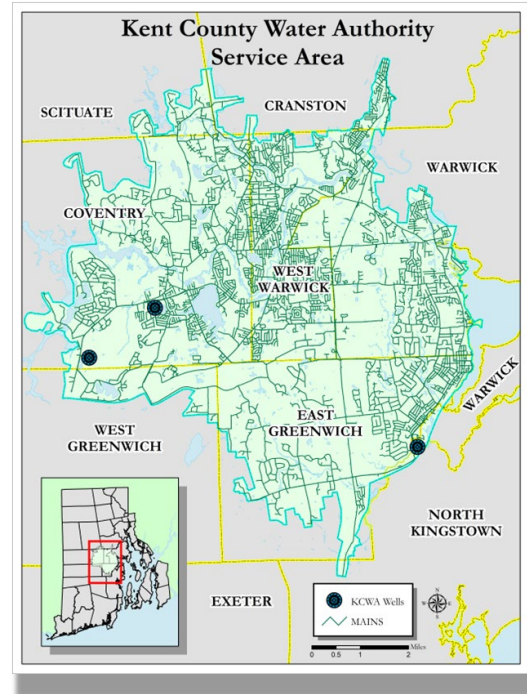


# Annual Report to Customers:

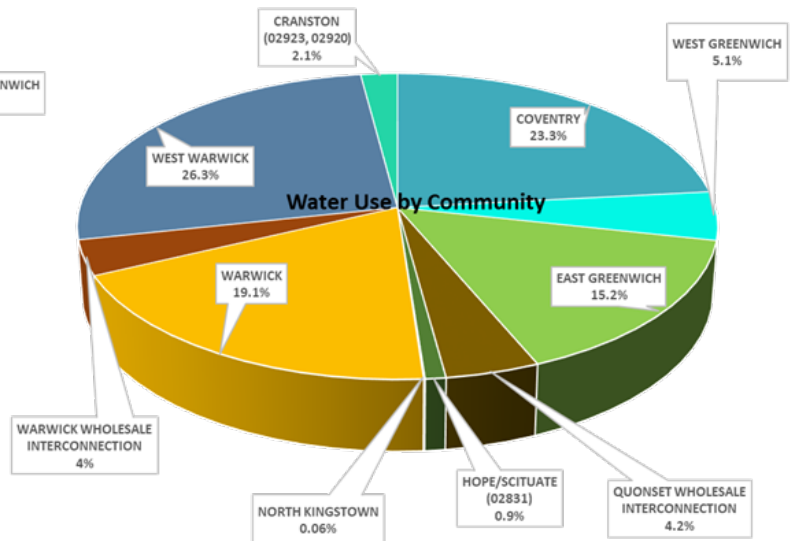
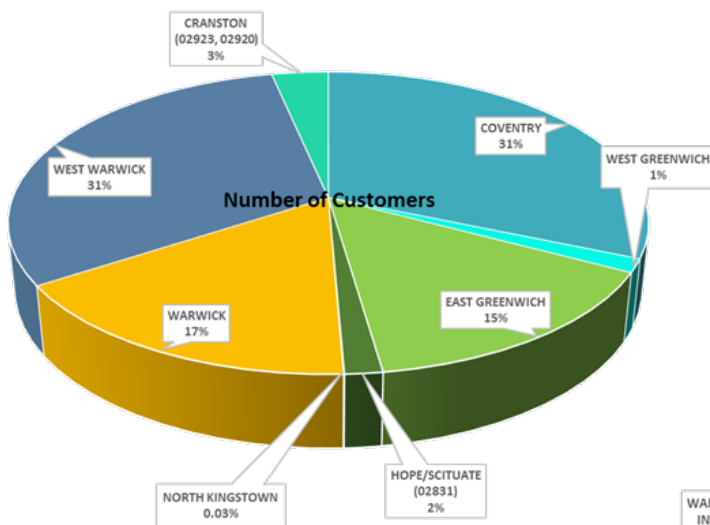
October 2024

We are completing another successful year at the Kent County Water Authority for our customers. Interruptions have been restricted to emergencies and service enhancement projects only. The dedicated staff has continuously worked to provide the essential safe supply of drinking water for consumption and fire protection to our customers. The supply has been sufficient, and we have had no disruptions in water quality. Infrastructure and capital programs continue, and we are setting sights on the future for automation and continuous improvement of our systems. Despite severe economic headwinds with record high inflation and cost increases across-the-board, KCWA continues to deliver enhancements and resiliency with a state-of-the-art water system providing a quality product and service without incurring any increase in cost to the customers. How many utilities can say the same?



ACTIVE KCWA CUSTOMERS BREAKDOWN BY TOWN / CITY (FY 2024)	
COVENTRY	8,556
WEST GREENWICH	390
EAST GREENWICH	4,062
HOPE/SCITUATE (02831)	446
NORTH KINGSTOWN	8
WARWICK	4,485
WEST WARWICK	8,413
CRANSTON (02923, 02920)	915
<b>TOTALS</b>	<b>27,275</b>

WATER USE IN GALLONS BREAKDOWN BY TOWN / CITY (FY 2024)	
COVENTRY	577,608,032
WEST GREENWICH	126,681,745
EAST GREENWICH	376,207,721
QUONSET WHOLESALE INTERCONNECTION	105,052,334
HOPE/SCITUATE (02831)	22,998,836
NORTH KINGSTOWN	1,520,688
WARWICK	472,918,344
WARWICK WHOLESALE INTERCONNECTION	91,871,574
WEST WARWICK	650,878,416
CRANSTON (02923, 02920)	51,574,977
<b>TOTALS</b>	<b>2,477,312,667</b>



## Financials

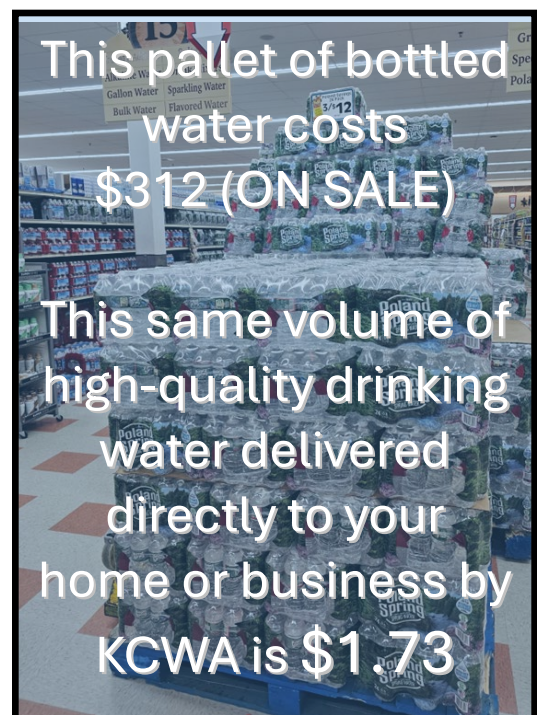
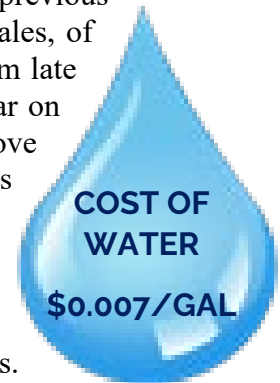
As implemented, our revenues are stable and expenses balance with our operational needs. Our Moody's water revenue rating is Aa2. Standard & Poor was not reviewed in FY 2024 and is still being held at Aa2. The Authority can only sell revenue bonds, and our solid AA rating reinforces our strength in the ability to competitively raise funds for future bonding mechanism within market levels.

