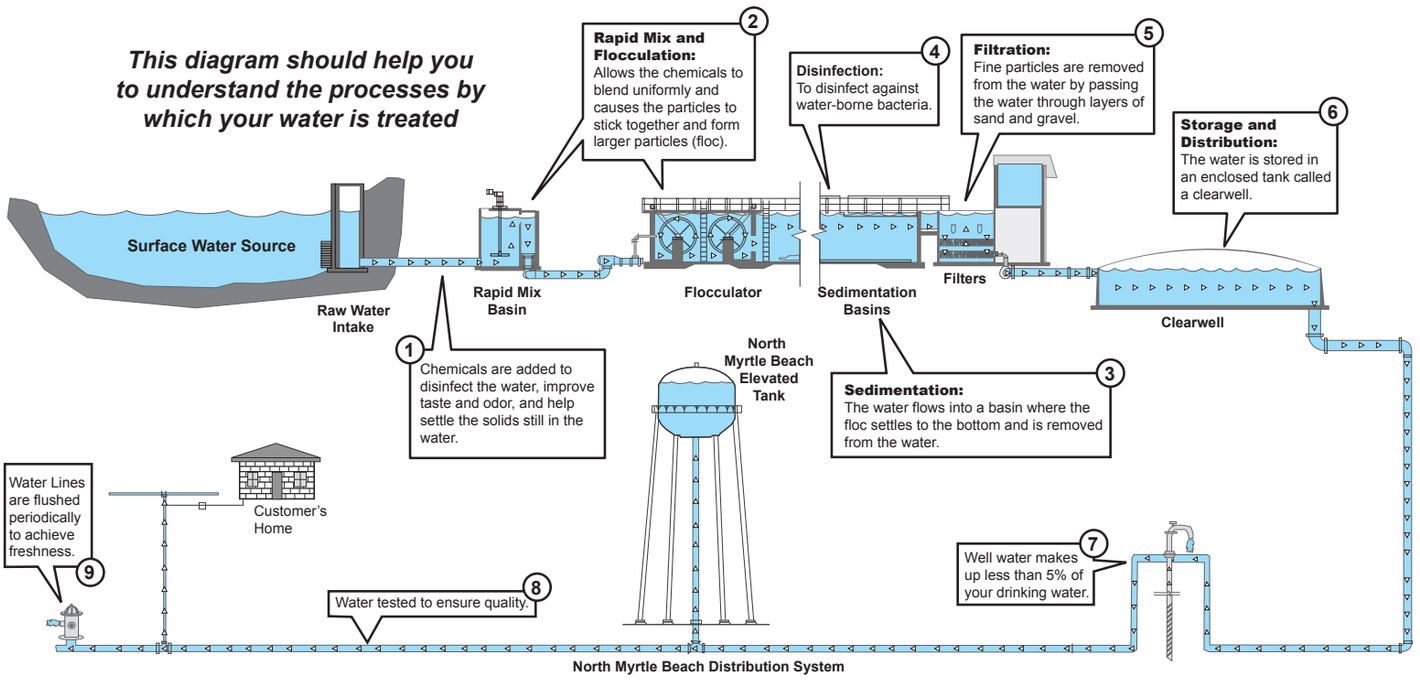
Where does my water come from?

North Myrtle Beach blends water from the Grand Strand Water & Sewer Authority's (GSW&SA) Myrtle Beach Surface Water Treatment Facility and Bull Creek Regional Treatment Facility, and groundwater from a well located in North Myrtle Beach. GSW&SA's Myrtle Beach Surface Water Treatment Facility treats water from the Intracoastal Waterway. Several rivers feed into the Intracoastal Waterway including the Waccamaw River and the Pee Dee River. The Intracoastal Waterway is not salt water. It is a fresh water source. GSW&SA's Bull Creek Regional Treatment Facility treats water from Bull Creek which is a branch of the Pee Dee River. Bull Creek is located north of the confluence of the Waccamaw and Pee Dee Rivers. The area of the City west of the Intracoastal Waterway at Barefoot Resort is served by Bull Creek water. All other portions are served by blended water from all sources.





