



## Town of Sullivan's Island

### Water & Sewer Department

843-883-5748

[ggress@sullivansisland.sc.gov](mailto:ggress@sullivansisland.sc.gov)

June 27, 2025

Dear Customer:

The Safe Drinking Water Act of 1996 requires that each community water system provide an annual Drinking Water Quality Report to all its customers. The information contained herein is for the Town of Sullivan's Island (System #1010003) for the reporting period of January 1, 2025, through December 31, 2025.

The Town of Sullivan's Island purchases its water from the Charleston Water System (CWS) which is a surface water facility, treating water from the Edisto River and Bushy Park Reservoir.

Below is a link of Charleston Water System's (CWS) 2025 Drinking Water Quality Report for your review [CWS 2025 Water Quality Report](#) The Water Quality Report from CWS is representative of the water delivered to Sullivan's Island residents in 2025.

We continue today to add food grade Polyphosphate to the water supply to minimize discolored (Red) water. In addition, we have replaced/rehabbed approximately 59,000 linear feet of water main and 25,500 feet of service lines. Sullivan's Island does not have any lead service lines in our system. We still have approximately 20,000 feet of Cast Iron water mains that need to be replaced. Our goal is to replace approximately 1,000 feet each year.

Attached, as Table One 2025, is the data specifically for the Town of Sullivan's Island distribution system and our monitoring program. In addition, our Consumer Confidence Report may be viewed on our web site <https://sullivansisland.sc.gov/drinking-water-quality-report>

The Town of Sullivan's Island had no monitoring violations during this reporting period. Additional information is available from the Safe Drinking Water Act Hotline (800) 426-4791 or visit [EPA Ground Water and Drinking Water](#) .

Our Water and Sewer Committee now meets on Thursday's at 9:15am at Town Hall every six weeks. Please feel free to participate in these meetings. If you require any additional information, please contact me at the Town of Sullivan's Island, PO Box 427, Sullivan's Island, SC. 29482.

Greg Gress  
Water/Sewer Manager



## Town of Sullivan's Island - Table One 2025

| Constituent                                              | Units              | Sullivan's Island Highest Level Detected | Range or Other Comments                              | (MCL)                                                             | Date Sampled | MCLG    | Possible Sources In Water                                                                                |
|----------------------------------------------------------|--------------------|------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------|--------------|---------|----------------------------------------------------------------------------------------------------------|
| <b>Biological Compounds and Physical Characteristics</b> |                    |                                          |                                                      |                                                                   |              |         |                                                                                                          |
| Total Coliform Bacteria                                  | % Positive Samples | 0                                        | 0                                                    | Presence of Coliform Bacteria In <5% Of Monthly Samples           | 2025         | 0%      | Naturally Present In The Environment                                                                     |
| <b>Inorganic Compounds</b>                               |                    |                                          |                                                      |                                                                   |              |         |                                                                                                          |
| Copper                                                   | ppm                | 90th Percentile=.032                     | No Sample Exceeded The Action Level (0.0025 to 0.32) | AL=1.3                                                            | 2024         | 1.3     | Erosion of natural deposits; Leaching from wood preservatives; Corrosion Of Household Plumbing Materials |
| Lead                                                     | ppb                | 90th Percentile=.590                     | No Sample Exceeded The Action Level (0.0 to 5.8)     | AL=15                                                             | 2024         | 0       | Corrosion Of Household Plumbing Materials                                                                |
| <b>Disinfectants &amp; Disinfection By-Products</b>      |                    |                                          |                                                      |                                                                   |              |         |                                                                                                          |
| Chloramine (as Cl <sub>2</sub> )                         | mg/L               | 2.64                                     | 0.10 to 3.66                                         | MRDL = 4                                                          | 2025         | MRDLG=4 | Water additive used to control microbes                                                                  |
| Total Trihalomethanes (THM's)                            | ppb                | LRAA: 11                                 | 7.7 to 14                                            | Locational Running Annual Average (LRAA) must be less than 80 ppb | 2025         | NA      | Byproduct of drinking water disinfection                                                                 |
| Total Haloacetic Acids (HAA's)                           | ppb                | LRAA: 10                                 | 7.6 to 11.8                                          | Locational Running Annual Average (LRAA) must be less than 60 ppb | 2025         | NA      | Byproduct of drinking water disinfection                                                                 |

### Abbreviations Of Units

ppm = Parts Per Million

ppb = Parts Per Billion

### Table Of Definitions

MCL = Maximum Contaminant Level: The highest level of a contaminant allowed in drinking water.

MCL's are set as close to the MCLG's as feasible using best available treatment technology.

MCLG = Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

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

LRAA = Locational Running Annual Average

MRDL = Maximum Residual Disinfectant Level: 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.

Disinfectant Level Goal: 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 contamination

MRDLG = Maximum Residual

**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. Sullivan's Island does NOT have any lead service lines. Sullivan's Island 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 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>.



# 2026 Water Quality Report

Summarizing 2025 Data  
*Published May 2026*



*Bushy Park Reservoir*



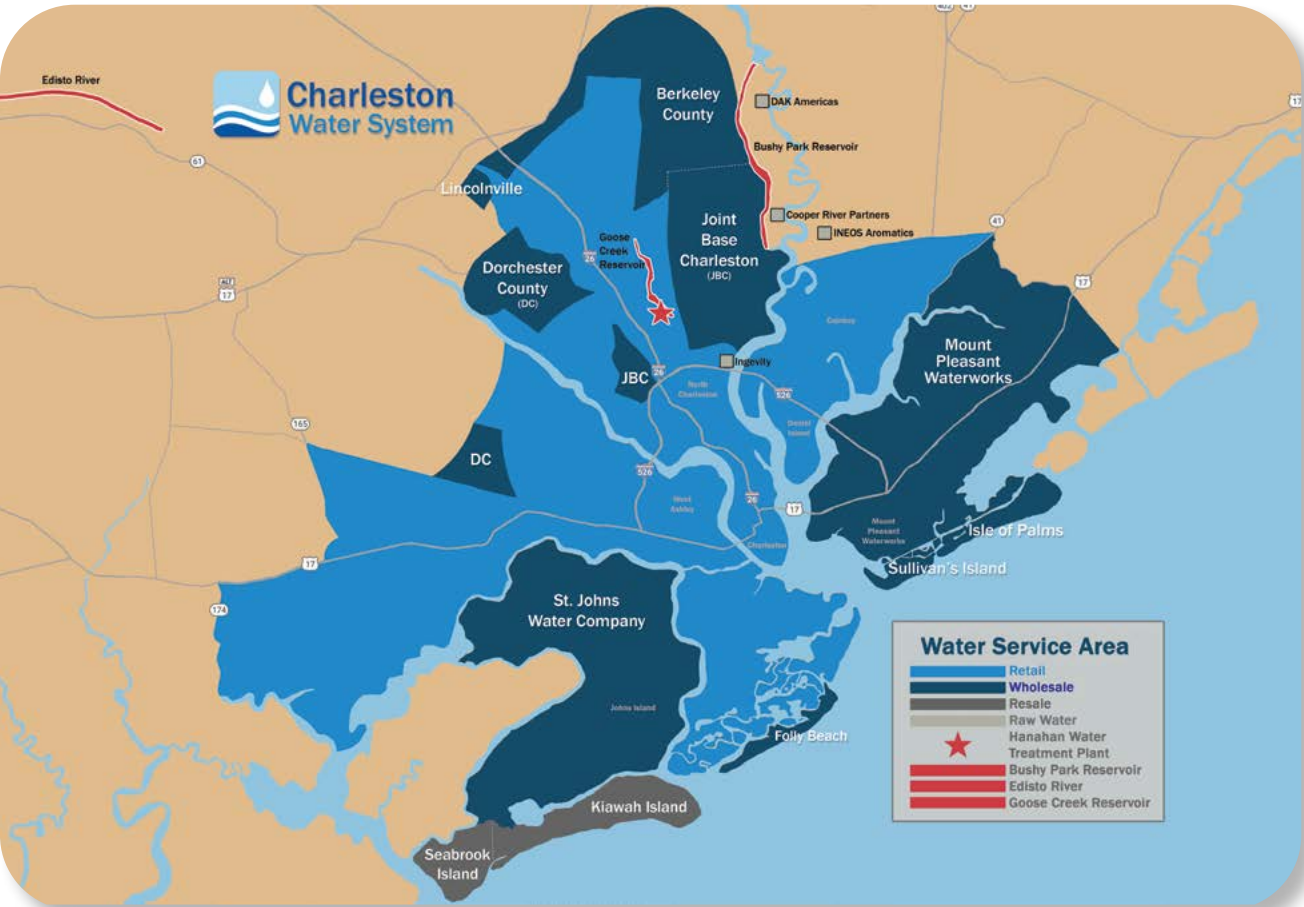


*For treating drinking water, our settling basins are some of our most important plant components.*



# Table of Contents

|                                                                  |    |                                                  |    |
|------------------------------------------------------------------|----|--------------------------------------------------|----|
| Summary.....                                                     | 4  | Voluntary Testing of Unregulated Compounds ..... | 16 |
| Information from the EPA .....                                   | 5  | Lead Data .....                                  | 20 |
| National Award for Water Quality .....                           | 6  | Finished Water Characteristics.....              | 22 |
| Drinking Water Sources .....                                     | 8  | Community Engagement .....                       | 23 |
| Regulatory Testing.....                                          | 10 | Quick Facts .....                                | 24 |
| EPA’s 2022 Unregulated Contaminant Monitoring Rule (UCMR 5)..... | 14 | Water Treatment Process .....                    | 26 |
| Voluntary PFAS Testing.....                                      | 15 | Infrastructure Highlights .....                  | 28 |



# Summary

## English

**Charleston Water System's drinking water met or surpassed all state and federal water quality requirements in 2025.** This report provides details on where your water comes from, how it's treated, and the results of rigorous testing conducted throughout the year. Our team works 24/7 to ensure the water you drink is safe, clean, and reliable.