Total operating revenues decreased \$1,424,237 for fiscal year 2024 from the previous year. The most significant contributing factor was the decreased use, hence sales, of water due to the greater amount of rainfall during the fiscal year spanning from late 2023 into the first half of 2024. Rhode Island experienced the 6th wettest year on record with 16.13 inches of rain in the summer of 2023, which was well above the average of 10.31 inches. The spring of 2024, the latter half of FY2024, was the second rainiest on record. However, in stark contrast to FY2024, the sales for FY2025 have started off strong due to a hot, dry summer and fall which resulted in a large increase in water usage and sales. Operating expenses in FY2024 increased by \$723,747 from the previous fiscal year mainly due to an increase in transmission and distribution expenses and water pumping expenses.

Specifically, we incurred unplanned expenditures such as replacement of motors at Clinton Avenue pump station, and planned expenses inclusive of membrane filters at Mishnock Treatment Plant, well rehabilitations, and tank inspections. Total net operating income at the end of the year was \$2,313,905, down 48.1% from the previous fiscal year. Total assets were \$231 million in FY2024, an increase of \$4.4 million or 1.9% from the previous year. Total liabilities were \$29.6 million, a decrease of \$724 thousand, or 2.4% from the previous year. The Authority had \$210.2 million invested in capital assets, which represents an increase of \$21.8 million or 11.6% from the previous year. The Authority's debt to equity ratio is excellent at 14.9% for FY2024, indicating the health of the regulated utility and continuance of capacity to issue additional debt when necessary. The restricted IFR account will be funded at \$6 million, and the restricted CIP account will be funded at \$2.5 million for FY2025.

Once again, our financial statements are professionally audited and prepared annually utilizing the Government Accounting Standards Board as we are classified as a public benefit corporation and a district designation of a political subdivision by the State Legislature. The annual report presented includes all current GASB Statements. It is our pleasure to report that our 2024 financial statements continue to demonstrate the sound and consistent operation of the Kent County Water Authority.

**KCWA is reliably delivering high quality pressurized water 24/7 directly to the doorsteps of our customers 99.4% cheaper with zero waste**



## **MAJOR GOALS COMPLETED IN FY2024:**

1. Completed construction of the new central operating facility in West Greenwich under budget and without the need for a rate filing before the Public Utilities Commission.
2. Completed the installation of 1,675 rooftop surface mounted solar panels at the new office and maintenance facility with an average production of 61,224 kWh, or 734,682 kWh, annually.
3. Completed IFR 2021 inclusive of connecting Staples/Summit Plaza on Bald Hill Road that experienced a catastrophic failure of their private pumping systems and connection with Warwick Water. Connecting to the KCWA from Warwick Water solved the need for pumping facilities for fire protection and domestic needs.
4. Designed, bid, and completed Centerville Road IFR replacement ahead of planned RIDOT roadway restoration.
5. Met all regulatory guidelines for safe drinking water required under State and Federal law with ZERO violations. In fact, this year marks 10 years with no violations.
6. The Authority submitted, and was accepted, to the RIDOH Project Priority List (PPL) for emerging contaminants under the Drinking Water State Revolving Fund for PFAS mitigation. Being on the PPL under the emerging contaminant category expands funding opportunities being made available under the Bipartisan Infrastructure Law inclusive of loan forgiveness funds. The Board has started the process of organizing the financing for the construction of a new treatment facility at our East Greenwich well for the removal of PFAS. Applications have been completed with RIDOH and Rhode Island Infrastructure Bank (RIIB) and the KCWA Board has passed a bond resolution for the funding of new treatment facility at the East Greenwich Well inclusive of additional treatment measures for the full removal of PFAS ahead of Federal requirements for the same.
7. KCWA entered a class action lawsuit against major chemical manufacturers to help mitigate the cost of design and treatment/removal of PFAS in our well systems. Good faith estimates are anticipated to bring in a couple of million dollars to offset the expense.
8. Completed the lead service line (LSL) inventory for both the public and private side of the distribution system to provide public mapping in conformance with the EPA Lead and Copper Rule Improvements (LCRI) and the RIDOH/ RIGL Lead Poisoning Prevention Act.
9. Completed large meter changeout and testing program.
10. Completed annual evaluation of per- and poly-fluoroalkyl substances (PFAS) for all KCWA well water in accordance with State regulations. PFAS was detected at all wells at levels below the 20 parts per trillion (ppt) standard set by RI State regulations.
11. Fully deployed leak detection sensors and software for a systemwide comprehensive leak detection program.
12. Continued to implement and leverage the meter technology using Muni-link Customer Information System (CIS) and utility billing and Neptune software. Deployed 7 of 10 fixed gateways so meters can be read through Advanced Metering Infrastructure (AMI).
13. Updated KCWA rules and regulations with current standards and technology.
14. Finished integration and deployment of GIS for desktop into GIS enterprise so KCWA can develop custom applications and data collection for enhanced mapping and editing, asset management, and real-time program management.

## **FY2025 Goals**

1. Complete pilot testing and the final design for the construction of East Greenwich Well treatment facility. This facility was initially designed to remove iron and manganese utilizing greensand filtration, however recent federal PFAS legislation in RI required additions to the design to accommodate the current regulatory changes.
2. KCWA is looking to wholesale partner with the Town of North Kingstown and Quonset Development Corporation (QDC) to provide PFAS free water from this treatment facility.
3. Maintain compliance with the EPA Lead and Copper Rule Improvements (LCRI) and the RIDOH/ RIGL Lead Poisoning Prevention Act and develop a replacement program for all public and private side lead and galvanized service lines.
4. Update and deploy all Supervisory Control and Data Acquisition (SCADA) hardware and software.
5. Continue to implement and leverage the meter technology using Muni-link Customer Information System (CIS) and utility billing and Neptune software. Deploy the final 3 of 10 total fixed gateways so meters can be read through Advanced Metering Infrastructure (AMI).
6. Move the City of Warwick's emergency interconnection and PRV out of KCWA's Bald Hill pump station to the base of the Bald Hill Tanks.
7. Paint at least half of the hydrants in the system
8. Deploy Digsafe tracking and records management using Utility Cloud.
9. Design and deploy final system management apps with our technical staff through our new ArcGIS enterprise system.
10. Initiate remote net metering contract to supply KCWA with electricity with the balance of renewable energy sources to meet 100% of the energy needs.
11. Continue the cross training of our employees both field and office, as well as emergency management training as needed for the company's future and ability to meet needs under emergency conditions. Continued workforce planning and organization structure improvements.
12. Continue to operate and service our customers with courtesy, professionalism, and a quality product. We will continue our emphasis on implementing customer service and customer communication strategies.
13. Continue our "invest and invigorate" employee program. This enhancement in the company will provide for better communication, staff training, and result in efficiency of operations.

