

SGWASA DIGEST

AUGUST 2025 | VOLUME 2 - ISSUE 1



CONTENTS

Advancing Infrastructure. Protecting Water. Serving Communities.



COMMUNITY SUPPORTED BY
EMERGENCY REPAIRS

[View repairs supported by the SGWASA utility team at \[sgwasa.org/utility-alerts\]\(https://sgwasa.org/utility-alerts\)](https://sgwasa.org/utility-alerts)

2
**Advancing Water &
Sewer Infrastructure**

5
**PFAS Mitigation Pilot
Study Breakthroughs**

8
Pay-By-Text

10
**Water Meter
Replacement Program**

12
I-85 SSI Project Update

14
**Water Terms to Know:
Source Water**

16
Community Updates
View holidays, closings,
and community updates

17
Word Finder



ADVANCING

WATER & SEWER INFRASTRUCTURE

- Across Southern Granville County -

At the South Granville Water and Sewer Authority (SGWASA), our commitment to water quality is unwavering. As the steward of drinking water for the communities of Creedmoor, Butner, Stem, and surrounding areas, SGWASA is executing a multi-layered strategy to ensure clean, safe, and reliable drinking water for our current customers and generations to come.

At SGWASA, water quality is not merely a matter of regulatory compliance, it is the foundational principle that drives our daily operations and long-term strategic investments. SGWASA is actively investing in infrastructure upgrades, regulatory compliance programs, and environmental innovations to protect this essential resource.

Explore this edition of the SGWASA Digest, dedicated to highlighting information surrounding the projects, programs, and partnerships shaping the future of water and sewer services in Granville County.

Providing quality water and sanitary sewer services to our customers in an efficient, sustainable, and environmentally conscious manner

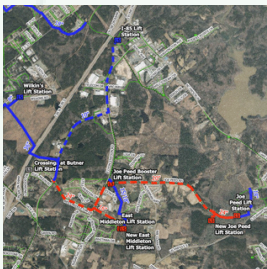
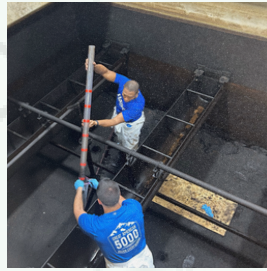
sgwasa.org

Project Schedule Chart

The following chart highlights SGWASA's ongoing efforts to strengthen and sustain its water and sewer infrastructure. The initiatives below reflect progress on critical capital improvements, system upgrades, and maintenance programs that enhance reliability, efficiency, and environmental stewardship. Each project represents a strategic step toward ensuring long-term service resilience for the communities we serve.

PROJECT NAME	BUDGET	TIMELINE	KEY UPDATE
PFAS Mitigation	\$25M-\$30M	2024–2029	Pilot testing underway. CDM-Smith developing a Scope of Work for design.
I-85 Sewer Upgrade – CP#1	\$34M	2025–2028	New Joe Peed Pump station and E. Middleton Rd. pump station are under construction. Concrete foundations and walls to be installed in August.
I-85 Sewer Upgrade – CP#2	\$30M	2025–2028	Project Bid over budget by \$8M. Evaluating alternate design and bidding for the Northern Interceptor sewer portion. Determining how to proceed with the Northern Interceptor project. Will consider re-bidding the project. Also considering alternate/additional funding via USDA,
Lead & Copper Rule	TBD	2022–2026	Pilot program in place. Material ID pilot underway.
Water Meter Replacement	\$1M	2024–2025	Contractor aiming for September 2025 start. SGWASA team meeting with meter installation vendor in August to fine-tune the project start dates. SGWASA is also developing marketing materials about the project.
Financial Software Upgrade	N/A	2023–2025	Key billing and financial components installed and operational starting FY25-26. SGWASA team is working with Tyler Technology team to implement new payroll software components.
Filter Media Replacement	\$245K (design). Estimated \$700k construction.	2025–2026	Bid opening August 5, 2025. Note: One bid received at a total project cost of \$897,753.00. Recommending award of contract to State Utility Contractors at the August 12TH Board meeting.
AIA Grant Project for Water Infrastructure Assessment	\$150k Grant; The AIA grant was funded from state ARPA money; thus, no local funding match is required.	2023-2025	Project in progress and on schedule. Consultant completing updated asset management plan and Capital Improvement Plan projections.



