DRAFT COMMISSION MEETING MINUTES
December 16, 2025

No.	Topic
	Call to Order
1.	Closed Meeting
2.	Reconvened Meeting
3.	Awards and Recognition
4.	Public Comments Not Related to the Agenda
5.	Consent Agenda
6.	Customer Cloud Service Implementation Initial Appropriation – Non-Regulatory Contract Award (>$200,000)
7.	Onancock Pump Station Improvements Initial Appropriation – Non-Regulatory, Task Order (>$200,000)
8.	Composting Facility and Services Expansion Project Contract Award (>$200,000)
9.	Compost Facility Capacity Expansion New CIP, Initial Appropriation – Non-Regulatory
10.	Small Communities Rehabilitation Phase VI Additional Appropriation – Non-Regulatory (>$1,000,000), Contract Award (>$200,000) and Task Order (>$200,000)
11.	Treatment Plant Solids Handling Replacement Phase II Additional Appropriation – Non-Regulatory (>$1,000,000), Contract Award (>$200,000) and Task Order (>$200,000)
12.	Wilroy Pressure Reducing Station and Off-line Storage Facility Additional Appropriation – Regulatory Required (>$10,000,000), Approval of Guaranteed Maximum Price (GMP), Task Order (>$200,000)
13.	Implementing Automated Compliance Monitoring for Total Residual Chlorine Briefing
14.	New Business

DRAFT COMMISSION MEETING MINUTES
December 16, 2025

The Commission Chair called the meeting to order at 9:00 a.m.

Name	Title	Present for Item Nos.
Rodriguez, Stephen C.	Commission Chair	1-17
Levenston, Jr., Willie	Commission Vice-Chair	Absent
Andrews, Elizabeth	Commissioner	1 (Virtual)
Glenn, Michael E.	Commissioner	1-17
Lakdawala, Vishnu K.	Commissioner	Absent
Stern, Nancy J.	Commissioner	2-17
Taraski, Elizabeth	Commissioner	1-17
Templeman, Ann	Commissioner	1-17

In accordance with Virginia Code § 2.2-3708.3 (B) and the HRSD Remote Participation Commission Adopted Policy, Commissioner Andrews requested approval to participate in today's meeting from Buenos Aires, Argentina due to a personal matter.

Moved: Michael Glenn
Seconded: Elizabeth Taraski

Ayes: 5
Nays: 0
(Excludes Remote Participant)

1. Closed Meeting

Action: Approve a motion to go into closed meeting for briefing by staff and/or auditors on plans to protect public safety and/or vulnerabilities as provided for in Code of Virginia §2.2-3711A19.

Moved:	Ann Templeman	**Ayes:**	5
Seconded:	Elizabeth Taraski	**Nays:**	0

Brief: Discussion of plans to protect public safety as it relates to terrorist activity or specific cybersecurity threats or vulnerabilities and briefings by staff members, legal counsel, or law-enforcement or emergency service officials concerning actions taken to respond to such matters or a related threat to public safety; discussion of information subject to the exclusion in subdivision 2 or 14 of § 2.2-3705.2, where discussion in an open meeting would jeopardize the safety of any person or the security of any facility, building, structure, information technology system, or software program; or discussion of reports or plans related to the security of any governmental facility, building or structure, or the safety of persons using such facility, building or structure.

Public Comment: None

2. Reconvened Meeting

Certification of Proceedings: Pursuant to Section 2.2-3712.D of the Code of Virginia, we will now have a roll call vote to certify that to the best of each Commission member's knowledge: (i) only public business matters lawfully exempted from open meeting requirements under this chapter, and (ii) only such public business matters as were identified in the motion by which the closed meeting was convened were heard, discussed or considered. Any Commissioner who believes there was a departure from these two requirements shall so state prior to the vote, indicating the substance of the departure.

Action: No action is required.

Roll Call Vote:

Ayes: 5 (Commissioner Andrews disconnected due to technical issues)
Nays: 0

3. **Awards And Recognition**

Action: No action required.

a. New Employee Introduction

Ms. Kimberly Brown was recently hired as a Customer Care Manager to oversee Payments/Mail Center and Vendor Management in Customer Care. She holds a Master's Degree in Management Information Systems from Strayer University and is currently pursuing a PhD in Management from Walden University. Kimberly worked for Cox Communications for the past 23 years and has extensive experience in Customer Service and Workforce Analytics. She will be leading the Payments/Mail Center team to maximize team utilization and vendor contract performance. Kimberly is also an active member of the Society for Collegiate Leadership & Achievement (SCLA) and Omega Nu Lambda Honor Society.

Public Comment: None

4. **Public Comments Not Related to Agenda** – None

5. Consent Agenda

Action: Approve the items listed in the Consent Agenda.

Moved:	Ann Templeman	**Ayes:**	5
Seconded:	Michael Glenn	**Nays:**	0

Brief:

a. Approval of minutes from previous meeting.

b. Contract Awards (>$200,000)

1.	Emerson Ovation Distributed Control System Supplemental Support Services	$1,500,000
2.	Hydrogen Peroxide Blanket Purchase Agreement	$397,575
3.	Managed Detection Response and Security Operations Center Services	$4,541,000
4.	Programmable Logic Controllers Hardware and Software	$1,000,000
5.	PURE Storage Solution, Installation, and Support	$312,850
6.	ZETAG and Praestol Brand Polymer Blanket Purchase Agreement	$818,285

c. Task Orders (>$200,000)

1.	North Churchill Interceptor Force Main (SF-206) Segmental Replacement at Swannanoa Drive	$281,676
2.	Operational Technology Cybersecurity Support Services	$1,924,771
	Additional Appropriation	$430,492
	Task Order #1	$2,186,905
	Task Order #2	

d. Non-Regulatory Capital Improvement Project – Additional Appropriation <$1,000,000

1.	Nansemond Treatment Plant Motor Control Center Replacement	Additional Funding	$200,000
		Change Order	$200,000

e. Regulatory Capital Improvement Project – Initial or Additional Appropriation <$10,000,000

1.	Nansemond Treatment Plant Anaerobic Digester Capacity Improvements	Total Project Funding	$481,832
		Contract Award	$381,832

Item(s) Removed for Discussion: None

Public Comment: None

6. **Customer Cloud Service Implementation**

Actions:

a. Appropriate total project funding in the amount of $9,870,000.

b. Award a contract to Oracle America, Inc. in the amount of $1,630,232 for one year with four one-year renewals with an estimated cumulative value of $8,151,160.

Moved:	Michael Glenn	**Ayes:**	5
Seconded:	Elizabeth Taraski	**Nays:**	0

CIP Project: AD012800

Regulatory Requirement: None

Project Description: This project is to implement a new Oracle Customer Cloud Service (CSS) platform which includes the initial purchase of new CSS software and licenses, implementation services, and interfaces. This platform will have five environments: one production, two test, and two development. Implementation of this platform will also provide the opportunity to implement four other modules not currently available on our current Customer Care and Billing System (CCB): Meter Data Management, Lifecycle management, Test Accelerator, and Oracle Utilities Analytics. This project will build the interfaces between CCS and customer portal, bill print, and mobile workforce applications.

Project Justification: The current on premise Customer Care and Billing System (CCB) will no longer be supported by Oracle. To maintain business continuity, HRSD will need to implement a new cloud hosted customer billing platform.

Contract Description: This is a multi-year contract for the purchase of the Oracle Customer Cloud Service (CCS) software, platform licensing, and technical support. These licenses are for production, test, and development environments as well as licensing for Oracle Utilities Data Intelligence Analytics, Data Warehouse, and storage.

Type of Procurement: This contract is being pursued as a sole source procurement due to the complexity of the cloud licensing requirements and the exclusive discounted rate structure only available through Oracle, the product owner.

Although authorized Oracle resellers can provide these licenses, they cannot match the substantial discounts offered directly to HRSD. Licensing through a reseller would result in higher costs including markup, making them non-competitive.

Analysis of Cost: The pricing was found to be fair and reasonable based on similar contracts and will be held firm for the full five-year term. This structure allows HRSD to save additional costs associated with the yearly renewal process which typically includes a standard 10-15% increase applied to software and licensing renewal contracts. The initial software and licensing costs will be applied against the project with future renewal years being budgeted and paid through the operating budget.

This work is in accordance with the Commission Adopted Procurement Policy.

Schedule:		
	License Purchase	December 2025
	Implementation Bid	January 2026
	Implementation	May 2026
	Project Completion	May 2028

Public Comment: None

7. Onancock Pump Station Improvements

Actions:

a. Appropriate total project funding in the amount of $4,706,250.

b. Approve a task order with HDR Engineering, Inc. in the amount of $485,256.

Moved:	Nancy Stern	**Ayes:**	5
Seconded:	Ann Templeman	**Nays:**	0

CIP Project: ES011000

Regulatory Requirement: None

Project Description: This project will replace the following pump stations located in Onancock, Virginia, to provide reliable service and operation for the sewer collection system:

- ON-PS-01 (at 1 Mount Prospect Avenue)
- ON-PS-03 (adjacent to 44 Ames Street)
- ON-PS-04 (adjacent to 4 South Street)

Project Justification: This project is necessary to address the following issues:

- **Pump Station 1 (PS-1) - 1 Mount Prospect Avenue:** This station's metering base and other electronic components are corroding due to their location within the 4-feet x 4-feet combined brick pump station and wet well. Lacking redundant pumps, the station cannot operate efficiently or prevent overflows in the event of a pump failure, and there is insufficient space to add a second pump. The pump capacity requires evaluation. Furthermore, the station lacks an alarm system.
- **Pump Station 3 (PS-3) – Adjacent to 44 Ames Street:** Installed in 1960, this station is also a 4-feet x 4-feet combined brick pump station and wet well. All of its infrastructure is worn and outdated. Roots from an adjacent tree are causing the pump station and wet well to deteriorate. Like PS-1, this station lacks redundant pumps for efficient operation and overflow prevention, and there is no room to install a second pump. It is also not equipped with an alarm system.

- **Pump Station 4 (PS-4) - Adjacent to 4 South Street:** This station pumps half of the Town of Onancock's wastewater flow to the existing treatment plant. Built in 1959, the pump station building and all its infrastructure are outdated and worn. The wet well has an overflow pipe that discharges directly into Onancock Creek. The aging equipment is very loud, creating a nuisance for nearby residents.

This project will also likely include the acquisition of property to site the new or expanded pump stations.

Task Order Description: This task order will provide the design phase services for the replacement of the pump stations listed above.

Analysis of Cost: The cost is based on hourly rates in HDR's annual services contract for General Engineering Services and estimation of hours for this effort. The effort includes portions of the PER, and the complete Design and Preconstruction Phases. The fee proposal is 15% of the Opinion of Probable Construction Cost (OPCC), which is in line with the anticipated 16% for all three phases. As such, the estimate provided is justified.

Schedule:		
	Design	January 2026
	Bid	August 2027
	Construction	December 2027
	Project Completion	December 2028

Public Comment: None

8. **Composting Facility and Services Expansion Project**

Action: Award a contract to McGill Environmental Systems of NC, Inc. DBA McGill in the amount of $77,650,000 for years one through ten, with the option to renew for two additional five-year periods with an estimated cumulative value of $145,300,000.

Moved:	Ann Templeman	**Ayes:**	5
Seconded:	Nancy Stern	**Nays:**	0

Contract Description: The contract is for the composting facility capacity expansion project and composting services of HRSD's wastewater solids.

Background: HRSD employs a multi-faceted strategy for managing its solids, historically relying on incineration, composting, and land application. In the spring of 2025, HRSD made the strategic decision to discontinue its land application operations. Consequently, solids from the Atlantic Treatment Plant (ATP) are now redirected to the composting program. This transition, combined with the planned closure of the Boat Harbor Treatment Plant (BHTP), will substantially increase the volume of solids currently processed by a private contractor.

For over 20 years, HRSD has successfully and cost effectively outsourced its composting operations with a third-party contractor to produce a Class A biosolids compost product from its wastewater solids. However, the contractor's current facility lacks capacity to meet HRSD's projected demand following the closure of the BHTP in 2026.

This contract compensates the contractor for expanding its composting facility to meet HRSD's long-term needs and secures (reserves) composting processing capacity up to 90,200 wet tons per year for a 10-year term, with two optional five-year renewal periods thereafter. Historically, before ceasing land application operations, HRSD delivered approximately 40,000 wet tons per year.

The expansion project cost estimate is $10,000,000 which includes $235,000 in design services, $8,300,000 in construction costs and $1,465,000 of project contingency based on a Class 5 cost estimate provided by the commercial composting contractor. The $235,000 design fee will be applied to the development of bid ready design documents and an AACE Class 1 cost estimate. Records and materials generated by the designer, including a copy of the scope and detailed breakdown of the fee must be provided to HRSD prior to HRSD's payment of the design fee.

Construction of the facility expansion may be cancelled by HRSD prior to the acceptance of a bid if (a) the Class 1 engineer's opinion of probable cost or (b) the lowest responsive and responsible contractor exceeds $8,300,000. In case of cancellation of the facility expansion, the contract composter will continue to receive and process HRSD solids up to a loading rate of 40,000 wet tons per year.

During the first five years of the contract, should the contractor default, it will be required to reimburse HRSD for all expansion costs funded by HRSD. Additionally, if the contractor chooses to sell the facility, HRSD will retain the right of first refusal to purchase it.

The composting services rate was negotiated and is considered to be fair and reasonable based on previous contract pricing and general market conditions. Costs are based on an estimated 90,200 wet tons per year. Costs are estimated to be $67,650,000 for the initial contract period and an estimated cumulative value of $135,300,000 through the end of all renewal options.

Services for composting wastewater solids are permitted through the Virginia Department of Environmental Quality (VDEQ) and the Environmental Protection Agency (EPA). At this time the only contractor currently permitted to compost wastewater solids within a reasonable distance from HRSD service areas is McGill. McGill is uniquely positioned to expedite expansion of its facility to meet HRSD's increased volume of wastewater solids.

This work is in accordance with the Commission Adopted Procurement Policy.

Staff provided a briefing during the meeting.

Schedule:		
	Design	January 2026
	Bid	March 2026
	Construction	June 2026
	Project Completion	March 2027

Discussion Summary: The Commission discussed Per-and-poly-fluoroalkyl Substances (PFAS) as a significant operational and financial impact to HRSD and emphasized the importance of tracking PFAS-related expenditures to support long-term planning and ratepayer cost projections, particularly in anticipation of a federal mandate. It was noted that Granular Activated Carbon (GAC) is expected to be a significant cost driver for SWIFT.

The Commission also discussed legislative outreach related to PFAS, and staff provided an update on proposed PFAS biosolids legislation being developed in coordination with VAMWA and the Virginia Biosolids Council.

Staff noted that effective PFAS reduction efforts begin with biosolids characterization and source control, and that Commissioner outreach may be helpful once legislation is finalized to reinforce the need to understand statewide impacts before implementing stringent limits that could result in increased landfill disposal.

Public Comment: None

9. Compost Facility Capacity Expansion

Actions:

a. Approve a new CIP project.

b. Appropriate initial project funding in the amount of $10,000,000.

Moved:	Ann Templeman	**Ayes:**	5
Seconded:	Elizabeth Taraski	**Nays:**	0

CIP Project: GN022000

Regulatory Requirement: None

Project Description: This project will fund the expansion of a privately owned composting facility in Waverly, VA to ensure adequate reserved capacity for HRSD's wastewater solids supporting a loading rate of 90,200 wet tons per year for at least 10 years.

Project Justification: With the closure of the Chesapeake-Elizabeth Treatment Plant (CETP), the Boat Harbor Treatment Plant (BHTP), along with the closure of the multiple hearth incinerator at the Army Base Treatment Plant (ABTP), and the unplanned, but necessary cessation of land application for solids from the ATP HRSD needs additional outlets for cost-effective and beneficial management of its wastewater solids.

Since 2005, HRSD has used a third-party contract to produce a Class A biosolids compost product from its wastewater solids; however, the existing capacity of that facility is insufficient to meet HRSD's projected needs following the closure of BHTP in 2026.

This project will fund the expansion of that facility to meet HRSD's stated needs and reserves adequate production capacity for a period of 10 years with two optional five-year renewal periods following the initial project term.

Analysis of Cost: The total project estimate of $10,000,000 includes $235,000 in design services and $8,300,000 in construction costs and $1,465,000 of project contingency based on a Class 5 cost estimate provided by the commercial composting contractor. The $235,000 design fee will be applied to the development of bid ready design documents and an AACE Class 1 cost estimate.

Records and materials generated by the designer, including a copy of the scope and detailed breakdown of the fee must be provided to HRSD prior to HRSD's payment of the design fee. Construction of the facility expansion may be cancelled by HRSD prior to the acceptance of a bid if (a) the Class 1 engineer's opinion of probable cost or (b) the lowest responsive and responsible contractor exceeds $8,300,000. In case of cancellation of the facility expansion, the contract composter will continue to receive and process HRSD solids up to a loading rate of 40,000 wet tons per year.

Schedule:		
	Design	January 2026
	Bid	March 2026
	Construction	June 2026
	Project Completion	March 2027

Public Comment: None

10. Small Communities Rehabilitation Phase VI

Actions:

a. Appropriate additional funding in the amount of $4,073,672.

b. Award a construction contract to Walter C. Via Enterprises, Inc. in the amount of $3,794,711.

c. Approve a task order with Rummel, Klepper and Khal (RK&K) in the amount of $599,941.

Moved:	Michael Glenn	**Ayes:**	5
Seconded:	Nancy Stern	**Nays:**	0

CIP Project: MP015500

Regulatory Requirement: None

	Project Cost & Appropriation Summary	CIP Project Summary
Capital Improvement Program Estimate (July 1, 2025)		$4,171,023
Funds Appropriated to Date	$1,395,700	
Expenditures and Encumbrances Already Incurred	($634,720)	
Available Balance	760,980	
Proposed Task Order to Contractor	$3,794,711	
Proposed Task Order to Engineer	$599,941	
Proposed Contingency	$440,000	
Revised Total Remaining Project Costs	$4,834,652	
Expenditures and Encumbrances Already Incurred	$634,720	
New Project Cost Estimate	$5,469,372	$5,469,372
Additional Appropriation Needed	$4,073,672	
Favorable (Unfavorable) Variance to CIP		($1,298,349)

Contract Status with Task Orders:	Amount
Original Contract with Engineer	$0
Total Value of Previous Task Orders	$410,435
Requested Task Order	$599,941
Total Value of All Task Orders	$1,010,376
Revised Contract Value	$1,010,376
Engineering Services as % of Construction	15.8%

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Engineering Division advertised and solicited bids directly from potential bidders. The project was advertised on September 24, 2025, and four bids were received on November 12, 2025, as listed below:

Bidder	Bid Amount
Walter C. Via Enterprises, Inc.	$3,794,711
Bridgeman Civil, Inc.	$4,652,300
Tidewater Utility Construction, Inc.	$5,185,255
J. Sanders Construction	$5,271,430

Engineer Estimate: $2,398,528

The design engineer, RK&K, evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder Walter C. Via Enterprises, Inc. in the amount of $3,794,711.00.

Project Description: This project will rehabilitate approximately 6,350 linear feet of 8- inch and 12-inch diameter gravity sewer, rehabilitate 46 manholes, rehabilitate and/or replace approximately 1,600 linear feet of 4-inch and 6-inch service laterals, multiple point repairs to the gravity main and service laterals, and will install one new manhole at 2490 Mattaponi Ave. All work will be completed within the Town of West Point. The attached map depicts the project location

Project Justification: The West Point Treatment Plant (WPTP) experiences significant increased flows during wet weather events. Since January 2019, the effluent flow monthly average has exceeded the Permitted Design Capacity (0.6 MGD) in several occasions, with 95% of capacity being exceeded frequently during heavy rain events.

Each of the consecutive occurrences requires a written letter to Virginia Department of Environmental Quality (VDEQ) outlying HRSDs plan of action to address these increased flows.

This project will continue HRSD's commitment to reducing Inflow and Infiltration (I&I) into the collection system in accordance with that plan of action. Analysis of gravity flow meter data collected from the West Point system and performance of Sanitary Sewer Evaluation Survey (SSES) identified the service areas of PS 5, located at the intersection of Bagby Street and Mattaponi Avenue; PS 8, located at Pamunkey Avenue; and PS 9, located at Oak Grove and Southern Avenue as the highest contributors to I&I levels. This project will address the deficiencies identified in this SSES and generate a large reduction of I&I and provide for structural repairs on at-risk infrastructure.

Contract Description: This contract is for an agreement for the rehabilitation of sanitary sewer gravity main by means of CIPP liner, sanitary sewer service lateral rehabilitation and/or replacement, rehabilitation of 46 sanitary manholes, multiple point repairs and placement of one manhole structure. The contract will include lump sum and unit price items.

Task Order Description: This task order will provide the required construction administration (CA) and inspection (CI) services.
A fee of $599,941 was negotiated with RK&K, LLP, and represents 15.8% of the construction cost. The fee proposal is comparable to other projects of similar size and complexity.

Funding Description and Analysis of Cost: The original Capital Improvement Project (CIP) project was estimated in 2021, and the initial estimate of the total project cost did not account for the need to acquire 14 easements, performance of lateral CCTV inspections and additional survey work, which increased the design cost. For the construction cost, the Engineer's estimate was developed using plan material quantities, anticipated labor requirements, supplier and vendor pricing, average unit costs from comparable recent projects, and published cost data.

At the 100% design submittal on August 15, 2025, the Engineer's estimate totaled $4.26 million. Following bid advertisement, RK&K prepared an updated estimate utilizing internal staff to conduct two separate independent cost estimates with individuals who have extensive experience in rehabilitation work and/or are familiar with construction estimating. The estimate was further refined to $2,398,528 based on their contractor outreach efforts, intended to broaden the bidding pool to include lining and rehabilitation contractors as prime bidders.

Despite these measures, no bids were received directly from rehabilitation contractors, which attributes to the higher bidding costs due to mark-ups for the sub-consultants work.

The construction bid amount of $3,794,711 and the fee for the construction related engineering services exceeds the current balance available for this CIP project. Additional appropriation is being requested for construction contract award, construction administration, inspection services and include a 10% contingency. The amount for this work exceeds the balance available by $4,073,672.

The fee proposal for this task order was negotiated based upon the anticipated number of hours to provide the required construction administration (5% of total CA/CI) and inspection services (10.8% of CA/CI). Inspection includes the services of a full-time construction inspector and an additional NACE level II inspector to oversee the manhole coatings. The fee was negotiated with the Engineer and was found to be representative of the effort to accomplish the proposed tasks and in alignment with the labor rates included in Amendment 2 of the Professional Services Agreement for Linear Infrastructure Projects, dated July 1, 2025.

Schedule:	Construction	January 2026
	Project Completion	January 2027

Public Comment: None

11. Treatment Plant Solids Handling Replacement Phase II

Actions:

a. Appropriate additional funding in the amount of $6,671,956.

b. Award a contract to WM Schlosser Company, Inc. in the amount of $7,766,000.

c. Approve a task order with HDR Engineering Inc. in the amount of $1,115,578.

Moved:	Ann Templeman	**Ayes:**	5
Seconded:	Elizabeth Taraski	**Nays:**	0

CIP Project: GN016700

Regulatory Requirement: None

	Project Cost & Appropriation Summary	CIP Project Summary
Capital Improvement Program Estimate (July 1, 2025)		$11,167,426
Funds Appropriated to Date	$5,972,000	
Expenditures and Encumbrances Already Incurred	($2,262,378)	
Available Balance	$3,709,622	
Proposed Task Order to Contractor	$7,766,000	
Proposed Task Order to Engineer	$1,115,578	
Proposed Contingency	$1,500,000	
Revised Total Remaining Project Costs	$10,381,578	
Expenditures and Encumbrances Already Incurred	$2,262,378	
New Project Cost Estimate	$12,643,956	$12,643,956
Additional Appropriation Needed	$6,671,956	
Favorable (Unfavorable) Variance to CIP		($1,476,530)

Contract Status with Task Orders:	Amount
Original Contract with Engineer	$0
Total Value of Previous Task Orders	$1,328,508
Requested Task Order	$1,115,578
Total Value of All Task Orders	$,2444,086
Revised Contract Value	$2,444,086
Engineering Services as % of Construction	31.5%

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Engineering Division advertised and solicited bids directly from potential bidders. The project was advertised on September 16, 2025, and four bids were received on November 5, 2025, as listed below:

Bidder	Bid Amount
WM Schlosser Company, Inc.	$7,766,000
MEB General Contractors	$7,827,000
American Contracting and Environmental Services, Inc.	$8,754,000
Crowder Construction Company	$9,119,000

HRSD/Engineer Estimate: $8,092,000

The design engineer, HDR Engineering, Inc., evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder WM Schlosser Company, Inc. in the amount of $7,766,000.

Project Description: This project will replace two Dewatering Centrifuges at the James River Treatment Plant (JRTP). Two DS-706 centrifuges acquired from Denver Metro will be installed at the JRTP, for a total of three Sharples DS-706 machines in the facility. In addition to the dewatering equipment replacement, this project will replace ancillary equipment to the dewatering process, including centrate piping and NPW pumps and piping. This project will also include the construction of a new control room for a RIO cabinet on the third floor of the Dewatering Building.

Project Justification: Rehabilitating and replacing the existing dewatering centrifuges at JRTP with like dewatering equipment, instrumentation/controls, and operations across all dewatering systems will provide the plant with reliable

dewatering processes as SWIFT comes online. This project will allow for leveraging of existing assets for established needs, renewing dewatering at JRTP with equipment that improves resource and operational efficiencies.

Contract Description: This contract is for the construction of GN016700 at the JRTP.