## **Water Quality and Resiliency**

Our continued priorities have been and will be to comply with all requirements of the Safe Drinking Water Act and their Amendments. The Safe Drinking Water Act (SDWA) is the primary federal law that ensures the quality of drinking water in the United States. The EPA and states can enforce the SDWA by: Issuing administrative orders, taking legal actions, and fining utilities. The SDWA limits exposure to harmful contaminants, including lead. It also requires the EPA to establish primary drinking water regulations for public

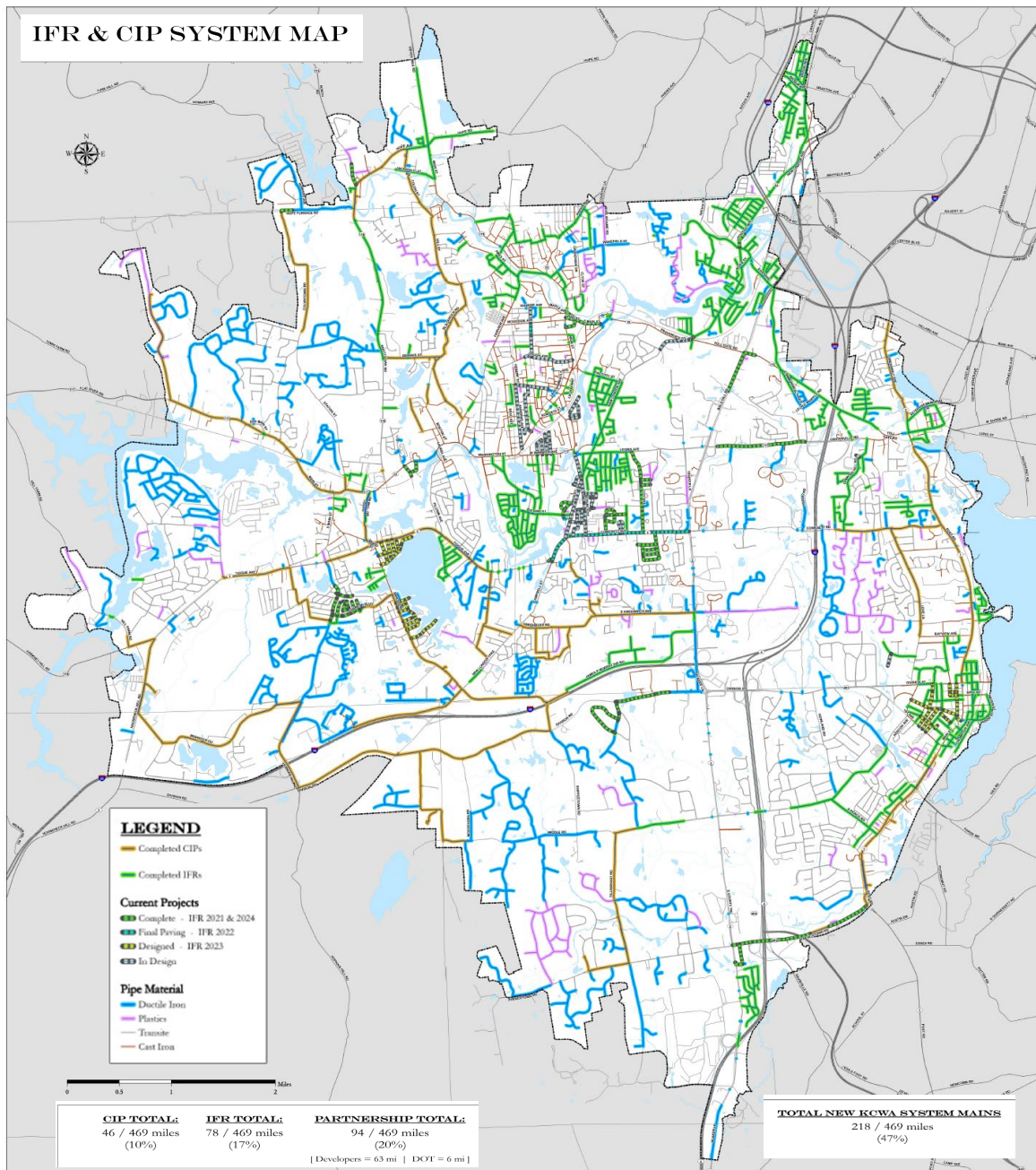
### **The Kent County Water Authority has not had any violations of the Safe Drinking Water Act (SDWA) in the last 10 years:**

- The Kent County Water Authority continues to meet AND exceed all federal and state requirements.
- The authority's monitoring results show that their system has had no violations.
- The Environmental Protection Agency (EPA) and Rhode Island Department of Health have determined that the water is safe at the detected levels.

water systems. This assures our customers that they are receiving safe and healthy water throughout our system, and it is our continued pledge to improve our system and to strive for the highest quality and most efficient, cost-effective system possible. We have established, as our highest priority, improvement programs to facilitate resiliency and enhance water quality into the far reaches of the distribution system.

## **Infrastructure Replacement (IFR) and Capital Improvement Projects (CIP)**

KCWA has been a leader in infrastructure replacement (IFR) and capital improvement (CIP). KCWA has added and/or replaced over 218 miles of water main since the state law and programming was implemented. It is required under state law that water suppliers perform a full detailed analysis of its infrastructure to determine useful life expectancy, prioritize repairs and replacements, and meet the needs of the public for consumptive use and fire protection.



## DID YOU KNOW

APPROXIMATELY ONE HALF OF EVERY DOLLAR RECEIVED BY KCWA IS USED TO DIRECTLY REPLACE AND UPDATE OUR INFRASTRUCTURE

To meet these requirements, the Authority finances large infrastructure projects through a pay-as-you-go model depending on the type of project and the approved funding allowed under the Public Utilities Commission. The infrastructure replacement (IFR) component is the renewal and replacement of existing infrastructure, whereas capital improvement projects (CIP) are for new infrastructure mostly large in scale and scope.

### **Infrastructure Replacement (IFR)**

This portion of the report contains information on the approved programs under the current Infrastructure Replacement Program (IFR) restricted funding approved by the PUC. The restricted IFR account is fully funded at \$6 million annually.