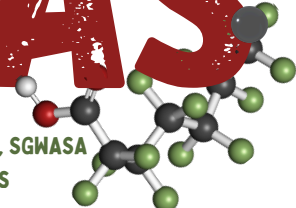


THE WORK WE DO TODAY

Will impact generations to come

THE FIGHT AGAINST PFAS

FROM GRANTS TO GROUNDWORK, SGWASA
CHAMPIONS FOREVER SOLUTIONS



In 2020, SGWASA initiated discussions on the urgent need to research and proactively address the growing problem of Per- and Polyfluoroalkyl Substances (PFAS) being deposited into Granville County's raw water supply.

Breaking from the historic pattern of prioritizing rapid fixes over well-researched and fiscally sustainable plans, SGWASA recognized the necessity of a more deliberate and comprehensive approach.

In 2022, based on the recommendation of the Board of Directors, SGWASA selected the environmental engineering firm CDM Smith to devise a multi-layered strategy.

In April 2024, the U.S. Environmental Protection Agency (EPA) finalized enforceable drinking water standards for six PFAS compounds, setting Maximum Contaminant Levels (MCLs) as low as 4 parts per trillion (ppt) for PFOA and PFOS, and introducing a Hazard Index to regulate mixtures of other PFAS.

Water systems must complete initial monitoring by 2027, and if MCLs are exceeded, implement corrective actions by April 2029. While the EPA is considering a potential two-year compliance extension to 2031, SGWASA is on course to meet the initial deadline.



Have you ever wondered the science behind PFAS and what makes their bond and staying power so strong? Explore the quick facts below:

PFAS = Per and Polyfluoroalkyl Substances

- They are a large family (thousands) of synthetic chemicals.
- What they all share: a strong carbon-fluorine (C-F) bond, one of the strongest bonds in organic chemistry, which makes them so persistent ("forever chemicals")

2023

Pilot program designed, grant applications submitted

2024

Pilot testing begins

2025

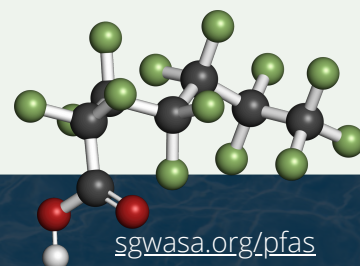
Pilot success confirmed, design-build planning in motion

2026–2028

Construction of permanent treatment system

2029

Deadline for compliance with EPA's PFAS rule





This plan encompasses:

- Conducting a PFAS Pilot Testing Program (October 2024–August 2025), funded by a \$500,000 NCDEQ grant.
- Applying for over \$26 million in state revolving fund (SRF) financing and grants to support full-scale design and construction.
- Partnering with CDM Smith to prepare detailed engineering, mitigation testing, and cost documentation to ensure effectiveness and sustainability.