Please share this information with anyone who drinks this water (or their guardians), especially those who may not have received this report directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this report in a public place or distributing copies by hand, mail, email, or another method. Visit [www.charlestonwater.com/waterreport](http://www.charlestonwater.com/waterreport) to read this report online.

### Questions / Extra Copies

Communications team: (843) 727-7146

Call our staff for direct assistance in translating this publication at (843) 727-6800.

### Get Involved

Our Board of Commissioners meets monthly and meetings are open to the public. Citizen participation is welcomed. Meetings are typically held the fourth Wednesday of every month at 9 a.m. at 103 St. Philip Street (location subject to change). More information: [www.charlestonwater.com](http://www.charlestonwater.com).

**Public Water System ID#: 1010001**

## Español

**El Sistema de Agua de Charleston cumplió o superó todos los requisitos estatales y federales de calidad del agua en 2025.** Este informe proporciona detalles sobre de dónde proviene su agua, cómo se trata y los resultados de las rigurosas pruebas realizadas durante todo el año. Nuestro equipo trabaja las 24 horas del día, los 7 días de la semana para garantizar que el agua que usted bebe sea segura, limpia y confiable.

Por favor, comparta esta información con cualquier persona que beba esta agua (o sus tutores), especialmente aquellos que quizás no hayan recibido este informe directamente (por ejemplo, personas en apartamentos, hogares de ancianos, escuelas y negocios). Puede hacerlo publicando este informe en un lugar público o distribuyendo copias en mano, por correo postal, correo electrónico u otro método. Visita [www.charlestonwater.com/waterreport](http://www.charlestonwater.com/waterreport) para leer este informe en línea.

### Preguntas / Copias Adicionales

Equipo de comunicaciones: (843) 727-7146

Llame a nuestro personal para obtener asistencia directa en la traducción de esta publicación al (843) 727-6800.

### Participar

La Junta de Comisionados se reúne mensualmente y las reuniones están abiertas al público. La participación ciudadana es bienvenida. Las reuniones se realizan normalmente el cuarto miércoles de cada mes a las 9 a.m. en el 103 de la calle St. Philip (el lugar está sujeto a cambios). Más información: [www.charlestonwater.com](http://www.charlestonwater.com).

**ID del Sistema Público de Agua #: 1010001**



*Construction at our Hanahan Water Treatment Plant created a training opportunity for first responders! Local fire departments performed a simulated rope rescue on the crane we're using to build a new plate settling basin (see [page 28](#) for more information on the construction project).*

**Our Mission**  
Support public health and protect the environment.

**Our Vision**  
Achieve excellence and exceed customer expectations.

**Produced by:**  
Communications Manager  
Matthew Kenwright

# Information from the EPA

## Contaminant Information

**Contaminants:** Any physical, chemical, biological, or radiological substance or matter in water. Both tap water and bottled water come from 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. The water can also pick up and transport substances resulting from the presence of animals or from human activity. To protect public health, the Environmental Protection Agency prescribes regulations to limit the amount of certain contaminants in tap water provided by public water systems. The Food and Drug Administration 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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by contacting the Environmental Protection Agency by calling the **Safe Drinking Water Hotline at (800) 426-4791** or visiting the website [www.epa.gov/safewater](http://www.epa.gov/safewater).

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.

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 occur naturally in the soil or groundwater or may 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can occur naturally or be the result of oil and gas production and mining activities.

**Cryptosporidium:** *Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. Current test methods cannot determine if the organisms are dead or alive. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness.

## Action Level Information

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

**Hazard Index (HI):** An approach that determines the health concerns associated with mixtures of certain PFAS in finished drinking water. Low levels of multiple PFAS that individually would not likely result in adverse health effects may pose health concerns when combined in a mixture. The Hazard Index MCL represents the maximum level for mixtures of PFHxS, PFNA, HFPO-DA (Gen-X), and/or PFBS allowed in water delivered by a public water system. A Hazard Index greater than 1 requires a system to take action.

**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 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 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.

**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.

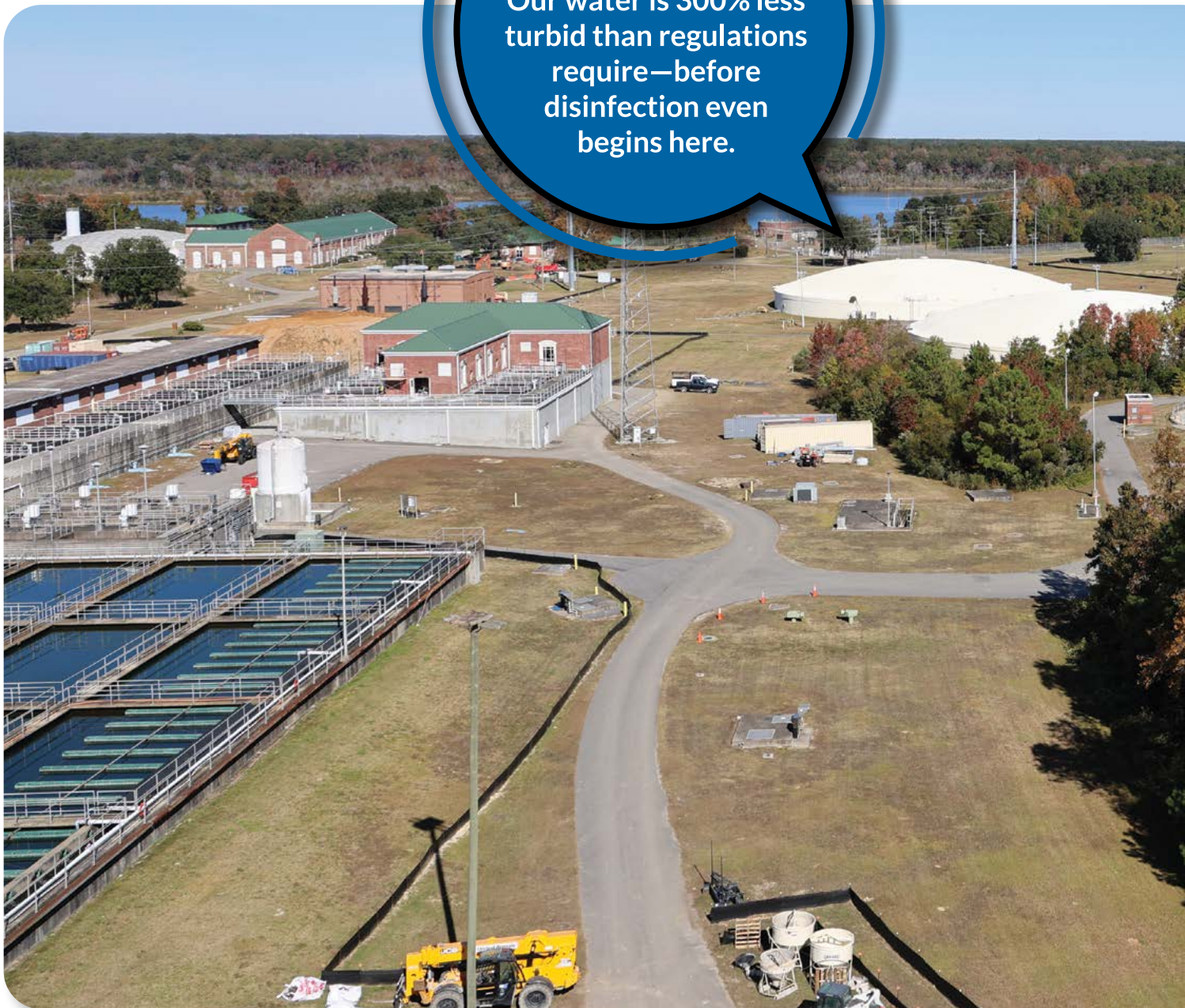
**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.



# National Award for Water Quality



Our water is 300% less  
turbid than regulations  
require—before  
disinfection even  
begins here.