Analysis of Cost: The engineer reviewed the low bidder's qualifications based on the submitted information and spoke with their references listed. Additionally, internal HRSD staff were contacted regarding the quality of their work. Based on their qualifications and internal and external references, WM Schlosser has been deemed qualified to work for HRSD. Additionally, the low bid price was below the OPCC by only 4%, which is considered reasonable.

Task Order Description: This task order will provide engineering services to HRSD during construction. Including Construction Administration (CA), Construction Inspection (CI), testing, startup and additional services as required.

Funding Description and Analysis of Cost: The cost of the engineer's CA/CI services for this project is 14.4% of the construction bid price. While this is a bit higher than what we would typically expect, it is justified based on the nature of the work and the amount of coordination that will be required to complete this project. A few points, 1) Construction will be challenging with the amount of work onsite at JRTP and coordination between this project and James River ANRI and SWIFT will be extensive. 2) HDR is familiar with the plant, High Performance Graphics (HPG) and Distributed Control System (DCS). We will likely require additional support from them when it comes to programming this into the DCS and converting dewatering to HPG. 3) The scope and fee include significant additional services for unforeseen circumstances.

Schedule:	Construction	February 2026
	Project Completion	April 2028

Public Comment: None

12. Wilroy Pressure Reducing Station and Off-line Storage Facility

Actions:

a. Appropriate additional funding in the amount of $27,942,971.

b. Approve GMP2 for $50,664,713 to the Comprehensive Agreement with Crowder Construction Company.

c. Approve a task order with Brown and Caldwell in the amount of $3,108,593.

Moved:	Michael Glenn	**Ayes:**	5
Seconded:	Elizabeth Taraski	**Nays:**	0

CIP Project: NP014000

Regulatory Requirement: Integrated Plan - HPP1 (2030 Completion)

	Project Cost & Appropriation Summary	CIP Project Summary
Capital Improvement Program Estimate (July 1, 2025)		$63,228,849
Funds Appropriated to Date	$34,302,000	
Expenditures and Encumbrances Already Incurred	($7,455,858)	
Available Balance	$26,846,142	
Proposed GMP Change Order to Crowder	$50,664,713	
Proposed Task Order to Brown and Caldwell	$3,108,593	
Proposed Task Order to LS Caldwell	$115,807	
Proposed Contingency	$900,000	
Revised Total Remaining Project Costs	$54,789,113	
Expenditures and Encumbrances Already Incurred	($7,455,858)	
New Project Cost Estimate	$62,244,971	$62,244,971
Additional Appropriation Needed	$27,942,971	
Favorable (Unfavorable) Variance to CIP		$983,878

Contract Status with Change Orders:	Amount
Original CMAR Contract with Crowder	$425,000
Change Order 1 (Partnering Session)	$11,197
GMP1 – Early Equipment Procurement	$2,569,113
Proposed GMP2 - Construction	$50,664,713
Revised Contract Value	$53,670,023

Contract Status with Task Orders:	Amount
Original Contract with Brown and Caldwell	$604,435
Total Value of Previous Task Orders	$3,086,087
Requested Task Order	$3,108,593
Total Value of All Task Orders	$6,194,680
Revised Contract Value	$6,799,115
Engineering Services as % of Construction	13%

Project Description: This project will install a new Pressure Reducing Station (PRS) and a new 3-million-gallon storage tank. These facilities are required as part of the Integrated Plan and are needed to reduce the likelihood of Sanitary Sewer Overflows (SSOs) in the Cities of Chesapeake and Suffolk. The attached map depicts the project location.

Project Justification: As part of HRSD's Integrated Plan, a program of High Priority Regional Wet Weather Management Plan (RWWMP) Projects (HPP) will be constructed through 2030. These projects were selected based on their ability to provide the greatest environmental and human health benefits. Further, this $200+ million investment will significantly reduce SSO volume at the 5-year level of service.

Guaranteed Maximum Price and Analysis of Cost: This project was procured through the Construction Management (CM) delivery process. On December 20, 2022, the Commission approved an Agreement with Crowder Construction Company in the amount of $425,000 for preconstruction phase services. GMP1 (Early Procurement Package for Long Lead Equipment) was approved by Commission on April 22, 2025. GMP1 included the procurement of long lead items (e.g., electrical gear, generator, valves, VFDs, pumps, odor control, etc.).

GMP2 includes the major construction work. This GMP is divided into four packages: PRS, Offline Storage Facility, Linework, and Electrical.

The Construction Manager received bids on October 31, 2025. The bids were reviewed by the Construction Manager and HRSD, and the lowest bidder was selected for each package. The project will be performed by four main sub-contractors:

- Pressure Reducing Station – American Contracting & Environmental Services (ACE)
- Offline Storage Facility – Precon Corporation
- Linework – Bridgeman Civil
- Electrical - Crowder Construction Company (*CMAR self-performed work; limited to 10%)

The Engineer's 100% estimate was $41,134,239 which included both GMP1 (early equipment procurement) and GMP2. The estimate did not include the Owner's Contingencies. The total construction effort (GMP1 + GMP2) without Owner's Contingencies is $48,099,111. The Engineer reviewed the GMP and deemed the costs appropriate for the project. It is recommended the Agreement with Crowder Construction Company be amended to include the proposed GMP2.

The cost breakdown of GMP2 is:

Direct Construction Costs	$ 37,372,280
CMAR Contingency	$ 747,446
General Conditions	$ 2,335,004
Permit and License Fees	$ 73,222
CMAR Overhead Costs	$ 2,836,957
Insurance and Bond Costs	$ 851,087
CMAR Profit	$ 1,547,560
Owner's Contingency	$ 4,901,157
TOTAL	**$ 50,664,713**

Task Order Description and Analysis of Cost: This task order will provide services during construction including contract administration, field engineering and inspection, testing and close-out services. HRSD and the design engineer, Brown and Caldwell, negotiated a fee of $3,108,593. The fee proposal is comparable to other projects of similar size and complexity.

Funding Description: The negotiated amount for GMP2 and the fee for construction related engineering services exceed the current balance available for the project. A separate task order will also be issued to L.S. Caldwell and Associates, Inc. under a blanket agreement to provide compliance oversight with the requirements of the Virginia Clean Water Revolving Loan Fund and the Davis Bacon Act.

The cost for that task order is below the $200,000 Commission approval threshold. This request also includes a contingency of $900,000 for anticipated stormwater fees and to accommodate any unforeseen conditions.

Staff provided a briefing during the meeting.

Schedule:		
	Construction	March 2026
	Substantial Completion	February 2028
	Project Completion	May 2028

Discussion Summary: The Commission discussed the project history, noting that planning began in 2020 and an engineer was retained in December 2021. Staff explained that the project remains substantially the same but has evolved through design refinements, packaging of work, and revised force main connections based on hydraulic analysis. The Commission expressed concern regarding cost increases and schedule extensions, including the impact of permitting delays and reduced benefits of the CMAR delivery method. Staff noted that extended permitting in an environmentally sensitive area and coordination with the City of Suffolk contributed to delays, but that CMAR has supported construction coordination. Staff outlined steps to improve costs and schedule discipline going forward, including detailed scheduling, risk management, establishment of an enterprise-wide Program Support Office (PSO), and a revised approach to seeking Commission appropriations after advancing projects through the Preliminary Engineering Report (PER) and design phases.

Public Comment: None

13. **Implementing Automated Compliance Monitoring for Total Residual Chlorine**

Action: No action is required.

Brief: In April of 2022, HRSD obtained approval of a Limited Use Alternative Test Procedure (ATP) to use the HACH CI-17 for online regulatory total residual chlorine (TRC) analysis in the chlorine contact at the Nansemond Treatment Plant (NTP). A multi-year pilot study and continuous iterative implementation made this effort a success. The Nansemond story is a case study for how expanded use of online instrumentation can be a novel approach to compliance reporting, while being less burdensome to operators but more protective of public health than conventional sampling requirements. We believe this is the first application of an online sensor for regulatory analysis and reporting of TRC at a wastewater treatment facility in the US. After multiple years of success at NTP, HRSD is now positioned to re-engage with regulators to refine our reporting criteria and expand our application of this technology to other treatment plants.

Staff provided a briefing during the meeting.

Public Comment: None

14. **New Business** – None

Public Comment: None

15. **Unfinished Business** – None

Public Comment: None

16. **Commissioner Comments** – None

17. **Informational Items**

Action: No action required.

Brief: The items listed below were presented for information.

a. Management Reports

(1) General Manager
(2) Communications
(3) Engineering
(4) Finance
(5) Information Technology
(6) Operations
(7) Talent Management
(8) Water Quality
(9) Report of Internal Audit Activities

b. Strategic Measures Summary

c. National Association of Clean Water Agencies (NACWA) Peak Performance Awards

Discussion Summary: Staff reported that the James River Crossing project received the American Council of Engineering Companies (ACEC) Grand Award and will be recognized at an upcoming awards event in Richmond, where it will also be considered for the Pinnacle Award. It was also noted that Lauren Zuravnsky was recognized as one of the Top 25 Women on the Leading Edge, contributing to continued positive media coverage for HRSD.

Staff provided an update on the state consent order, noting it is currently in public notice through December 31 and is expected to be signed by the Director of DEQ

following coordination with EPA Region III.

Staff highlighted upcoming events, including the RiverStar Business Luncheon and SWIFT Industry Day on January 29, and advised Commissioners of the scheduling overlap.

The Commission Chair recognized HRSD treatment plants for receiving the 2024 NACWA Awards and acknowledged representatives from each award-winning work center who were in attendance. The Chair commended plant staff for their outstanding compliance, operational excellence, and sustained commitment to regulatory requirements, environmental stewardship, and professional performance.

Public Comment: None

Next Commission Meeting Date: January 27, 2026, at the HRSD North Shore Operations Center, 2389 G. Avenue, Newport News, VA 23602

Meeting Adjourned: 12:05 pm

SUBMITTED:

Draft

Elizabeth I. Scott
Commission Secretary

APPROVED:

Draft

Stephen C. Rodriguez
Commission Chair

5. Consent Agenda

Resource: Eddie Abisaab

CONSENT AGENDA ITEM 5.b.1. – December 16, 2025

Subject: Emerson Ovation Distributed Control System Supplemental Support Services Contract Award (>$200,000)

Recommended Action: Award a contract to Stantec Consulting Services Inc in the amount of $300,000 for one year with four renewal options and an estimated cumulative value of $1,500,000.

Regulatory Requirement: None

Type of Procurement: Competitive Negotiation

A Public Notice was issued on July 23, 2025. Three firms submitted proposals on August 21, 2025, and all firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the Professional Services Selection Committee (Committee) and to the requirements in the Request for Proposals. Three firms were short-listed, interviewed, and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
Stantec Consulting Services Inc	73	1
Industrial Design Solutions Inc	65	2
Emerson Process Management Power & Water Solutions Inc	47	3

HRSD Estimate: $300,000

The Committee recommends award to Stantec Consulting Services Inc, whose professional qualifications and proposed services best serve the interest of HRSD.

Contract Description: This contract is for labor, supervision, tools, materials, parts, transportation, and incidentals required to perform Emerson Ovation Distributed Control Systems (DCS) programming and integration services for HRSD. The supplemental support contract will assist the Industrial Automation Programming (IAP) staff in completing larger programming projects, critical or emergency situations on an as needed basis or through scheduled requests for both operating and capital improvement projects.

Analysis of Cost: The cost is determined to be fair and reasonable against market industry standards and in comparison with the existing Emerson DCS services contract. This is an estimated usage contract.

This work is in accordance with the Commission Adopted Procurement Policy.

Resource: Eddie Abisaab

CONSENT AGENDA ITEM 5.b.2. – December 16, 2025

Subject: Hydrogen Peroxide Blanket Purchase Agreement
Contract Award (>$200,000)

Recommended Action: Award a contract to Brenntag Mid-South Inc. in the amount of $79,515 for one year with four renewal options and an estimated cumulative value of $397,575.

Regulatory Requirement: None

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Procurement Department advertised and solicited bids directly from potential bidders. The project was advertised on November 10, 2025, and two bids were received on November 25, 2025, as listed below:

Bidder	Bid Amount
Brenntag Mid-South, Inc.	$79,515
US Peroxide LLC DBA USP Technologies	$97,030

HRSD Estimate: $150,000

Contract Description: This contract is to supply and deliver a 50 percent solution of hydrogen peroxide to HRSD treatment plants on an as needed basis. The initial ordering facility will be James River Treatment Plant (JRTP) SWIFT facility. This product is added into the ozonation process for bromate control and enhancement of hydroxyl radical production for the oxidation of emerging contaminants.

Analysis of Cost: This is an estimated use contract. Cost is found to be fair and reasonable based on the competitive bid results. This is the first year award and use of this product at HRSD with no incumbent. HRSD Estimate is based on average supplier market unit prices and HRSD estimated annual usage.

This work is in accordance with the Commission Adopted Procurement Policy.

Resource: Mary Corby

CONSENT AGENDA ITEM 5.b.3. – December 16, 2025

Subject: Managed Detection Response and Security Operations Center Services Contract Award (>$200,000)

Recommended Action: Award a contract to ReliaQuest, LLC in the amount of $822,000 for one year with four renewal options and an estimated cumulative value of $4,541,000.

Regulatory Requirement: None

Type of Procurement: Competitive Negotiation

A Public Notice was issued on November 3, 2025. Eight firms submitted proposals on November 25, 2025, and all firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the Selection Committee (Committee) and to the requirements in the Request for Proposals (RFP). Eight were evaluated and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
ReliaQuest, LLC	84	1
Computer Aid, Inc.	70	2
Global Solutions Group, Inc.	66	3
Sensei Enterprises, Inc.	58	4
NOVA MSP LLC	57	5
Arraya Solutions, Inc.	56	6
Netizen Corporation	55	7
IP DataSystems, Inc.	42	8

The Committee recommends an award to ReliaQuest, LLC, whose professional qualifications and proposed services best serve the interest of HRSD. The proposal from ReliaQuest provides fixed price security operations and monitoring services, along with tailored cyber incident response support designed to integrate cleanly with our existing vulnerability management framework.

HRSD Estimate: $825,000

Contract Description: This contract is for Managed Detection and Response & Security Operations Center Services. This contract will directly support HRSD's ongoing efforts to enhance the maturity of its cybersecurity program and meet the requirements of Critical Infrastructure Protection (CIP) standards while in alignment with HRSD's security objectives, regulatory obligations, and organizational growth.

Reliaquest is the incumbent and has held the previous five-year term contract.

Analysis of Cost: The labor rates, fixed price components and support were determined to be fair and reasonable compared to similar and current contracted rates. Proposal includes a fixed five percent cap increase for renewal years.

This work is in accordance with the Commission Adopted Procurement Policy.

Resource: Eddie Abisaab

CONSENT AGENDA ITEM 5.b.4.–. December 16, 2025

Subject: Programmable Logic Controllers Hardware and Software Contract Award (>$200,000)

Recommended Action: Award a contract to Schneider Electric Systems USA Inc. in the amount of $200,000 for one year with four renewal options and an estimated cumulative value of $1,000,000.

Regulatory Requirement: None

Type of Procurement: Competitive Negotiation

A Public Notice was issued on July 25, 2025. Three firms submitted proposals on August 22, 2025, and all firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the Selection Committee (Committee) and to the requirements in the Request for Proposals. Three firms were short-listed, interviewed, and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
Schneider Electric Systems USA Inc.	89	1
Electrical Equipment Company	65	2
Integrated Power Systems	32	3

The Committee recommends award to Schneider Electric Systems USA Inc., whose qualifications and proposed services best serve the interest of HRSD.

Contract Description: This is a multi-year estimated use contract for the purchase of Programmable Logic Controller (PLC) hardware and software to be installed in new construction projects and will replace existing Emerson Control Wave PLCs at HRSD facilities over time as hardware failures dictate. The PLC will support operations across HRSD's diverse remote sites ranging in complexity from single-point monitoring stations to larger pumping facilities with over 1,000 data points. The PLC hardware and software platform is an integrated system, ensuring efficient, reliable, unified performance, and seamless communication with HRSD's existing Ovation SCADA system, as well as future SCADA systems.

Analysis of Cost: The unit pricing was found to be fair and reasonable based on similar purchases and in line with other respondents' pricing. There are no guaranteed minimum purchases. Individual task orders will be issued when needed and based on the final negotiated unit prices.

This work is in accordance with the Commission Adopted Procurement Policy.

Resource: Mary Corby

CONSENT AGENDA ITEM 5.b.5. – December 16, 2025

Subject: PURE Storage Solution, Installation, and Support Contract Award (>$200,000)

Recommended Action: Award a contract to CDW LLC DBA CDW Government LLC in the amount of $312,850.

Regulatory Requirement: None

Type of Procurement: Use of Existing Contract Vehicle

Contract Description: This contract is for the purchase of the PURE Storage enterprise solution, including installation and support, to replace our current Dell/EMC Unity storage array, which reaches end-of-supported life in July 2026. This solution supports the critical Supervisory Control and Data Acquisition (SCADA) and operational systems at HRSD to remain compliant with wastewater treatment operations.

Upon evaluation of the Fairfax County IT Hardware/Software contract terms and conditions, as a public agency, HRSD is eligible to use the contract awarded to CDW Government LLC.

Analysis of Cost: By utilizing Fairfax County contract 4400006325 for PURE Storage Solution, Installation, and Support, HRSD is receiving two percent cost savings.

This work is in accordance with the Commission Adopted Procurement Policy.

Resource: Eddie Abisaab

CONSENT AGENDA ITEM 5.b.6. – December 16, 2025

Subject: ZETAG and Praestol Brand Polymer Blanket Purchase Agreement
Contract Award (>$200,000)

Recommended Action: Award a contract to Solenis LLC in the amount of $163,657 for one year with four renewal options and an estimated cumulative value of $818,285.

Regulatory Requirement: None

Type of Procurement: Polymer Evaluation Policy

Contract Description: This contract is a new five-year term agreement to furnish and supply various cationic and anionic polymers to HRSD treatment plants on an as needed basis. This is continuous use contract developed and utilized in accordance with the Polymer Evaluation Policy.

The Polymer Evaluation Policy establishes procedures for the procurement of polymer products from suitable suppliers. It is an organized approach for competitive evaluation and purchase of polymers which, based on performance, are determined to be most cost effective for a particular application. Suppliers have an ongoing responsibility to maintain their competitiveness and performance of their products. In addition, HRSD has the flexibility and responsibility to investigate new polymer products or re-evaluate existing products routinely to improve performance and generate savings.

Analysis of Cost: This is an estimated use contract. Unit prices are found to be fair and reasonable based on market indices. Annual estimated usage has declined due to removal of various products based on successful challenges by other polymer suppliers.

This work is in accordance with the Commission Adopted Procurement Policy.

CONSENT AGENDA ITEM 5.c.1. – December 16, 2025

Subject: North Churchill Interceptor Force Main (SF-206) Segmental Replacement at Swannanoa Drive
Task Order (>$200,000)

Recommended Action: Approve a task order with Rummel, Klepper, & Kahl, LLP in the amount of $281,676.

CIP Project: NP015800

Regulatory Requirement: None

Contract Status with Task Orders:	Amount
Original Contract with Engineer	$0
Total Value of Previous Task Orders	$104,804
Requested Task Order	$281,676
Total Value of All Task Orders	$386,480
Revised Contract Value	$386.480
Engineering Services as % of Construction	10%

Project Description: This project will replace approximately 1,800 linear feet of corroded 16-inch ductile iron interceptor force main (SF-164) along Swannanoa Drive in the City of Portsmouth. The attached map depicts the project location.

Project Justification: This project will provide for the replacement of the interceptor force main on Swannanoa Drive. This replacement is necessitated by three previous failures (2009, 2014, 2023) and a subsequent assessment that found extensive pipe wall loss due to interior and exterior corrosion.

The most recent failure, which occurred at the intersection of Swannanoa Drive and Summerset Drive (June 2023), required the pipe to be encased in concrete as a temporary repair. Given that the remaining ductile iron pipe in this location was determined to have similar wall thickness and a very high Likelihood of Failure (LoF = 5.0), additional investigation of the upstream and downstream segments was performed, and the assessment report was updated based on these new findings.

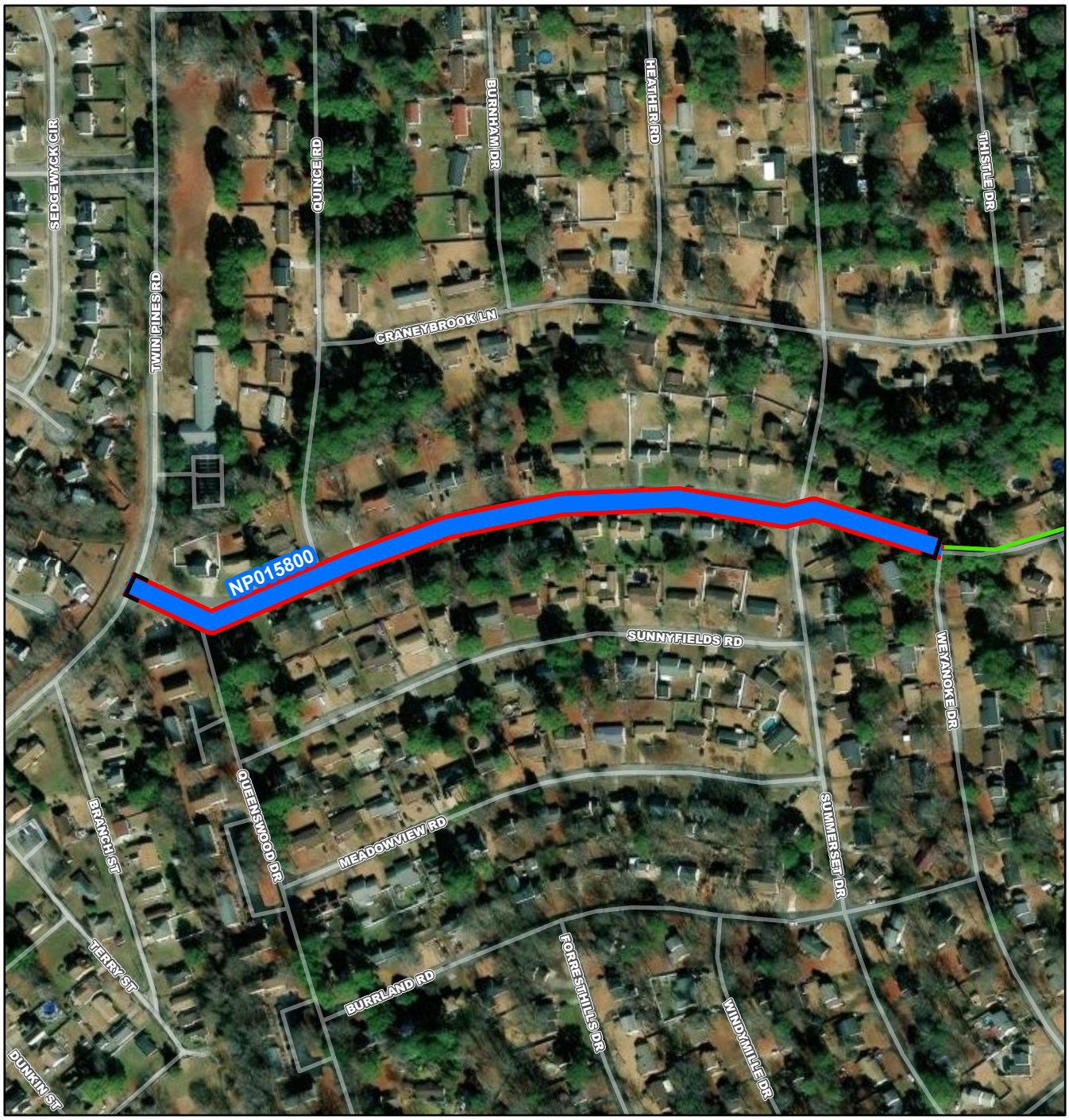
The upstream portion (to the west) of the force main is a significant concern, as internal wall thickness measurements show severe degradation. It is therefore recommended that additional force main be replaced to the west of the original 600 linear feet (LF), extending from the intersection of Summerset Drive to approximately the intersection of Quince Street. Given there is only approximately 250 LF from Quince Street to the end of the force main run, the suggested replacement encompasses the entire length, resulting in the replacement of approximately 1,800 LF.

Task Order Description: This task order will provide the necessary design phase and preconstruction phase services for the replacement of approximately 1,800 LF of the 16-inch

corroded force main along Swannanoa Drive, beginning at the intersection of Weynoake Drive and terminating at the intersection of Twin Pines Road.

Analysis of Cost: The cost is based on hourly rates in RK&K's annual services contract for Linear Infrastructure Projects as well as an estimation of hours for this effort. The fee proposal is 10% of the Opinion of Probable Cost (OPCC) generated during the PER phase, which is slightly lower than the anticipated 11% for the design and preconstruction phases. As such the estimate provided is justified.

Schedule:		
	Design	January 2026
	Bid	November 2026
	Construction	February 2027
	Project Completion	December 2027



NP015800

- Project Interceptor Line
- Project Interceptor Point
- Project Location Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- WTP HRSD Treatment Plant
- PRS HRSD Pressure Reducing Station
- PS HRSD Pump Station

0 110 220 440 660 880 Feet

N
W E
S

CIP Location

NP015800

North Churchill Interceptor Force Main (SF-206)
Segmental Replacement at Swannanoa Drive

HRSD

Resource: Mary Corby

CONSENT AGENDA ITEM 5.c.2. – December 16, 2025

Subject: Operational Technology Cybersecurity Support Services Task Order (>$200,000)

Recommended Actions:

a. Approve a Task Order #1 with Jacobs Engineering Group Inc. in the amount of $430,492.

b. Approve a Task Order #2 with Jacobs Engineering Group Inc. in the amount of $2,186,905.