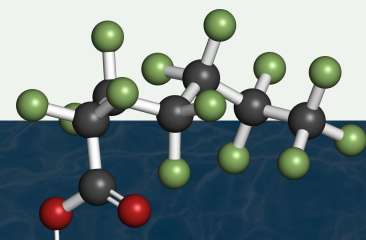
THE PRELIMINARY RESULTS ARE IN

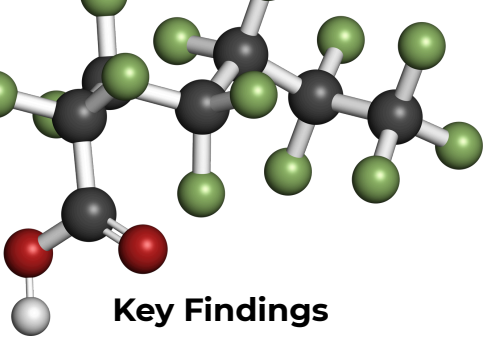
SGWASA's pilot program has been running for over nine months at the Water Treatment Plant. Testing included Granular Activated Carbon (Calgon F-400 GAC), DuPont Amberlite PSR2+ Anion Exchange Resin, and Fluorosorb 200 Novel Sorbent. All three media have successfully removed PFAS compounds, with no breakthrough detected above EPA MCLs to date. SGWASA's current powdered activated carbon (PAC) system reduces PFAS but is insufficient on its own for compliance.

CDM Smith has recommended a pressure vessel contactor system to provide flexibility for changing treatment media as regulations evolve. SGWASA is now refining the scope of work for full-scale design, with the goal of completing construction and placing the PFAS removal system into operation ahead of the 2029 federal deadline

References

U.S. Environmental Protection Agency. Final National Primary Drinking Water Regulation for PFAS. April 10, 2024.
South Granville Water and Sewer Authority. Executive Director's Monthly Project Update Report – July 2025.





Key Findings

PFAS Removal Performance:

All tested media consistently reduced PFOA and PFOS concentrations below EPA MCLs. SGWASA's current powdered activated carbon (PAC) system helps reduce PFAS but is insufficient alone for compliance.

Priority Compounds:

PFOA and PFOS are the primary PFAS compounds in SGWASA's raw water and should be the focus of initial treatment efforts.

Design Flexibility:

A pressure vessel contactor system is recommended to allow future media changes in response to evolving regulations and technologies.

Recommendations

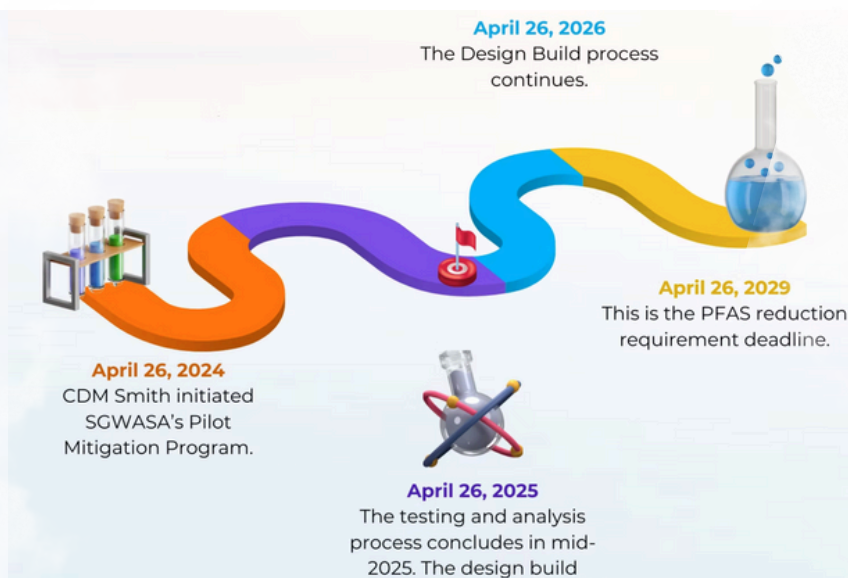
Proceed with Full-Scale Design:

Begin detailed design of a system that can accommodate any of the three tested media, ensuring flexibility and regulatory compliance.

Extend Pilot Duration:

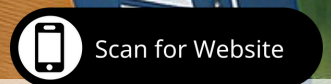
From 10 to 12 months to potentially observe media breakthrough and gather more data for lifecycle cost analysis.

The project timeline is shown below.





PAY BY TEXT



Scan for Website

BILL-PAY JUST GOT EASIER WITH THE NEW TEXT TO PAY FEATURE!