*Hanahan Water Treatment Plant*



Since 1995, CWS has received national recognition for the quality of its drinking water!

The honor comes from the Partnership for Safe Water Program, which is made up of seven drinking water organizations, including the EPA. This program recognizes water treatment plants for going above and beyond just meeting federal regulations. The focus is on removing particulates from the source water, which is measured as turbidity, because they can harbor disease-causing organisms. **Our water is 300% less turbid than regulations require**—before disinfection even begins.

CWS has earned the **Phase IV 10-year President's Award**. This honor recognizes the Hanahan Water Treatment Plant for implementing practices to continually analyze and compare many separate process performance indicators on each of its 24 individual filters in an effort to keep turbidity lower than regulatory requirements, to continuously improve, and to act on indications of water quality changes well before they become an issue.

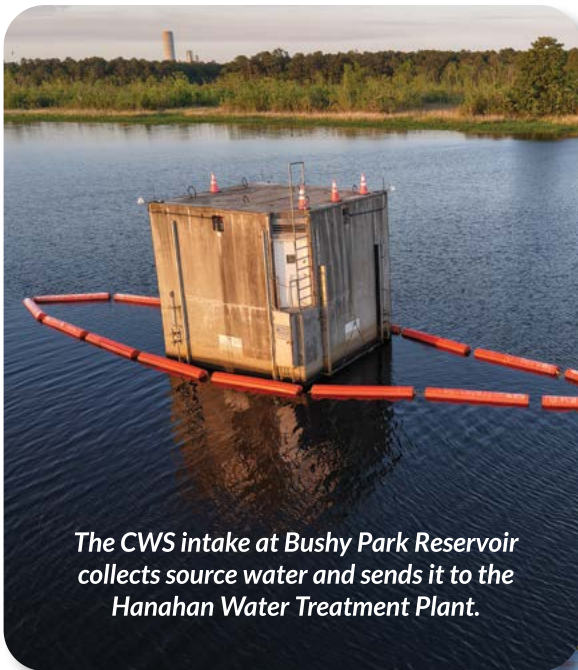




## Drinking Water Sources:

# Bushy Park Reservoir

Bushy Park Reservoir is one of our two main sources of water that we treat for drinking water. Built in the early 1950s, it is connected to the Hanahan Water Treatment Plant by a tunnel named after Francis B. McDowell, Jr., a leader of the Commissioners of Public Works from 1947-1953 before it became known as the Charleston Water System.

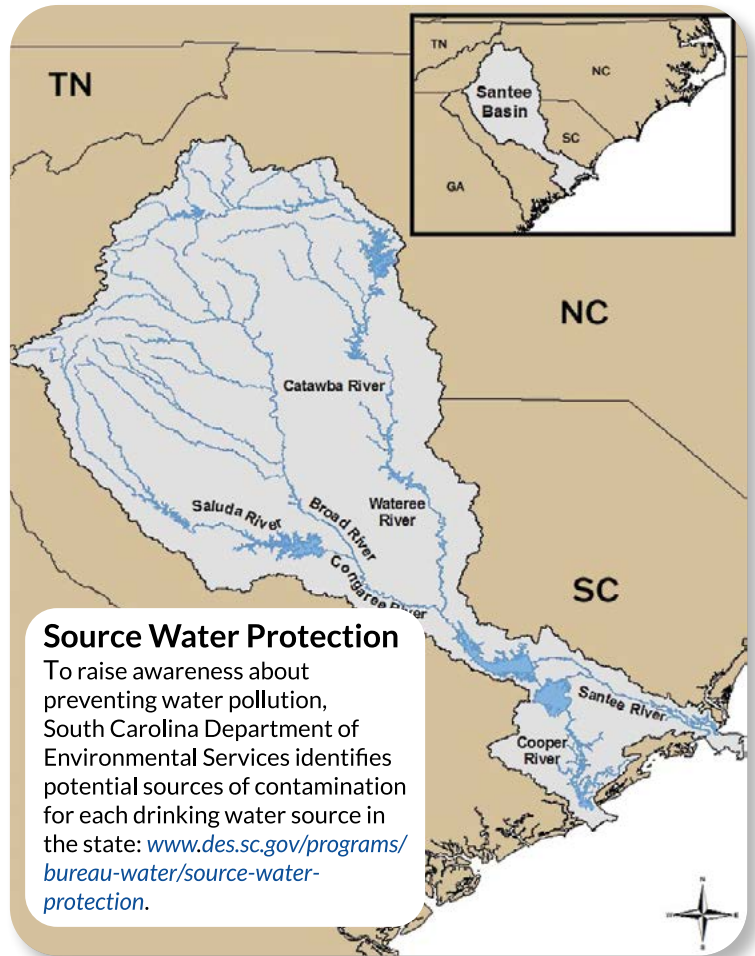


*The CWS intake at Bushy Park Reservoir collects source water and sends it to the Hanahan Water Treatment Plant.*



*Source Water Assistant Manager Baker Stevens collects water samples throughout Bushy Park Reservoir so the Hanahan Water Treatment Plant can proactively adjust the water treatment process as necessary.*

## Bushy Park Reservoir Watershed



### Source Water Protection

To raise awareness about preventing water pollution, South Carolina Department of Environmental Services identifies potential sources of contamination for each drinking water source in the state: [www.des.sc.gov/programs/bureau-water/source-water-protection](http://www.des.sc.gov/programs/bureau-water/source-water-protection).



## Edisto River

The Edisto River is the second of our two main sources of water that we treat for drinking water. Located in Givhans Ferry State Park, the Kinard Intake and Tunnel is named in honor of three generations of the Kinard family who worked for the Commissioners of Public Works before it became known as the Charleston Water System. The 23-mile tunnel to our Hanahan Water Treatment Plant was hand-dug from 1928-1937.



*The Kinard Intake and Tunnel connect to our Hanahan Water Treatment Plant.*



*The Edisto River*

# Regulatory Testing

These are the compounds we are required to test for compliance. All were below the regulatory limit.

|                     | Required Regulatory Report                                                                                                                                                    | Maximum Contaminant Level (MCL) set by EPA                                                      |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|                     | <b>Turbidity<sup>1</sup></b><br>A measure of the amount of suspended particles in the water (cloudiness); an indicator of overall water quality and filtration effectiveness. | Requires a specific treatment technique; 95% of monthly samples must be less than 0.3 NTU       |
|                     | <b>Cryptosporidium (in source water)</b><br>A parasite spread through human and animal waste that causes gastrointestinal illness.                                            | No MCL exists                                                                                   |
|                     | <b>Giardia (in source water)</b><br>A parasite spread through human and animal waste that causes gastrointestinal illness.                                                    | No MCL exists                                                                                   |
| Inorganic Compounds | <b>Copper</b><br>A metal widely used in household plumbing that may corrode into water.                                                                                       | 90 <sup>th</sup> percentile of all samples collected must be less than the 1.3 ppm action level |
|                     | <b>Lead</b><br>A metal no longer used in new water pipes, but may be present in plumbing fixtures or old pipes; may corrode into water.                                       | 90 <sup>th</sup> percentile of all samples collected must be less than the 15 ppb action level  |
|                     | <b>Nitrate (measured as Nitrogen)</b><br>Nitrates are nitrogen-oxygen compounds that can become a source of pollution in the form of unwanted nutrients.                      | Nitrate 10 ppm                                                                                  |
|                     | <b>Fluoride</b><br>A substance that is naturally occurring in some water sources, particularly groundwater. It is also added to drinking water to help prevent tooth decay.   | 4 ppm                                                                                           |
| Disinfectants       | <b>Chlorine Dioxide</b><br>A disinfection agent added in small amounts to protect against microbes.                                                                           | 800 ppb                                                                                         |
|                     | <b>Chloramine Residual</b><br>A compound of chlorine and ammonia added in small amounts to treated water to protect against microbes.                                         | 4 ppm MRDL                                                                                      |

<sup>1</sup>Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

<sup>2</sup> Lead and copper regulatory sampling frequency is every three years, based on our compliance history.



