Marine Corps Air Station Cherry Point
2025 Biannual Water Quality Report (PWSID NC0425035)

Is My Water Safe?

Marine Corps Air Station Cherry Point is pleased to present the Biannual Water Quality Report (Consumer Confidence Report) as required by America's Water Infrastructure Act of 2018 and the Department of the Navy Memorandum dated February 19, 2021. This report is designed to provide details about the Air Station's water, its source, its contents, and how it compares to standards set by regulatory agencies. This report is a snapshot of water quality from January 1 to June 30, 2025. The annual consumer confident report required by the Safe Drinking Water Act will be available on July 1, 2026.

Do I Need to Take Special Precaution?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as individuals with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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. Environmental Protection Agency (EPA) or Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available and may be obtained by calling the Safe Drinking Water Hotline (800-426-4791).

Where Does My Water Come From?

The source of Cherry Point's drinking water is groundwater from the Castle Hayne Aquifer. Water is drawn from 31 wells at depths ranging from 195 to 329 feet below the surface. The water is pumped to one of the best available technologies reverse osmosis/nanofiltration (RO/NF) membrane treatment, in the water industry for providing safe drinking water. The RO/NF plant was placed online in February 2021. Groundwater is first pumped through strainers to remove sand and silt particles. The flow then splits into a bypass, filtering (about 10 percent of total flow) and the RO/NF membrane treatment systems. The systems are monitored by certified operators. In the bypass system, sodium hypochlorite is dosed to the raw water to remove iron and manganese. The RO/NF system consists of cartridge filters, feed pumps, and membrane trains, designed to remove naturally occurring organic materials, microbial substances, and dissolved solids from the water. Booster pumps then transfer the permeate stream through air strippers (de-gasifiers) to remove carbon dioxide and optimize pH balance. The permeate is blended with the bypass water and final pH balance, hardness, corrosion control and disinfection are made. The treated water is then pumped to water storage tanks. From there, water is pumped to the distribution system.

Source Water Assessment and Its Availability

The North Carolina Department of Environmental Quality, Public Water Supply Section, Source Water Assessment Program (SWAP), conducted assessments for all drinking water sources across North Carolina. The source for MCAS Cherry Point water is from groundwater wells. The assessment determines the susceptibility of each water well to potential contaminant sources (PCS). Results are available in SWAP assessment reports that include maps, background information, and a relative susceptibility rating of higher, moderate, or lower.

The SWAP report dated September 10, 2020, indicates a susceptibility rating of moderate for wells 4, 11, 21, and 26 and lower for all other wells. The relative susceptibility rating of each source was determined by combining the contaminant rating (number and location of PCS within the assessment area) and the inherent vulnerability rating (that is, characteristics or existing conditions of the well or watershed and its delineated assessment area).

The complete SWAP assessment report for MCAS Cherry Point is updated periodically and may differ from results that were available at the time this Biannual consumer confidence report was prepared. To receive a copy of the report, contact the Environmental Affairs Department at 252-466-5917. If you have any question about the SWAP report, please contact the source water assessment staff at 919-707-9098.

It is important to understand that a higher susceptibility rating does not imply poor water quality, only the system's potential to become contaminated by PCS in the assessment area.

Important Information about PFAS and Your Drinking Water

Per- and polyfluoroakyl substances (PFAS) represent a significant environmental challenge due to their persistence, bioaccumulation, and potential adverse health effects. Often term "forever chemicals," PFAS compounds resist breakdown in the environment, leading to contamination of soil, air, and particularly, water resources. This contamination poses a critical threat to public health, with exposure linked to conditions such as cancer, liver damage, and reproductive issues. The ubiquity of PFAS in products like nonstick, cookware, firefighting foams, and water-resistant fabrics has further exacerbated their environmental presence.

The U.S. EPA has been grappling with the complexities of regulating PFAS since the early 2000s. Public pressure, legal battles, and increasing scientific evidence have pushed the agency to tighten regulations on these chemicals, culminating in the landmark April 2024 ruling. This new regulation not only sets stringent drinking water standards for PFAS but also designates perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund. In addition to CERCLA designation, EPA's new drinking water regulation sets a maximum contaminant level (MCL) for PFOA and PFOS at 4 ppt (part per trillion), significantly lower than previous health advisory, 70 ppt. The new standard forces water systems across the United States to assess their PFAS levels and implement treatment technologies capable of reducing concentrations to the new regulatory limits. Fortunately for the MCAS Cherry Point community, the installation is using one of the best available technologies, RO/NF to treat the water and can remove PFAS contaminant below the MCL.

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some substances. The presence of substances does not necessarily indicate that water poses a health risk. Information about potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (tap and bottled) 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 and human activity. Industrial processes, pesticide and herbicide applications, farming, petroleum production or spills, are additional sources. Microbial substances, such as viruses and bacteria, that come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife can also impact the source water. In order to ensure that

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

Water Conservation Tips

The average U.S. household uses approximately 400 gallons of water daily or 100 gallons per person, per day. Below is a list of ways to conserve this natural resource.

