Charleston Water System

We met or surpassed all regulatory water quality requirements.

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.

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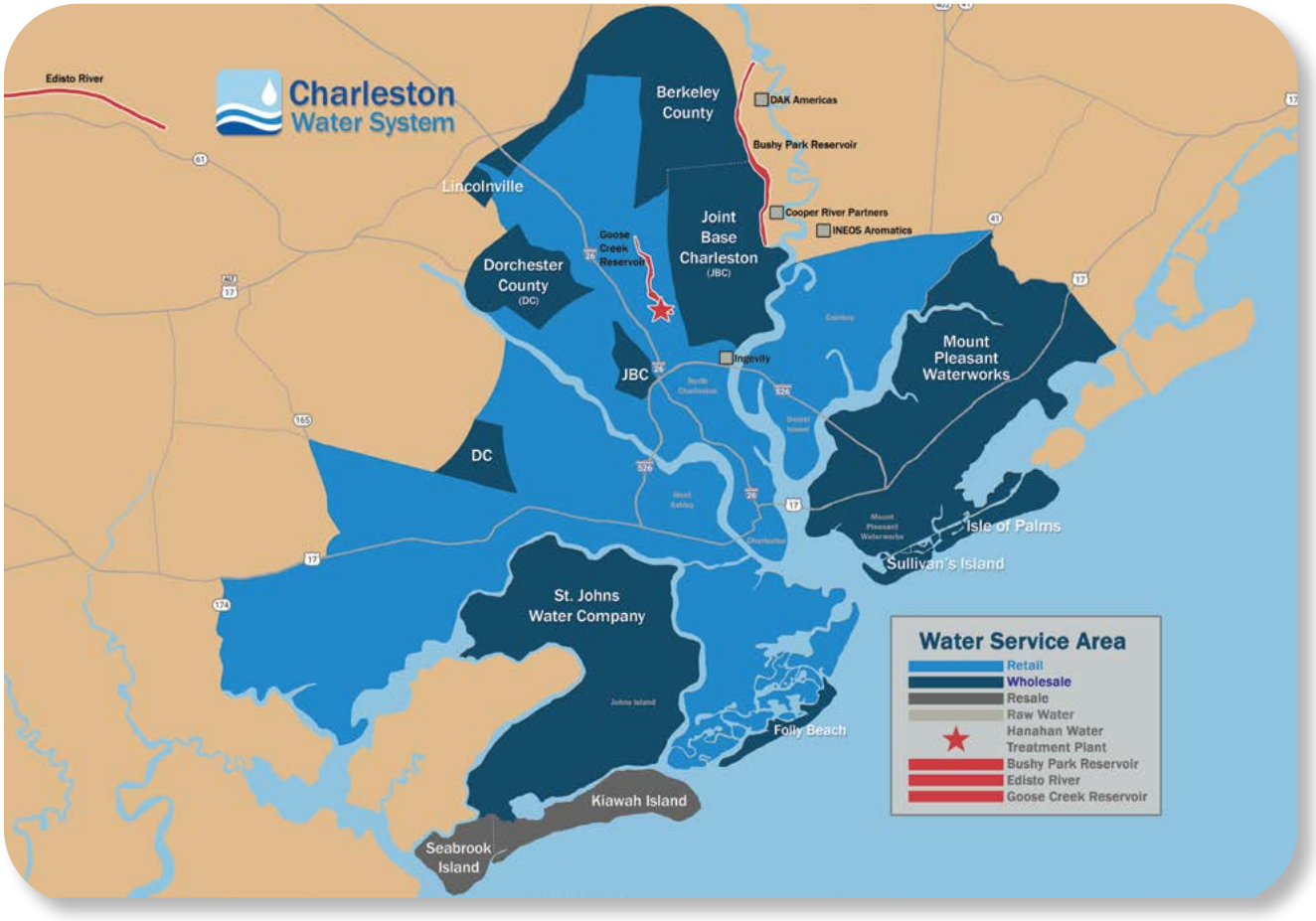

Summary

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*** 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.***

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*** para leer este informe en línea.

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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***.

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***.

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

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.