## Measurement Abbreviations:

ug/L: Micrograms per Liter  
 NA: Not Applicable  
 NTU: Nephelometric Turbidity Units

ppb: Parts per billion (ug/L)  
 ppm: Parts per million (mg/L)  
 ppt: Parts per trillion (ng/L)  
 pCi/l: picocuries per liter

| Maximum Contaminant Level Goal (MCLG)            | Actual Level in CWS Water for 2025                                                                       | Year Sampled      | Possible Sources in Water                                                                |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------------------------|
| None                                             | 0.09 NTU highest level detected<br>100% of monthly samples met the limit<br>Range: 0.07 – 0.09 NTU       | 2025              | Soil runoff                                                                              |
| None                                             | 0.1 oocysts per liter<br>Range: 0 to 0.1                                                                 | 2025              | Human and animal                                                                         |
| Zero <i>Giardia</i> oocysts per 1 liter of water | 0.0 oocysts per liter<br>Range: NA                                                                       | 2025              | Human and animal                                                                         |
| 1.3 ppm                                          | 90 <sup>th</sup> percentile = 0.089 ppm<br>No samples exceeded the action level.<br>Range: 0 to 0.26 ppm | 2024 <sup>2</sup> | Corrosion of household plumbing materials                                                |
| 0 ppb                                            | 90 <sup>th</sup> percentile = 3.5 ppb<br>One sample exceeded the action level.<br>Range: 0 to 43 ppb     | 2024 <sup>2</sup> | Corrosion of household plumbing materials                                                |
| Nitrate 10 ppm                                   | 0.14 ppm<br>Range: 0.14 to 0.14 ppm                                                                      | 2025              | Runoff from fertilizers                                                                  |
| 4 ppm                                            | 0.16 ppm in source water<br>0.24 ppm in finished water<br>Range: 0.07 to 0.24 ppm                        | 2025              | Naturally occurring in source water and adjusted during treatment to prevent tooth decay |
| 800 ppb                                          | 200 ppb<br>Range: 0 to 200 ppb                                                                           | 2025              | Added for disinfection                                                                   |
| 4 ppm MRDLG                                      | 3.0 ppm Running Annual Average (RAA)<br>Range: 3.0 – 3.0 ppm                                             | 2025              | Added for disinfection                                                                   |

## Regulatory Testing, continued

|                         | Required Regulatory Report                                                                                                                                                                                                                       | Maximum Contaminant Level (MCL) set by EPA           |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Disinfection Byproducts | <b>Total Trihalomethanes (Stage 2)</b><br>Stage 2 of the Disinfectants and Disinfection Byproducts Rule requires the locational running annual average (LRAA) for each sampling location to be below the MCL. CWS has eight sampling locations.  | LRAA must be below 80 ppb.                           |
|                         | <b>Total Haloacetic Acids (Stage 2)</b><br>Stage 2 of the Disinfectants and Disinfection Byproducts Rule requires the locational running annual average (LRAA) for each sampling location to be below the MCL. CWS has eight sampling locations. | LRAA must be below 60 ppb.                           |
|                         | <b>Chlorite</b><br>A byproduct formed when chlorine dioxide is used to disinfect water.                                                                                                                                                          | 1 ppm                                                |
| Organics & Bacteria     | <b>Total Organic Carbon (TOC)</b><br>The measure of organic substances in a body of water, mostly from naturally occurring sources such as plant material. TOC provides a measurement for the potential formation of disinfection byproducts.    | No MCL; EPA requires a specific treatment technique. |
|                         | <b>Total Coliform Bacteria</b><br>A group of bacteria whose presence in water indicates possible contamination with soil or waste from warm-blooded animals.                                                                                     | No more than 5% samples total coliform positive.     |
| Radionuclides           | <b>Gross Alpha excluding Radon and Uranium</b>                                                                                                                                                                                                   | 15 pCi/L                                             |
|                         | <b>Selenium</b>                                                                                                                                                                                                                                  | 50 ppb                                               |
|                         | <b>Di (2-ethylhexyl) phthalate</b>                                                                                                                                                                                                               | 6 ppb                                                |

<sup>3</sup> Radionuclides regulatory sampling frequency is every six years.



| Maximum Contaminant Level Goal (MCLG)                 | Actual Level in CWS Water for 2025                                                                               | Year Sampled      | Possible Sources in Water                                                                        |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------|
| NA                                                    | LRAA: 12 ppb<br>Range: 2.6 to 23.9 ppb                                                                           | 2025              | Byproduct of disinfection                                                                        |
| NA                                                    | LRAA: 13 ppb<br>Range: 4.5 to 22.4 ppb                                                                           | 2025              | Byproduct of disinfection                                                                        |
| 0.8 ppm                                               | Highest level detected: 0.96 ppm<br>Range: 0.37 to 0.96 ppm                                                      | 2025              | Byproduct of disinfection                                                                        |
| Required % removal depends on source water, 35% - 50% | Removal range: 47% to 61%                                                                                        | 2025              | Naturally present in the environment                                                             |
| 0%                                                    | 2.5% highest level detected in any monthly sample.<br>All repeat samples were satisfactory.<br>Range: 0% to 2.5% | 2025              | Naturally present in the environment                                                             |
| 0 pCi/L                                               | Highest level detected: 0.376 pCi/L<br>Range: 0.376 to 0.376 pCi/L                                               | 2022 <sup>3</sup> | Runoff from herbicide used on row crops                                                          |
| 50 ppb                                                | 3.7 ppb<br>Range: 3.7 - 3.7 ppb                                                                                  | 2025              | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines |
| 0 ppb                                                 | 3.7 to 3.7 ppb                                                                                                   | 2025              | Discharge from rubber and chemical factories.                                                    |

# EPA's 2022 Unregulated Contaminant Monitoring Rule (UCMR 5)

The Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) is an EPA initiative requiring public water systems to monitor for 30 specific chemical contaminants, including 29 PFAS substances and lithium, between 2023 and 2025, to help the EPA determine the prevalence of these contaminants and set future health-based regulations.

| Compound        | Maximum Contaminant Level (MCL) Set by EPA | Hazard Index Set by EPA | Actual Level in CWS Water for 2025 | Possible Sources in Water                         |
|-----------------|--------------------------------------------|-------------------------|------------------------------------|---------------------------------------------------|
|                 |                                            |                         | Range                              |                                                   |
| PFOA            | 4 ppt                                      | NA                      | Average 4.3<br>4.1 to 4.7 ppt      | Widespread throughout the environment and society |
| PFOS            | 4 ppt                                      | NA                      | Average 5.8<br>5.2 to 6.5 ppt      |                                                   |
| PFBS            | NA                                         | <1 (unitless)           | Average 3.9<br>3.7 to 4.3 ppt      |                                                   |
| PFHxS           | 10 ppt                                     | <1 (unitless)           | Not Detected                       |                                                   |
| PFNA            | 10 ppt                                     | <1 (unitless)           | Not Detected                       |                                                   |
| Gen-X (HFPO-DA) | 10 ppt                                     | <1 (unitless)           | Not Detected                       |                                                   |
| PFHxa           | NA                                         | NA                      | Average 4.2<br>3.8 to 4.6 ppt      |                                                   |
| PFPeA           | NA                                         | NA                      | Average 4.6<br>4.4 to 5.0 ppt      |                                                   |

PFAS are man-made chemicals that have been used for decades in products like nonstick cookware and stain-resistant fabrics. Industrial processes and everyday consumer use release these chemicals into the environment and wastewater systems.

Effective in either 2029 or 2031 (see the Key PFAS Dates below for more information), the EPA's standard for PFOA and PFOS in drinking water will be 4 parts per trillion. **To visualize 4 ppt, it is roughly the equivalent of a typical residential living room (417 square feet) within the total area of the United States..** While 4 ppt is a tiny part of everyday PFAS exposure (see [page 15](#)), utilities and customers will bear the costs of compliance. For more information about the EPA's intentions with some of the compounds below, visit [www.epa.gov/newsreleases/epa-announces-it-will-keep-maximum-contaminant-levels-pfoa-pfos](https://www.epa.gov/newsreleases/epa-announces-it-will-keep-maximum-contaminant-levels-pfoa-pfos).

We collect our PFAS data through participating in EPA's Unregulated Contaminant Monitoring Rule, as well as additional voluntary testing. The UCMR 5 data is below, and our long-running voluntary monitoring data on PFAS is on [page 15](#). Results vary because samples were taken on different days and analyzed by different labs. For more information about our testing for unregulated compounds in drinking water, visit [www.charlestonwater.com/positionstatement](https://www.charlestonwater.com/positionstatement).

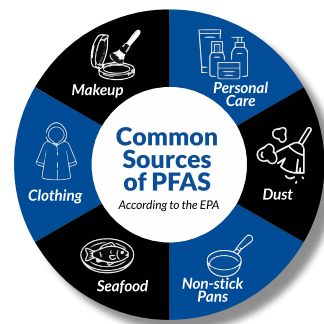
The EPA has developed and modified rules and deadlines for PFAS, and CWS is committed to meeting any threshold and compliance deadline they establish.