Regulatory Requirement: None

Contract Status with Task Orders:	**Amount**
Original Contract with Contractor	$1,870,501
Total Value of Previous Task Orders	$592,466
Requested Task Orders #1 and #2	$2,617,397
Total Value of All Task Orders	$3,209,863
Revised Contract Value	$5,080,364

Contract Description: This contract is for Operational Technology Cybersecurity Support Services to minimize vulnerability to the Industrial Control Systems (ICS) and Operational Technology (OT) environments that are vital to the wastewater treatment process. These services will enhance the cyber-resiliency of HRSD critical infrastructure, while simultaneously ensuring the continued operational efficiency of these environments. Services include conducting a baseline assessment to evaluate the current cybersecurity investments, solutions, and controls within ICS and OT environments and performing a range of tasks based on those assessments.

Task Order #1 Description: This task order authorizes cybersecurity activities under the existing contract, encompassing six key workstreams: (1) Governance, Risk & Compliance, delivering a facilitated tabletop exercise with reusable materials, advancing critical infrastructure protection, providing ongoing risk training, and finalizing policies; (2) Design & Architecture, remediating high-risk OT exposures in the Verizon private IP wireless network (rogue devices, outdated protocols, missing segmentation) through modern encryption, zero-trust segmentation, and full alignment with SLAs, resiliency, and RTO/RPO objectives; (3) SEL Firewall Implementation, replicating the approved proof-of-concept at up to 12 additional sites, with as-is/to-be documentation and a centralized orchestration platform for enterprise visibility and remote management; (4) Dragos Platform Migration & Sensor Restoration, reimaging sensors, correcting routing and ACLs, and restoring full functionality at sites impacted by vendor updates, unreported changes, and communication failures; (5) Active Directory Remediation, executing approved action plans across all three Windows domains, supported by detailed work plans, assigned responsibilities, safety protocols, and a phased execution schedule; (6) Backup Solution Remediation, completing the delivered remediation plan, restoring critical domain controller backups, and addressing remaining gaps to ensure full infrastructure resilience.
These efforts maintain multiyear program momentum, eliminate critical OT vulnerabilities, and deliver a compliant, resilient cybersecurity posture in line with approved objectives.

Analysis of Cost: The cost is based on the pre-negotiated labor rates under the Jacobs Engineering Group service contract.

Task Order #2 Description: This task order for continued cybersecurity program execution and adds one full-time onsite resource to deliver an expanded scope across four critical workstreams. These include (1) Governance, Risk & Compliance, delivering a tabletop exercise with after-action report, advancing CIP phases, completing policies/procedures, and providing ongoing risk training and change management; (2) Design & Architecture, closing high-risk gaps in the Verizon private IP wireless network (rogue devices, outdated protocols, missing segmentation) via discovery, detailed designs, diagrams, asset inventory, and implementation plans that enable modern encryption and zero-trust segmentation; (3) SEL Firewall Implementation, replicating the proven POC with centralized orchestration across up to 12 additional sites; and (4) Dragos Cloud SiteStore Migration, finalizing secure cloud migration with traffic analysis and access controls, restoring full functionality at affected sites (ten migrations already successfully completed).

These efforts ensure multiyear program continuity, eliminate critical OT vulnerabilities, achieve NIST 800-82 and IEC 62443 compliance, and deliver a resilient, future-ready cybersecurity posture.

Analysis of Cost: The cost is based on the pre-negotiated labor rates under the Jacobs Engineering Group service contract.

This work is in accordance with the Commission Adopted Procurement Policy.

Resource: Eddie Abisaab

CONSENT AGENDA ITEM 5.d.1. – December 16, 2025

Subject: Nansemond Treatment Plant Motor Control Center Replacement
Additional Appropriation - Non-Regulatory Capital Improvement Project (<$1,000,000)
Contract Change Order (>25% of original contract value or $50,000, or whichever is greater)

Recommended Actions:

a. Appropriate additional funding in the amount of $200,000.

b. Approve a change order to the contract with Saunders Contracting Services, Inc. in the amount of $200,000.

CIP Project: NP013000

Regulatory Requirement: None

	Project Cost & Appropriation Summary	**CIP Project Summary**
Capital Improvement Program Estimate (July 1, 2025)		$3,709,271
Funds Appropriated to Date	$1,986,000	
Expenditures and Encumbrances Already Incurred	(1,919,719)	
Available Balance	$66,281	
Proposed Change Order to Contractor	$200,000	
Revised Total Remaining Project Costs	$66,281	
Expenditures and Encumbrances Already Incurred	$1,919,719	
New Project Cost Estimate	$2,186,000	$2,186,000
Additional Appropriation Needed	$200,000	
Favorable (Unfavorable) Variance to CIP		$1,523,271

Contract Status with Change Orders:	**Amount**	**Cumulative % of Contract**
Original Contract with Contractor	$990,326	
Total Value of Previous Change Orders	$124,359	12.55%
Requested Change Order	$200,000	20.19%
Total Value of All Change Orders	$324,359	32.75%
Revised Contract Value	$1,314,685	

Time (Additional Calendar Days)		60

Project Description: This project is to replace six Motor Control Centers (MCC). The MCC's were installed in the early 1980's. The MCC's feed the Primary Pump Station #1, Float Thickening Building, Primary Pump Station #2, Clarified Recycle (CRCY) Pump Station, and Nitrified Recycle (NRCY)/CRCY Pump Station.

Project Justification: This project will replace 32-year-old MCC's nearing the end of their useful life. The main breakers on the MCC's are no longer available and replacement parts are not available. The replacement of the MCC's will improve reliability to ensure critical unit processes are not adversely impacted. In addition, this project will reduce hazards to employees associated with arc flash.

Change Order Description: The configuration of the MCC layout required additional rework of conduits and circuits because the entire MCC lineup could not be de-energized t the same time. Due to the critical nature of the process, the NRCY/CRCY pumps were required to remain online at all times, with only one pump able to be taken out of service at a time. As a result, extensive electrical work was necessary to maintain continuous pump operation during construction. To prevent any plant process interruptions, a temporary electrical bypass and backup generator system was installed. Due to these unforeseen challenges, an additional $200,000 in funding is requested.

Analysis of Cost: The cost is based on current market value of needed supplies, labor, and in accordance with the current Electrical Services Contract.

This work is in accordance with the Commission Adopted Procurement Policy.

Schedule: Project Completion January 2026

CONSENT AGENDA ITEM 5.e.1. – December 16, 2025

Subject: Nansemond Treatment Plant Anaerobic Digester Capacity Improvements Initial Appropriation – Non-Regulatory and Contract Award (>$200,000)

Recommended Actions:

a. Appropriate project funding for study based services in the amount of $481,832.

b. Award a contract to HDR Engineering, Inc. in the amount of $381,832.

CIP Project: NP015900

Regulatory Requirement: Nutrient Reduction

Type of Procurement: Competitive Negotiation

A Public Notice was issued on September 4, 2025. Three firms submitted proposals on October 1, 2025, and all firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the Professional Services Selection Committee (Committee) and to the requirements in the Request for Proposals. three firms were short-listed, interviewed, and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
HDR Engineering	89.8	1
Black and Veatch	88.5	2
Hazen and Sawyer	75.3	3

The Committee recommends award to HDR Engineering, whose professional qualifications and proposed services best serve the interest of HRSD.

Project Description: This project will add additional digestion capacity to Nansemond Treatment Plant (NTP), likely in the form of a third 1MG (nominal) anaerobic digester tank, to meet solids loading requirements following the completion of Boat Harbor Treatment Plant (BHTP) closure, NTP SWIFT and anticipated future (37 MGD) flow conditions. Alternatives to achieve the needed increase in digester capacity will be considered during pre-planning. Siting of new facilities and process integration with the existing digestion, biogas, and dewatering systems will be a critical aspect of this project.

Project Justification: The NTP is currently undergoing upgrade from 30 MGD to 50 MG rated design flow (NTP Advanced Nutrient Reduction Improvements Phase II - NP013820) to allow closure of the BHTP in 2026 and SWIFT facilities will be constructed for operation beginning in 2028 (Nansemond SWIFT Facility - GN016380). Solids loading with these facilities online will result in operational risk (digester upset) and regulatory risk (too low solids retention time to meet Class B biosolids requirements) during max month loading and any time a single digester is

out of service. This project is proposed in lieu of separate solids management facilities as part of NTP SWIFT.

Contract Description: This contract is for study phase services with the engineer, HDR Engineering.

Funding Description and Analysis of Cost: The FY 2026 Capital Improvement Project (CIP) estimate for this project is $32,292,500, which makes the fee for this study only 1.2% of the overall project costs. Based on the limited space available at the NTP site, the uncertainty with the technology to be used to achieve additional solids handling, and the anticipated difficulty with solids pumping, it was determined that a study would need to be completed to fully understand the scope of the project and give a reasonable project cost estimate prior to beginning the design phase. Based on the scale of studies completed for other projects, it has been determined that this study is not only needed but comes with a reasonable cost. The appropriation includes a $100,000 contingency.

Schedule:

Study	January 2026
PER	September 2026
Design	February 2027
Bid	January 2028
Construction	May 2028
Project Completion	July 2031

ES011000

- Project Interceptor Line
- Project Interceptor Point
- Project Location Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- WTP HRSD Treatment Plant
- PRS HRSD Pressure Reducing Station
- PS HRSD Pump Station

0 110 220 440 660 880 Feet

ES011000

Onancock Pump Station Improvements

HRSD

N
W E
S

CIP Location

8. Composting Facility and Services Expansion Project

Composting Services Contract and Facility Expansion CIP

Briefing to HRSD Commission, December 2025

HRSD
Sustainable, Innovative Wastewater Treatment

Composting Facility and Services Expansion Project Contract Summary

- Continuation of previous service agreement
  - McGill agrees to continue processing 40,000 wet tons per year of wastewater solids for HRSD
- Reservation of capacity
  - McGill agrees to process up to 71,900 wet tons per year until July 1, 2026
  - McGill agrees to process up to 90,200 wet tons per year beginning July 1, 2026
- Composting facility capacity expansion paid for by HRSD
  - To accommodate increase in HRSD's wastewater solids disposal volumes, McGill will make capital improvements to Waverly facility to increase capacity by 50,200 wet tons per year
  - HRSD will pay and estimated $235,000 design services fee and $8,300,000 in construction costs
  - HRSD has an off-ramp option
  - Reservation of 90,200 wet tons per year is contingent on the facility expansion project
- Updated fee structure
  - $65/wet ton July 1, 2025
  - $75/wet ton July 1, 2026 (with subsequent annual escalation)
- 10-year contract with two optional five-year renewal periods

HRSD
Sustainable, Innovative Wastewater Treatment

Wastewater Solids are…

…the product of all wastewater treatment.
…produced every day.
…not stored on site at any HRSD plant.
…full of valuable organics and nutrients.
…subject to state and federal reuse regs.

Wastewater Solids management and hauling at HRSD is a major activity for Operations…

AT 

66 tons/day

NP 

61 tons/day

JR 

37 tons/day

YR 

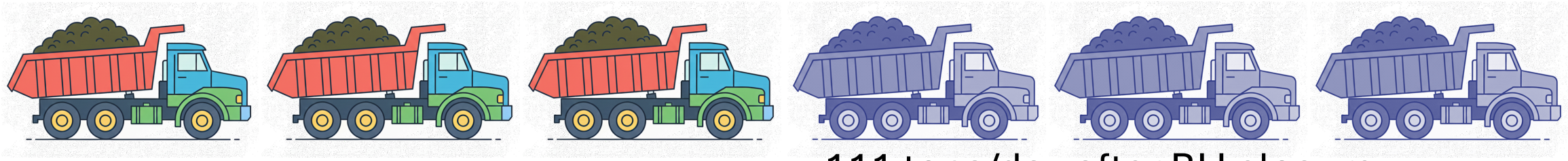
35 tons/day

…and it is becoming larger in 2026.

AT

66 tons/day

NP



111 tons/day after BH closure

JR

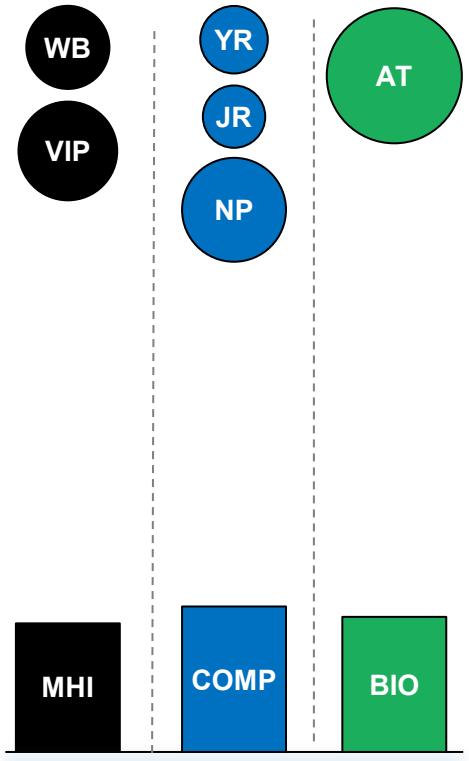
37 tons/day

YR

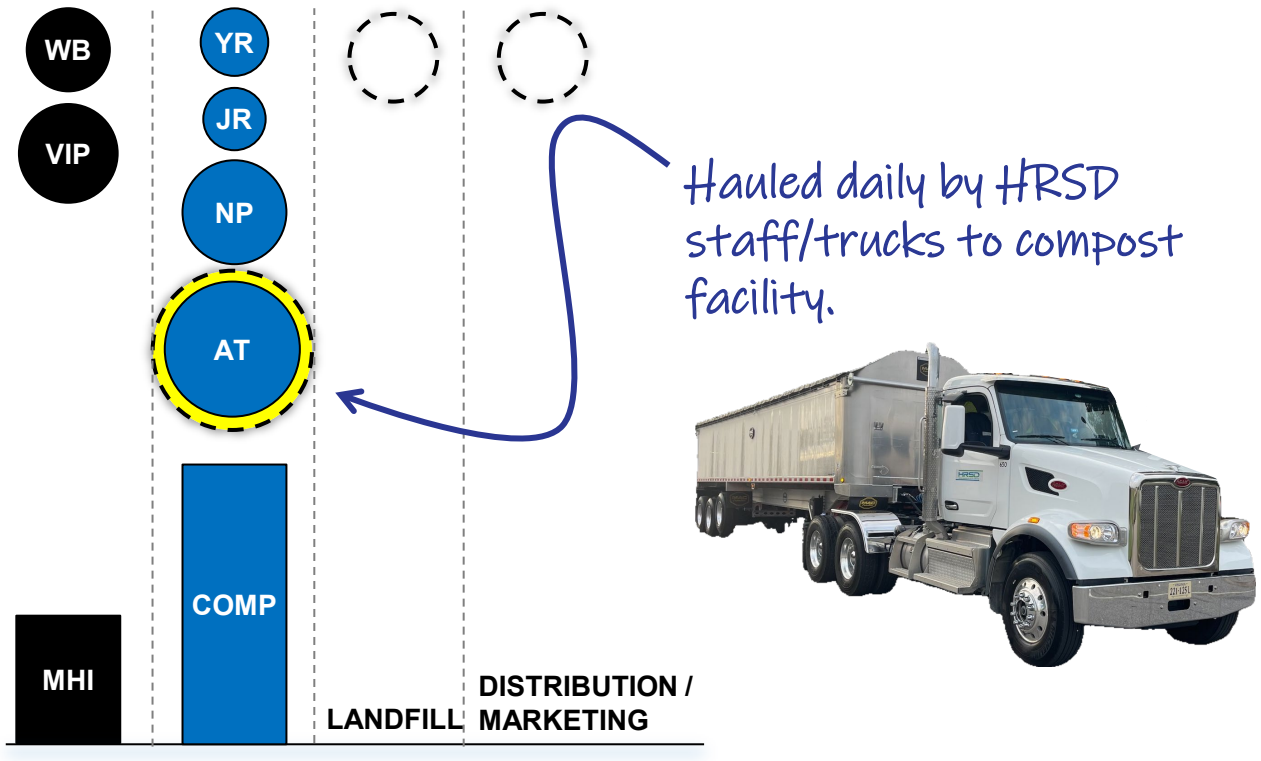
35 tons/day

HRSD
Sustainable, Innovative Wastewater Treatment

Our prior wastewater solids management strategies and decisions have made us resilient to recent changes.



PRIOR Solids Distribution
(scaled to dry tons per day)



REVISED Solids Distribution
(scaled to dry tons per day)

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Consolidation of wastewater solids management around few approaches has occurred for several reasons.

Driver		Result
• Cost-effectively meeting our nutrient obligations (WIP Phase 3 and ENRCP)	►	• Closure of Chesapeake-Elizabeth and Boat Harbor Treatment Plants (and MHI facilities)
• Risk mitigation and operational cost optimization.	►	• Closure of Army Base TP MHI facility and establishment of internal hauling group
• EPA Draft Risk Assessment for PFAS in Biosolids and impending regulatory guidance.	►	• Suspension of agricultural land application of Atlantic TP biosolids.

HRSD Sustainable, Innovative Wastewater Treatment

McGill has been a reliable biosolids management contractor to HRSD since 2009.

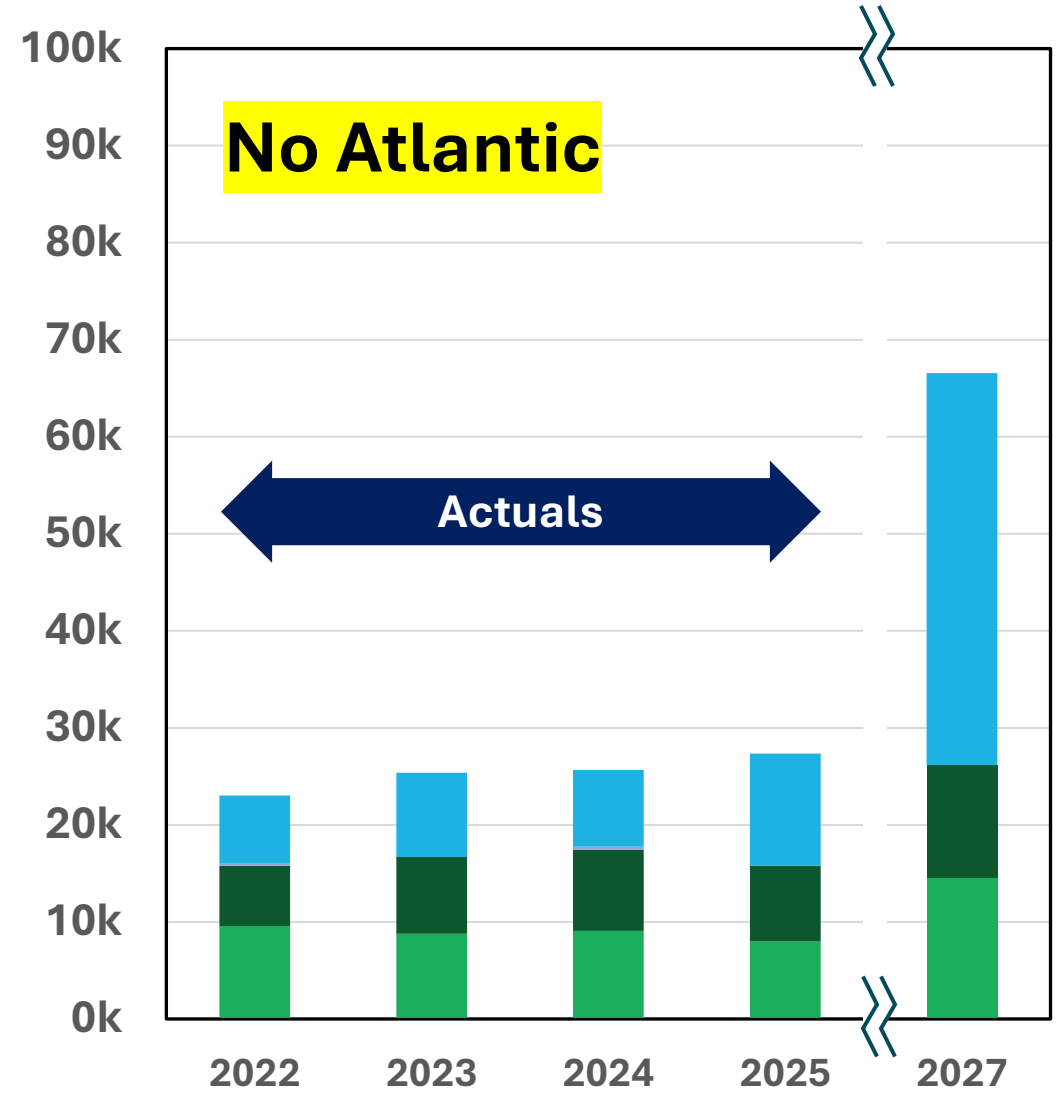
- Founded as McGill Environmental Systems in 1991 in North Carolina.
- Operating facilities – 7 in the Eastern US and 2 in Ireland
- Waverly Facility opened in 2009; has been providing continuous and reliable service for James River and York River Biosolids since opening.
- Facility capacity of approximately 40,000 wet tons per year for biosolids.

McGill Waverly Facility in Sussex County, VA

McGill Merry Oaks (Raleigh) Facility
(typical of Waverly Facility that serves HRSD)

Our use of contract composting has increased over the past 4 years.

Annual Wet Tons Delivered to McGill



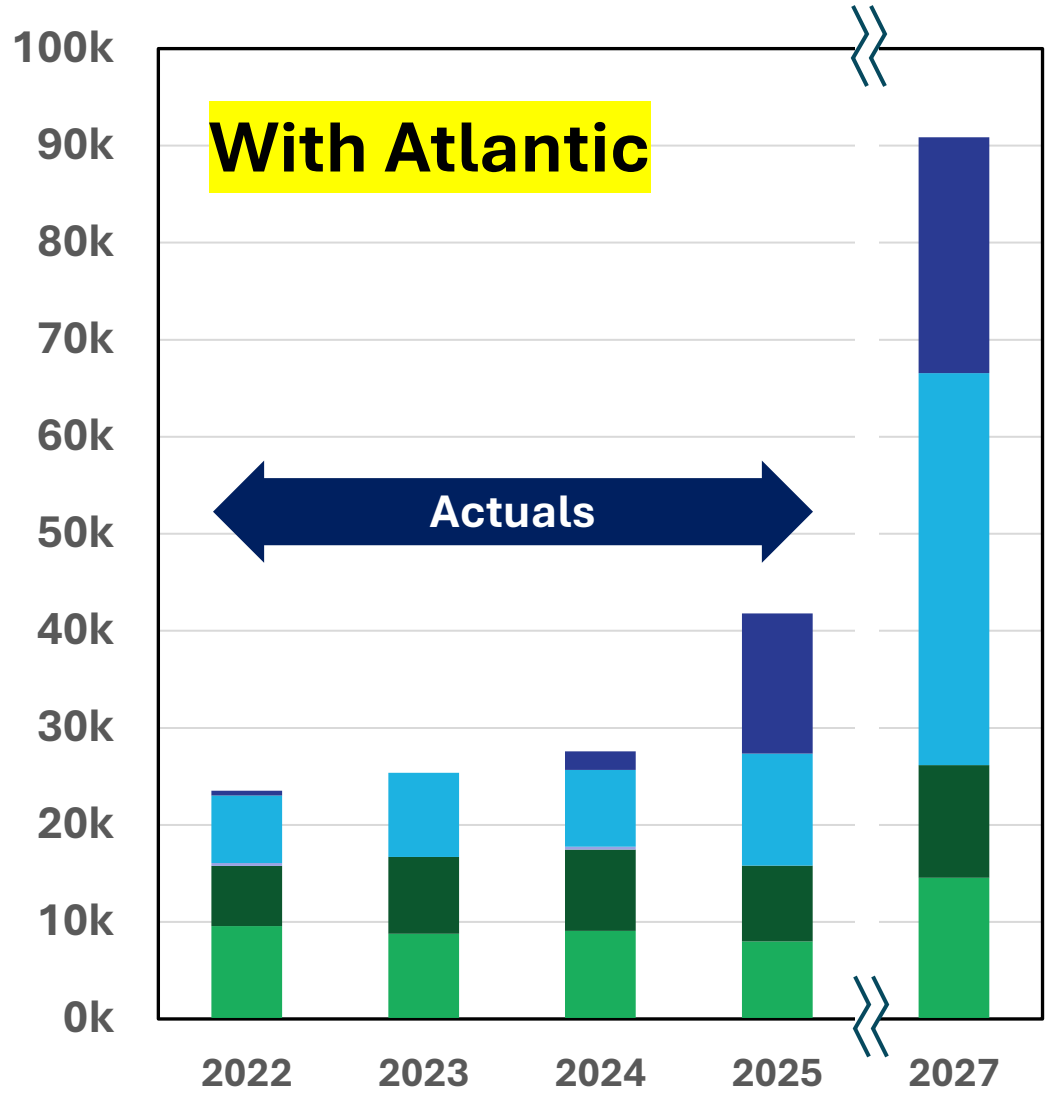
AT NP YR JR

Planning (with McGill) for Boat Harbor closure.

Concurrent decision to pause land application at Atlantic.

Our use of contract composting has increased over the past 4 years.

Annual Wet Tons Delivered to McGill



AT NP YR JR

Planning (with McGill) for Boat Harbor closure.

Concurrent decision to pause land application at Atlantic.