Select an enrollment option below in the Pay-to-Pay Program.

VIA PHONE

1. Dial 1-833-510-6338
2. Press option 4
3. Follow the activation prompts
4. Be prepared to provide your account number, cell number, and credit or debit card information

VIA WEBSITE

1. Click Pay My Bill in the top corner of the SGWASA website
2. Select the "Sign In / Register" button to log in to SGWASA's Tyler Technology bill payment portal
3. Once Logged in, you will see an "Enroll in Text to Pay" box appear on your account homepage
4. Once you enroll in Text to Pay, you will receive a verification text message to confirm your enrollment



After your account is enrolled in Text to Pay, you will then receive a text message each time a new balance is posted to your account. Reply "pay" to that message and your account will be paid with the credit card set-up during enrollment.

To make Text to Pay adjustments, log in to your account. Select the "Enroll in Text to Pay" box; or reply "Stop" directly via text in the message to opt out of Text to Pay at any time.

SGWASA PREPARES FOR WATER METER REPLACEMENT PROGRAM

SGWASA's Capital Improvement Plan (CIP) Project ID# 102-05
Total Project Budget: \$1,000,000.

In recent years, the Authority identified a need to modernize its metering infrastructure, ensuring efficiency and rapid information sent from the meters to and from utility teams. Many of the existing meters have aged and no longer perform optimally.

To address this need efficiently and cost-effectively, SGWASA contracted Vanguard Utility Services, a firm with extensive experience in water meter replacement and system upgrades.

Project Status

All new water meters and associated hardware are currently in stock and ready for installation, following full implementation of SGWASA's financial and utility billing software upgrade to Tyler Technologies' new cloud platform. This approach ensures a seamless transition and prevents data from being divided between two software systems.

SGWASA and Vanguard Utilities met in June 2025 to discuss project timing, and both agreed to tentatively begin installation in September 2025. The two teams will reconvene in late September to finalize installation the start date. Vanguard Utilities has indicated that the meter replacement program will be completed before the end of 2025. While the official start date may shift slightly depending on final compatibility with the Tyler Technologies cloud platform, SGWASA remains on schedule.

Once Tyler completes its final upgrade, a 30–40 day turnaround for meter replacements is anticipated.

NEPTUNE MACH 10 WATER METER

SGWASA manages approximately 6,600 water meters across its service area, ensuring reliable service for its customers.



PRIMARY UPGRADE BENEFITS:

The MACH 10® is an ultrasonic, solid-state water meter. Its main advantage is high accuracy and long-term reliability without moving parts. Unlike traditional mechanical meters, it uses ultrasonic transit-time technology to measure flow, which means:

- No wear and tear from moving components.
- Maintains accuracy throughout its lifespan.
- Excellent for detecting low flows and leaks.
- AMR/AMI compatible for advanced meter reading systems.
- This makes it especially valuable for utilities modernizing infrastructure to improve billing accuracy, leak detection, and operational efficiency.

Image: Example of the new water meter that SGWASA will be installing during this project.



Updates & Developments

A healthy sewer system is critical for maintaining the overall integrity of water infrastructure. A well-functioning sewer system ensures the proper transport of wastewater, reducing the risk of contamination to water supplies.

- CP#1 includes the construction of two new sewer pump stations and the installation of new sewer pipe. Haren Construction started construction on 4/1/25. Construction is ongoing.
- CP#2 was bid in May 2025, but only one bid was received, prompting an extension to June 12. Park Construction submitted the sole proposal, which exceeded the project budget. SGWASA and CDM Smith are now conducting value engineering to reduce costs and evaluate whether parts of the North Interceptor can be deferred.

A contract recommendation is anticipated at the September/October 2025 Board meeting. The project timeline is shown below.