## Key PFAS Dates:

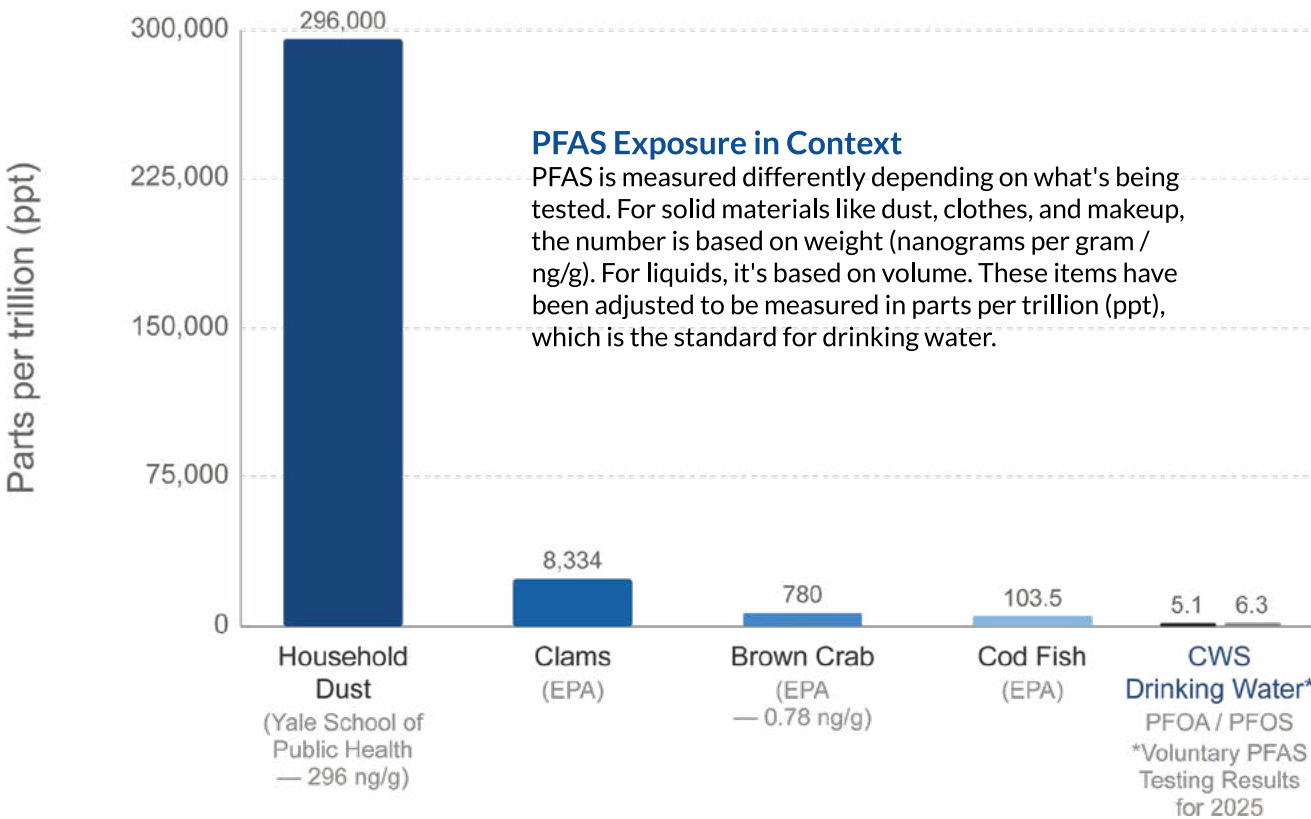
- **April 2024:** EPA finalized standards for PFAS in drinking water. The compliance deadline is set for 2029.
- **May 2025:** EPA announced its intent to extend the compliance deadline for PFOA and PFOS standards in drinking water to 2031. EPA also published its intent to rescind the regulations and reconsider the regulatory determinations for PFHxS, PFNA, HFPO-DA (commonly known as Gen-X), and the Hazard Index mixture of these three plus PFBS Perfluorobutanesulfonic acid).
- **April 2029:** Until the EPA finalizes its announced intent to delay compliance with PFAS standards, this is the official deadline for water utilities to meet the new EPA standards.

# Voluntary PFAS Testing

Since 2018, we have voluntarily tested and published our PFAS data in our annual Water Quality Report (see the voluntary data below). Results vary because samples were taken on different days and analyzed by different labs.



| Compounds with Health Advisories | Units | Aug 2018 | Dec 2018 | Feb 2019 | May 2019 | Oct 2020 | Nov 2021 | Feb 2022 | Oct 2023 | Jan 2024 | April 2025 | EPA Health Advisory | Secondary Drinking Water Standards |
|----------------------------------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|---------------------|------------------------------------|
| PFOA                             | ppt   | 5.0      | 4.1      | 4.4      | 5.3      | 4.3      | 4.7      | 4.5      | 4.2      | 3.1      | 5.1        | 0.0004              | NA                                 |
| PFOS                             | ppt   | 9.7      | 6.1      | 6.3      | 7.0      | 7.5      | 6.0      | 5.4      | 5.2      | 5.3      | 6.3        | 0.02                | NA                                 |
| PFBS                             | ppt   | 3.8      | 4.0      | 3.2      | 3.5      | 2.9      | 3.5      | 3.8      | 2.8      | 2.6      | 3.2        | 2,000               | NA                                 |
| PFBA                             | ppt   | 7.0      | NA       | NA       | NA       | 8.0      | 4.8      | 5.6      | NA       | NA       | NA         | NA                  | NA                                 |
| PFHpA                            | ppt   | 3.2      | 2.9      | 2.3      | 2.8      | 2.6      | 3.0      | 3.0      | 2.1      | 2.0      | 2.2        | NA                  | NA                                 |
| PFHxA                            | ppt   | 5.6      | 5.7      | 4.3      | 5.6      | 4.9      | 6.3      | 7.7      | 4.2      | 3.6      | 3.9        | NA                  | NA                                 |
| PFHxS                            | ppt   | 3.3      | 2.8      | 2.1      | 2.2      | 2.7      | 2.2      | 2.2      | NA       | 2.2      | 1.9        | NA                  | NA                                 |
| PFPeA                            | ppt   | 7.5      | 7.5      | 4.7      | 5.8      | 5.5      | 7.2      | 8.8      | NA       | NA       | NA         | NA                  | NA                                 |





# Voluntary Testing of Unregulated Compounds

We voluntarily test our treated drinking water for compounds that do not have regulatory limits to help our customers make their own decisions about their health and safety of our water.

| Compounds                              | Units | Aug 2018 | Dec 2018 | Feb 2019 | May 2019 | Oct 2020 |
|----------------------------------------|-------|----------|----------|----------|----------|----------|
| 2,4-D (2,4-dichlorophenoxyacetic acid) | ppt   | NA       | NA       | NA       | 8.7      | NA       |
| Aluminum                               | ppb   | 74       | 58       | 38       | 35       | 70       |
| Atrazine                               | ppt   | 22       | 19       | 7.2      | 16       | 24       |
| Barium                                 | ppb   | 14       | 12       | 16       | 17       | 14       |
| Bromodichloromethane                   | ppb   | 5.6      | 3.7      | 3.3      | 2.9      | 5.2      |
| Bromoform                              | ppb   | NA       | NA       | NA       | NA       | NA       |
| Chloroform                             | ppb   | 7.2      | 2.7      | 2.6      | 3.2      | 7.1      |
| Dibromochloromethane                   | ppb   | 2.6      | 2.0      | 1.6      | 1.5      | 1.9      |
| Diuron                                 | ppt   | NA       | NA       | NA       | NA       | 82       |
| Formaldehyde                           | ppb   | NA       | NA       | NA       | 7.1      | 7.3      |
| Manganese                              | ppb   | 13       | 6.4      | 3.3      | 9.6      | 8.5      |
| Perchlorate                            | ppb   | NA       | NA       | 0.13     | 0.12     | NA       |
| Simazine                               | ppt   | NA       | 6.9      | 14       | 16       | NA       |
| Strontium                              | ppb   | 53       | 41       | 43       | 53       | 46       |
| Zinc                                   | ppb   | NA       | NA       | 6.3      | NA       | NA       |
| 1,4 Dioxane                            | ppb   | 0.11     | 0.14     | 0.32     | 0.33     | 0.11     |

| Nov 2021 | Feb 2022 | Oct 2023 | Jan 2024 | April 2025 | EPA Health Advisory | Secondary Drinking Water Standards |
|----------|----------|----------|----------|------------|---------------------|------------------------------------|
| NA       | NA       | NA       | NA       | NA         | 200,000*            | NA                                 |
| 78       | 73       | NA       | 94       | 44         | NA                  | 50 to 200                          |
| NA       | NA       | NA       | NA       | NA         | 700,000*            | NA                                 |
| 12       | 13       | 19       | 14       | 18         | 7,000*              | NA                                 |
| 1.6      | 0.96     | 2.2      | 3.1      | 1.8        | 100*                | NA                                 |
| 0.5      | NA       | NA       | NA       | NA         | 1,000               | NA                                 |
| 0.77     | NA       | 1.9      | 3.6      | 1.5        | 350*                | NA                                 |
| 1.6      | 1.0      | 1.5      | 1.6      | 1.1        | 700*                | NA                                 |
| NA       | NA       | NA       | NA       | NA         | 100,000*            | NA                                 |
| 6.3      | NA       | NA       | NA       | 8.5        | 7000*               | NA                                 |
| 4.3      | 3.9      | 8.5      | 5.2      | 5.0        | 1,600*              | NA                                 |
| 0.09     | 0.44     | 0.14     | 0.17     | 0.20       | 25*                 | NA                                 |
| NA       | NA       | NA       | NA       | NA         | 700,000*            | NA                                 |
| 39       | 44       | 50       | 42       | 51         | 20,000*             | NA                                 |
| 5.2      | NA       | NA       | NA       | NA         | 10,000*             | NA                                 |
| 0.31     | 0.56     | 0.45     | 0.10     | 0.27       | 270                 | NA                                 |