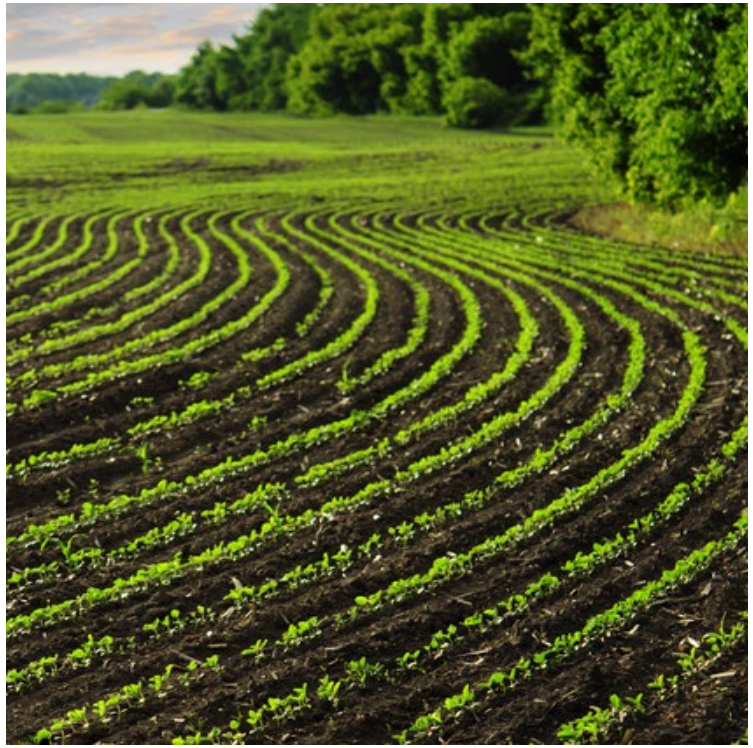
Leveraged landfills and Boat Harbor TP incinerator in 2025 to manage capacity of McGill facility.

Adding Atlantic has resulted in a substantial capacity shortfall for both HRSD and McGill.

HRSD Sustainable, Innovative Wastewater Treatment

The new agreement for composting services ensures continuous process capacity for HRSD's biosolids.

Reserves capacity for HRSD's biosolids production

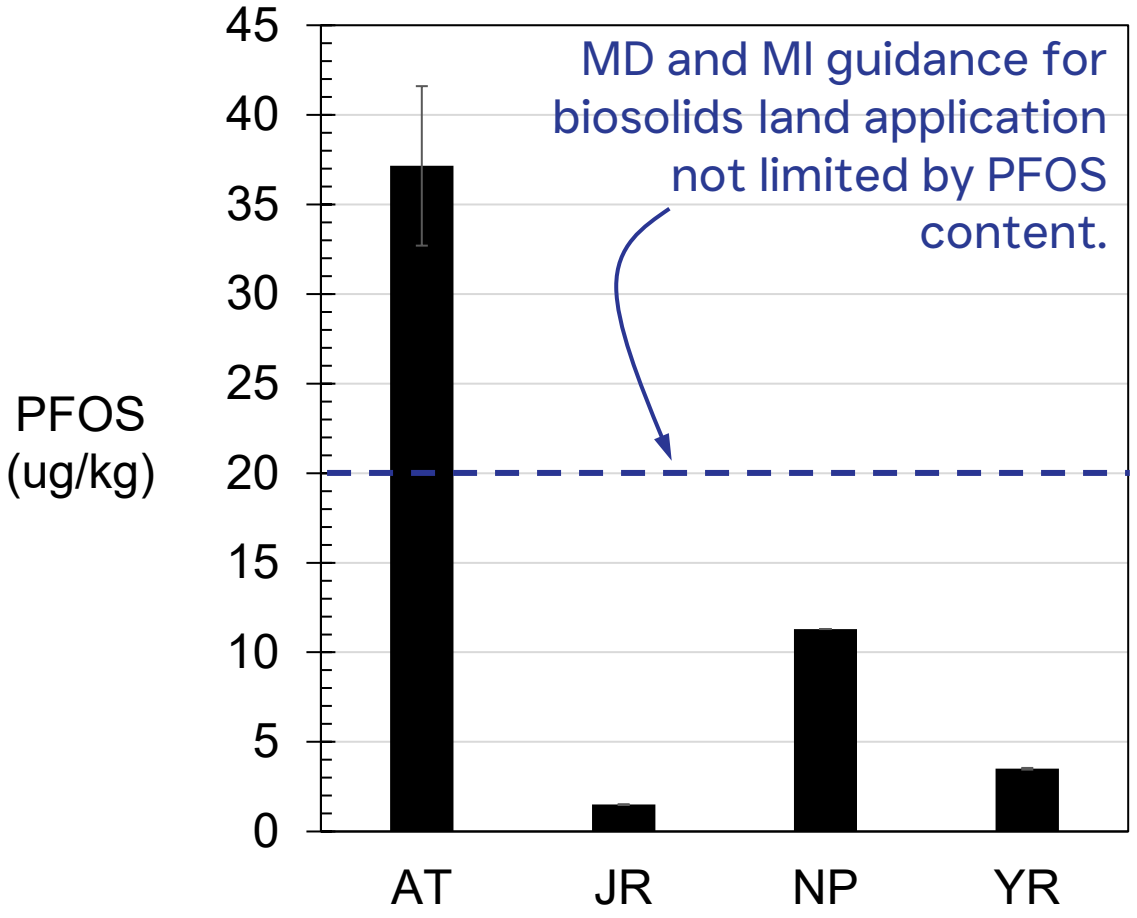


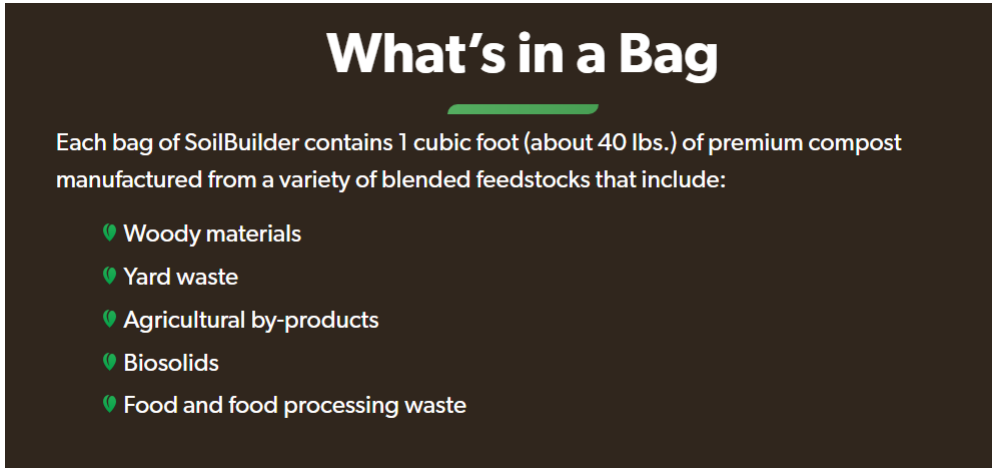
Promotes beneficial organics and nutrient recycling

Minimizes PFAS risk

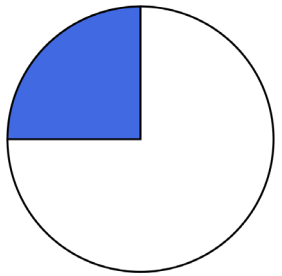
HRSD
Sustainable, Innovative Wastewater Treatment

Composting, in particular, is an important approach for HRSD to manage PFAS risk.





mcgillcompost.com



1 lb of biosolids becomes 4lbs of compost

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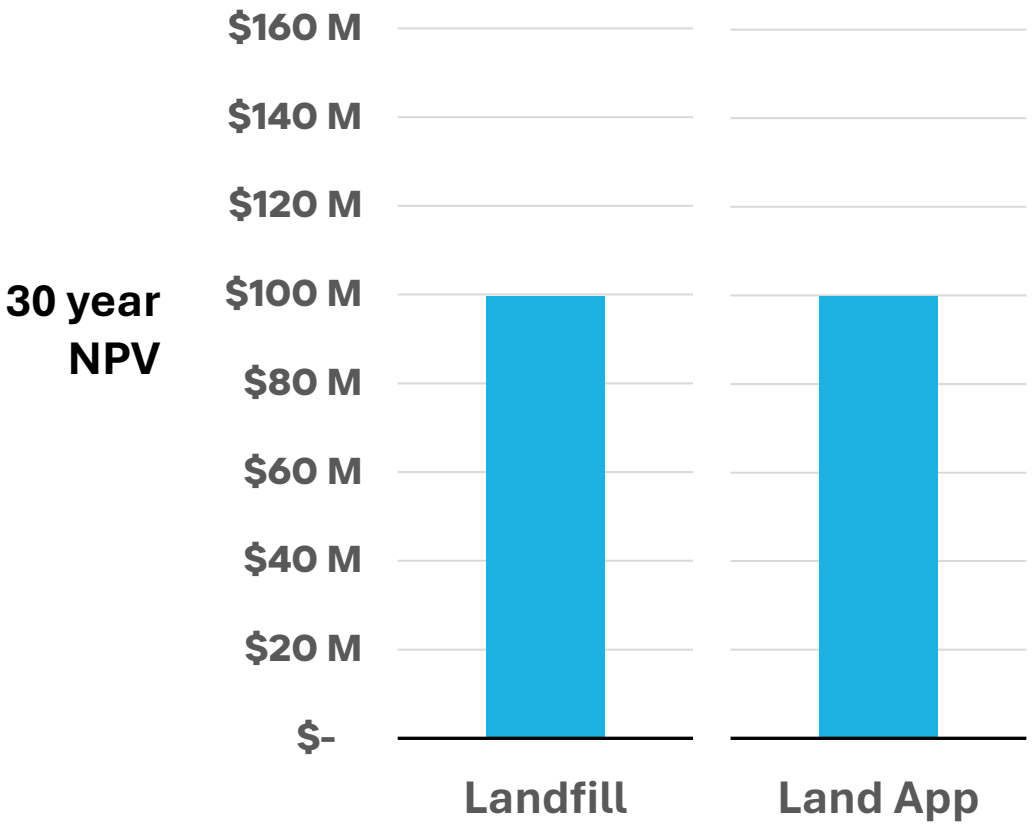
Lower cost biosolids management options cannot meet HRSD's capacity needs.



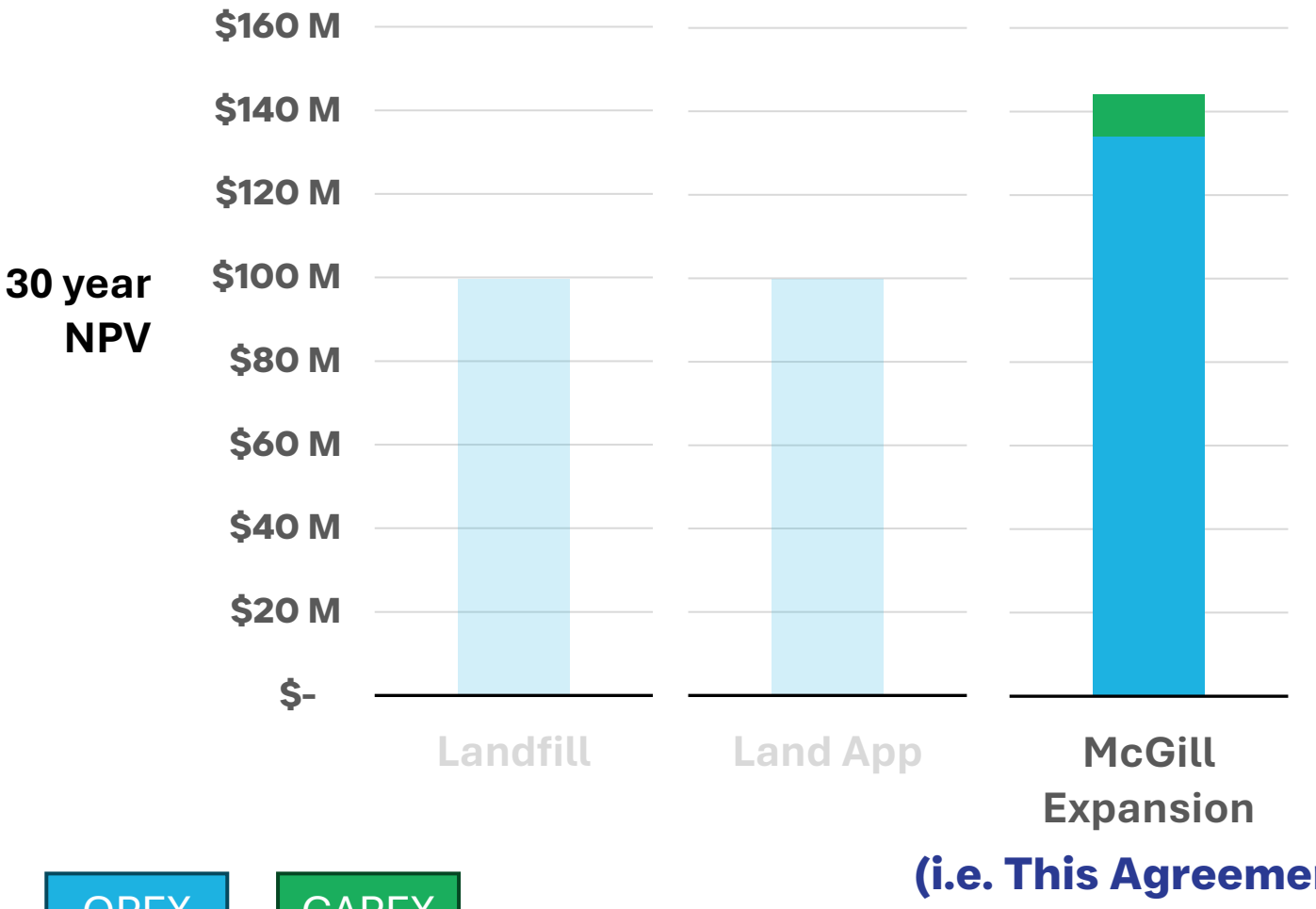
- Regional landfill capacity is very limited.
- Access to landfills is logistically challenging (time-of-day, wet weather, steep slopes)
- Continues to be a useful backup.

- Land application only currently permitted for Atlantic TP.
- Developing permitting for JR/YR/NP plants as interim and/or contingency strategy.

OPEX CAPEX

HRSD
Sustainable, Innovative Wastewater Treatment

Lower cost biosolids management options cannot meet HRSD's capacity needs.



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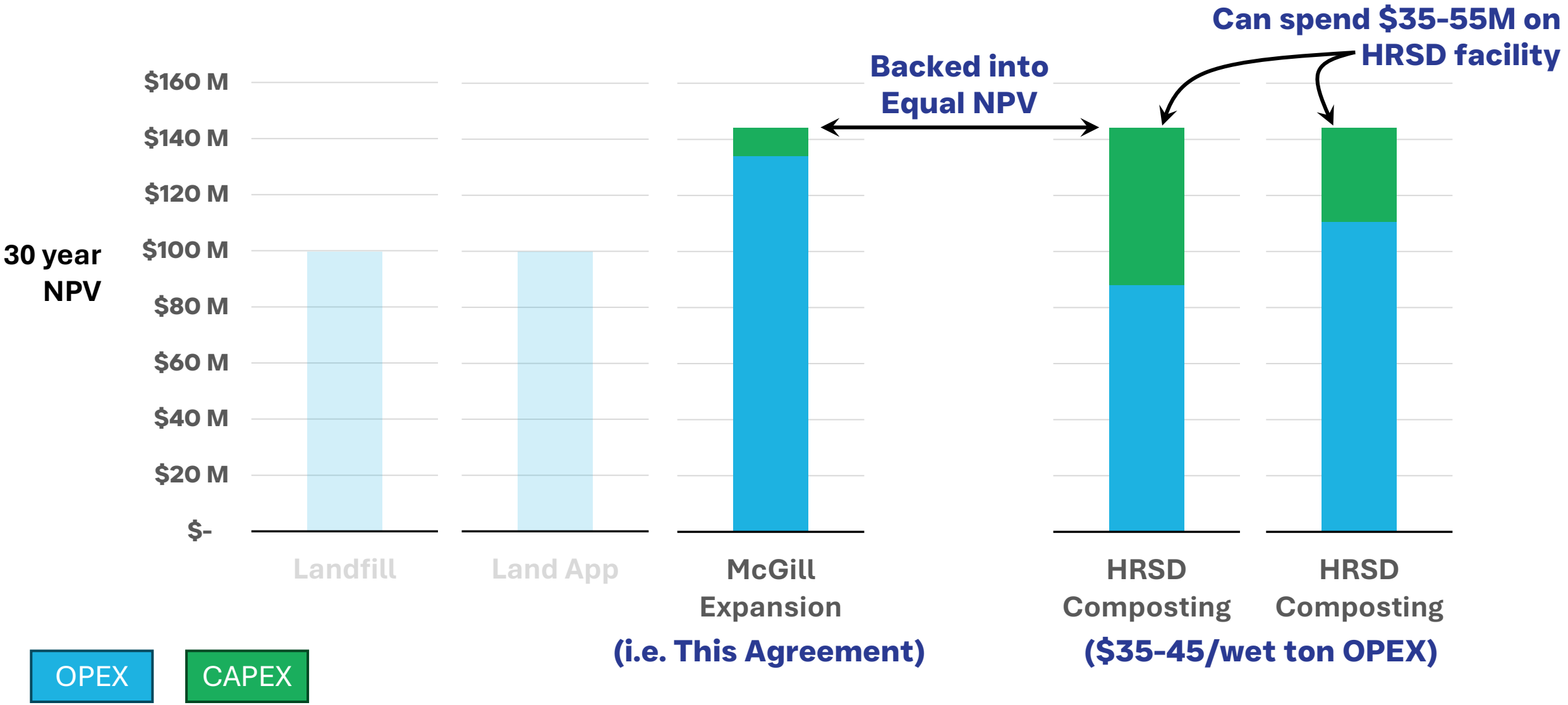
Funding the expansion of the existing Waverly facility carries lower cost risk than other options.



An HRSD funded and operated facility would be more expensive over the life of this agreement.

excerpted from 2011 HRSD CIP Book:

HRSD

York River Treatment Plant Expansion Phas
Dewatering Fa

SYSTEM	York River	CATEGORY	Trea
TYPE	Improvement	PROJ STATUS	Desi

PROGRAM CASH FLOW PI

Prog Cost	Exp to FY11	FY12	FY13	FY14	FY15	F
$45,708	$4,108	$13,200	$21,500	$6,900	$0	

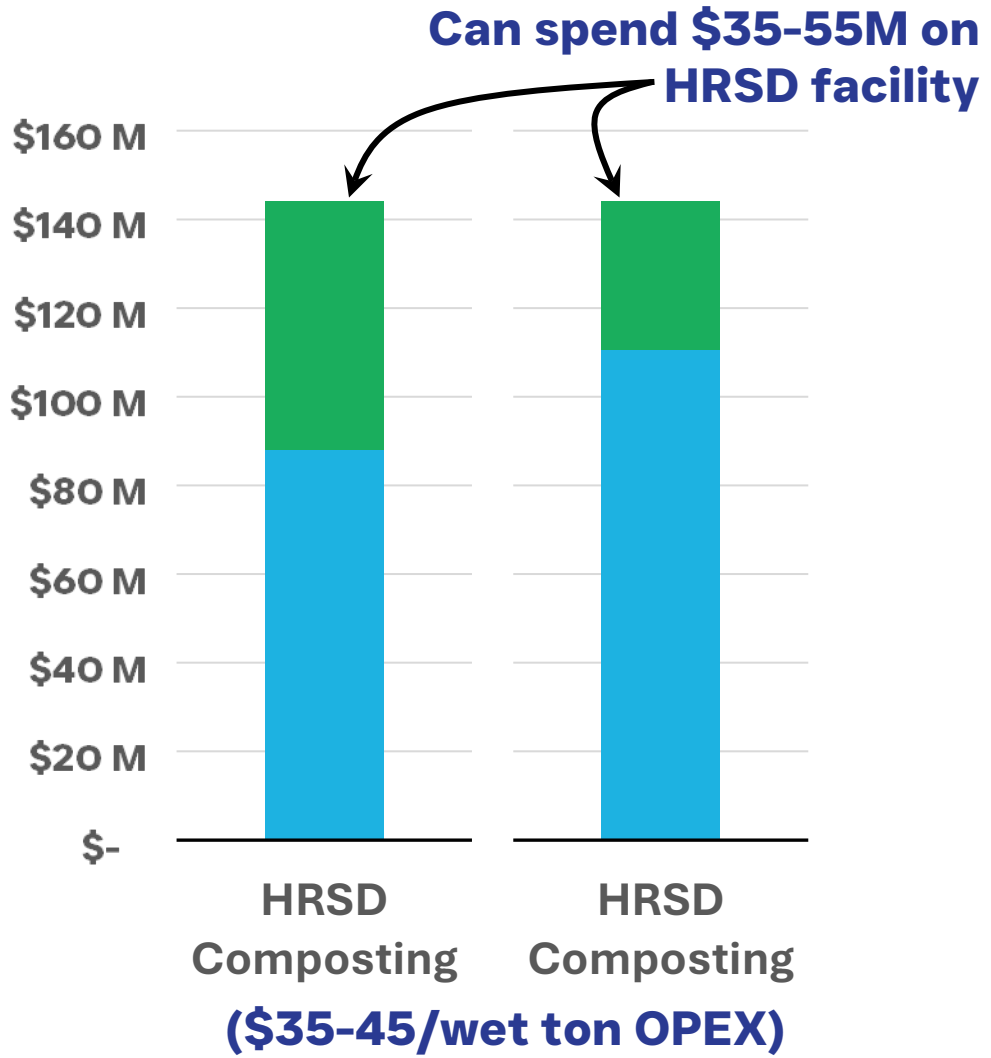
- Smaller facility sized for only YR and JR
- 2011 dollars
- Class 5 OPCC (cost risk)

26k wet tons in 2027

OPEX

CAPEX

30 year NPV



Composting Facility and Services Expansion Project Contract Summary

- Continuation of previous service agreement
  - McGill agrees to continue processing 40,000 wet tons per year of wastewater solids for HRSD
- Reservation of capacity
  - McGill agrees to process up to 71,900 wet tons per year until July 1, 2026
  - McGill agrees to process up to 90,200 wet tons per year beginning July 1, 2026
- Composting facility capacity expansion paid for by HRSD
  - To accommodate increase in HRSD's wastewater solids disposal volumes, McGill will make capital improvements to Waverly facility to increase capacity by 50,200 wet tons per year
  - HRSD will pay an estimated $235,000 design services fee and $8,300,000 in construction costs
  - HRSD has an off-ramp option
  - Reservation of 90,200 wet tons per year is contingent on the facility expansion project
- Updated fee structure
  - $65/wet ton July 1, 2025
  - $75/wet ton July 1, 2026 (with subsequent annual escalation)
- 10-year contract with two optional five-year renewal periods

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Alongside the McGill agreement, HRSD is pursuing a diversified strategy for resilient biosolids management.

Property Acquisition

- Land for interim and contingency biosolids storage in Waverly, VA
- Potential location for future biosolids processing

RFP for Supplementary Biosolids Management

- Interim solution to handle HRSD's biosolids during McGill facility expansion

Holistic Biosolids Management Plan

- PFAS source control for Atlantic Treatment Plant
- Evaluation of PFAS management & risk reduction
- Continue to pursue future marketable biosolids products and technologies.

Questions?