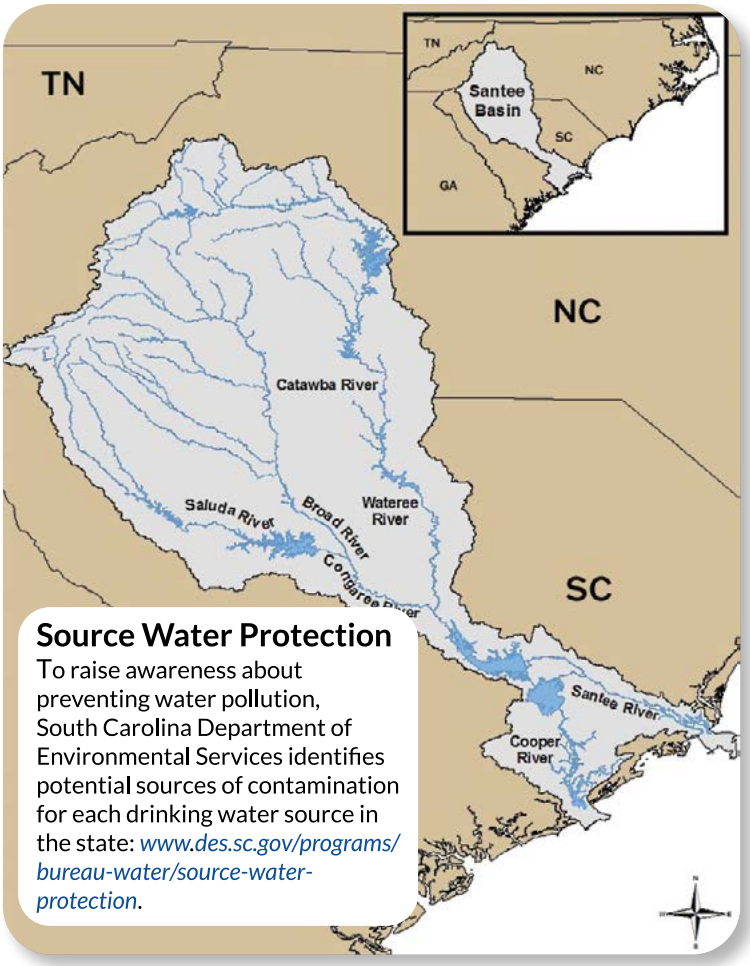
CWS has earned the **Phase IV 10-year President's Award**. This honor recognizes the Hanahan Water Treatment Plant for implementing practices to continually analyze and compare many separate process performance indicators on each of its 24 individual filters in an effort to keep turbidity lower than 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

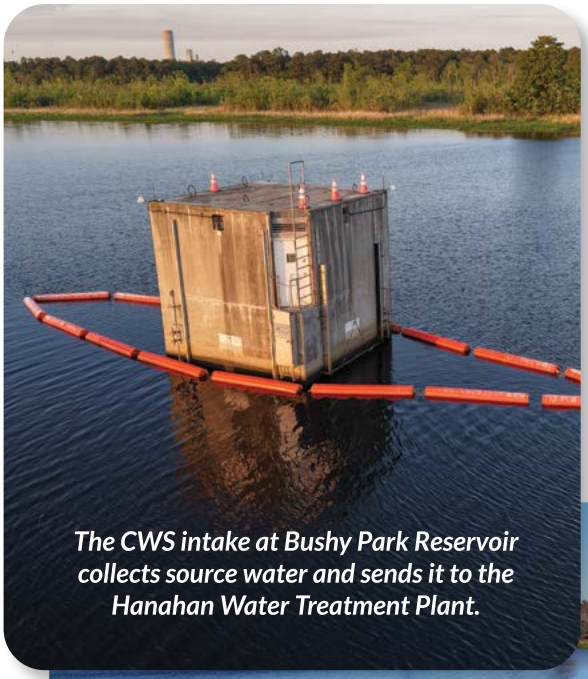
Bushy Park Reservoir is one of our two main sources of water that we treat for drinking water. Built in the early 1950s, it is connected to the Hanahan Water Treatment Plant by a tunnel named after Francis B. McDowell, Jr., a leader of the Commissioners of Public Works from 1947-1953 before it became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

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*.