\*EPA Drinking Water Equivalent Level (DWEL)

## Voluntary Testing of Unregulated Compounds, continued

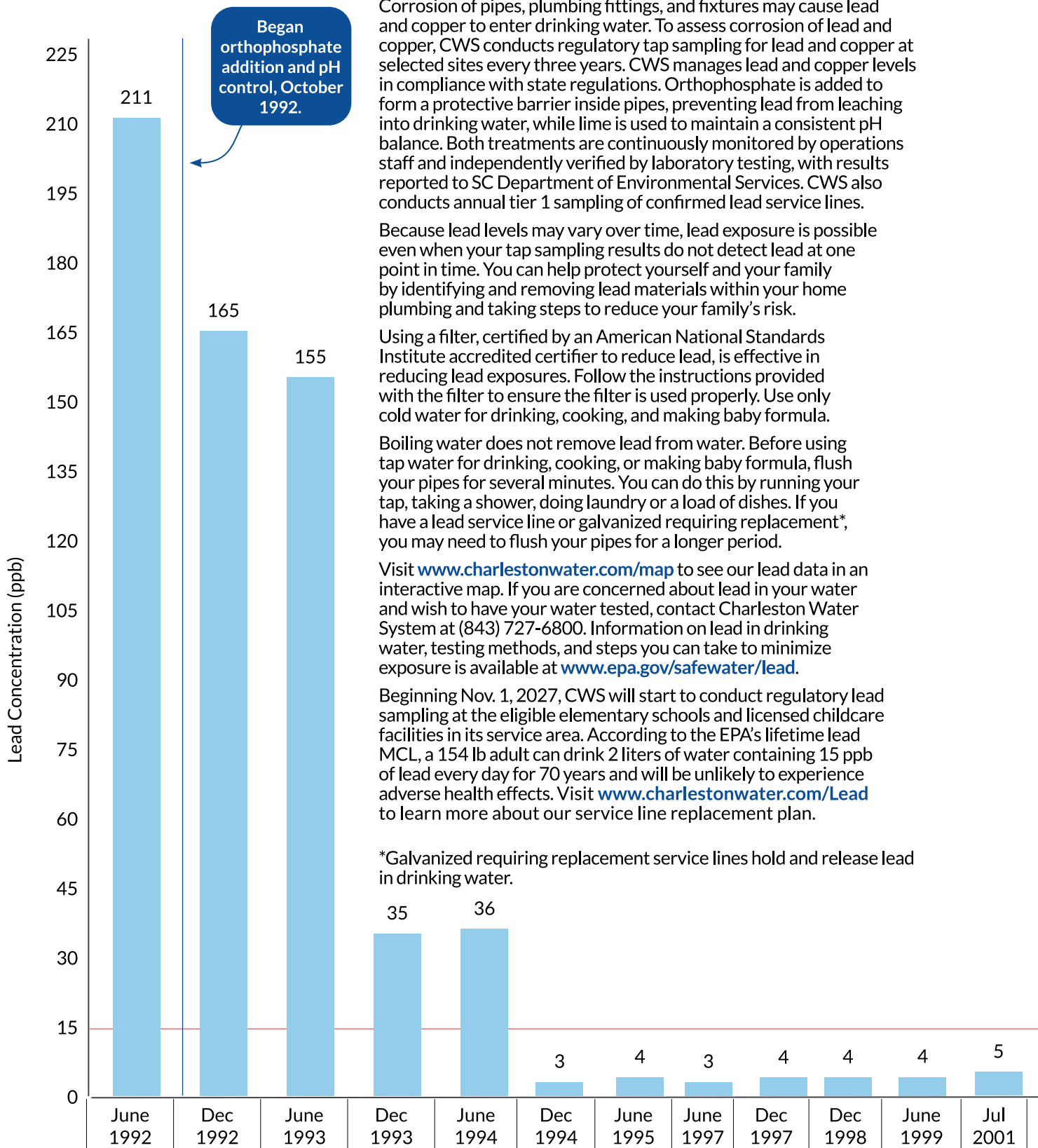
| Compounds                                      | Units | Aug 2018 | Nov 2018 | Feb 2019 | May 2019 |
|------------------------------------------------|-------|----------|----------|----------|----------|
| 6:2 Fluorotelomer sulfonic acid (6:2 FTS)      | ppt   | NA       | 4.0      | NA       | NA       |
| Acesulfame-K                                   | ppt   | NA       | 32       | 160      | 88       |
| Atenolol                                       | ppt   | NA       | NA       | NA       | 5.8      |
| Boron                                          | ppb   | 37       | 32       | 26       | 22       |
| Chromium, hexavalent                           | ppb   | 0.06     | 0.06     | 0.06     | 0.06     |
| DEA (Diethanolamine)                           | ppt   | NA       | NA       | NA       | NA       |
| DEET                                           | ppt   | NA       | 12       | NA       | NA       |
| Erucylamide                                    | ppt   | NA       | NA       | NA       | NA       |
| Iohexal                                        | ppt   | NA       | 19       | 19       | 51       |
| Lincomycin                                     | ppt   | NA       | 24       | NA       | NA       |
| NDMA                                           | ppt   | 7.5      | 3.4      | 5.6      | 5.1      |
| NMEA                                           | ppt   | NA       | 2.5      | NA       | NA       |
| Quinoline                                      | ppt   | NA       | 19       | NA       | NA       |
| Sucralose                                      | ppt   | NA       | 950      | 640      | 580      |
| Tetrahydrofuran                                | ppb   | NA       | NA       | NA       | 6.1      |
| Theobromine                                    | ppt   | NA       | NA       | 16       | NA       |
| Hexafluoropropylene Oxide Dimer Acid (HCPO-DA) | ppt   | NA       | NA       | NA       | NA       |



| Oct 2020 | Nov 2021 | Feb 2022 | Oct 2023 | Jan 2024 | April 2025 |                                                                                           |
|----------|----------|----------|----------|----------|------------|-------------------------------------------------------------------------------------------|
| NA       | NA       | NA       | NA       | NA       | NA         | No EPA Health Advisories or Secondary Drinking Water Standards exist for these compounds. |
| 46       | NA       | NA       | 28       | 33       | 50         |                                                                                           |
| NA       | NA       | NA       | NA       | NA       | NA         |                                                                                           |
| 28       | 31       | 28       | 26       | 31       | 28         |                                                                                           |
| 0.33     | 0.20     | 0.17     | 0.20     | 0.23     | 0.10       |                                                                                           |
| 6.2      | NA       | NA       | NA       | NA       | NA         |                                                                                           |
| 21       | NA       | NA       | NA       | NA       | NA         |                                                                                           |
| NA       | 5.8      | 5.3      | 9.5      | NA       | NA         |                                                                                           |
| 21       | NA       | NA       | NA       | NA       | NA         |                                                                                           |
| NA       | NA       | NA       | NA       | NA       | NA         |                                                                                           |
| 7.7      | NA       | NA       | 2.3      | 2.2      | 6.9        |                                                                                           |
| NA       | NA       | NA       | NA       | NA       | NA         |                                                                                           |
| NA       | NA       | NA       | NA       | NA       | NA         |                                                                                           |
| 430      | NA       | NA       | 130      | 89       | 1500       |                                                                                           |
| 20       | NA       | NA       | NA       | NA       | NA         |                                                                                           |
| NA       | NA       | NA       | NA       | NA       | NA         |                                                                                           |
| NA       | NA       | NA       | NA       | 2.3      | NA         |                                                                                           |

# Lead Data

## Tier I Lead Values (90<sup>th</sup> percentile)



Lead exposure can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Charleston Water System is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home.

Corrosion of pipes, plumbing fittings, and fixtures may cause lead and copper to enter drinking water. To assess corrosion of lead and copper, CWS conducts regulatory tap sampling for lead and copper at selected sites every three years. CWS manages lead and copper levels in compliance with state regulations. Orthophosphate is added to form a protective barrier inside pipes, preventing lead from leaching into drinking water, while lime is used to maintain a consistent pH balance. Both treatments are continuously monitored by operations staff and independently verified by laboratory testing, with results reported to SC Department of Environmental Services. CWS also conducts annual tier 1 sampling of confirmed lead service lines.

Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk.

Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula.

Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement\*, you may need to flush your pipes for a longer period.