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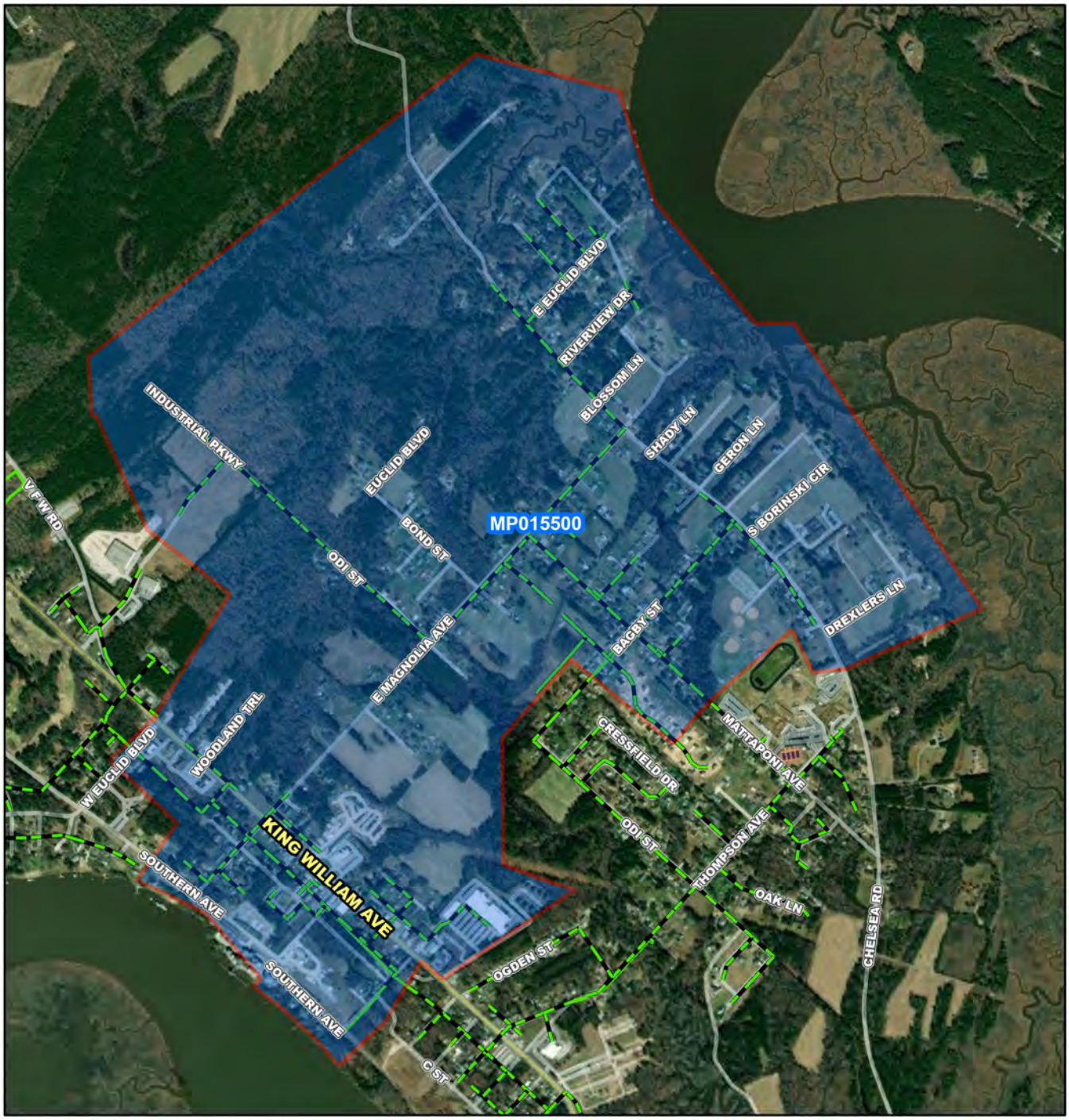
10. Small Communities Rehabilitation Phase VI



MP015500

- Project Interceptor Line
- Project Interceptor Point
- Project Location Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- WTP HRSD Treatment Plant
- PRS HRSD Pressure Reducing Station
- PS HRSD Pump Station

0 500 1,000 2,000 3,000 4,000 Feet

MP015500

Small Communities Rehabilitation Phase VI

HRSD

N
W E
S

CIP Location

12. Wilroy Pressure Reducing Station and Off-line Storage Facility

NP014000

- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- HRSD Treatment Plant
- HRSD Pressure Reducing Station
- HRSD Pump Station

0 80 160 320 480 640 Feet

NP014000

Wilroy Pressure Reducing Station and Off-line Storage Facility

HRSD

N
W E
S

CIP Location

Wilroy Pressure Reducing Station (PRS) and Offline Storage Facility (OLSF) GMP2: Construction Package CIP No. NP014000

December 16, 2025

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Agenda

- Project Overview
- CMAR Delivery Overview
- Prior Commission Action
- Proposed Construction Contract Cost Build-up
- OPCC and CIP Program Cost Evolution

Wilroy PRS & OLSF Overview

- Project Overview
  - Pressure Reducing Station (PRS)
  - Offline Storage Facility (OLSF)
- Project Purpose
  - Provide pressure assistance to upstream Suffolk system
  - Assist HRSD's new Suffolk Pump Station during wet weather by "boosting flow" (PRS) and holding excess flow (3 MG OLSF)
- Regional Wet Weather Management Plan High Priority Phase 1 – 2030 Deadline

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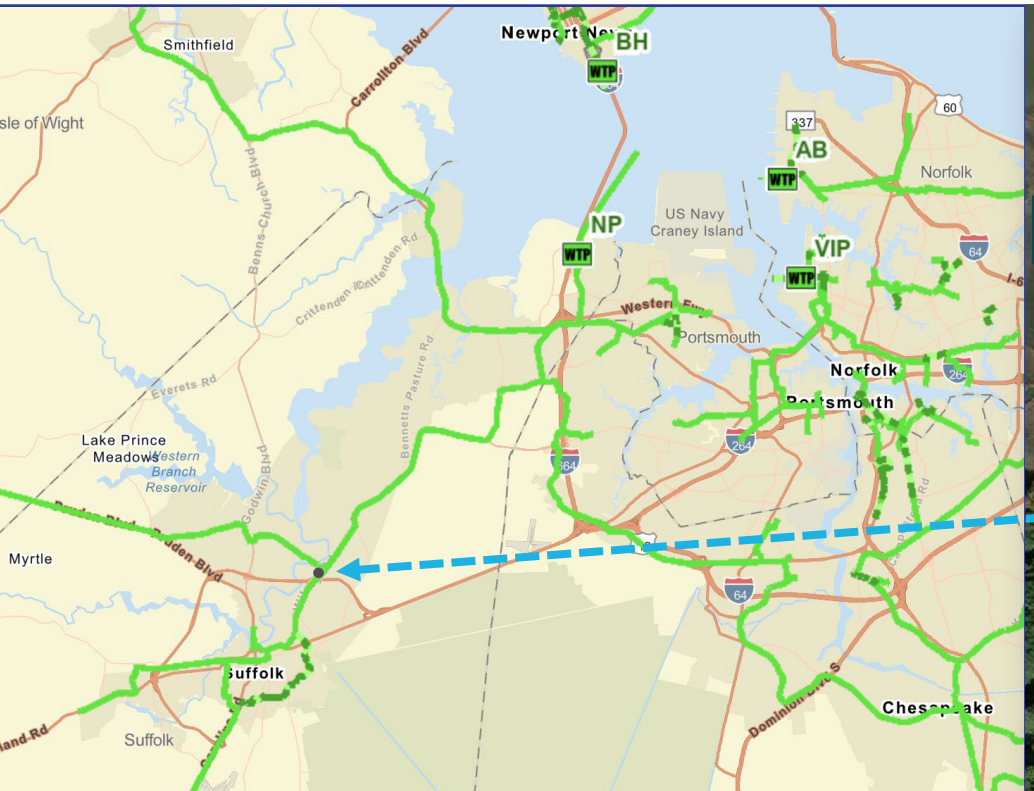
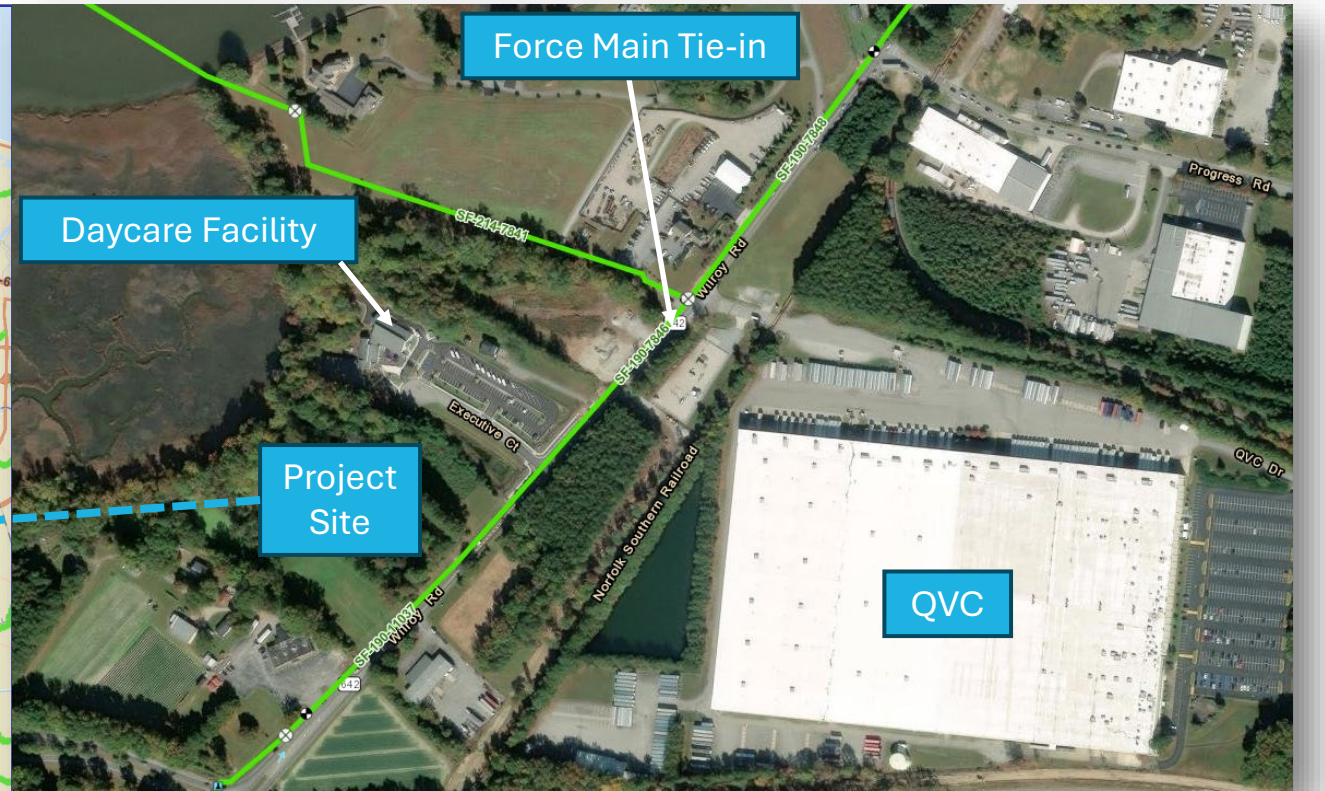
Location

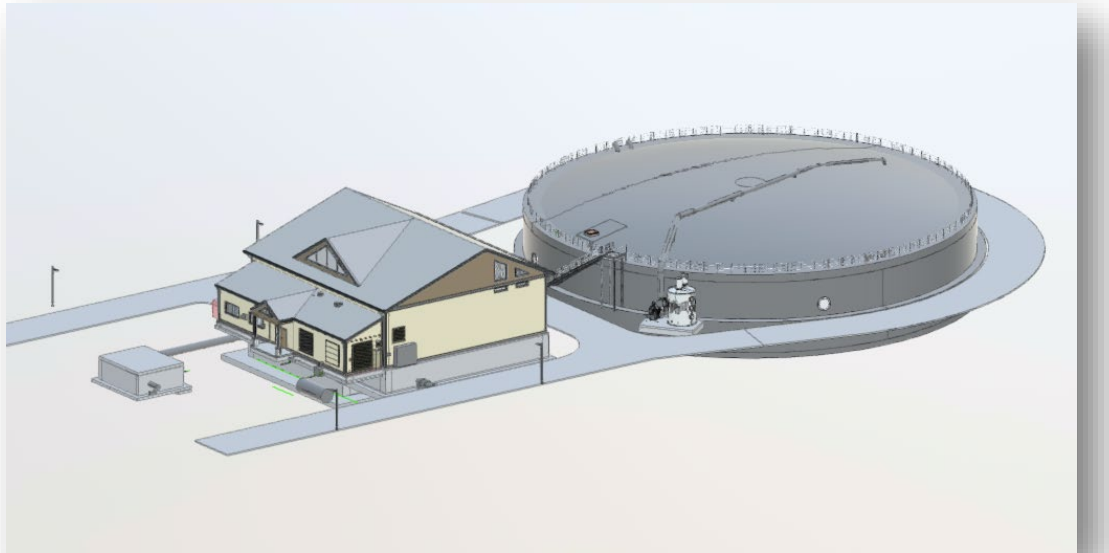
- 1941 Wilroy Road (west side)
- North of 13/58 Bypass
- Neighbors: QVC, Daycare Facility, Old Bunny's Restaurant, Farm

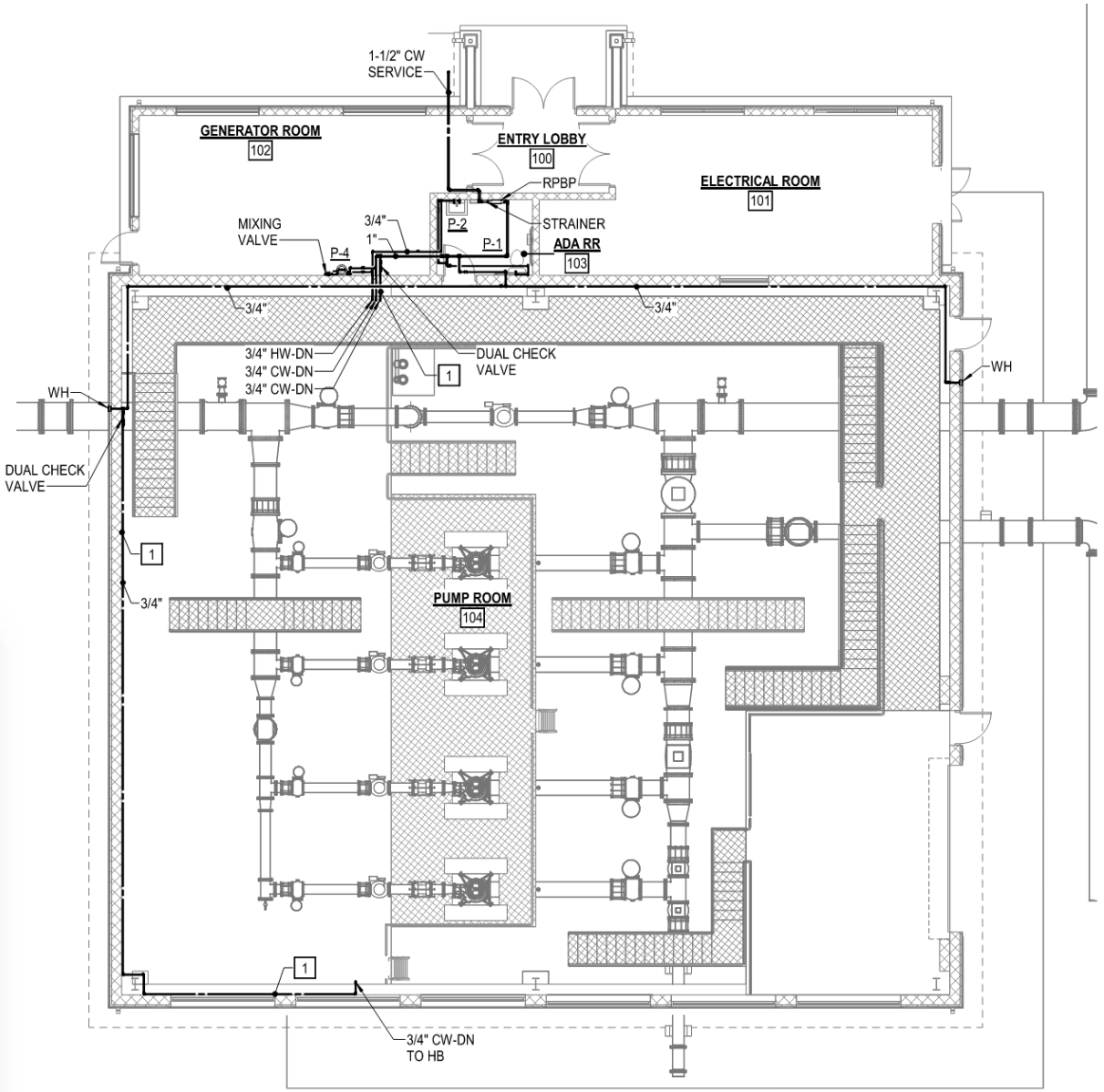




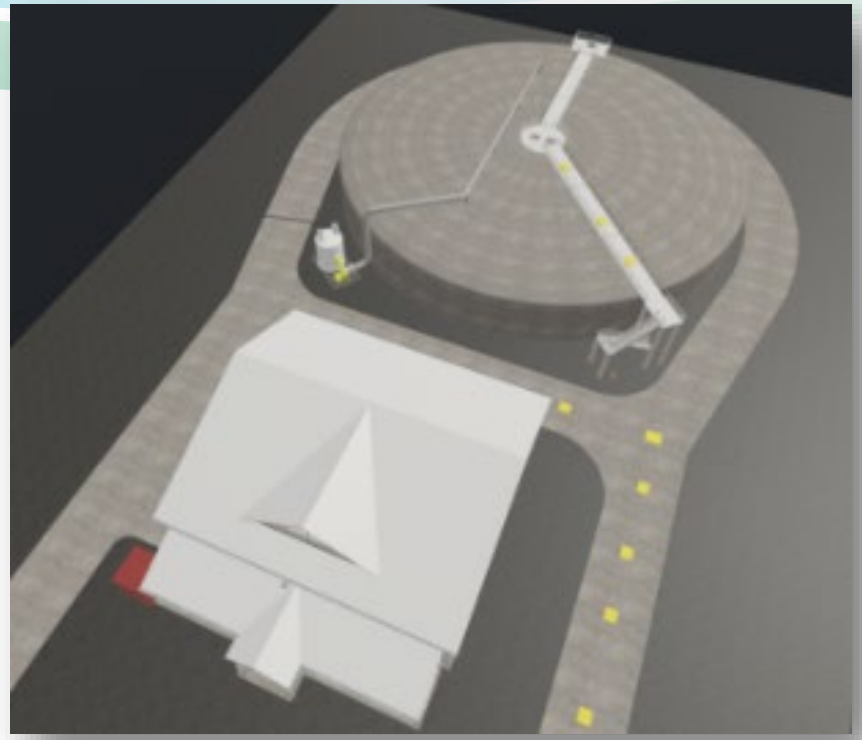
Major Project Components

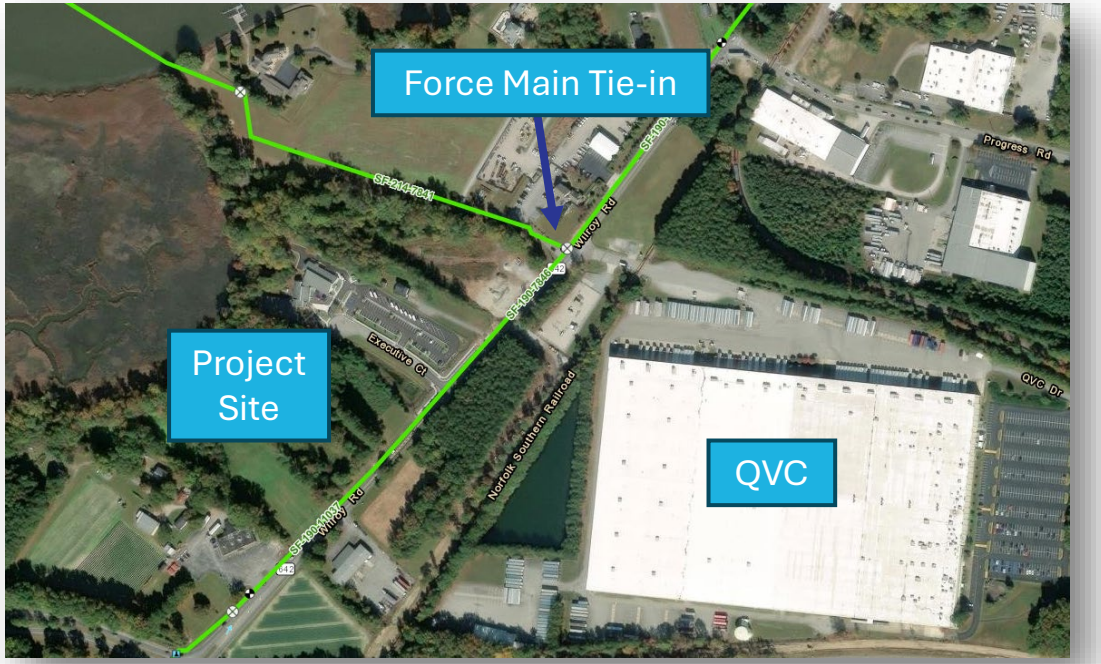
- PRS with 4 Pumps & Generator
- 3 MG Storage Tank
- Odor Control System
- Sewer Force Main Extension
- Water Main Extension

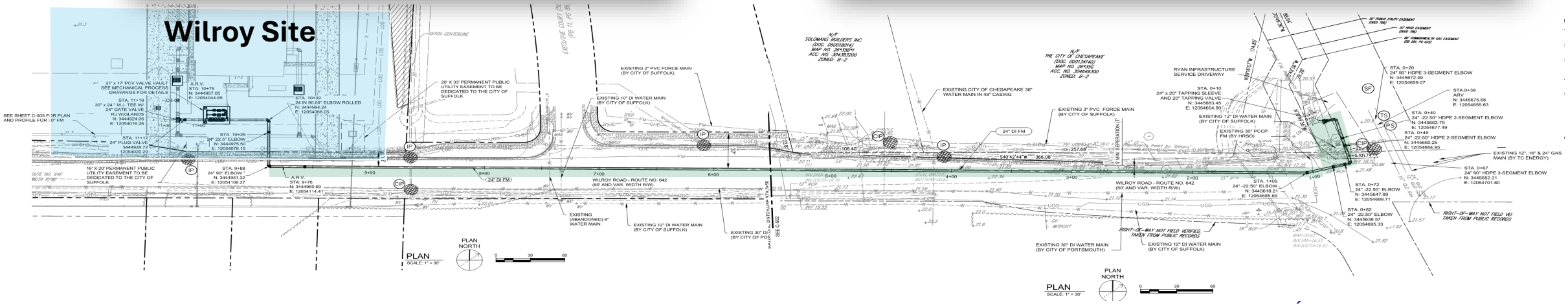




Station, Tank, and Force Main







Rendering with Newly Planted Landscaping

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Rendering with Mature Landscaping

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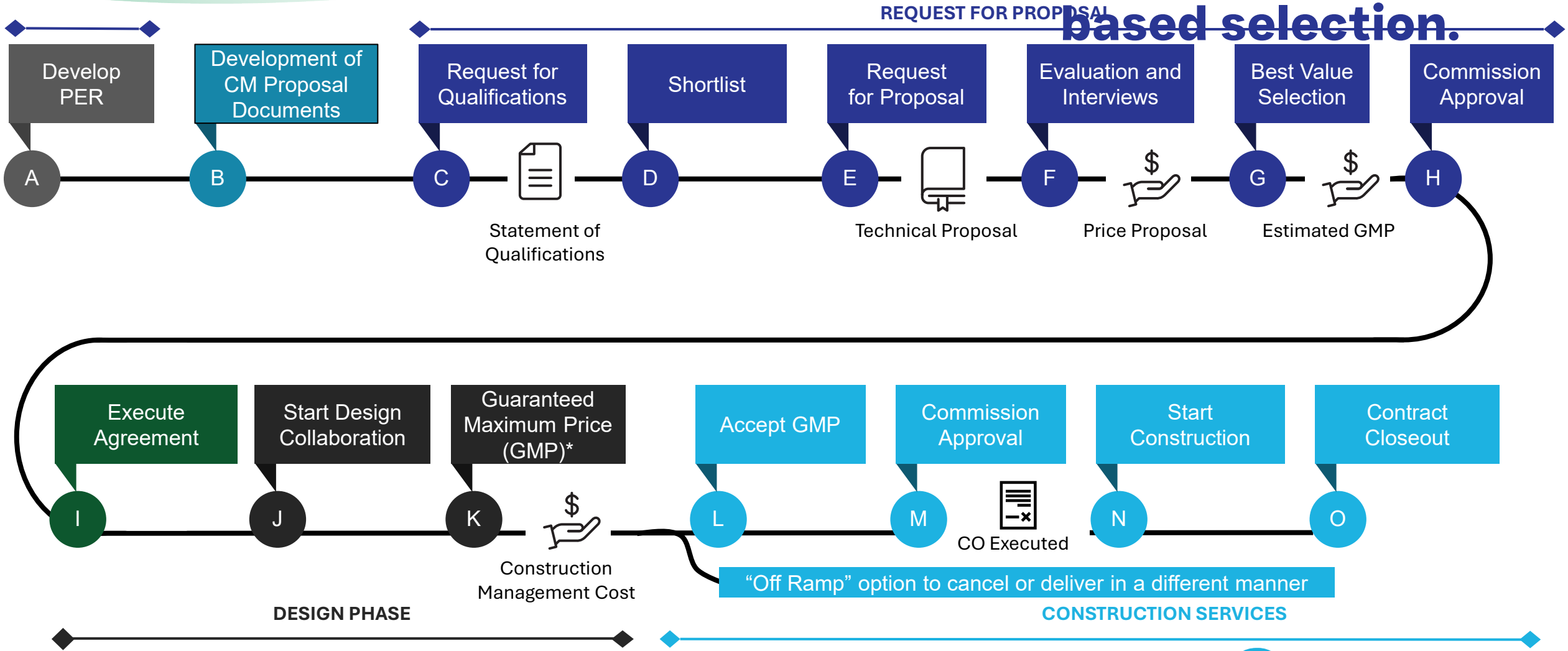
Project Preconstruction Progression

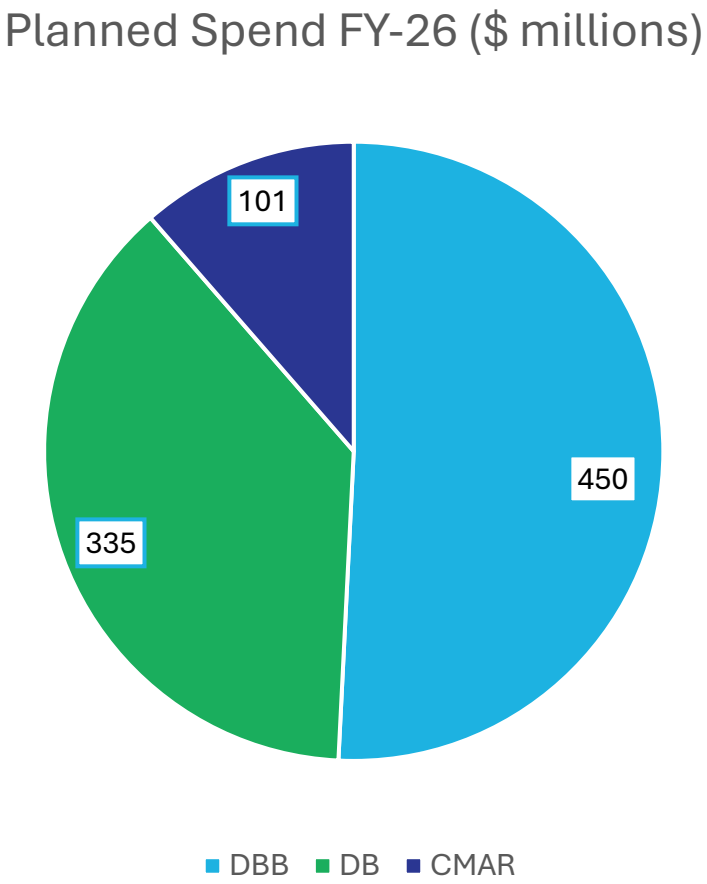
The Construction Manager at Risk (CMAR) is competitively procured through a qualifications-based selection.