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.

Edisto River

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

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 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
	Turbidity[1] 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
	***Cryptosporidium* (in source water)** A parasite spread through human and animal waste that causes gastrointestinal illness.	No MCL exists
	***Giardia* (in source water)** A parasite spread through human and animal waste that causes gastrointestinal illness.	No MCL exists
Inorganic Compounds	**Copper** A metal widely used in household plumbing that may corrode into water.	90th percentile of all samples collected must be less than the 1.3 ppm action level
	Lead A metal no longer used in new water pipes, but may be present in plumbing fixtures or old pipes; may corrode into water.	90th percentile of all samples collected must be less than the 15 ppb action level
	Nitrate (measured as Nitrogen) Nitrates are nitrogen-oxygen compounds that can become a source of pollution in the form of unwanted nutrients.	Nitrate 10 ppm
	Fluoride 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	**Chlorine Dioxide** A disinfection agent added in small amounts to protect against microbes.	800 ppb
	Chloramine Residual A compound of chlorine and ammonia added in small amounts to treated water to protect against microbes.	4 ppm MRDL

[1]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.

[2] 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 100% of monthly samples met the limit Range: 0.07 – 0.09 NTU	2025	Soil runoff
None	0.1 oocysts per liter Range: 0 to 0.1	2025	Human and animal
Zero *Giardia* oocysts per 1 liter of water	0.0 oocysts per liter Range: NA	2025	Human and animal
1.3 ppm	90th percentile = 0.089 ppm No samples exceeded the action level. Range: 0 to 0.26 ppm	2024[2]	Corrosion of household plumbing materials
0 ppb	90th percentile = 3.5 ppb One sample exceeded the action level. Range: 0 to 43 ppb	2024[2]	Corrosion of household plumbing materials
Nitrate 10 ppm	0.14 ppm Range: 0.14 to 0.14 ppm	2025	Runoff from fertilizers
4 ppm	0.16 ppm in source water 0.24 ppm in finished water 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 Range: 0 to 200 ppb	2025	Added for disinfection
4 ppm MRDLG	3.0 ppm Running Annual Average (RAA) 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	**Total Trihalomethanes (Stage 2)** 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.
	Total Haloacetic Acids (Stage 2) 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.
	Chlorite A byproduct formed when chlorine dioxide is used to disinfect water.	1 ppm
Organics & Bacteria	**Total Organic Carbon (TOC)** 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.
	Total Coliform Bacteria 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	**Gross Alpha excluding Radon and Uranium**	15 pCi/L
	Selenium	50 ppb
	Di (2-ethylhexyl) phthalate	6 ppb

[3] 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 Range: 2.6 to 23.9 ppb	2025	Byproduct of disinfection
NA	LRAA: 13 ppb Range: 4.5 to 22.4 ppb	2025	Byproduct of disinfection
0.8 ppm	Highest level detected: 0.96 ppm 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. All repeat samples were satisfactory. Range: 0% to 2.5%	2025	Naturally present in the environment
0 pCi/L	Highest level detected: 0.376 pCi/L Range: 0.376 to 0.376 pCi/L	2022[3]	Runoff from herbicide used on row crops
50 ppb	3.7 ppb 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	Maximun Contaminent 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 4.1 to 4.7 ppt	Widespread throughout the environment and society
PFOS	4 ppt	NA	Average 5.8 5.2 to 6.5 ppt	
PFBS	NA	<1 (unitless)	Average 3.9 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 3.8 to 4.6 ppt	
PFPeA	NA	NA	Average 4.6 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**.