- Take short showers. A five-minute shower uses four to five gallons of water.
- Shut off water while brushing teeth, washing hair, and shaving.
- Run dish and cloth washers only when full.
- Fix leaky toilets and faucets.
- Adjust sprinklers so only the lawn is watered. Apply water only as fast as the ground can absorb it and only during the cooler parts of the day.
- Teach children about water conservation. Make an effort to reduce the water bill.
- Visit www.epa.gov/watersense for more information.

Cross-Connection Control Survey

The purpose of this survey is to determine whether a cross-connection exists at your home or facility. A cross-connection is an unprotected or improper connection to a public water distribution system that can cause a substance to backflow into the finished water being provided for consumption. Cherry Point Public Works Department is responsible for enforcing cross-connection control regulations. If there are potential cross-connections at your facility or home, contact the operator responsible in charge (ORC) for the water system, Fred West (252) 466-2520 to assess the connection. Examples include:

- Connections to boilers and chemical processing equipment or tanks
- Outside hoses and water taps attached to chemical sprayers
- Outside hoses submerged in swimming pools
- Improperly installed toilet valves
- Connections to irrigation systems, fire systems, and air conditioning systems

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect the source water is several ways:

- Eliminate excess use of lawn or garden fertilizers and pesticides.
- Pick up after your pets.
- Properly maintain septic systems – notify Public Works at 466-5874 for issues.
- Properly dispose of chemicals.

Additional Information for Lead

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. When water has been sitting for several hours, minimize the potential for lead exposure by flushing the tap for 30-120 seconds before using water for drinking or cooking. Information on lead in drinking water and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at *http://www.epa.gov/safewater/lead*.

Water Quality Data Table

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the Maximum Contaminant Level (MCL) of substances that can be found in water provided by public water systems. MCAS Cherry Point water is monitored for various substances on a schedule determined by the state of North Carolina. The table below lists drinking water substances that were detected from January to June 2025. For substance that are tested less frequently than every six months the date that substance was detected is annotated. Detecting a substance does not mean the water is unsafe to drink. In the event a substance is detected above the MCL, the water system would receive a violation requiring public notice to consumers. All sources of drinking water contain naturally occurring substances, which at low levels are generally not harmful. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, the definitions are provided below the table.

Disinfectants	**MRDLG**	**MRDL**	**Highest Detected Amount**	**Range of Detected Amounts**	**Sample Schedule**	**Drinking Water Violation**	**Typical Source**
Chlorine residual, mg/L	4.0	4.0	1.76	0.6 – 1.76	Monthly	No	Water additive used to control microbes
Disinfection By-products	**MCLG**	**MCL**	**Highest LRAA**	**Detected Amount**	**Sample Schedule**	**Drinking Water Violation**	**Typical Source**
Halo Acetic Acid (HAA5), mg/L	NA	0.060	0.023	0.023	Annual	No	By-product of drinking water chlorination
Total Trihalomethane (TTHM), mg/L	NA	0.080	0.027	0.027	Annual	No	By-product of drinking water chlorination
Inorganic Compounds	**MCLG**	**MPL or AL**	**Highest Detected Amount**	**Number of Sites with Results Greater than AL**	**Frequency of Completion; Completion Date**	**Drinking Water Violation**	**Typical Source**
Iron, mg/L	NA	0.3 (MPL)	0.03	NA	Once Every 3 years; 11-7-2023	No	Erosion of natural deposits leaching
Sodium, mg/L	NA	NA	0.5	NA	Once Every 3 years; 11-7/2023	No	Erosion of natural deposits leaching
Copper, mg/L	1.3	1.3 (AL)	0.05	0	Once Every 3 years; 08-20-2024	No	Corrosion of household plumbing; erosion of natural deposits
Lead, mg/L	0	0.015 (AL)	0.003	0	Once Every 3 years; 08-20-2024	No	Corrosion of household plumbing; lead service lines

Term	Definition
AL	Action level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements
LRAA	Locational Running Annual Average: Used as the compliance measure for disinfection by-products.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal: The level of a substance in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MNR	Monitored not Regulated
MPL	Maximum Permissible Level: State assigned level for which exceedance requires operational adjustments
MRDL	Maximum Residual Disinfection Level: The highest level of disinfection allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants
MRDLG	Maximum Residual Disinfection Level Goal: The level of a drinking water disinfectant below which there are no known or expected risk to health. MRDLG do not reflect the benefits of the use of disinfectants to control microbial contaminants.
NA	Not Applicable

ND	Not Detected
NR	Monitoring not required but recommended
mg/L	microgram per liter or parts per billion
ppm	parts per million or milligrams per liter
ppt	parts per trillion
TT	Treatment Technique: A required process intended to reduce the level of contaminant
Variance/Exemptions	State or EPA permission not to meet an MCL or TT under certain conditions

Questions?

For additional information regarding this report or questions about your drinking water, contact Ruan Stewart, Water Program Manager, of the Environmental Affairs Department at (252) 466-5917.