*Multiple GMPs are possible

The CMAR Delivery Method is used sparingly on complex projects.

- Why CMAR for this project?
  - Better control over project schedule
  - Contractor input during design
  - Single responsible construction entity for both on-site and off-site work
  - Best value selection of subcontractors
- Project Benefits from CMAR Participation
  - Constructability Reviews
  - Risk Identification
  - Early Equipment Selections
  - Good Market Participation
  - Early Cost Certainty



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The Early Equipment Procurement Package was approved at the April 2025 Commission Meeting.

Category	CM Cost
Direct Equipment Costs	**$2,024,137**
Permit & License Fees	**$3,737**
CMAR Contingency (2%)	**$40,483**
CMAR Overhead (7%)	**$144,785**
Insurance & Bond (2.1%)	**$43,435**
CMAR Fee (3.5%)	**$78,980**
Subtotal	***$2,335,557***
Owner's Contingency	**$233,556**
TOTAL Early Procurement Package	**$2,569,113**

- Includes:
  - Electrical Gear
  - Generator and Automatic Transfer Switch
  - Rotary Cone Valves
  - Controls, Instrumentation, Variable Frequency Drives
  - Pumps
  - Odor Control
- Status: Submittals under review

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The Early Procurement Package costs remain within the approved GMP.

Category	CM Cost	Revised Cost: Pump Tariffs	Updated Cost
Direct Equipment Costs	$2,024,137	*$34,700*	$2,058,837
Permit & License Fees	$3,737	*$64*	$3,801
CMAR Contingency (2%)	$40,483	*$694*	$41,177
CMAR Overhead (7%)	$144,785	*$2,482*	$147,267
Insurance & Bond (2.1%)	$43,435	*$745*	$44,180
CMAR Fee (3.5%)	$78,980	*$1,345*	$80,334
Subtotal	***$2,335,557***	***$40,039***	***$2,375,596***
Owner's Contingency	**$233,556**		**$193,517**
TOTAL Early Procurement Package	$2,569,113		$2,569,113

Tariffs on Pumps:

- Pump equipment and accessories saw between an 11 and 13% increase in price
- Resulted in a reduction in Owner's Contingency

HRSD Sustainable, Innovative Wastewater Treatment

Four bid packages are included in this Construction

Bid Packages / Contractor Scopes of Work:

- **Bid Package 1 – Linework**
  - Sewer Force Main Tie-ins & Extension
  - Water Main Tie-ins & Extension
- **Bid Package 2 – Pressure Reducing Station (PRS)**
  - Pressure Reducing Station
  - Odor Control System
  - Site Improvements
- **Bid Package 3 – Offline Storage Facility (OLSF)**
  - 3 MG Storage Tank
- **Bid Package 4 – Electrical Work**

HRSD
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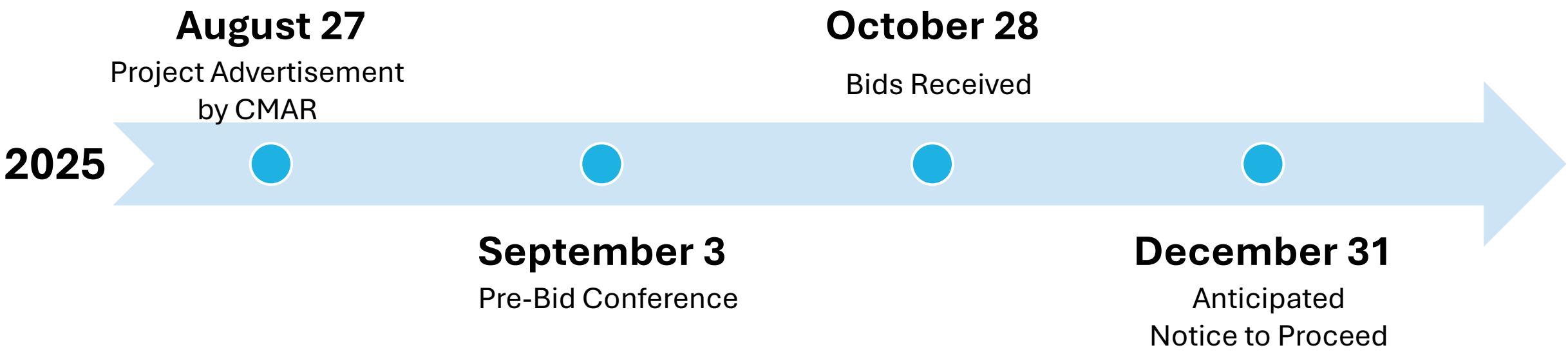
Construction Contract Bidding and Timeline



December 8, 2027

Substantial Completion

March 1, 2028

Final Completion

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Wilroy PRS & OLSF CMAR Work Package Pricing

Category	Early Equipment Package	Construction Package	TOTAL
Direct Construction Costs	$2,024,137	$37,372,280	$39,396,417
Permit & License Fees	$3,737	$73,222	$76,959
CMAR Contingency (2%)	$40,483	$747,446	$787,928
CMAR General Conditions (10%)	$0	$2,335,004	$2,335,004
CMAR Overhead (7%)	$144,785	$2,836,957	$2,981,742
Insurance & Bond (2.1%)	$43,435	$851,087	$894,522
CMAR Fee (3.5%)	$78,980	$1,547,560	$1,626,540
Subtotal	***$2,335,557***	***$45,763,554***	***$48,009,111***
Owner's Contingency	$233,556	$4,901,158	$5,134,714
TOTAL	**$2,569,113**	**$50,664,713**	**$53,233,825**

HRSD
Sustainable, Innovative Wastewater Treatment

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Approved in April 2025

HRSD Sustainable, Innovative Wastewater Treatment

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TOTAL	**$2,569,113**	**$50,664,713**	**$53,233,825**
		Today's Request for Approval	

HRSD Sustainable, Innovative Wastewater Treatment

Engineer's Estimate Comparison

Category	Early Equipment Package	Construction Package	TOTAL
Direct Construction Costs	$2,024,137	$37,372,280	$39,396,417
Permit & License Fees	$3,737	$73,222	$76,959
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CMAR Fee (3.5%)	$78,980	$1,547,560	$1,626,540
CMAR Work Package Subtotal	***$2,335,557***	***$45,763,554***	***$48,009,111***
Engineer's Estimate *without Owner's Contingency*	**$2,629,627**	**$38,504,614**	**$41,134,239**

- Engineer identified ~$1.5 million in material differences between their and CMAR's estimates prior to bid.
- Approximately $5 million in general contractor mark-ups from the 4 bid packages

HRSD Sustainable, Innovative Wastewater Treatment

The CMAR contract cost build-up includes direct costs, percentages established during competitive CMAR procurement, and Owner's Contingency.

Category	Construction Package
Direct Construction Costs	$37,372,280
Permit & License Fees	$73,222
CMAR Contingency (2%)	$747,446
CMAR General Conditions (10%)	$2,335,004
CMAR Overhead (7%)	$2,836,957
Insurance & Bond (2.1%)	$851,087
CMAR Fee (3.5%)	$1,547,560
Subtotal	***$45,763,554***
Owner's Contingency	$4,901,158
TOTAL	**$50,664,713**

Item	Cost
TOTAL Direct Construction Cost	***$37,372,280***
Linework	$5,778,000
Pressure Reducing Station	$19,866,000
Off-line Storage Facility	$8,816,00
Electrical	$2,394,483
Equipment Procurement (VFD)	$58,843
Mobilization/Demobilization	$458,954

HRSD Sustainable, Innovative Wastewater Treatment

Multiple bidders responded to each bid package.

Bid Package	*Low Bidder*	→	*High Bidder*	*Approximate Range of Bids (High – Low)*
Linework	**$5,778,000**	$13,786,530		*$8 million*
PRS	**$19,866,000**	$21,997,777	$26,922,000	*$7 million*
Tank	**$8,816,00**	$13,722,000	$14,437,000	*$5.6 million*
Electrical	**$2,394,483***	$3,476,979		*$1.1 million*

*Note: Crowder will self-perform electrical bid package.

- Total (low bidders): $36.9 million
- Total (high bidders): $58.6 million

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Owner's Contingency includes a standard 10% for unknowns and an amount for a known risk.

Category	Construction Package
Direct Construction Costs	$37,372,280
Permit & License Fees	$73,222
CMAR Contingency (2%)	$747,446
CMAR General Conditions (10%)	$2,335,004
CMAR Overhead (7%)	$2,836,957
Insurance & Bond (2.1%)	$851,087
CMAR Fee (3.5%)	$1,547,560
Subtotal	***$45,763,554***
Owner's Contingency	$4,901,158
TOTAL	**$50,664,713**

Item	Cost
TOTAL Direct Construction Cost	***$37,372,280***
Linework	$5,778,000
PRS	$19,866,000
OLSF	$8,816,00
Electrical	$2,394,483
Equipment Procurement (VFD)	$58,843
Mobilization/Demobilization	$458,954

Item	Cost
TOTAL Owner's Contingency	***$4,901,158***
10% Contingency	$4,576,335
Wages Determination Contingency	$324,803

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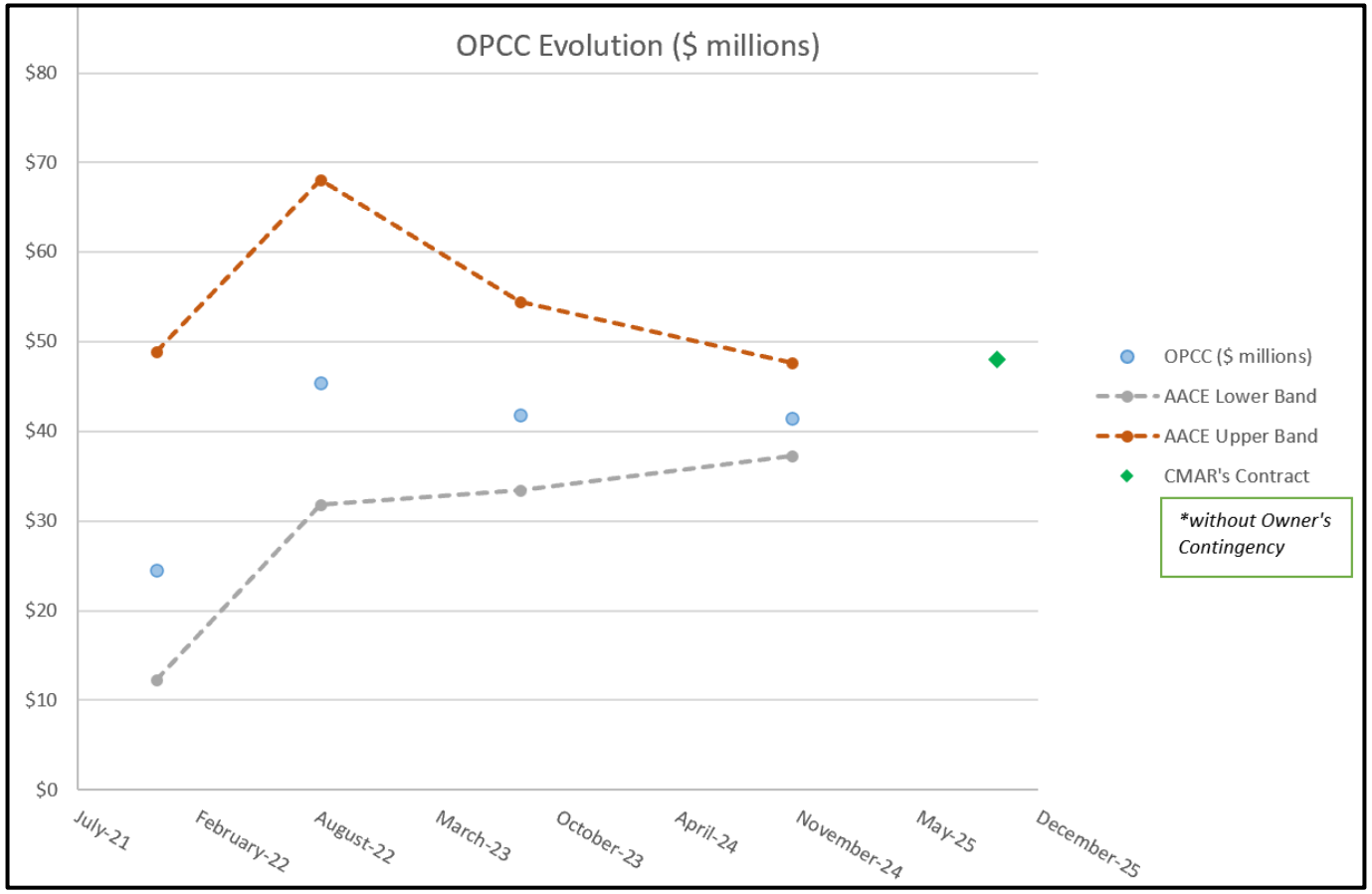
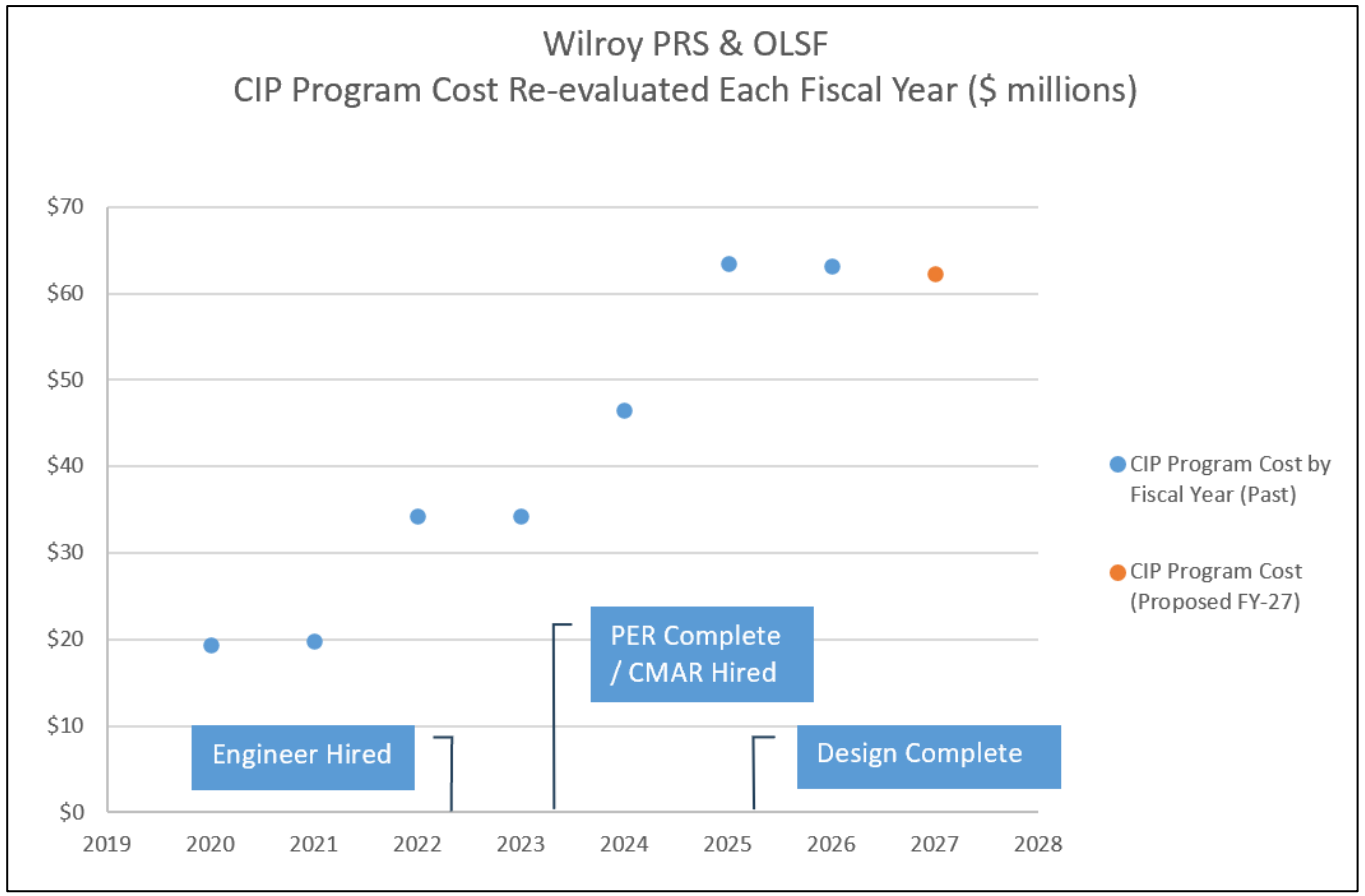
The Engineer's OPCC has remained nearly constant throughout the project.



- CMAR Contract Price is just outside of the AACE Expected Accuracy Range of Engineer's OPCC at 100% Design
  - Note: Initial OPCC provided by HRSD

The overall project cost has been reviewed and updated as needed through the yearly CIP cycle.



- Initial appropriation (2021) $34.3 million vs. New appropriation $62.2 million
- Program cost changed substantially at three points
  - project became active and HRSD PM was assigned
  - at PER completion
  - near final design
- Design development and changes

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Recommended Actions for Approval

- Appropriate additional funding in the amount of **$27,942,971.**
- Approve GMP2 for **$50,664,713** to the Comprehensive Agreement with **Crowder Construction Company.**
- Approve a task order with **Brown and Caldwell** in the amount of **$3,108,593.**

Questions?

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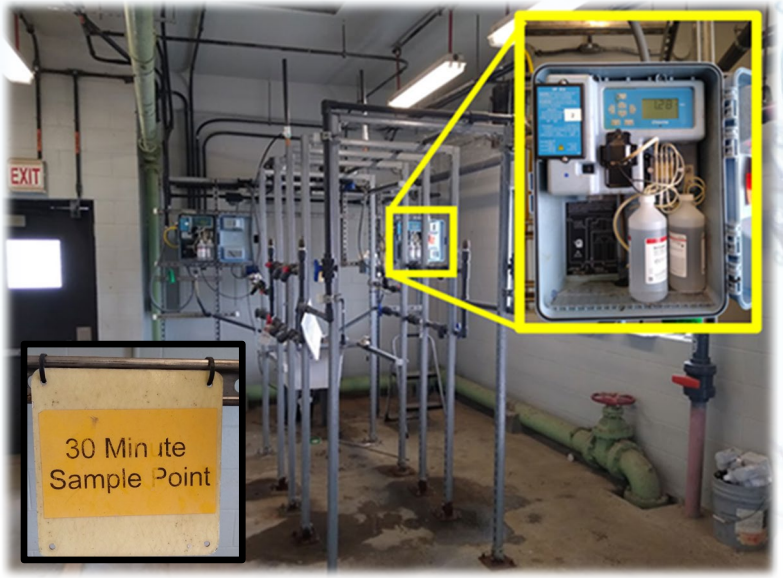
13. Implementing Automated Compliance Monitoring for Total Residual Chlorine

Implementing Automated Compliance Monitoring For Total Residual Chlorine



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December 16, 2025

Jeff Sparks, Seth Luma, Jack Denby

Background

- HACH CI-17 is a site-dedicated instrument that is designed to continuously monitor a sample stream for free and total chlorine.

- Online sensors are widely used at HRSD facilities for real time monitoring and process control – but not for compliance and reporting

- In March of 2023, NTP went live with reporting compliance TRC measurements using Hach CI-17

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Permit Requirement

A. ADDITIONAL TOTAL RESIDUAL CHLORINE (TRC) LIMITATIONS AND MONITORING REQUIREMENTS

The permittee shall monitor the TRC at the outlet of the chlorine contact tank, prior to dechlorination, every two hours by grab sample.

No more than 36 of all samples taken after the chlorine contact tank, prior to dechlorination, shall be less than 0.50 mg/1 for any one calendar month.

The facility shall operate the chlorination facilities in a manner, which will ensure continuous disinfection. The permittee shall notify the DEQ in the event TRC sample collected prior to dechlorination is less than 0.50 mg/1 for 3 or more consecutive readings or the TRC sample collected is less than 0.10 mg/1.

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Approval

In April of 2022, HRSD obtained approval of a Limited Use Alternative Test Procedure (ATP) to use the HACH Cl-17 for on-line regulatory total residual chlorine (TRC) analysis at the Nansemond Treatment Plant (NTP)

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Proposal to DEQ

- **Report CI-17 generated value in lieu of lab analysis for chlorine contact tank. Reduce operator burden.**
  - The CI-17 analyzes and generates a TRC value every 2.5 minutes.

Compliance Reporting

Pocket Colorimeter

- Samples collected and analyzed at the top of hour, every other hour.
  - ➢ 00:00, 2:00, 4:00
- One sample every 2 hours

HACH CI-17

- Minimum value reported for each 2-hour time-block
- Time blocks defined as:
  - 00:00 – 01:59, 02:00 – 03:59, etc.
- ~48 samples every 2 hours

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From Conception to Implementation

- Multiple years of trial and error
- A secondary unit was installed
- Daily quality control measures
  - Accuracy verification/Instrument validation
- Data comparison study
- Contingency planning
  - Return to 2-hour grab samples/diversion pond
- Submission of Alternative Test Procedure application and approval by DEQ
  - HRSD's CI-17 standard operating procedure (SOP) now serves as the regulatory method

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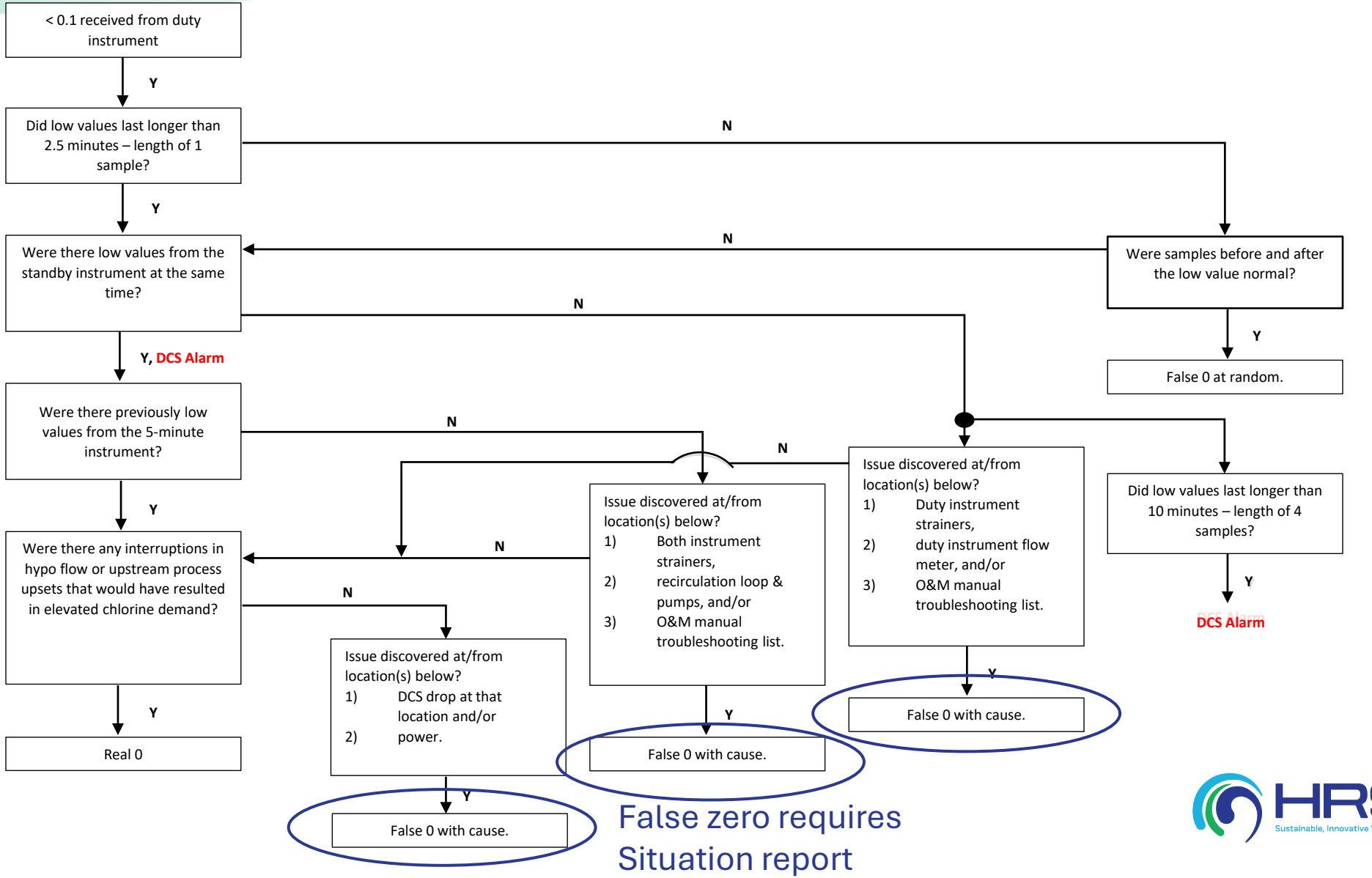
Day-to-Day Life with the CI-17