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.**

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

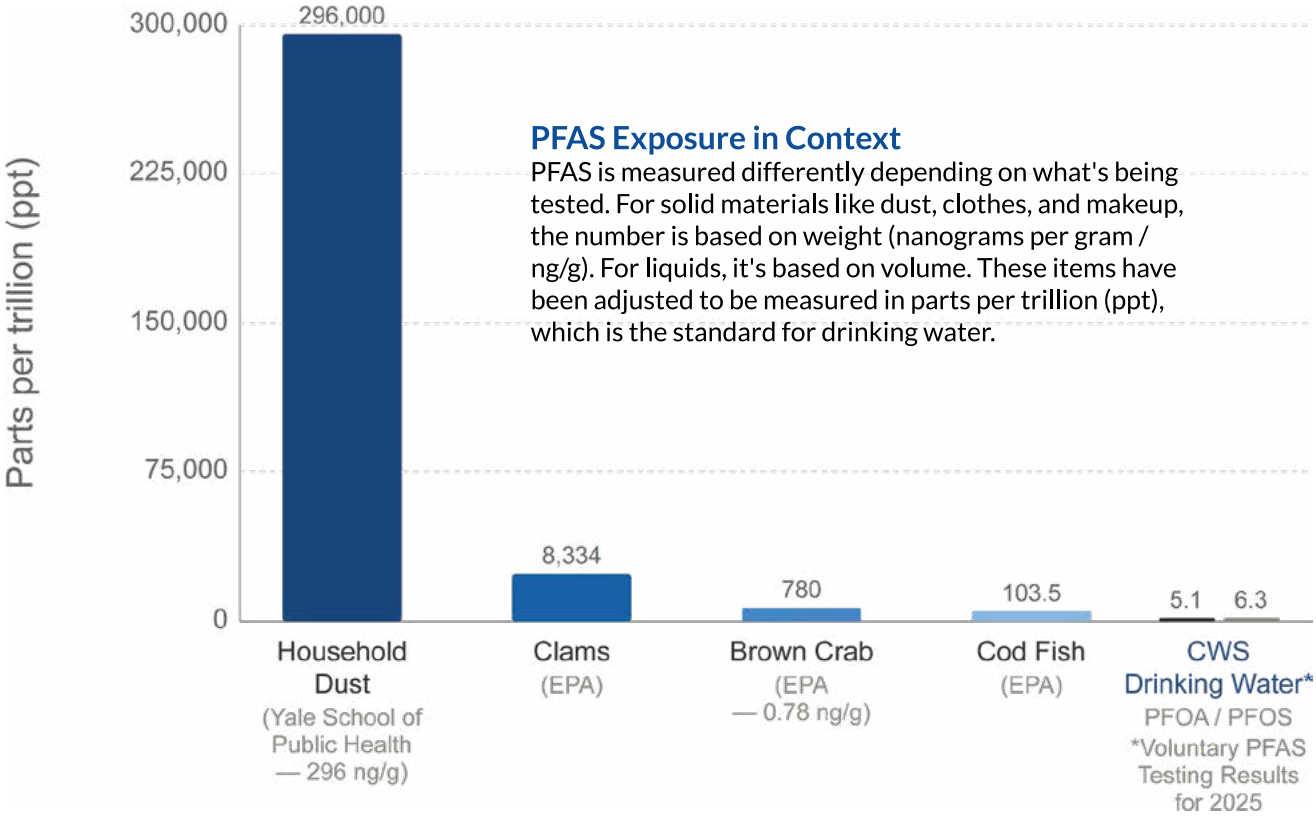
Key PFAS Dates:

- **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



PFAS Exposure in Context

PFAS is measured differently depending on what's being tested. For solid materials like dust, clothes, and makeup, the number is based on weight (nanograms per gram / ng/g). For liquids, it's based on volume. These items have been adjusted to be measured in parts per trillion (ppt), which is the standard for drinking water.