Visit [www.charlestonwater.com/map](http://www.charlestonwater.com/map) to see our lead data in an interactive map. If you are concerned about lead in your water and wish to have your water tested, contact Charleston Water System at (843) 727-6800. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

Beginning Nov. 1, 2027, CWS will start to conduct regulatory lead sampling at the eligible elementary schools and licensed childcare facilities in its service area. According to the EPA's lifetime lead MCL, a 154 lb adult can drink 2 liters of water containing 15 ppb of lead every day for 70 years and will be unlikely to experience adverse health effects. Visit [www.charlestonwater.com/Lead](http://www.charlestonwater.com/Lead) to learn more about our service line replacement plan.

\*Galvanized requiring replacement service lines hold and release lead in drinking water.

Our Water

- There is no lead in our treated water leaving the plant.
- No schools in our service area have lead service lines.

Water Treatment

- We adjust our water’s pH and buffering capacity and add orthophosphate to inhibit lead from leaching.

Regulatory Compliance

- Our orthophosphate corrosion control program, implemented in 1992, has never allowed the average of our sample homes to exceed the EPA’s Maximum Contaminant Level (MCL) of 15 parts per billion (ppb) since compliance was achieved in 1994. According to the EPA’s lifetime lead MCL, a 154 lb. adult can drink 2 liters of water containing 15 ppb of lead every day for 70 years and never experience adverse health effects.

1992 – 1994:

- June 1992: Reported highest lead levels in US under the new Lead and Copper Rule.

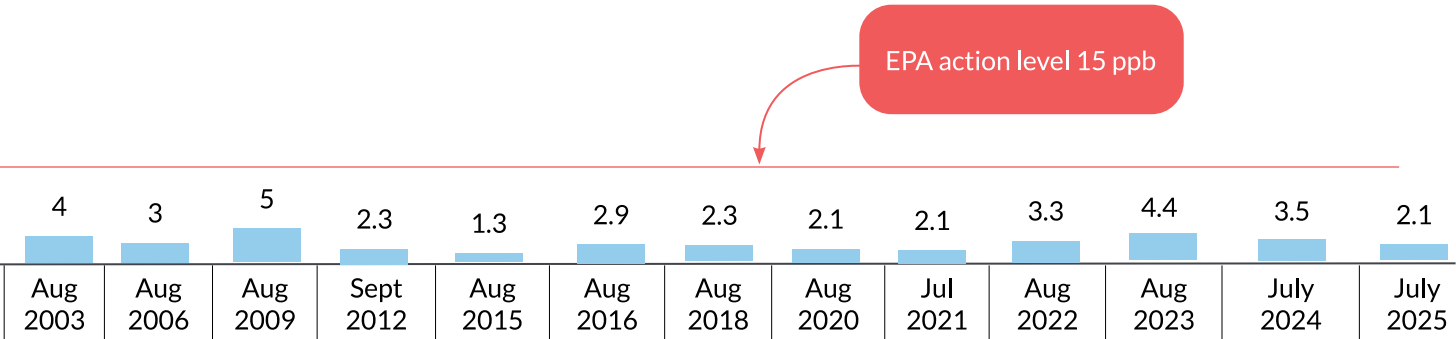
- Oct. 1992: Began corrosion control via orthophosphate; entered EPA consent agreement to control lead corrosion.

1994 – 2000:

- Dec. 1994: Lead results under the EPA Action Level. 2x/yr./100 homes, meeting EPA criteria in every case.
- June 2000: Approved for reduced monitoring.

2002 – Present:

- Jan. 2002: Approved for further reduced monitoring.
- Aug. 2018: 90<sup>th</sup> percentile at 2.3 ppb. All 51 homes tested under the EPA Action Level (15 ppb).
- July 2021: 90<sup>th</sup> percentile at 2.1 ppb. Of the 50 homes tested, two were above the EPA Action Level and 40 of the homes were below the detection limit.
- 2022, 2023, and 2025 results reflect the samples were from homes with lead service lines. 2024 results were regulatory sampling of lead and copper lines.
- November 2027: The EPA action level will be 10 ppb.





## Finished Water Characteristics

| Parameter                    | Units    | 2025 Average        | Highest Level Recommended by EPA |
|------------------------------|----------|---------------------|----------------------------------|
| Chloride                     | ppm      | 15                  | 250                              |
| Color                        | PCU      | 3                   | 15                               |
| Iron                         | ppm      | <0.10               | 0.3                              |
| Manganese                    | ppm      | <0.05               | 0.05                             |
| Total Dissolved Solids (TDS) | ppm      | 100                 | 500                              |
| Sodium                       | ppm      | 10                  | No Standard                      |
| Alkalinity                   | ppm      | 29                  |                                  |
| Conductivity                 | µmhos/cm | 176                 |                                  |
| Hardness                     | ppm      | 54<br>(3.16 gr/gal) |                                  |
| Orthophosphate               | ppm      | 1.1                 |                                  |
| Silica                       | ppm      | 7.1                 |                                  |
| Temperature                  | F        | 69.8° (21°C)        |                                  |

## Finished Water Characteristics Abbreviations

These parameters affect aesthetics such as taste, odor, hardness, etc. The EPA has secondary standards for some of these parameters, which are recommended guidelines.

**ppm** Parts per million  
**PCU** Platinum Cobalt Units  
**gr/gal** Grains per gallon  
**µmhos/cm** Micromohs/cm



*Chemist Nigel Lascelles performs tests in the laboratory.*

# Community Engagement



Our Citizens Academy participants visited our Hanahan Water Treatment Plant in September 2025 for a behind-the-scenes tour.

**Source Water Assistant Manager Baker Stevens** presented three sessions about our source water to Hanahan High School students. We explored our sources' history, the job of a water quality professional and more.

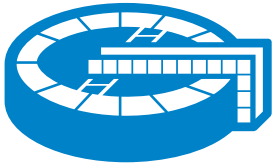


**Assistant CEO Jonathan Ladd** visited First Baptist School of Charleston to talk about the water cycle.

**Communications Director Mike Saia** presented to classes at Porter-Gaud School to educate the next generation about the importance of water treatment for public health, quality of life, and the economy.



## Quick Facts



**1**

Water treatment plant, the largest by permitted capacity in S.C.



**11,072**

Fire hydrants



**40,586**

Water valves



**500,000**

People served in the tri-county area



**130,000**

Retail customer accounts



**9**

Wholesale customers



**66 Million**

Gallons per day, average daily volume treated in 2025



**84.25 Million**

Gallons per day, largest recorded volume treated in one day since 2020.\*

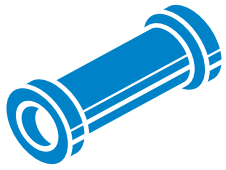


**115.4 Million**

Gallons per day, SC DES permitted capacity

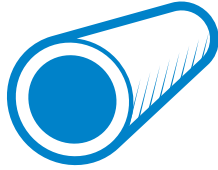
\* According to our Water Information Management System variable, which tracks one specific measurement such as raw water flow rate. Large demand is primarily driven by irrigation during the summer and burst pipes during freezing weather. For irrigation, we recommend watering between 5-8 a.m. To avoid burst pipes, we recommend dripping your faucets during freezing temperatures.





**1,912**

Miles of water mains



**33**

Miles of raw water tunnels



**\$115,500**

Spent since 2017 on voluntary  
unregulated compound testing



*The tower at our Hanahan Water Treatment plant serves two roles. It ensures we have enough water to wash the filters used during the water treatment process and helps to maintain pressure.*