Project Timeline



FINAL DESIGN, EASEMENTS, PERMITTING

CP#1 Design, Easements, Permitting

CP#2 Design, Easements, Permitting

BIDDING & AWARD

CP#1 Bidding & Award

CP#2 Bidding & Award

CONSTRUCTION

CP#1 Construction

CP#2 Construction

Water Term to Know

SOURCE WATER

Definition

Source water refers to rivers, lakes, reservoirs, springs, and groundwater aquifers that supply public drinking water systems and private wells. It is the natural origin of the water that is treated, tested, and delivered to homes and businesses.

The First Step in Clean Water: Before treatment and distribution, water begins its journey at the source. Protecting these natural supplies ensures cleaner, safer water for all.



**SGWASA withdraws water
from Lake Holt (43 sq. mi.)
for its water supply.**



➞ **Holiday Closing**



The South Granville Water & Sewer Authority will be closed in observance of the holidays on the following dates:

- September 1st**
Labor Day
- November 11th**
Veterans Day
- November 27th-28th**
Thanksgiving Holiday

UPCOMING PUBLIC MEETINGS

-  **General Board Meetings**
- September 9th
October 14th
November 12th
-  **Virtual Town Hall**
- August 27th

In October of 2024, SGWASA announced the launch of the new Customer Focus Corner, a dedicated online space designed to foster open communication and information based on community requests.

- Submit inquiries about SGWASA services, projects, and water-related topics.
- Stay informed by diving into the current Community Spotlight Topic featuring detailed information, research, and updates on community-prioritized issues, infrastructure projects, and more.
- Suggest future topics and share your ideas for future discussions that address your questions and curiosities surrounding the region’s infrastructure.



Visit the Community Focus Corner at sgwasa.org/community for opportunities to share your thoughts and support work in progress.