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)

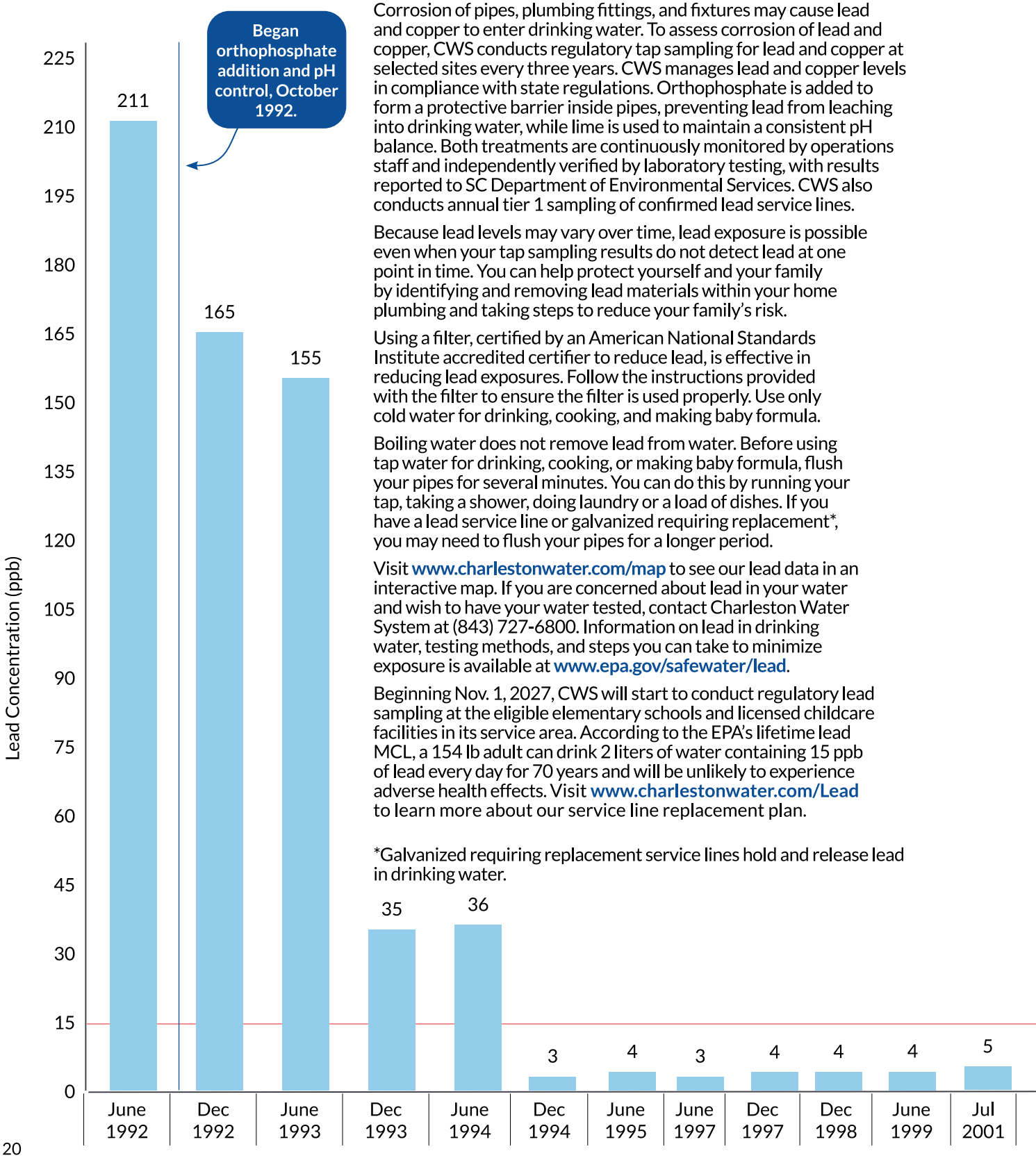
Voluntary Testing of Unregulated Compounds, continued

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
Hexafluoropropxylene 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 (90th 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 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.

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 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:

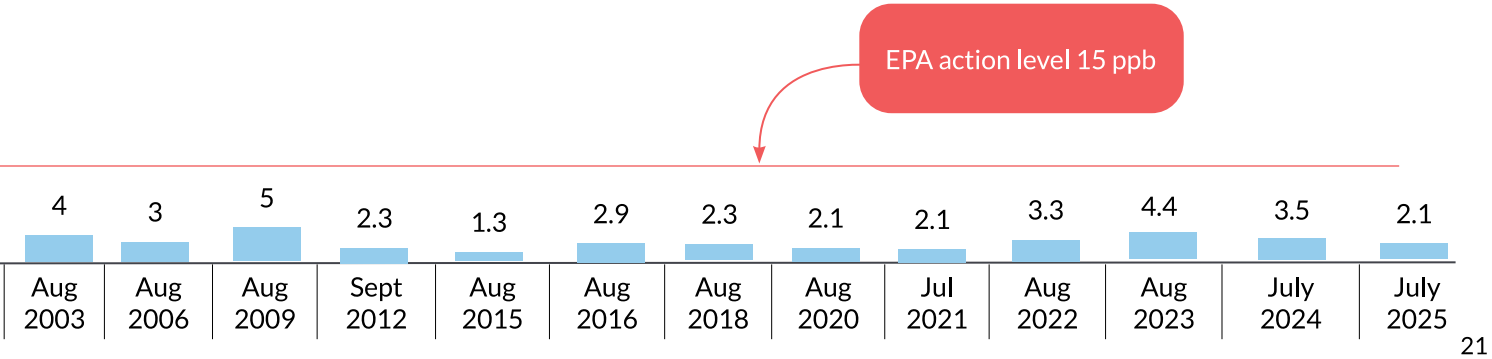
- June 1992: Reported highest lead levels in US under the new Lead and Copper Rule.
- Oct. 1992: Began corrosion control via orthophosphate; entered EPA consent agreement to control lead corrosion.

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: 90th percentile at 2.3 ppb. All 51 homes tested under the EPA Action Level (15 ppb).
- July 2021: 90th 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 (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

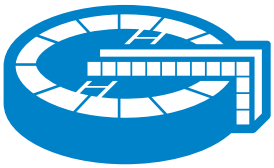
Our Citizens Academy participants visited our Hanahan Water Treatment Plant in September 2025 for a behind-the-scenes tour.

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.

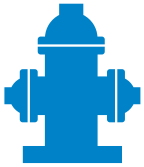
Assistant CEO Jonathan Ladd visited First Baptist School of Charleston to talk about the water cycle.

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.