#### **Current Infrastructure Projects**

##### **IFR 2021**

IFR 2021 includes several critical upgrades to KCWA, or the Authority, distribution system to increase resiliency and higher quality of service. The project scope is comprised of replacement and new installation of water main and supporting infrastructure in the Towns of Coventry, East Greenwich, West Warwick, Scituate, and the City of Warwick. IFR 2021 involved the installation of approximately six (6) miles of pipelines consisting of primarily 12-inch and 8-inch ductile iron pipe and three pressure reducing valve (PRV) stations. This work includes reservicing existing and new customers to higher pressures, looping dead end mains to increase water quality, and inactivation of old obsolete and degraded piping. As with all IFR pipeline replacement projects on existing roadways, pavement restoration is incorporated into this project resulting in higher quality road surfaces when the projects are completed. Also included are the installation of new service connections and hydrants, furnishing of telemetry equipment and programming to KCWA's supervisory control and data acquisition (SCADA) system, connections to existing mains, fittings, by-pass piping systems, and other related appurtenances. The IFR 2021 construction bid was awarded on February 18, 2021, to CB Utility Co. Inc. This project was extended to include the emergency replacement pipework and roadway restoration on Tollgate Road and Bald Hill Road for installation of a 12" water main to progress up Bald Hill Road to service 1276 Staples/Summit Plaza that can no longer be serviced by Warwick. Also included was emergency replacement of water mains and bypass piping on Greenbush Road in West Warwick from flooding and bridge collapse that occurred in January of 2024. This job is now complete with a final contract price of \$15,513,131. Please note that approximately 2 million dollars is being reimbursed back to the Authority IFR restricted fund from the private extension and from FEMA for the Greenbush emergency work. It should be noted that this extension can be added in the future to service all Warwick Water customers in this immediate area who may be faced with similar problems in the future.

##### **Centerville Road IFR.**

The work of this project involved the installation of a water main on Centerville Road (Route 117) in the City of Warwick, RI. This project required installing pipelines consisting of approximately 1,700 linear feet of 12-inch ductile iron pipe. Also included are installation of

service connections, connections to existing mains, hydrants, fittings, and appurtenances. Full depth trench patch pavement restoration was also incorporated into this project. This project was shoehorned into a rapid IFR project due to two very large water main breaks that occurred in the area of Routes 117 and 95 that caused severe disruptions. The main reason it was fast tracked was to get the waterlines in the ground before RIDOT replaced the road curb-to-curb in late 2024. This project was awarded and completed by to Ferriera Construction in the Summer 2024 at a contract cost of \$1,168,537

### **IFR 2022**

IFR 2022 was designed to continue the aggressive replacement of critical infrastructure for several high priority locations within the Kent County Water Authority (KCWA) distribution system. The work in this project generally involves the installation of water mains in the Town of West Warwick, which will serve all KCWA customers. This project encompasses installing pipelines consisting of approximately 7,600 linear feet of 16-inch ductile iron pipe, 4,360 linear feet of 12-inch ductile iron pipe and 2,100 linear feet of 8-inch ductile iron pipe. Specifically, the project includes the replacement of 1887 vintage cast iron main along Cowesett Avenue. While in the roadway, KCWA is simultaneously installing a separate high service line to loop several dead-end mains and reservice localized areas of historic low pressures in and around Carlson Circle. A major component to this project is the replacement and relocation of the water main at the intersection of Cowesett Avenue and Bald Hill Road. Water main failure at this location had the potential of catastrophic collateral damage to surrounding infrastructure due to the recent installation of a natural gas high pressure underground station and infrastructure in close proximity to KCWA's existing water infrastructure. The IFR 2022 construction bid was awarded on October 27, 2022, to Boyle & Fogarty Construction Co., Inc., at a contract price of \$8,381,537

#### *IFR 2022 Construction Details:*

On April 17th, 2023, Boyle & Fogarty Construction Co., Inc. began installing new water mains, hydrants, and water services to the curb stop in the Town of West Warwick. Construction continued throughout 2023 in the following areas: Main Street from the intersection of Tiogue Avenue and New London Turnpike to the Intersection of Main Street, Cowesett Avenue and East Greenwich Avenue. Cowesett Avenue from the intersection of Main St and Cowesett Avenue to the intersection of Cowesett Avenue and Coit Avenue. The job was originally planned to extend to the intersection of Cowesett Avenue and Bald Hill in 2023. However, delays due to the amount of ledge encountered by the contractor and multiple weather events and drainage issues caused the underground piping components of the job to be extended into the Spring of 2024. It is anticipated that this project will be completed in November of 2024, with the exception of final curb-to-curb paving from Coit Ave to Route 2. All other final paving will be complete.

### **Future IFR Lead and Galvanized Service Replacement**

With the passage of the Bipartisan Infrastructure Law (BIL), the Drinking Water State Revolving Fund (DWSRF) will be receiving approximately \$292 million of additional funding for projects, including \$179 million for lead service line (LSL) and galvanized service line replacements. Currently, 49% of the funding is allocated toward principal forgiveness/grants on full private and public side replacement. KCWA is working to put together a project to obtain grant funding to remove any remaining lead and galvanized service lines in the system. KCWA completed the

lead service line (LSL) inventory for both the public and private side of the distribution system to provide public mapping in conformance with the EPA and RIDOH/ RIGL Lead Poisoning Prevention Act. KCWA is also partnering with the EPA and RIDOH under the voluntary [Get the Lead Out \(GLO\)](#) initiative for technical assistance relating to bid development for LSL replacement and construction, inventory refinement, funding, and community engagement.

**Meter Replacement Program**

The original meter program funding under Docket 4611 did not include the replacement of large and medium meters sized 3-inches and above. There are approximately 300 accounts out of 27,500 that fall into this category but contribute 20% of the revenues to the Authority. The Authority strongly felt that the large meter customers needed the most current and correctly sized metrology in place to accurately monitor the use from these customers in real time with the latest technology.

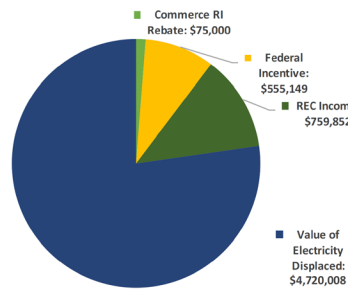
Docket 5012 expanded the meter program to include a right-sizing survey for larger meters sized three inches and above to best determine if size and type of each large meter is correctly matched to the downstream use. The survey outlined the recommendations on replacement of unitized measuring elements (UME) and update/replace old turbine meters to new ultrasonic meters. The goal of the program is to apply uniform metering technology to deliver improved service and billing that is in line with current utility standards. The Authority is also providing certified large meter testing for every meter checked, updated, and/or installed under the program to ensure baseline accuracy. All meters are being outfitted with the same latest generation automatic meter reading (AMR) technology and metrology as what was installed on all meters sized 2-inches or less. We are also outfitting every large meter with additional updated microchips installed in the register heads that have the ability to broadcast a Long-Range Wide Area Network (LoRaWAN) signal. When activated, the Authority and the customers will have the ability to monitor these accounts in real time similar to expensive fixed network systems without additional infrastructure costs. This project is now complete.

**Renewable Energy**



The Kent County Water Authority is working toward being powered by 100% renewable sources within the next year from our own solar

facility on the new central operating facility in combination with a remote net metering agreement.