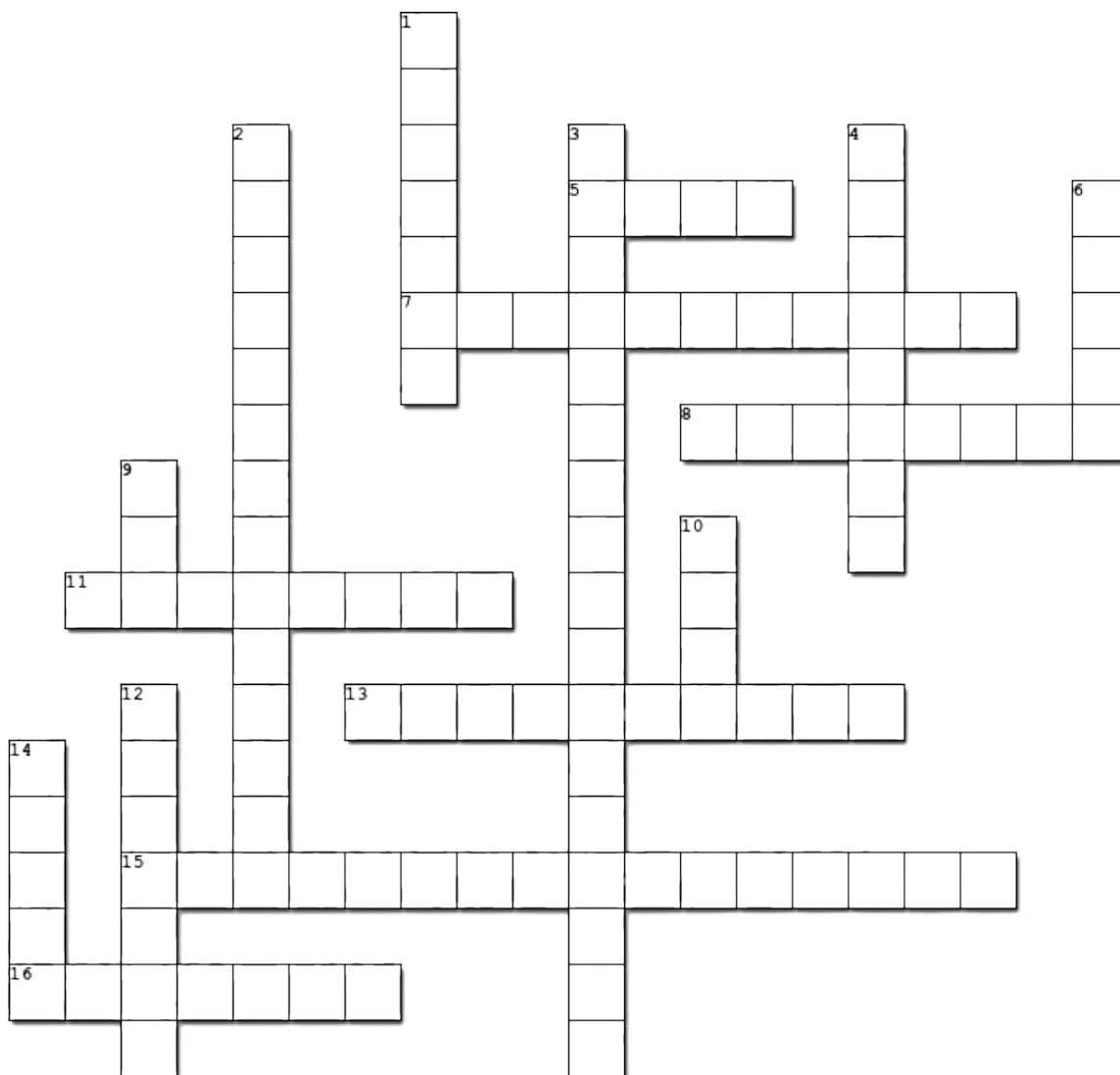
CROSSWORD PUZZLE

Test your knowledge of water, sewer, and environmental topics shaping the future of our community. This crossword puzzle holds clues describing important projects, environmental initiatives, utility operations, and connected topics trending in SGWASA discussions.

Use the clues provided to fill in the crossword puzzle. Clues cover SGWASA projects, environmental programs, and common water and sewer terminology.

Some clues are straightforward, others may stretch your thinking, all are drawn from real SGWASA initiatives.

Tip: Keep a copy of the July 2025 Executive Director's Report nearby. Many answers are hidden in plain sight. Completed answers will be published in the News section of [SGWASA.org](https://www.sgwasa.org) on September 19, 2025.



Across

- 5. Federal funding source behind SGWASA's AIA grants for infrastructure.
- 7. Resin-based treatment option tested in SGWASA's PFAS program.
- 8. Treated wastewater discharged into the environment.
- 11. Routine hydrant maintenance program designed to improve water quality.
- 13. Novel sorbent tested alongside GAC and AER in PFAS pilot program.
- 15. Construction company awarded CP#2 of the I-85 Sewer Upgrade project.
- 16. Science of interactions between organisms and their environment.

Down

- 1. Reverse form of this natural process used to filter contaminants.
- 2. Engineering firm evaluating SGWASA's water filter media replacement.
- 3. Construction company awarded CP#1 of the I-85 Sewer Upgrade project.
- 4. Type of activated carbon used in SGWASA's PFAS pilot testing media.
- 6. A small-scale program to test PFAS treatment before full design and construction.
- 9. The highest level of a contaminant that is allowed in drinking water based on cost benefit analysis and is enforceable.
- 10. Forever chemicals SGWASA is piloting removal technologies for.
- 12. Onsite SGWASA payment option, customers can leave checks securely.
- 14. Environmental practice of reclaiming wastewater for beneficial purposes.

TEST YOUR KNOWLEDGE

**Together, with the southern Granville
County community, ongoing
collaboration will shape a future where
our communities thrive on a sustainable,
reliable water and sewer system.**



This is a publication of the South Granville Water & Sewer Authority. Public distribution is encouraged. Submit topics of interest online via sgwasa.org/news-topic

sgwasa.org