# Water Treatment Process

## How It Works

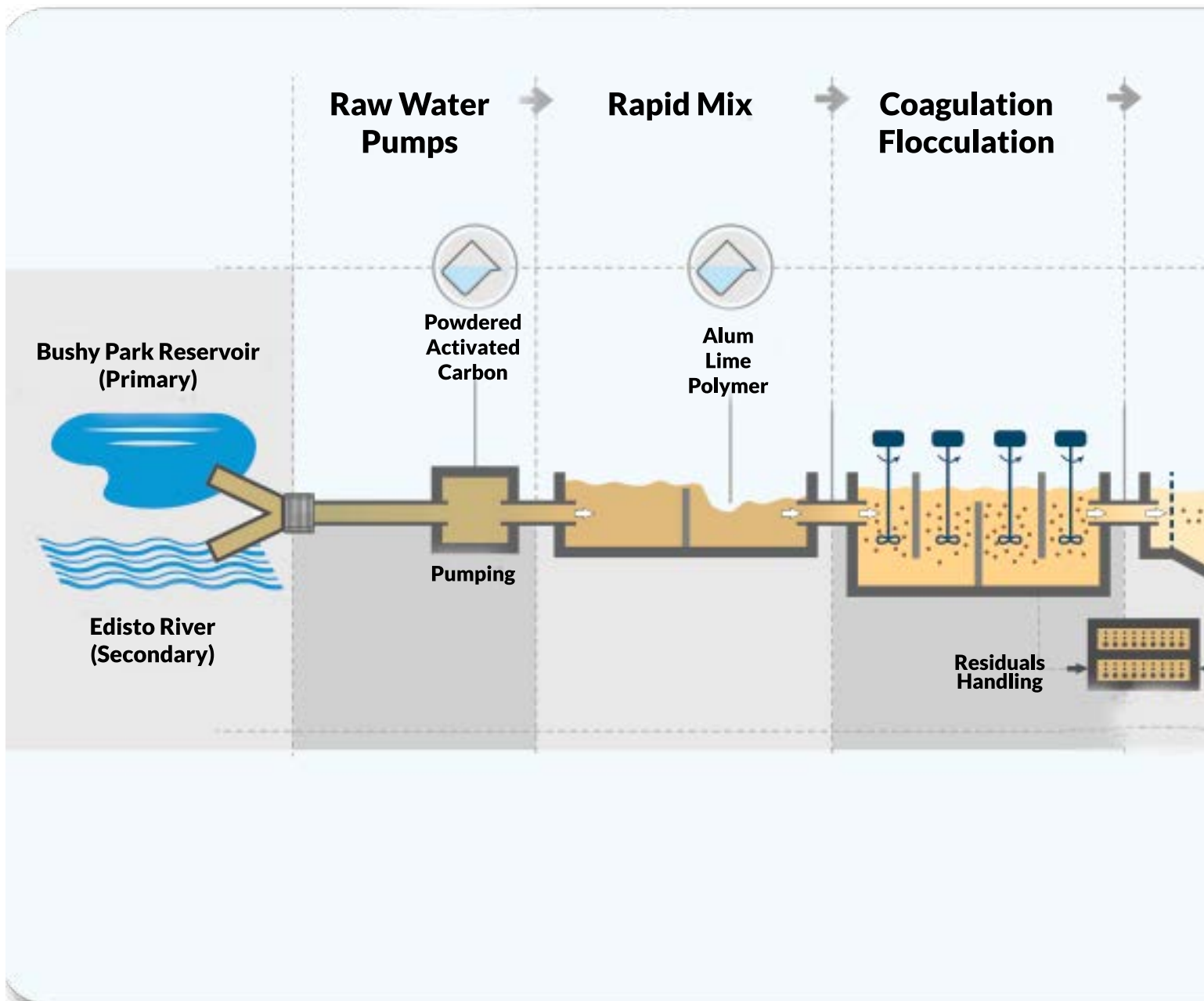
**Alum (aluminum sulfate):** Helps impurities stick together to form bigger particles called floc. Gentle mixing allows the floc particles to grow bigger and heavier.

**Chloramine:** Long-lasting disinfectant.

**Chlorine Dioxide:** Disinfectant.

**Filtration:** A physical process that removes very tiny particles.

**Fluoride:** Added for dental health. View our fluoride position statement at: [www.charlestonwater.com/positionstatement](http://www.charlestonwater.com/positionstatement)



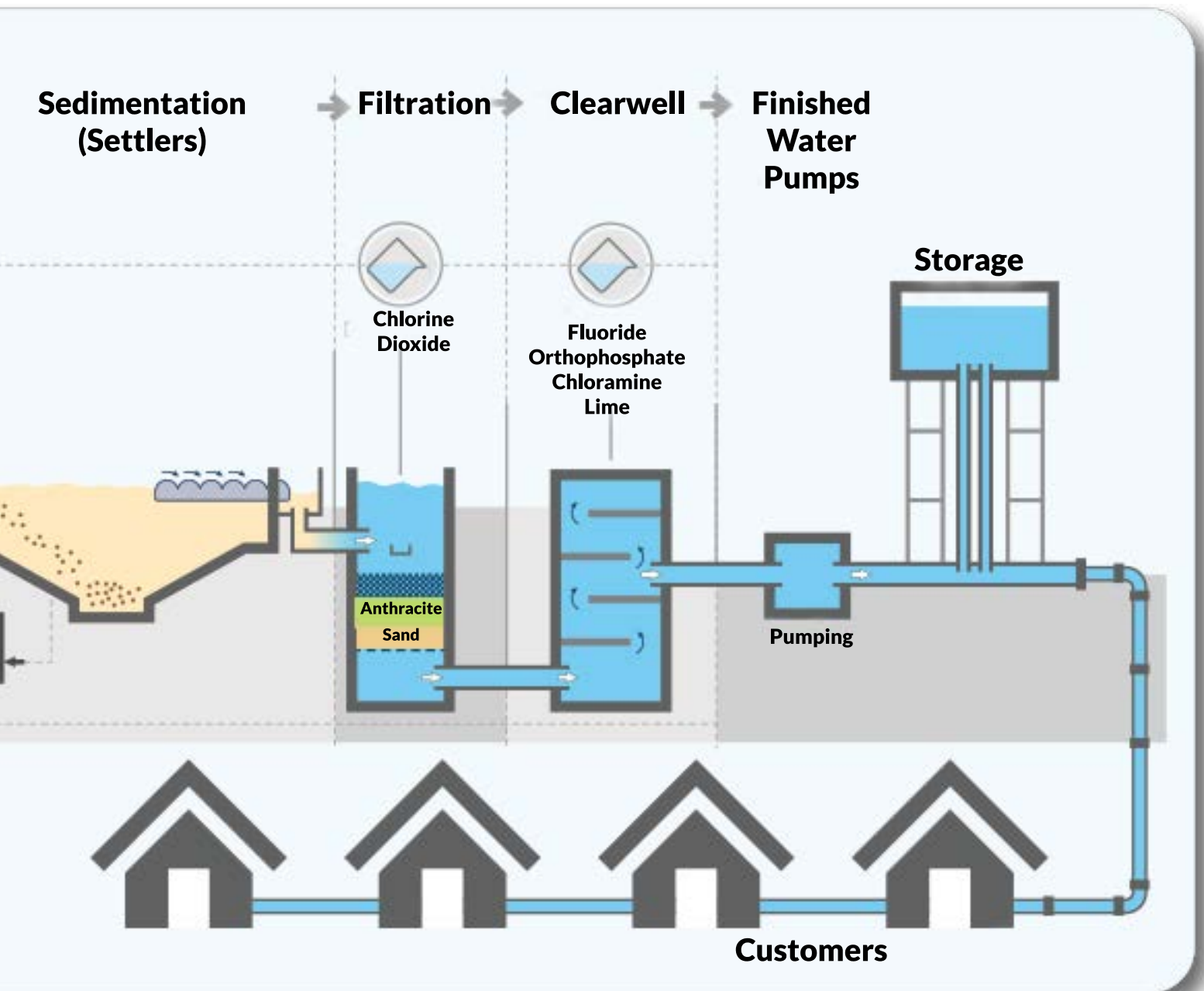
**Lime:** pH Adjustment for chemical stability.

**Orthophosphate:** Lead and copper control.

**Polymer:** Aids with flocculation.

**Powdered Activated Carbon:**  
Added for taste and odor control.

**Sedimentation (settling):** Allows the large, heavy floc particles to settle to the bottom, leaving the clean water on top.



# Infrastructure Highlights

**Adding and maintaining critical infrastructure** is an important part of maintaining water quality all the way to customer taps!

Learn more about our capital improvements program:  
[www.charlestonwater.com/CIP](http://www.charlestonwater.com/CIP)

## Plate Settler Basin No. 13 and Settled Water Conveyance Improvements Phase 2 (Construction Phase)

Several improvement projects are recommended as part of the Hanahan Water Treatment Plant Master Plan to increase reliability and accommodate planned future expansions.



*Plate Settling Basin No. 13 is among the projects in the Hanahan Water Treatment Plant Master Plan.*

**\$152 Million**

## West Ashley Transmission Main Extension Phase 1 (Construction Phase)

This project will help us to meet projected water demand for West Ashley, Hollywood, Ravenel, Meggett and our wholesale customer St. John's Water Company.

**\$28.7 Million**





## Main Road Corridor Segment A Water Utility Relocations (Construction Phase)

We are moving our existing water infrastructure because it conflicts with a Charleston County project to improve traffic at the intersection of US Highway 17 and Main Road.

**\$5 Million\***

*\*It is expected a portion of the project cost will be reimbursed to CWS under the terms of a Utility Agreement whereby CWS has established prior rights. Additionally, the project qualifies for utility reimbursement for up to 4% of the overall roadway improvements construction cost pursuant to ACT 36 of 2019, codified as S.C. Code § 57-5-880.*



**\$8.6 Million**

## Baker Avenue Transmission 2 (Design Phase)

The project will relocate and replace approximately 2,252 feet of an existing 24-inch transmission main from the 1920s.





*Bushy Park Boat Landing, which CWS owns and manages, divides two separate bodies of water. On the left, Bushy Park Reservoir, is fresh water that we treat for drinking water. On the right is the Cooper River, which is brackish/salty water.*









Hanahan Water Treatment Plant and Goose Creek Reservoir

Charleston Water System  
103 St. Philip Street  
Charleston, SC 29403

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 [www.charlestonwater.com](http://www.charlestonwater.com)

24/7 Customer Service: (843) 727-6800