Solar Revenue by Source

Solar Array Details:	636.5 kW DC
System Size:	1,675 Solar Panels
Panel Rating:	380 W
Average Monthly Production:	61,224 kWh/month
Average Annual Production:	734,682 kWh/year

Investment Information:	
Purchase Price:	\$1,850,498
Commerce RI Rebate:	\$75,000
Year 1 Net System Income	\$155,936
<b>Total Year 1 Income</b>	<b>\$230,936</b>
<b>Net Cost After One Year</b>	<b>(\$1,064,412)</b>

Solar Income	
1 Year	\$786,086
5 Years	\$1,453,785
20 Years	\$4,712,174
25 Years	\$6,110,010
40 Years	\$11,451,598
<b>Internal Rate of Return (25 yrs)</b>	<b>17.1%</b>
<b>Years to Recoup Investment:</b>	<b>7.18</b>
<b>Effective Cost per kWh</b>	<b>\$0.03</b>

**25-Year Revenue: \$ 6,110,010**

*Rooftop Solar:*

In February of 2023, KCWA solicited a request for proposals from qualified firms to provide competitive bids to furnish and install rooftop solar panels to be installed on the new building. The project was awarded to Nadeau Corp working with US Solar for \$1,850,498. The panel and equipment are all installed, and we are awaiting final permitting and the meter that reads both directions in November of 2024.

### *Virtual Net Metering:*

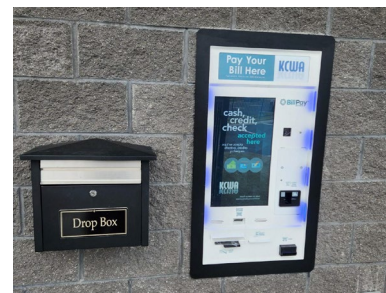
In March of 2023, KCWA solicited a request for proposals from qualified firms to provide competitive market-based virtual net metering credits from qualified renewable energy resources. Both new projects and active renewable systems with available credits were eligible for consideration. KCWA is anticipating an average annual usage and remote net metering need (offset amount) of 3,606,641 kWh to be served under the agreement. Taking into consideration the evaluation factors set forth in the RFP, Green Development, LLC was the most responsible offeror, whose proposal was the most advantageous and provided the greatest long-term fiscal savings and value to KCWA. The savings are estimated to be \$12,000,000 over the next 25 years once the contract goes live and we begin off taking power. The contract is slated to start by the end of the year.

### **Payment Processing**

In July 2023, KCWA began using Invoice Cloud to accept electronic payments. Invoice Cloud allows KCWA to provide online payment processing in a securely hosted, real-time environment.

Invoice Cloud can send notifications to customers reminding them of their bill due dates which have proven useful in preventing non-payment shutoffs. Customer service representatives can notify customers of a pending non-payment shutoff, allowing the customer sufficient time to make a payment prior to their non-payment shutoff date. Invoice Cloud also allows customers to view and print bills, make payments using credit cards, debit cards and electronic checks all through the existing KCWA online customer portal and automated phone service with no transaction fees. Invoice Cloud also allows customers to store multiple payment methods in the online customer portal.

After the first year of implementation, 43.1% of invoices have been paid through autopay totaling approximately \$3.6 million, 51% of registered customers have enrolled in paperless billing, and 70% of online payments came from autopay and the customer portal. In addition to Invoice Cloud, KCWA also installed a new payment kiosk that is linked to Invoice Cloud at our new office and maintenance facility where the customers can easily pay their bills 24/7 using all methods of payment, including cash.



### **Hydraulic Model / GIS/Utility Cloud**

*Hydraulic Model:* The Authority updated its hydraulic model and integrated the model with our GIS system using WaterGEMS. Integration with the GIS system and the tools in WaterGEMS now allows for hydraulic and pipeline evaluations inclusive of age, material, diameter, break history, water quality, static and residual pressure analysis, and scenario development more efficiently for optimization and the creation of IFR and CIP projects. The Authority is now performing full in-house hydraulic modeling for customers/developers requesting these services.

*Utility Cloud:* The Authority has launched the integration of Utility Cloud to manage its assets and project programming. Specifically, storing all critical operation and maintenance data, as-builts for development of a systematic preventative maintenance program for our pump stations,

tanks, treatment plants, and pressure reducing stations. Small system assets and programs are also tracked. These include, but are not limited to, hydrants, blowoffs, and private construction inspection. Utility Cloud will also rest on our CIS system for the office staff and managers to create work orders that are available on the operator phones or tablets in the field.

### **Quonset Development Corporation (QDC) Wholesale Interconnection**

QDC and KCWA both use groundwater wells located within the Hunt River Aquifer. KCWA has two wholesale interconnections from Providence Water Supply Board (PWSB) that are conveyed to the south to backstop the existing supply in that region. Analysis performed by the RI Department of Environmental Management suggested that the intermittent surface flow conditions may be influenced by high water withdrawals from the Hunt aquifer. The water supply being conveyed through KCWA to QDC will purportedly relieve the stress on the aquifer and provide an alternative water source thus enhancing the reliability of the available water to allow them to maximize growth within the business park. QDC wanted to present to all new businesses that are interested in coming to RI and producing new jobs that there are zero utility constraints regarding available water. Based on these findings, QDC determined that it was in the best interest of the park to enter into a permanent wholesale agreement with KCWA. It should be noted that with the aforementioned legislation in place and water quality studies completed, a similar agreement could be extended to provide wholesale water to the Town of North Kingstown to alleviate the same PFAS issues that face that community. KCWA has more than sufficient capacity to satisfy the needs of both QDC and the Town of North Kingstown.

An interconnection agreement between QDC and KCWA was executed on March 19, 2021. The PUC approved the wholesale rate to feed QDC in the most recent rate filing PUC Docket 5012. QDC completed the construction of the infrastructure necessary to start conveying water to the business park in the Spring of 2022. The Rhode Island Department of Health required a corrosion control study prior to the activation of service. This study was completed in August of 2022 and the service was activated on August 22, 2022 at a rate of approximately 200 GPM. The current feed design will accommodate the full build out of the park at 1.7 million gallons per day. KCWA has sufficient capacity to meet these demands.

### **Capital Improvement Projects (CIP)**

This portion of the report contains information on the programs under the restricted funding approved by the Rhode Island Public Utilities Commission. The Kent County Water Authority (KCWA, or the Authority) receives Capital Improvement Project funding available to advance approved projects on a cash-based pay as you go basis. The restricted CIP account is funded at \$3.6 million annually without debt service.

#### **CIP Bonding/Debt Service**

The CIP 2012 Series A bond was defeased as approved under the abbreviated rate filing Docket 5012. Also approved under Docket 5012 was the use of a portion of this restricted account to fund debt service on project(s) that require bonding. KCWA filed for and received authorization in February 2022 to borrow \$20 million dollars for the construction of a new central operations facility under Docket D-22-03. The debt service funding for this bond will be applied through approved restricted CIP collections. The amount of debt service carved out of the CIP funding is

approximately 32%, or \$1.15 million dollars, annually. The annual accrual to the CIP restricted account after meeting the debt service obligation is approximately 68% or \$2.45 million dollars.