This diagram should help you to understand the processes by which your water is treated



About this report...

Each day, our employees work to ensure that the water delivered to your home meets all regulatory requirements and your expectations for safety, reliability and quality. For your protection, the staff at the Water Treatment Facilities test your drinking water for many parameters. In addition, North Myrtle Beach collects fifty samples each month from various locations around the water distribution system to further test the quality of our water. The tables below show only the parameters detected in your water during calendar year 2020.

Why am I getting this report now?

The U.S. Environmental Protection Agency (EPA) requires water suppliers to provide annual drinking water quality reports to their customers. This requirement was adopted in the 1996 Amendments to the Safe Drinking Water Act. These reports give consumers valuable information to make personal health-based decisions regarding their drinking water consumption.

Why are there contaminants in the 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Definitions of Terms:

Inorganic Compounds: Compounds such as salts, minerals, and metals.

Trihalomethanes (THMs) and Haloacetic Acids (HAAs): By-products of the disinfection process.

Volatile Organic Compounds (VOCs): Natural and manmade substances used for a variety of industrial purposes. VOCs vaporize and become airborne.

ppm (parts per million): One ppm equals one minute in two years or 1 penny in $10,000.

mg/L (milligrams per liter): In water, mg/L means the same as ppm.

ppb (parts per billion): One ppb equals one minute in 2,000 years or 1 penny in $10,000,000.

ND: Not Detected

Nephelometric Turbidity Unity (ntu): Units for measuring turbidity.

Running Annual Average (RAA): A moving average based on the four most recent quarterly averages.

Turbidity: Turbidity is a measure of the cloudiness of the water. It can be an indicator of the possible presence of contaminants. As an example, milk is turbid because you cannot see through it. Tea is not turbid because you can see through it.

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.

MCL Violations: Violations are rare. When there is a violation of a MCL, the elevated level of the contaminant usually occurs for just a day or so. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary to control microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expectant risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

µg/L (micrograms per liter): In water, µg/L means the same as ppb.

ppt (parts per trillion): One ppt equals one penny in $10 billion.

ng/L (nanograms per liter): In water, ng/L means the same as ppt.

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 the result of oil and gas production and mining activities.

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

Source Water Assessment

SCDHEC has conducted an assessment of the City of North Myrtle Beach groundwater source as well as the source waters of our wholesale water supplier (Grand Strand Water & Sewer Authority). The assessments include a list of all potential contamination sources. Information about Source Water Assessments and whom to contact to read the report is available on the internet at http://www.dhec.sc.gov/HomeAndEnvironment/Water/SourceWaterProtection/. If you do not have internet access, but would like to make arrangements to view the Source Water Assessment Report, please feel free to contact us at (843) 280-5500.

For People with Special Health Concerns

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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Any Questions?

To know more about the quality of your drinking water, please contact the City of North Myrtle Beach Public Works Department at (843) 280-5500. City Council meets the 1st and 3rd Monday of each month at 7:00 pm in the City Council Chambers at the Municipal Complex. For additional information on City Council meetings, visit the City's website at www.nmb.us. Find more information about drinking water on the EPA's drinking water web site at https://www.epa.gov/ground-water-and-drinking-water.