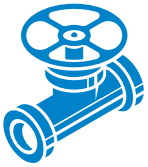
Quick Facts



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

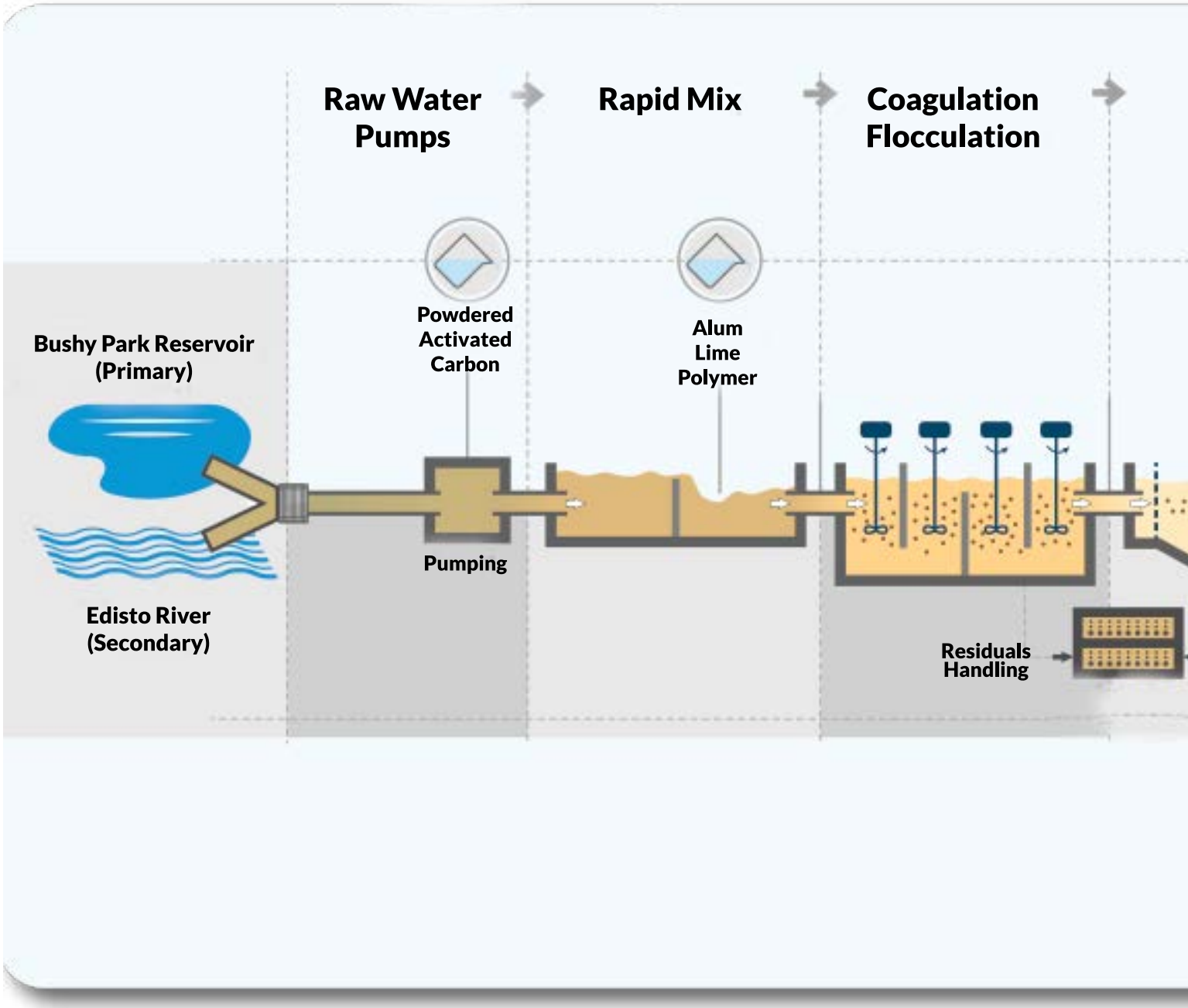
Alum (aluminum sulfate): Helps impurities stick together to form bigger particles called floc. Gentle mixing allows the floc particles to grow bigger and heavier.

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*



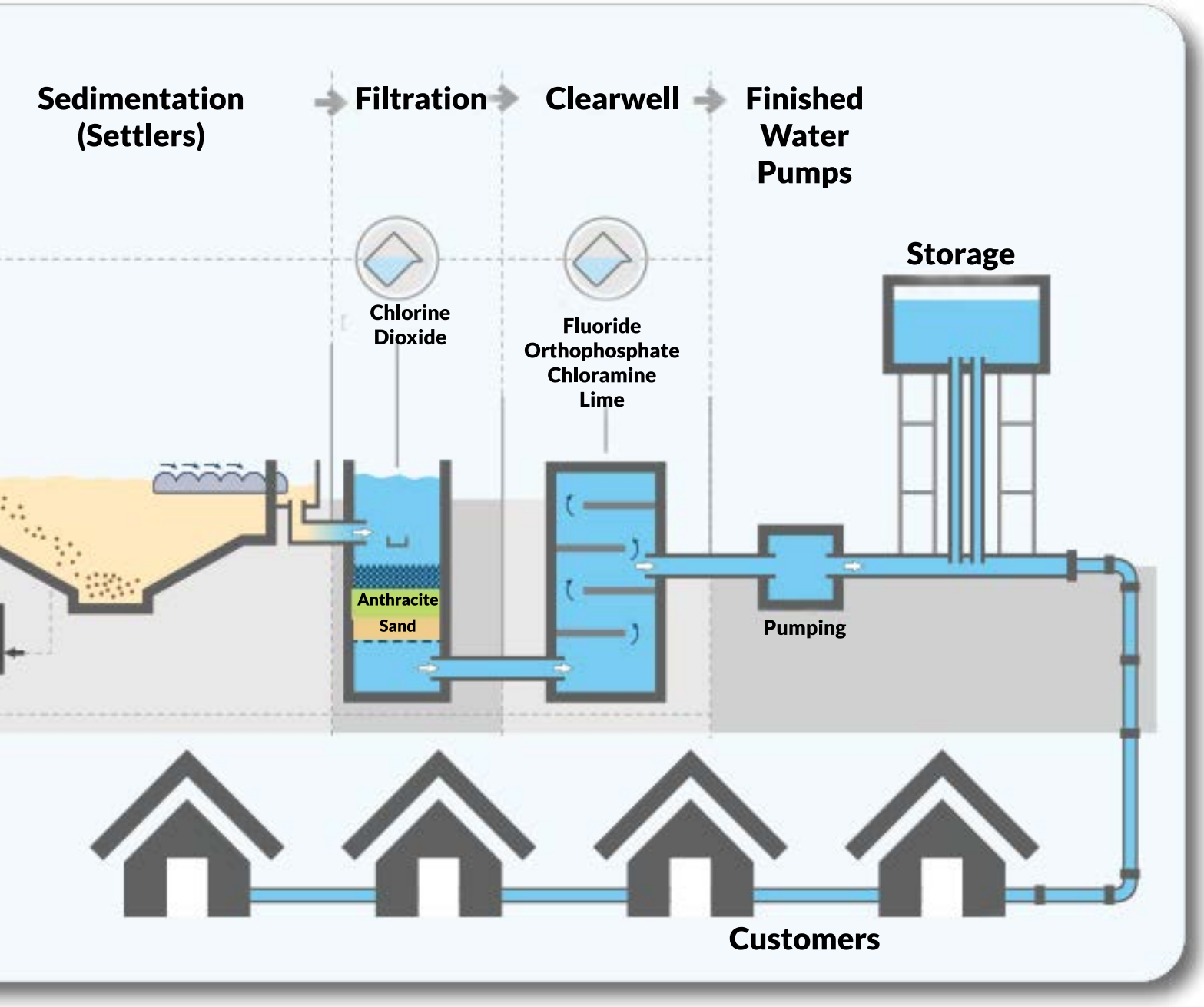
Lime: pH Adjustment for chemical stability.