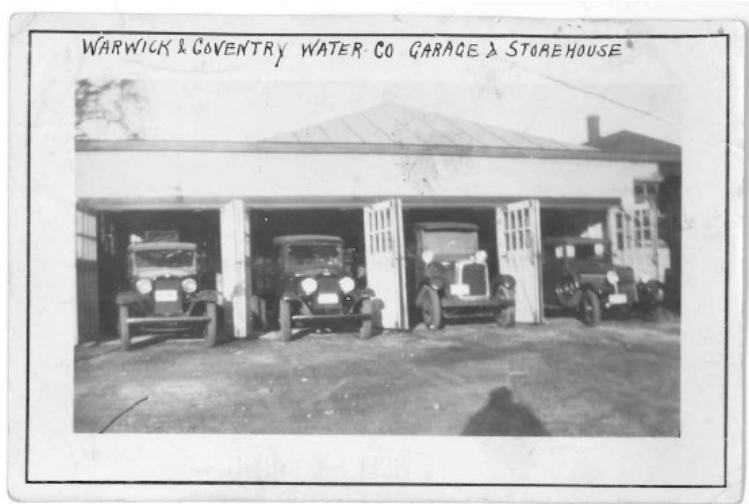
**New Office and Maintenance Facility**

After almost three decades of thought, discussion, and planning, the Board moved forward with final research, design, and construction of a much-needed office and maintenance facility. Construction has now been completed at our new operations and maintenance facility and the Authority has officially moved from its office and maintenance facilities located at 1072 Main Street, West Warwick, Rhode Island to its new location at 35 Technology Way, West Greenwich Rhode Island 02817.

**The Authority will be hosting an official ribbon cutting ceremony on Friday December 6<sup>th</sup>, 2024, to commemorate this major milestone**

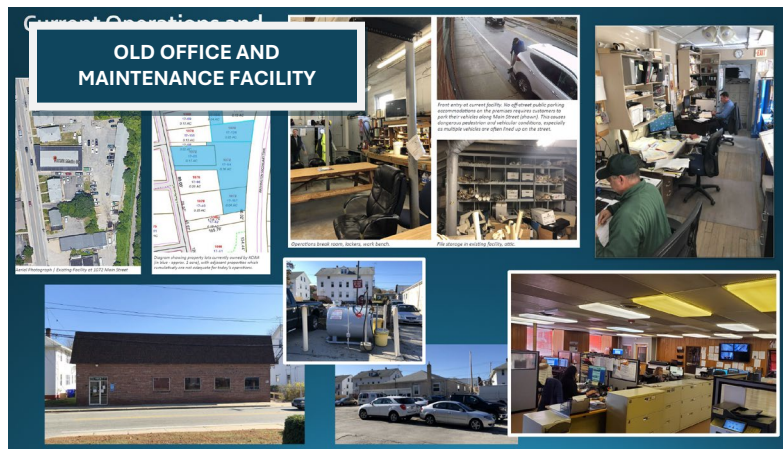
*Why the move was necessary:*

The original facility was built at the turn of the century with modifications and new garages in the 1970's. Several additional renovations had been accomplished over the years to support increased operations, and accommodate capital equipment acquisitions, spare parts warehousing and workforce needs. The old facility had no usable area for additional expansion and the Authority believes they can no longer support the Authority's daily operations.



Furthermore, there was inadequate public parking to properly service KCWA customers. Customers had to park on the street in the lane of traffic in front of the building and exit their vehicle into oncoming traffic to conduct business at the Authority.

The need for a new facility was first seriously entertained 25 years ago when Camp Dresser & McKee conducted a feasibility study for a new KCWA facility to start planning. It was then in 2016, when C&E Engineering Partners prepared a Water Supply System Five-Year Capital Improvement Program Update for 2017-2022 for the KCWA and the Public Utilities Commission (PUC). The updated Capital Improvement Project (CIP) plan recommended a new facility supporting the 1999 findings, deeming the project as



essential to provide the expected level of service goals required by State Regulatory Requirements and the Authority's Strategic Plan.

It was decided by the Board of Directors that a new updated feasibility study was necessary to support and supplement future Capital Plan implementation, Commission rate filings, and bond issues because the original study was over 20 years old. The Authority requested proposals from qualified professional architects and engineers to perform the update to the facilities analysis and evaluation study (2020 Study). The Authority publicly engaged the professional services of Vision 3 Architects (V3A) partnered with Pare Engineering to complete the study.

As a part of due diligence, the 2020 Study re-evaluated the potential modification and retrofitting the existing facility and concluded that the buildings have far exceeded their useful lives and are no longer adequate to support the future increase in capital equipment acquisitions, warehousing and administrative responsibilities of the KCWA. The study also calculated that a minimum net five acres would be required to meet the needs of the Authority. The Authority's current complex occupies in its entirety approximately one acre on 1072 Main Street. Exploring the viability of remaining at its current location by means of renovating the existing facility and /or constructing additional buildings would involve acquiring multiple separate sites, either adjacent to or in very close proximity to 1072 Main Street. Thus, it was reaffirmed that KCWA's current location was not an option. The efforts were then focused on spatial programming needs, potential site locations, and schematics.



The 2020 study submitted to the Authority detailed a comprehensive spatial programming analysis, conceptual building schematic options, and eleven available site locations. Based on spatial and programming needs, the study further recommended three sites that could best fit the Authority's facility requirements. Included in the study were pricing valuations, construction/site cost estimates, and energy efficient design components such as, rooftop solar and electric vehicle charging stations.

In addition to the 2020 Study, the Board performed additional due diligence in searching for potential other property locations by issuing a public RFP, which was added to the study. After reviewing the thirteen properties in detail, the Board settled on pursuing 35 Technology Way in West Greenwich, which was deemed the best fit for the next phase. A subcommittee was formed to order a formal appraisal and negotiate and provide detailed information regarding the site and its ability to satisfy the Authority's future facility needs to the



full Board. The Authority entered into a purchase and sales agreement contingent upon the satisfactory full site due diligence evaluation inclusive of geotechnical, Phase 1 environmental, wetlands delineation and verification, pre-application planning review, and a full ALTA survey.

The site was purchased in September of 2021 and the Board signed a resolution authorizing the engagement of financing for the design and construction of a new central operations facility. The Authority put out an RFP in December 2021 to complete the final design and prepare construction bid documents. The contract was awarded to the V3A and Pare Corporation team. KCWA filed for and received debt service authorization in February 2022 to borrow \$20 million dollars for the construction of a new central operations facility under Docket D-22-03. On April 29, 2022, after completing all of the clearing house procedures, the Authority closed on two bonds with the Rhode Island Infrastructure Bank. The Safe Drinking Water bond (\$18,173,087) and the Efficient Buildings Fund bond (\$1,826,913). These bonds, plus the use of KCWA CIP restricted conserved funds, were used to construct and furnish the new office and maintenance facility in West Greenwich. The final design and bid documents were completed for construction and the project was advertised for bid on September 9, 2022. The work of this project includes the construction of a new 16,000 square foot administrative building and the attached 30,000 square foot prefabricated metal garage.



The project includes construction of the proposed building and a covered storage area, a fueling area, an asphalt parking area, site improvements, and utilities. The construction project was awarded to Bentley Builders in January of 2023 for \$21,469,460 and construction commenced immediately thereafter. Substantial completion was achieved in June of 2024.