About Lead in Drinking Water

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 North Myrtle Beach 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 drinking water, you may wish to have your water tested. Information is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Microorganisms/Indicators

Parameter	Treatment Requirement	Levels Detected	Violation?	Potential Sources
Turbidity	95% of combined filter effluent samples less than 0.3 ntu and no single sample >1.0 ntu	**100%** less than 0.3 ntu; highest single sample of **0.11 ntu[2] and 0.14 ntu[3]**	No	Soil runoff
Total Coliform	≤ 1 sample that is positive	**0** positive samples	No	Naturally present in environment

Inorganic Contaminants

Parameter	MCL	MCLG	Highest Level Detected	Violation?	Potential Sources
Fluoride	2 ppm*	2 ppm*	**0.31 ppm[1] (2018)** **0.19 ppm[2]** **2.0 ppm[3]**	No	Erosion; discharge from fertilizer; drinking water additive to prevent tooth decay
Nitrate	10 ppm	10 ppm	**0.09 ppm[1]** **0.075 ppm[2]** **0.63 ppm[3]**	No	Erosion; runoff from fertilizer; leaching from septic tanks

* EPA's MCL and MCLG for fluoride are 4 ppm. However, SCDHEC has set lower levels to ensure human health.

Synthetic Organic Chemicals

Parameter	MCL	MCLG	Highest Level Detected	Violation?	Potential Sources
Atrazine	3 ppb	3 ppb	**0.36 ppb[3]**	No	Runoff from herbicide used on row crops

Organics Removal

Parameter	MCL	Required % TOC Removal	Level Detected	Range	Sample Frequency	Violation?	Potential Sources
Total Organic Carbon	TT	50%[3]	**4.41%[2]** **65.4%[3]**	**2.83 – 5.22%[2]** **52.7 – 74.7%[3]**	Monthly	No	Decaying organic materials in environment

Disinfectants

Parameter	MRDL	MRDLG	Highest Compliance Value	Range of Monthly Averages	Violation?	Potential Sources
Chlorine/Chloramines	4 ppm (RAA)	4 ppm	**1.96 ppm[1] (RAA)**	**1.47 – 2.35 ppm[1]**	No	Drinking water additive used to control microbes

Disinfection Byproducts

Parameter	MCL	MCLG	Highest Compliance Value	Range Detected	Violation?	Potential Sources
Total THM	80 ppb (LRAA)	N/A	**30.0 ppb[1] (RAA)**	**17.27 – 36.29 ppb[1]**	No	Byproduct of drinking water disinfection
HAA5	60 ppb (LRAA)	N/A	**15.0 ppb[1] (RAA)**	**1.23 – 28.2 ppb[1]**	No	Byproduct of drinking water disinfection

Metals

Parameter	MCL	MCLG	90th Percentile Value	Number of Sites Exceeding AL	Violation?	Potential Sources
Copper	AL = 1.3 ppm (based on 90th percentile)	0 ppm	**0.2 ppm[1]**	**0*[1]**	No	Erosion; corrosion of plumbing system
Lead	AL = 15 ppb (based on 90th percentile)	0 ppb	**0.58 ppb[1]**	**0*[1]**	No	Erosion; corrosion of plumbing system

*Based on most recent sample results (2019).

Radioactive Parameters

Parameter	MCL*	Level Detected	Violation?	Potential Sources
Beta/photon emitters (MCL is 4 mrem/yr)	50 pCi/L	**3 pCi/L***[3]**	No	Decay of natural and man-made deposits
Alpha Emitters	15 pCi/L	**0.0771 pCi/L**[2]**	No	Erosion of natural deposits

**Based on most recent sample results (2009). ***Based on most recent sample results (2019).

Secondary Parameters

Parameter	MCL	MCLG	Highest Level Detected	Violation?	Potential Sources
Sodium	N/A	N/A	**36 ppm[2]** **480 ppm[3]**	No	Erosion from natural deposits

Notes for all tables

[1] North Myrtle Beach Data | [2] Grand Strand Water & Sewer Authority (Myrtle Beach Surface Water Treatment Plant) | [3] Grand Strand Water & Sewer Authority (Bull Creek Regional Water System)

5 Quick Tips to Conserve Water

- Regularly check for leaks inside and outside your home.
- When brushing your teeth, turn off the tap. This is a simple way to save a lot of water!
- Run the dishwasher and washing machine only when full. Try skipping the extra rinse.
- Water plants before 10 am or after 4 pm.
- Choose efficient appliances.