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

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

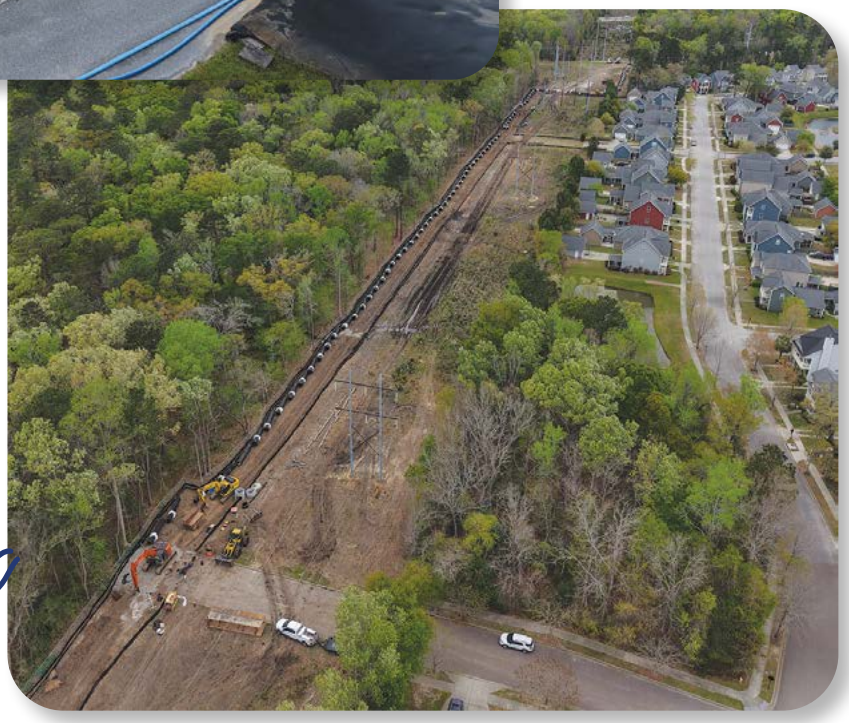
Several improvement projects are recommended as part of the Hanahan Water Treatment Plant Master Plan to increase reliability and accommodate planned future expansions.

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

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