### **Updated East Greenwich Well Treatment Facility**

This project consists of the design and construction of a new treatment plant at the existing East Greenwich Well facilities site at 5870 Post Road, Warwick, Rhode Island 02818, in the general vicinity of the intersection of Post Road and Franklin Street, along the East Greenwich and Warwick city line within the Hunt River Aquifer. The East Greenwich well is a critical water source in the overall hydraulic supply capacity of the Kent County Water Authority (KCWA) district. The existing well supply facility is designed to meet minimum water quality standards for pH, disinfection, sequestering of manganese and to provide sufficient hydraulic capacity to meet the needs of the KCWA system now and into the future. This source in combination with KCWA's Mishnock treatment facility is capable of providing emergency supply redundancy in sufficient capacity to continue essential public water service to its critical customers and emergency interconnections.

The East Greenwich Well has a full production yield capability of approximately 2,000 gallons per minute (gpm). The well facility, updated in 2018, consists of one (1), 1,200 gpm submersible pump, emergency power, SCADA control and monitoring, disinfection and pH adjustment but did not include filtration. To this end, KCWA requested proposals from qualified professional engineering firms to conduct an inspection, evaluation, and review of the newly constructed well facilities and prepare final design and contract documents for the construction of a new water treatment facility with filtration at the existing site under its Capital Improvement (CIP) initiatives. Pare Engineering, in partnership with Stantec, was chosen and awarded the contract to design the updated facility in December of 2019. A preliminary design report (PDR) and plans

were generated and submitted to the Rhode Island Department of Health (RIDOH) and Department of Environmental Management (RIDEM) for review and comment in 2021. The updated facility was being designed with two filtration trains. The new design was intended to provide an average daily output capacity of 1.44 MGD (1,000 gpm) to the distribution system with one treatment unit offline. The trains could be rotated, or alternated, in and out of service to meet an average daily demand of 1,000 GPM or they could be combined to provide a maximum daily output capacity of 3 MGD (approx. 2,000 gpm) with both treatment units online. The output capacity was being designed at a maximum of 3 MGD to ensure resiliency and redundancy of individual unit processes, treatment trains, and discharge pumping. The design would also allow the ability to treat additional well(s) if acquired in the future. The proposed variable frequency drive well pump that will feed the station will be restricted to pump to a maximum of 2.5 MGD.

This design and subsequent responsible operation will not adversely affect the Hunt River, today or in the future, as it reflects significantly less volumes than historic withdrawals from this basin. The goal of this first iteration of the treatment facility design was to comply with more stringent EPA and RIDOH water quality requirements with the focus mainly reducing the secondary contaminant levels to below the applicable standards, provide enhanced disinfection treatment (4-log inactivation of viruses), corrosion control, pH adjustment and radon removal to facilitate improving water quality to the public from this source of supply. However, this original design only provided a space to house potential future PFAS treatment equipment and did not include the necessary pipework and treatment trains for PFAS removal. KCWA had to pivot on this planning approach when the narrative around PFAS and its potential impacts on public health shifted at the national level.

PFAS are an emerging contaminant of concern in groundwater throughout the United States. PFAS are man-made chemicals used to fight fires and in a variety of products and applications that are resistant to water, grease or stains, including non-stick cookware, carpets, upholstered furniture, clothing and food packaging. These chemicals are highly recalcitrant to degradation in the environment and can mobilize into surface and groundwater from areas throughout the country that may have been contaminated for various reasons.

### **Adjusting to the Regulatory Landscape Around Per-and Polyfluoroalkyl Substances (PFAS)**

During final design and permitting of the new treatment facility, the Biden-Harris Administration proposed the first ever national standard for per- and polyfluoroalkyl substances (PFAS). This signaled to States across the country that regulation is imminent and that affected water utilities should start preparing. With new Federal regulations coming, the Rhode Island Legislature, working with the Rhode Island Department of Health, wanted to get ahead of what was already

*“The proposal, if finalized, would regulate PFOA and PFOS as individual contaminants, and will regulate four other PFAS – PFNA, PFHxS, PFBS, and GenX Chemicals – as a mixture.*

- *PFOA and PFOS: EPA is proposing to regulate PFOA and PFOS at a level they can be reliably measured at 4 parts per trillion.*
- *PFNA, PFHxS, PFBS, and GenX Chemicals: EPA is also proposing a regulation to limit any mixture containing one or more of PFNA, PFHxS, PFBS, and/or GenX Chemicals. For these PFAS, water systems would use an established approach called a hazard index calculation, defined in the proposed rule, to determine if the **combined** levels of these PFAS pose a potential risk.”*

**Source:** Biden-Harris Administration Proposes First-Ever National Standard to Protect Communities from PFAS in Drinking Water  
<https://www.epa.gov/newsreleases/biden-harris-administration-proposes-first-ever-national-standard-protect-communities>

forthcoming on the national level and passed a law in June of 2022 to set an interim concentration standard for PFAS of 20 parts per trillion (ppt). This new law also required public water systems to conduct additional sampling by July 1, 2023. Systems that cannot provide water less than 20 ppt are required to find alternative sources. Considering new regulatory guidelines at the State level, KCWA is now including a series of Granulated Activated Carbon (GAC) treatment trains for PFAS removal in the design.

Soon after the State legislation was introduced, the Biden-Harris Administration proposed the first ever national standard to protect communities from PFAS in drinking water. Because the potential MCL is being set at the Federal level, the State requirement would have to shift to the EPA standard. Therefore, the EPA Press Release (summarized to the right) dictated KCWA’s design of PFAS treatment at the new treatment facility. In the release, the EPA signaled that it would be setting a legally enforceable maximum contaminant level (MCL) for PFAS under the Safe Drinking Water Act (SDWA) in the coming months.

*“EPA finalized a National Primary Drinking Water Regulation (NPDWR) establishing legally enforceable levels, called Maximum Contaminant Levels (MCLs), for six PFAS in drinking water. PFOA, PFOS, PFHxS, PFNA, and HFPO-DA as contaminants with individual MCLs, and PFAS mixtures containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS using a Hazard Index MCL to account for the combined and co-occurring levels of these PFAS in drinking water. EPA also finalized health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these PFAS.*

<b>Compound</b>	<b>Final MCLG</b>	<b>Final MCL (enforceable levels)</b>
PFOA	0	4.0 ppt (also expressed as ng/L)
PFOS	0	4.0 ppt
PFHxS	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
HFPO-DA (commonly known as GenX chemicals)	10 ppt	10 ppt
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1 (unitless) Hazard Index	1 (unitless) Hazard Index”

*Source: Final PFAS National Primary Drinking Water Regulation  
<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>*

One year after the press release, on April 10, 2024, the EPA officially announced the final National Primary Drinking Water Regulation (NPDWR) for 6 PFAS substances. Because the NPDWR MCLs for PFAS are more stringent than the State requirement of 20 ppt, the final design of the new East Greenwich Well treatment facility has fully shifted to the new EPA standard.

### PFAS Levels at East Greenwich Well

An evaluation of PFAS substances for all KCWA wells was performed in June of 2023 and 2024. During the most recent testing, PFOA was detected at 6.02 ppt at the East Greenwich Well. Although PFOA was detected below the State requirement of 20 ppt, the EPA MCL is 4 ppt. KCWA will be performing another round of PFAS testing in the Summer of 2025 to conform to the RI State law on PFAS and to confirm the design parameters of the new East Greenwich Well treatment facility.