What to do with all the data

- What to do if <0.1 mg/L received from instrument
  - False zero with cause may be the result of failure of a component of the CI-17 resolved by troubleshooting
  - False zero at random occurs when a zero is recorded by the CI-17 with no diagnosable cause and verified as inaccurate
  - A real zero is when the CI-17 records a zero that is confirmed through screening comparison with another instrument.
    - Real zero must be reported

Zero value flow chart



False zero requires Situation report

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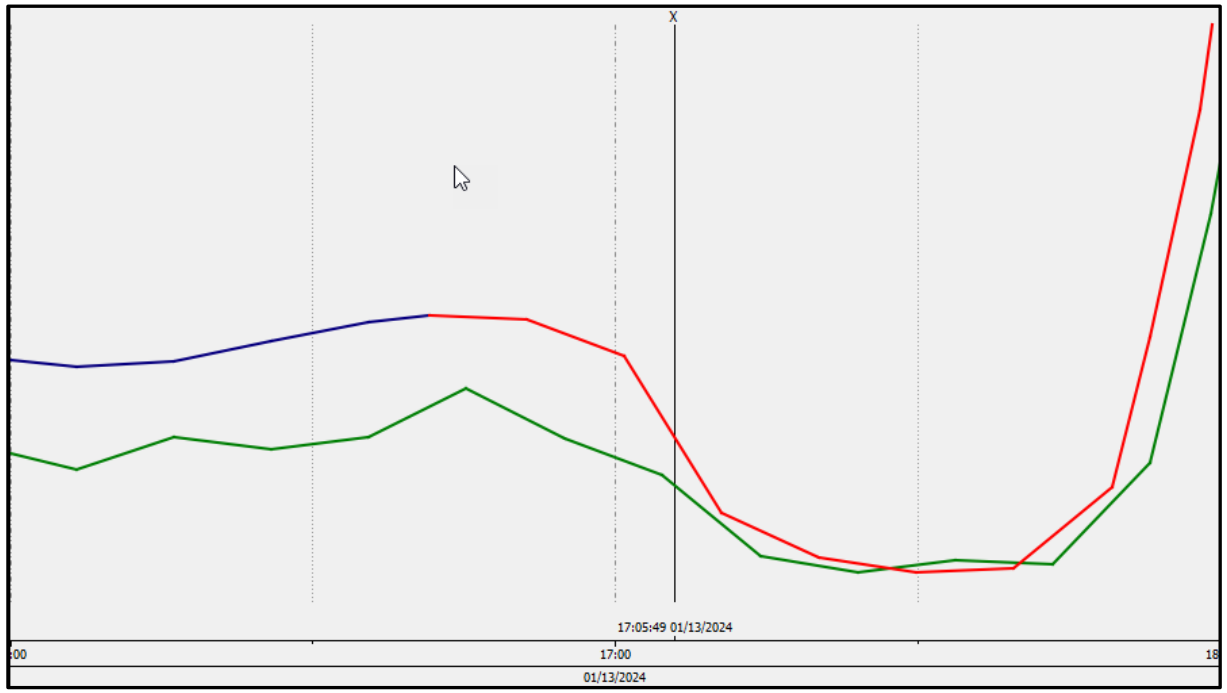
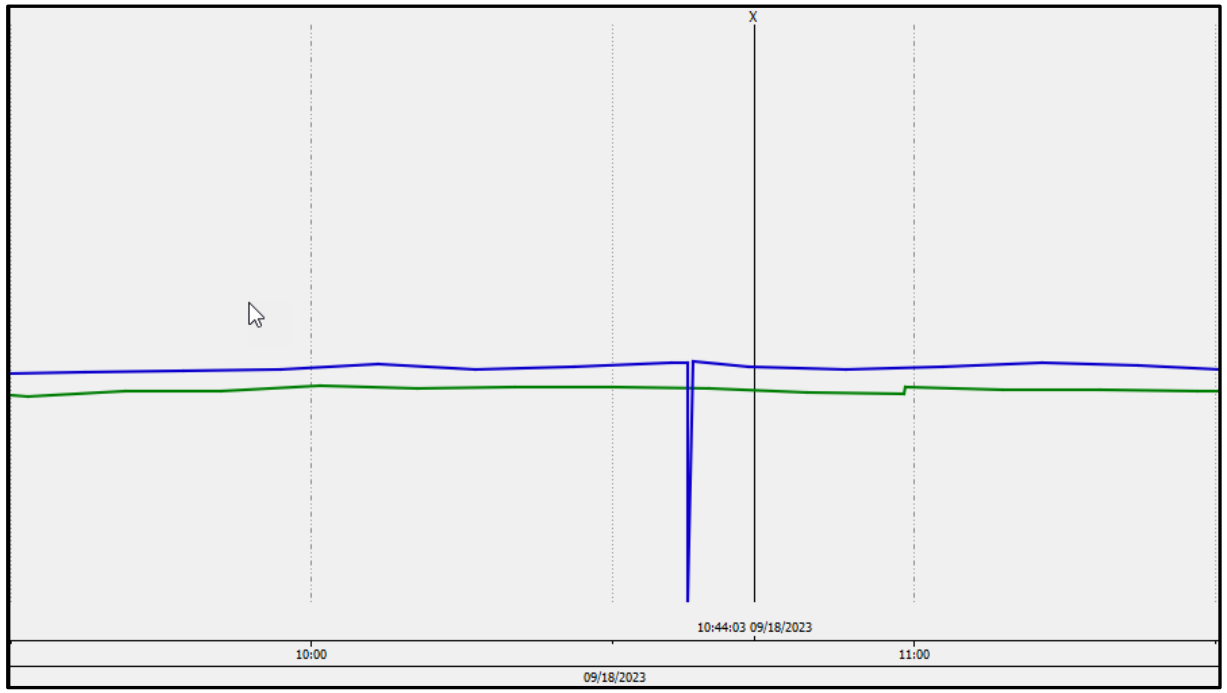
Real Zero or False Zero

Real Zero



False Zero



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When is a Violation Reportable?

March 2023 – February 2024

	Total	Process	Mechanical	Power Loss	Violation
March 2023	2		1		1
April 2023	2		2		
May 2023	1		1		
June 2023	0				
July 2023	0				
August 2023	5		4	1	
September 2023	6	2	2	2	
October 2023	2			2	
November 2023	2		2		
December 2023	0				
January 2024	1	1			
February 2024	1		1		
Total	**22**	**3**	**13**	**5**	**1**

- A total of 22 residuals identified
  - 13 of those residuals were a “mechanical” error
  - Three outlier Months
  - 1 Violation “Real” Zero

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Time Saved

- Operator Time Commitment
  - Hand Grabbed Residuals
    - 3 hours per day – day shift
  - CI-17 Maintenance / Validation
    - 35 minutes per day – day shift
  - **Hours saved**
    - **~2.5 hours per day**

- Supervisor Time Commitment
  - March 2023 – February 2024
    - 22 residuals were investigated and updated
    - ~20 minutes to investigate and update each residual
  - **Hours worked**
    - **~7.5 hours per year**

Total Hours Saved: ~900/yr

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Future Modifications / Updates

Benefit to Public Health

- CI-17 is protective at any reporting frequency
  - Allows immediate response to low chlorine levels
  - Troubleshooting the cause of low TRC
  - Taking corrective actions
    - Adjusting chemical dosing
    - Addressing upstream process upsets
- Minimizes risk of discharging non-disinfected effluent
  - Single violation recorded in first year at NTP, likely would have been undetected with conventional sampling

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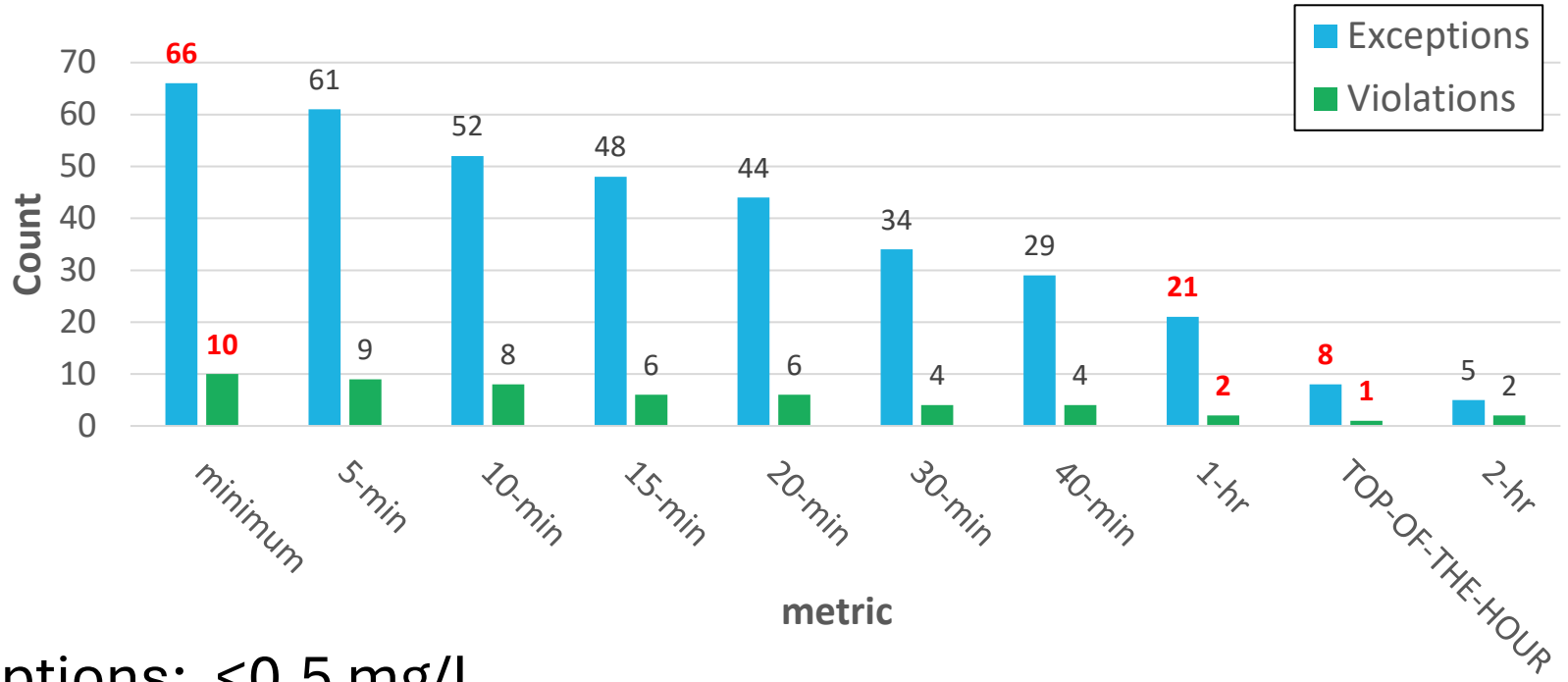
Alternatives to the minimum

- Reporting Alternatives:
  - What is required for plants that don't have a pond fail-safe?



Exceptions: <0.5 mg/L

Violations: <0.1mg/L

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Next steps

- Updated proposal to include additional treatment plants and reporting criteria
  - Proposed reporting:
    - Average reading for every 1-hr time block
      - 2x the amount of conventional sample reporting
  - Army Base Treatment Plant
    - CI-17 are installed and collecting data – pending approval for compliance reporting
  - James River Treatment Plant
    - Installation in progress

Questions?

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17. Informational Items

a. Management Reports

(1) General Manager

(2) Communications

(3) Engineering

(4) Finance

(5) Information Technology

(6) Operations

(7) Talent Management

(8) Water Quality

(9) Report of Internal Audit Activities

b. Strategic Measures Summary

c. National Association of Clean Water Agencies (NACWA) Peak Performance Awards

HRSD
Sustainable, Innovative Wastewater Treatment

Post Office Box 5911
Virginia Beach, VA 23471-0911
757.460.7003
hrsd.com

December 10, 2025

Re: General Manager's Report

Environmental Responsibility

Staff continue to work with the Department of Environmental Quality (DEQ) on transitioning the Federal Consent Decree to a State Consent Order. The Consent Order will be publicly noticed in the Virginia Register from December 1-31. Assuming no issues with public comments, the DEQ Director is prepared to sign the order in January. As a reminder, this Consent Order will not take effect until the Federal Consent Decree is vacated.

Treatment Compliance and System Operations: There were multiple events this month and additional details are available in the Air and Effluent Summary in the Water Quality (WQ) monthly report.

- For Fiscal Year (FY) 2026 to date, there have been six Permit Exceedances out of 23,277 Total Possible Exceedances.

- Pounds of Pollutants Removed in FY 2026 to date: 72.3 million pounds.

Water Quality: No civil penalties were issued in November.

Financial Stewardship

I am working with financial consultants sponsored by NACWA to develop a utility finance whitepaper on resilience strategies. Since HRSD is one of the largest borrowers for Water Infrastructure Finance & Innovation Act (WIFIA) loans and the largest borrower of Clean Water Revolving Loan Funds in Virginia, we have some great examples of how we continue to find the lowest cost of capital to keep rates low. In addition, our deal with Virginia Natural Gas is an excellent example of alternative revenue enhancement with zero capital outlay.

DA Davidson released a research report on variable rate bonds and highlighted HRSD as the best-performing self-liquidity portfolio in the country. This speaks to HRSD's unwavering commitment to finding the lowest cost of capital, and our strong financial and operating fundamentals make us very investable.

Revenues continue to be slightly above budget, with Interest Income continuing to be strong. Facilities Charges, which represent new development, remain in line with the previous year and above target. Expenses continue to be controlled in spite of tariffs and rising inflation.

Talent

I had the great opportunity to speak on a virtual AWWA panel focused on Strategic Planning. I spoke about how HRSD used scenario planning to develop our plan. In addition, I provided concrete examples of how we are using our plan to execute specific action items that align with our priorities.

Turnover excluding retirements continues to be low at 2.0% fiscal year to date. Staffing levels remain relatively high at 93%.

Community Engagement

I participated on a panel at the 10-Year Celebration Dutch Dialogues conference on November 6. The panel focused on the "Success of Cross-Jurisdiction Collaborations". I presented on SWIFT and how it is a regional collaboration success story.

Staff provided a SWIFT Research Center tour to over 20 DC Water staff members. They are embarking on an ambitious water reuse program as a backup water supply in case the Potomac River is not available, which would be a national security issue. This same week, Dr. Charles Bott participated on a panel where they launched this new initiative called Pure Water DC.

HRSD remains engaged with the National Association of Black Women in Construction and recently participated in their virtual "Billion Dollar Lunch".

Innovation

We are seeing some decent data that suggests Calcium carbonate ($CaCO_3$) addition, paired with our hydrocyclones (inDENSE – one of our patents) improves biological treatment and process stability. This setup combines CREW Carbon's technology with ours and is one of our latest patents.

HRSD added XPV partners, a Venture Capital firm, to our innovation ecosystem. They were recently involved in the Badger meter acquisition of Smart Cover for $185 million.

Climatehaven is a water-focused incubator in Connecticut that is connected to Yale and the University of Connecticut. We recently added them to our innovation ecosystem as HRSD fits

perfectly in their startup pipeline. This is the same group that helped Crew Carbon, which is one of our startups that came out of Yale.

I participated in a global panel on Water Positivity. This was part of Desalytics virtual Water Week, which is based out of Dubai. The speakers on our panel were from Dubai, Madrid, Paris, and South Carolina. I had the opportunity to talk about our SWIFT program and all of the great benefits to a global audience.

I look forward to seeing you in Virginia Beach at 9:00 a.m. on Tuesday, December 16, 2025.

Respectfully submitted,

Jay Bernas

Jay Bernas, P.E.
General Manager/CEO

TO: General Manager

FROM: Chief Communications Officer

SUBJECT: Monthly Report for November 2025

DATE: December 10, 2025

A. Publicity and Promotion

1. HRSD and the Sustainable Water Initiative For Tomorrow (SWIFT) were mentioned or featured in 11 stories this month. Topics included:

   a. Suspension of shutoffs in Newport News amid federal shutdown

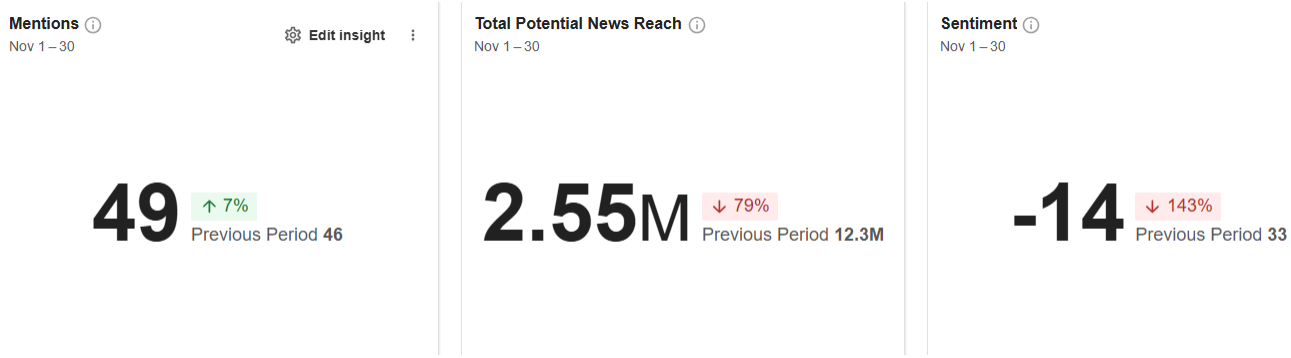
   b. Two stories about water reuse driving infrastructure spending through 2035

   c. HRSD's SWIFT Research Center achieves one billion gallons of SWIFT Water® in the Potomac aquifer (Chesapeake Bay Magazine)

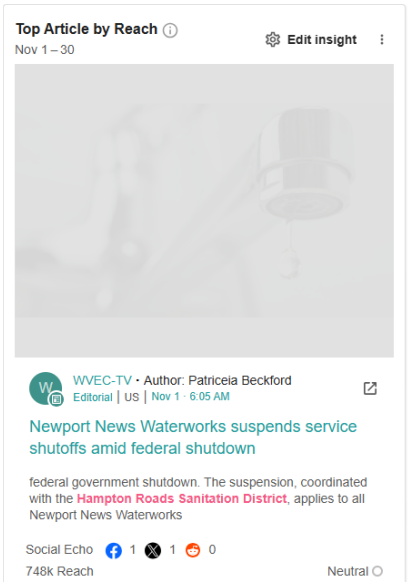
   d. Four stories about HRSD data breach investigation

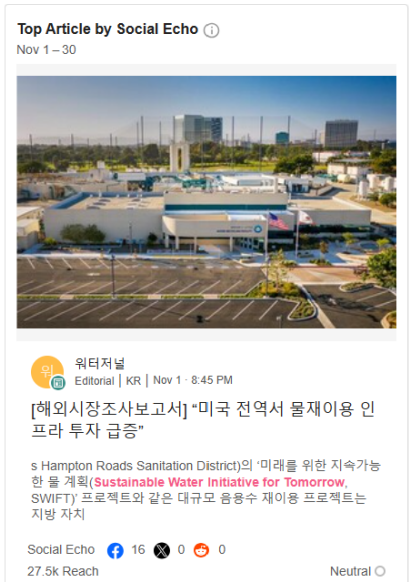
2. Analysis of Media Coverage

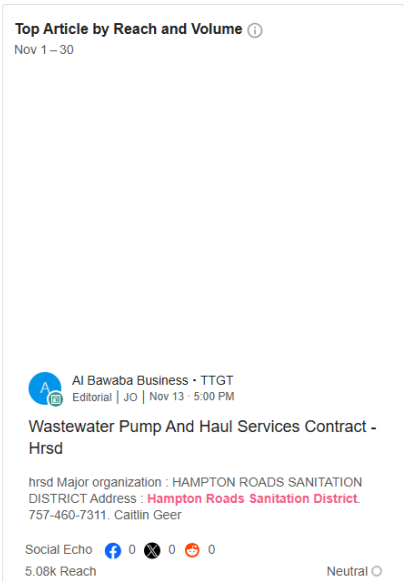
   a. Key results for November



b. Top performing news content

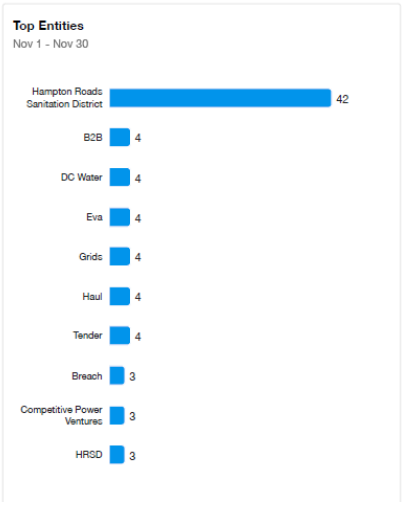


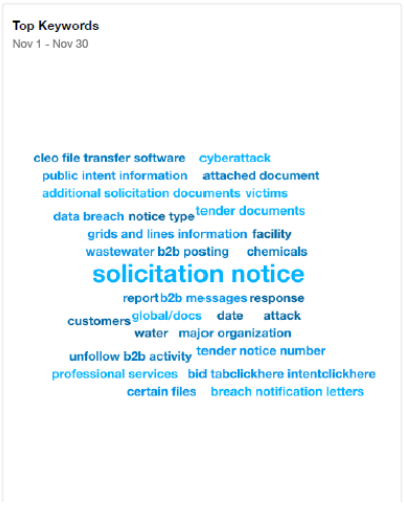


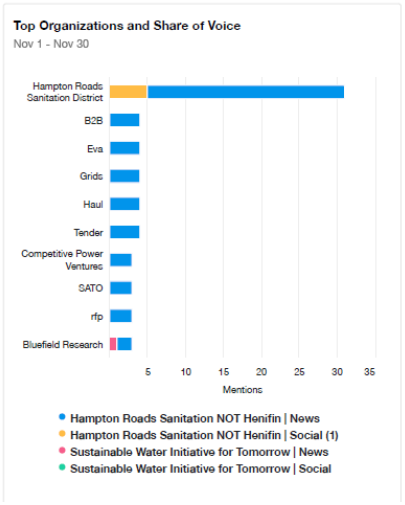


c. Top entities and keywords

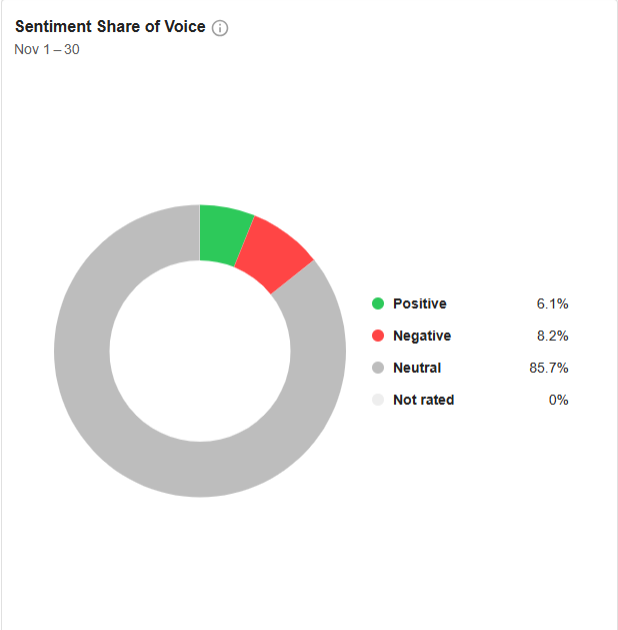
What are the top entities and keywords?

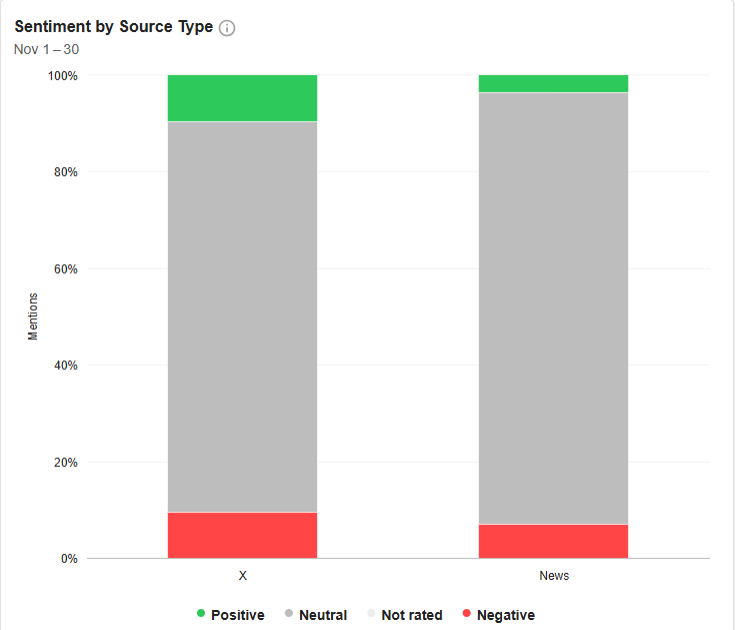






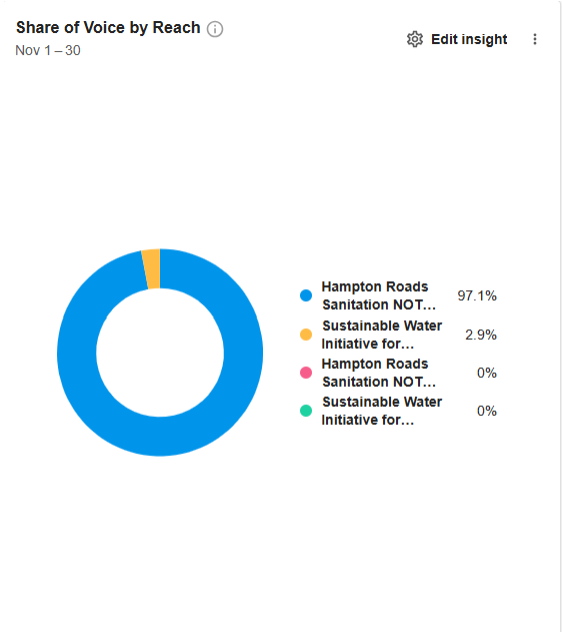
d. How favorable is the content?