	<b>Date Analyzed 6/25/24</b>	<b>East Greenwich Well Results</b>
<b>RI PFAS 6</b>	PFOS	2.05 ppt
	PFOA	6.02ppt
	PFNA	< 1.00 ppt (ND)
	PFHxS	1.88 ppt
	PFHpA	2.19ppt
	PFDA	< 1.00 ppt (ND)
	PFAS 6 Sum	12.1 ppt

### New Design Objective and Cost

The proposed treatment facility and major unit processes at the East Greenwich Well facility was reevaluated based on achieving the primary objective of protecting public health by providing a

regulatory compliant, reliable source of potable water that meets or exceeds current drinking water regulations.

The updated project and treatment processes includes iron and manganese removal utilizing a pressurized filtration system, followed by PFAS removal utilizing pressurized granular activated carbon (GAC) adsorption vessels in a lead-lag configuration. PFAS treatment media will be determined by the results of pilot testing. Chemical injections are anticipated to include potassium hydroxide for pH adjustment and sodium hypochlorite for disinfection, as well as a dichlorination step prior to PFAS treatment. A new submersible well pump sized to maintain pressure throughout the proposed treatment system will be installed in the existing well.

The project will consist of the demolition of the existing treatment plant building and the construction of a new treatment plant within the existing building's footprint. Conceptual layouts for the Site and treatment plant building have been prepared to depict the proposed Site layout and interior plant layout. The proposed 8,300 square feet (SF) treatment plant building will feature an increased plant capacity to allow for future expansion, PFAS, and manganese removal using pressurized treatment vessels, a below-grade clearwell, and mechanical, electrical, office, and laboratory spaces. Additionally, a backwash holding tank and sewer force main will be required to manage the residual waste resulting from the treatment processes. The Site will be improved with paved access surrounding the new building, an upgraded transformer, emergency generator, and stormwater detention areas.

The updated design, inclusive of updated PFAS treatment, should be completed by the end of 2024. KCWA obtained an opinion of probable construction estimate of \$23 million to construct the new treatment facility at full scale up to 4 million gallons per day. KCWA does not anticipate building it out to full scale unless QDC and/or the Town of North Kingstown decide to come on board. The design is

*"The litigation will help to ensure that the cost of removing PFAS contaminants are borne by the manufacturers and sellers of these products, not the ratepayers."*

modular where additional filters can be installed if additional capacity becomes available from the neighboring wells. KCWA has applied for principal forgiveness loans and subsidized loans under SRF to help facilitate construction of the facility without the need for a rate increase. With the passage of the Bipartisan

*The costs to remove these toxic 'forever chemicals' has created a financial burden for the Kent County Water Authority and initiation of this litigation and the terms of the proposed settlement will allow KCWA to hold the PFAS manufacturers financially accountable for the costs, expenses, and impacts caused by this contamination. The KCWA has and continues to spend countless efforts and resources testing and working to remediate PFAS from the drinking water to remain in compliance with State and Federal water quality guidelines.*

*The Executive Director of the Kent County Water Authority, David L. Simmons, PE, said "This lawsuit represents the collective interests of all residents within the Kent County Water Authority's service area and aims to safeguard the preservation of clean drinking water. Joining this litigation demonstrates our continuing efforts to prioritize the protection of our water supply and will help guarantee a sustained supply of clean water for future generations." The Director added, "The litigation will help to ensure that the cost of removing PFAS contaminants are borne by the manufacturers and sellers of these products, not the ratepayers."*



Source: <https://www.businesswire.com/news/home/202210802414638/en/Kent-County-Water-Authority-Joins-PFAS-%26%80%98Forever-Chemicals-%26%80%99-Lawsuit-Against-Manufacturers-3M-DuPont-and-Others-For-PFAS-Drinking-Water-Contamination>

Infrastructure Law (BIL), the Drinking Water State Revolving

Fund (DWSRF) is receiving approximately \$292 million of additional funding for projects, including \$179 million for lead service line replacements and addressing emerging contaminants over the coming few years, including PFAS. In addition to funding research and development, KCWA has also entered into a class action lawsuit to help defray capital costs.

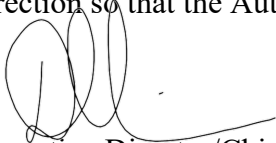
## Closing Message from the Chairman

As the Chairman of the Kent County Water Authority, I would like to thank my fellow Board members: Vice Chair, Mr. Jefferey M. Giusti; Treasurer, Mr. Scott R. Duckworth, Mr. Brian E. Kortz, Secretary, Mr. Charles J. Donovan and Mr. Geoffrey S. Rousselle for their cooperation, diligence, and their foresight into the future of the Authority. I also wanted to give a special welcome to our newest member, Mr. Kenneth R. Mason P.E. to the board. Mr. Mason has filled the vacant Coventry seat left behind by Mr. Russell Crossman who passed away last year. Russ left a large void and provided a tremendous amount of knowledge, insight, and guidance through some of the largest changes and challenges the Authority. We know that Mr. Mason is up to the challenge. He comes with a tremendous amount of experience and knowledge, and we are looking forward to working alongside our new member to provide the best service to our customers.

Our programs certainly keep the staff at the Authority very busy, but we continue to see major strides in the quality of our product and reduced breakage within our system. This does not mean that our aged infrastructure will not fail as we continue to repair and/or replace mains in problem areas. Infrastructure and operations will continuously be reviewed, and needs prioritized, to maximize efficiencies and maintain quality. We will stay current with the best available technologies to bring the highest-level service and excellence to our customers. Our ongoing maintenance programs must continue and in some areas be accelerated. The board deserves all the credit for their foresight and direction in pressing these programs and providing the support needed to our staff.

The Authority's cooperation with all the various State agencies and regulators has been excellent and the Board is proud of what has been achieved so rapidly. We look forward with great enthusiasm toward the future. Most importantly, I would like to express my gratitude to our customers who continue to support our efforts in the cost-effective modernization of the system and a long overdue central operating facility to better serve our customers. Great accomplishments each year have been achieved by the professionalism of everyone involved with the Authority. We look forward to the continued support of our customers as we implement our programs this year and in meeting our regulatory obligations and the continuous delivery of safe potable water at a very reasonable cost of \$0.007 per gallon.

As always, critical issues are addressed first, emergencies repaired, and customer service diligently performed every day. Again, public health and safety are paramount and represent the overarching guiding principle that guides the Authority on our continued mission. The Authority has welcomed a few new members in recent years, along with a change in leadership and direction. We will continue to keep an eye on reducing expenditure, increasing efficiencies, and expansion in sales where possible. We have a great team, and I am confident we will all bring great stewardship and continuity to the organization in the future. I know the board has always been proud of our staff and our actions and we will continue to support the board in their direction so that the Authority can remain in the forefront of the water supply industry.



Executive Director/Chief Engineer  
David L. Simmons, P.E.



Chairman  
Robert B. Boyer P.L.S