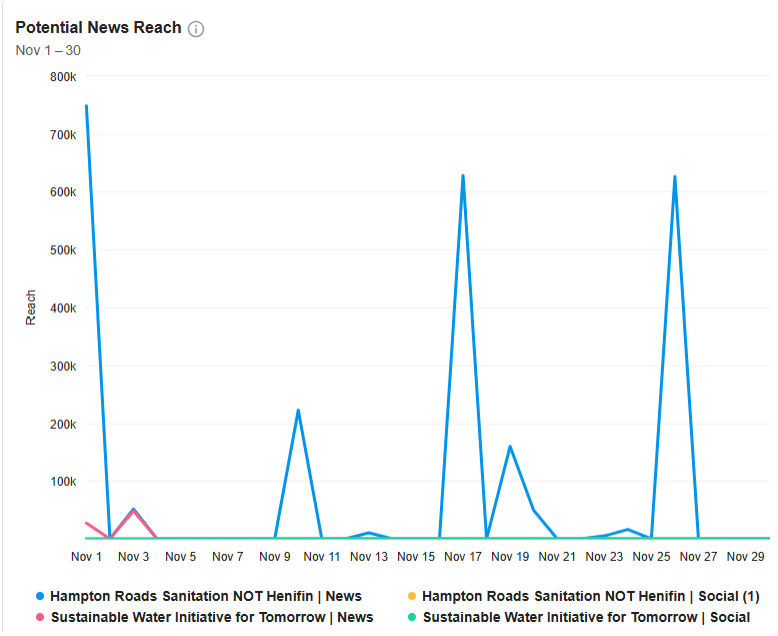




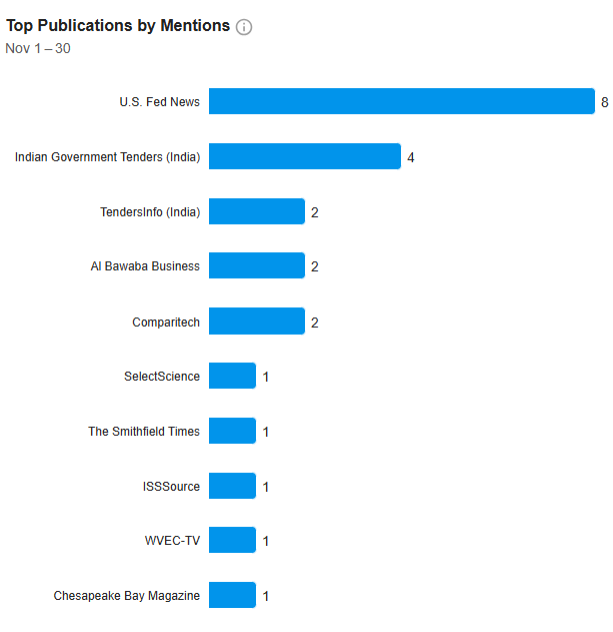
(Negative sentiment directly attributed to HRSD associated with cyber incident)

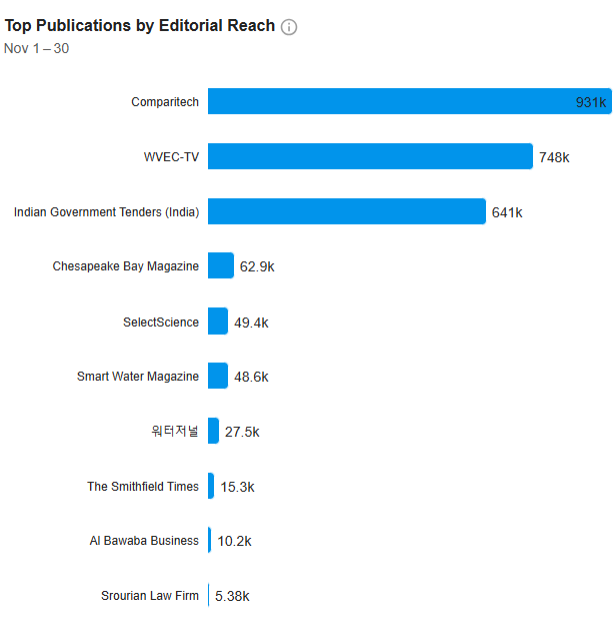
e. What is the potential reach?





f. Top publishers

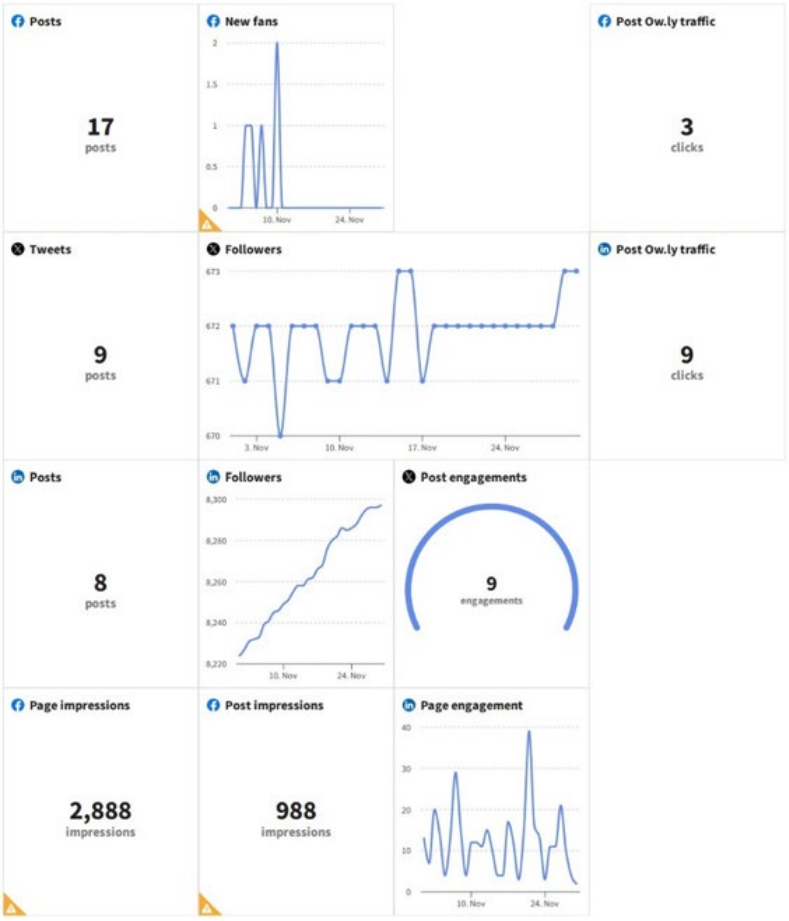




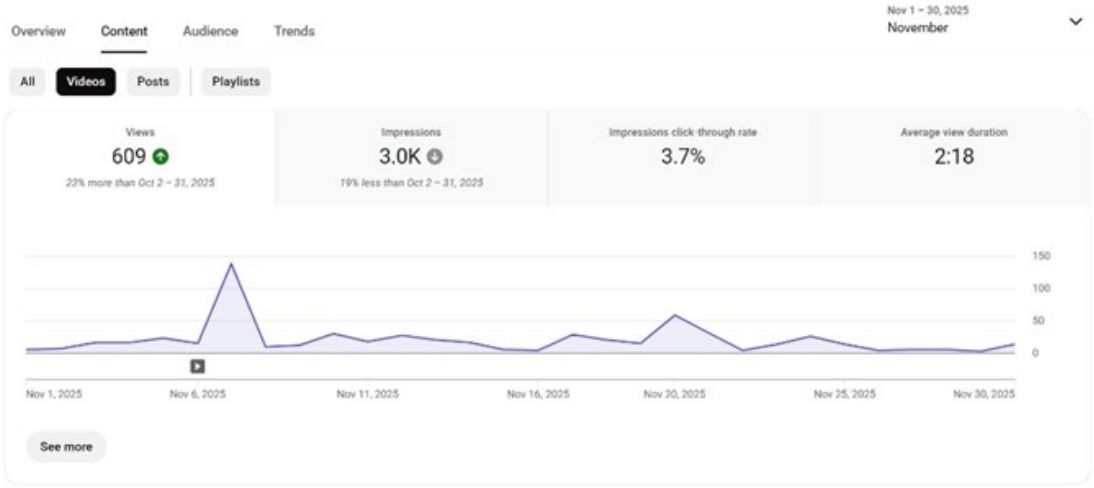
Community Engagement

B. Social Media and Online Engagement

1. Metrics – Facebook, X and LinkedIn

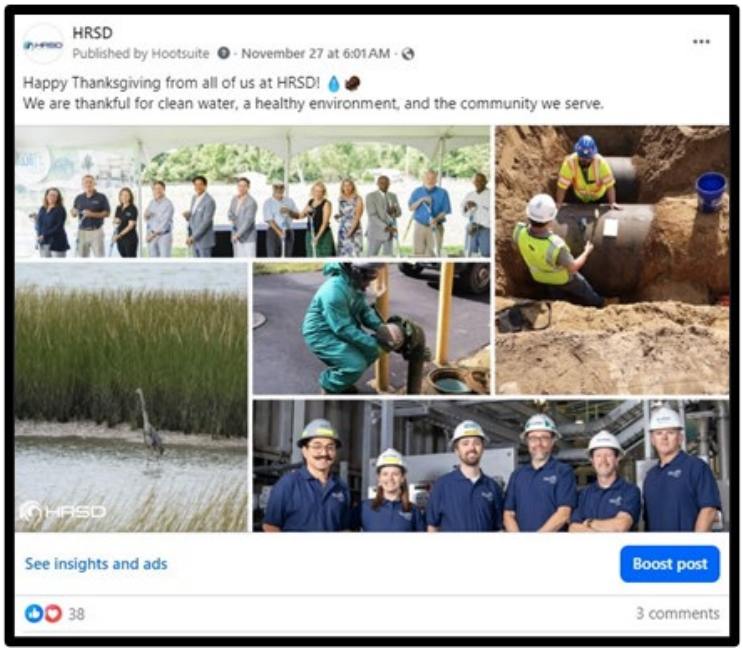


2. YouTube



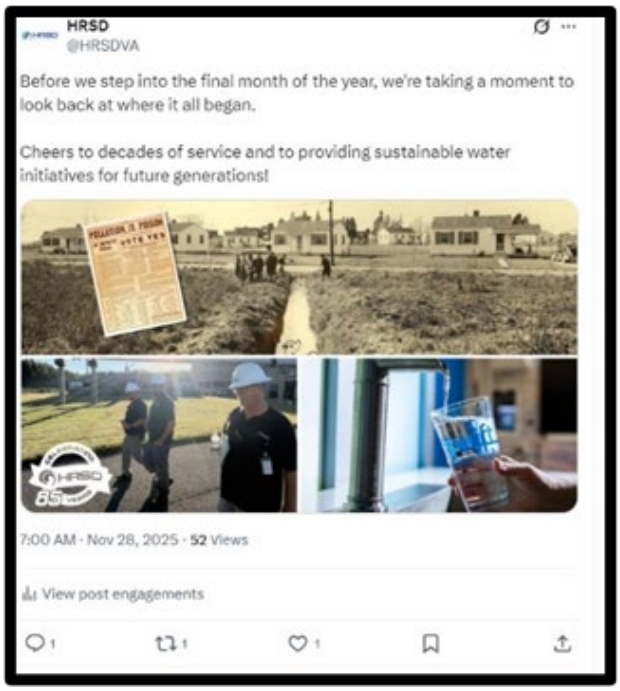
3. Top posts on Facebook, Twitter, and YouTube

    a. Top Facebook post



b. Top LinkedIn Post

c. Top X Post



d. Top YouTube Videos (based on views in the month)

(1) SWIFT Research Center: What is the Potomac Aquifer

(2) The Wastewater Treatment Process

(3) Incoming Water from HRSD's Wastewater Treatment Plant

(4) SWIFT Industry Day 2025

4. Website and Social Media Impressions and Visits

a. Facebook:

(1) 2,888 page impressions

(2) 988 post impressions reached 4,919 users.

(3) Facebook Engagement of 141 (129 reactions, 4 shares, and 8 comments)

b. X: 2.2% engagement rate

c. HRSD.com/SWIFTVA.com: 677 page visits

d. LinkedIn Impressions:

(1) 16,524 page impressions

(2) 8,260 post impressions

e. YouTube: 609 views

f. NextDoor unique impressions: 7,447 post impressions from 20 targeted neighborhood postings and one regionwide posting.

g. Blog Posts: (0)

h. Construction Project Page Visits – 1,220 total

C. Education and Outreach Activity Highlights

1. 11/01/25 -- Mariners Fall Festival
2. 11/13/25 – Jaycox Elementary School Science Night
3. 11/17/25 – Meadowbrook Civic League Meeting – project update presentation
4. 11/18/25 – Lafayette Winona Civic League Meeting -project update presentation
5. 11/18/25 – HRSD FOG and Billing presentations at Cox High School
6. 11/20/25 – SWIFT tour and activity for Phoebus High School
7. 11/20/25– SWIFT tour for Virginia Wesleyan University Hydrology class
8. Newsroom postings:

    a. Construction notices – 6
    b. News releases – 0
    c. Traffic Advisories - 1

D. Internal Communications

CCO participated in the following internal meetings and events:

1. SWIFT website review meeting
2. Luncheon and preview screening of branding videos for video participants
3. HRSD.com redesign meetings
4. HRSD/SWIFT Industry Day 2026 planning meetings

5. HRSD Security Team meeting

6. Bi-weekly General Manager (GM) briefings

7. Discharge Monitoring Report (DMR), SWIFT Quality Steering Team (QST), and HRSD QST meetings

8. Check-in meetings with Deputy General Manager (DGM)

9. CCO conducted biweekly Communications department status meetings and weekly one-on-one check-in meetings.

10. Staff participated in 24 project progress and/or construction meetings in addition to communication planning meetings with various project managers, plant staff, internal and external stakeholders.

Talent

Professional development activities and pursuits for November:

- CCO is wrapping up a multi-class certificate course titled, “Professional Development: Ai Tools for the Modern Communicator”
- South Shore Public Information Specialist put in seven hours of virtual graphic design and visual communications training via LinkedIn learning
- North Shore Public Information Specialist remains active in Toastmasters

Respectfully,

Leila Rice, APR

Chief Communications Officer

TO: General Manager

FROM: Chief Engineer

SUBJECT: Monthly Engineering Report for November 2025

DATE: December 8, 2025

Environmental Responsibility

- HRSD has numerous fuel storage tanks to be used when power is lost at many critical locations. These storage tanks are located both below and above ground. Annual inspections are conducted to be sure that negative environmental impacts do not occur. Leaks are possible at the tank wall, fittings and associated piping. Coordinated inspections occur with inspectors from the Virginia Department of Environmental Quality (VDEQ). These inspections occur annually and three pump stations and one treatment plant was inspected in November. Follow-up inspections were also conducted at two sites. These proactive efforts help to find deficiencies prior to an actual fuel spill or other negative impacts on the environment.

- HRSD's treatment plants ultimately discharge treated water back to the environment. Typically, this discharge is accomplished through an outfall pipe and diffuser system. The diffuser is designed to limit impacts on the receiving waters and environment. When improvements are made to the treatment process, the dilution at the diffuser must be reviewed. This is the case at both the James River and Nansemond Treatment Plants due to the SWIFT process changes. A sophisticated computer model is used to anticipate the impacts to the environment as part of the plant improvements. This model is used to ensure HRSD meets all federal and state water quality requirements. This modeling effort is underway and will be used to address local water quality issues and make any needed diffuser improvements.

Financial Stewardship

- Capital Improvement Program (CIP) spending for the fourth month of FY2026 was above the planned spending target and annual spending is still above the planned CIP target for the FY.

CIP Spending ($M):

	Current Period	FYTD
Actual	52.12	232.76
Plan	46.30	175.20

- WQIF Grant applications have been made to the VDEQ for the following projects:
    - Boat Harbor Conveyance Project
    - James River ANRI & SWIFT Project
    - Nansemond ANRI Phase II

  It verify compliance during the application process, invoicing during design/construction and post-construction monitoring, HRSD will conduct an audit of this effort. SC&H will be working with numerous individuals here at HRSD who are engaged in the WQIF Grant process. We expect to learn lessons to be more efficient, address any shortcomings to improve future applications and to stay in compliance with VDEQ requirements.

Talent

- Staff retention and recruitment remain significant priorities for the Engineering Division. Four open positions are needed to fully staff the Engineering Division including:
    - Director of Design& Construction – Special Projects
    - Director of Program Support Office (PSO)
    - Hydraulic Analysis Manager
    - Condition Assessment Inspector

  These opportunities are due to promotions and newly created positions. Interviews are scheduled in the month of December for the Condition Assessment Inspector and we expect to fill the remaining open positions in the coming months.

- HRSD formed an in-house team over a year ago to study ways to improve the delivery and processes surrounding the CIP. One result of this study was the recommendation to form a Program Support Office (PSO) within the Engineering Division. Two new positions have been proposed to staff this new department. The Director of PSO will be selected first to stand up this new group and begin needed efforts defined in the study.

Community Engagement

- HRSD has been engaged and spoken on an annual basis at the National Association of Black Women in Construction's "Billion Dollar Lunch". This virtual event allows public sector Owners to present their CIP initiatives to members of this national organization. This group has as their focus to better engage underserved firms anxious to do business in the construction industry. This virtual meeting is one way to make needed contacts to engage with large CIP efforts from some of the largest Owners in the country including DC Water, WSSC, Charlotte Water and HRSD.

- HRSD's CIP projects often have a significant impact to the region but often have local impacts on the neighborhoods where the specific project will be constructed. HRSD and

our consultants often present at local civic league meetings to inform citizens of upcoming work. A result example is our presentation at the Lafayette Winona Civic League Meeting to discuss the Luxembourg Avenue Pump Station Replacement and associated gravity sewer construction efforts. These presentations allow citizens to understand the upcoming work and ask questions of staff and our consultants/contractors. We also highlight the importance of needed pre-construction inspections to verify the condition of certain properties that could be negatively impacted by the work. These inspections safeguard the interests of both residents and HRSD to clearly define if damages do occur during construction.

Innovation

- HRSD has been working in coordination with the Southeastern Public Service Authority (SPSA) to address landfill leachate concerns. The SPSA Landfill in Suffolk sends leachate to the local sewer system that ultimately is delivered to the Nansemond Treatment Plant. Due to concerns with constituents within the leachate impacting the SWIFT Process, additional pre-treatment options are needed. The solution to this concern was the installation of an evaporator system at the SPSA Suffolk Landfill. Evaporating waste streams at industrial sites is a fairly unique treatment process and HRSD is a financial partner in this effort. The new evaporator system will be complete in the coming months and HRSD staff recently toured this new facility.

- Innovation is a pillar of HRSD's Strategic Plan. Innovation is important but sharing these successful efforts is equally valuable. HRSD recently met with staff from DC Water to share our experiences related to the SWIFT Program. DC Water is considering a similar initiative to provide reclaimed water in the D.C. Region to improve sustainable water resources into the future. Open knowledge sharing is a core focus of HRSD and we often reach out to other organizations to learn from their innovative efforts.

Bruce W. Husselbee

Bruce W. Husselbee, PhD, P.E., BCEE, DBIA

TO: General Manager/CEO

FROM: Deputy General Manager and Chief Financial Officer

SUBJECT: Monthly Report for November 2025

DATE: December 8, 2025

Financial Stewardship

Debt and Grants Management

HRSD's variable rate debt program was nationally recognized by DA Davidson as the top-performing self-liquidity portfolio in the country, reinforcing the Division's commitment to securing the lowest cost of capital.

HRSD received a $67 million reimbursement for the Boat Harbor conveyance grant, as well as State Water Control Board approval for a $60 million Clean Water Revolving Loan Fund programmatic loan.

Accounting & Interim Financial Reports

Staff, along with representatives from Cherry Bekaert, the Commission's independent audit firm, met with the Finance Committee to review the Annual Comprehensive Financial Report, which was accepted and presented at the November 18 Commission meeting. The auditors outlined their audit process and confirmed that there were no disagreements with management, no reportable deficiencies, and that they issued an unmodified (clean) audit opinion.

The Operating Fund Interim Financial Report shows that both revenues and expenses are generally tracking with the adopted budget. Although billed consumption, HRSD's largest revenue driver, continues to fall short of budgeted expectations, the gap has been steadily narrowing each month. Staff continue to believe this shortfall is temporary, primarily due to meter-reading staffing shortages and ongoing meter upgrades or replacements by several major locality partners across the service area.

Summary of Billed Consumption (,000s ccf)

Month	FY2026 Cumulative Budget Estimate	FY2026 Cumulative Actual	% Difference From Budget	Cumulative FY2025 Actual	% Difference From FY2025	Cumulative 3 Year Average	% Difference From 3 Year Average
July	4,723	4,536	-3.9%	4,630	-2.0%	4,605	-1.5%
Aug	9,735	9,205	-5.4%	9,518	-3.3%	9,534	-3.4%
Sept	14,331	13,682	-4.5%	14,223	-3.8%	14,132	-3.2%
Oct	18,841	18,219	-3.3%	18,870	-3.4%	18,801	-3.1%
Nov	22,973	22,425	-2.4%	23,421	-4.3%	23,067	-2.8%
Dec	27,367	-	N/A	27,666	N/A	27,309	N/A
Jan	31,942	-	N/A	32,016	N/A	31,835	N/A
Feb	35,907	-	N/A	35,801	N/A	35,861	N/A
March	40,149	-	N/A	40,246	N/A	39,959	N/A
Apr	44,110	-	N/A	44,404	N/A	44,064	N/A
May	48,484	-	N/A	48,830	N/A	48,554	N/A
June	53,000	-	N/A	53,606	N/A	53,120	N/A

Strong investment performance and the continued availability of invested bond proceeds are bolstering interest income, which has already reached 82 percent of the annual budgeted amount.

Capital spending remains active with more than $316 million in cash disbursements made this fiscal year.

Customer Care

Staff believe that the recent increase in past-due account balances, particularly in the 31–90-day categories, is largely the result of short-term impacts from the federal government shutdown. Staff continue to monitor these trends closely and provide assistance to affected customers. Due to the shutdown, field activity was intentionally limited: 6,326 warning door tags were delivered, but only 20 water service disconnections occurred, reflecting management's decision to pause most service severance actions during this period.

A. Entity Wide Interim Financial Report & Summary of Reserves

Hampton Roads Sanitation District
Interim Financial Report
Funds Analysis
For the Period Ending November 30, 2025

	Operating Fund	Capital Fund	Total
Inflows			
Wastewater Treatment Charges	$ 205,025,696	$ -	$ 205,025,696
Interest Income	8,353,683	960,060	9,313,743
Grants	-	67,001,733	67,001,733
Debt Issuances	-	287,390,455	287,390,455
Transfers-In	-	72,125,560	72,125,560
Total Inflows	213,379,379	427,477,808	640,857,187
Outflows			
Operational	100,180,836	-	100,180,836
Debt Service	50,898,434	-	50,898,434
Capital	-	316,359,201	316,359,201
Transfers-Out	72,125,560	-	72,125,560
Total Outflows	223,204,830	316,359,201	539,564,031
Net Change in Reserves	(9,825,451)	111,118,607	101,293,156
Beginning Reserves	287,822,081	315,786,765	603,608,846
Ending Reserves	**$ 277,996,630**	**$ 426,905,372**	**$ 704,902,002**
Ending Reserves Summary			
Unrestricted			
General	$ 235,937,632	$ -	$ 235,937,632
Risk	4,799,555	-	4,799,555
PayGo	-	224,801,482	224,801,482
Total Unrestricted Reserves	240,737,187	224,801,482	465,538,669
Restricted			
Debt Service	37,709,000	-	37,709,000
Bond Proceeds	-	201,654,333	201,654,333
Total Ending Reserves	**$ 278,446,187**	**$ 426,455,815**	**$ 704,902,002**

Notes to Entity Wide Interim Financial Report and Summary of Reserves

The Entity Wide Interim Financial Report and Summary of Reserves summarizes the results of HRSD's operations and capital improvements on a basis of accounting that differ from generally accepted accounting principles. Revenues are recorded when received and expenses are generally recorded when paid. No provision is made for non-cash items such as depreciation and bad debt expense.

Reserves represent the balance of HRSD's cash and investments classified into functional purposes.

B. Operating Fund Interim Financial Report - Budget to Actual

Hampton Roads Sanitation District
Operating Fund Interim Financial Report
Budget to Actual
For the Period Ending November 30, 2025

	Amended Budget	Current YTD	Current YTD as % of Budget (42% Budget to Date)	Prior YTD as % of Prior Year Budget
Operating Revenues				
Wastewater	$ 486,718,000	$ 202,359,097	42%	44%
Surcharge	1,568,000	616,411	39%	53%
Indirect Discharge	3,526,000	2,123,991	60%	46%
Fees	4,560,000	2,018,175	44%	51%
Municipal Assistance	734,000	330,279	45%	36%
Miscellaneous	808,000	82,691	10%	34%
Total Operating Revenue	497,914,000	207,530,644	42%	44%
Non Operating Revenues				
Facility Charge	6,620,000	3,191,530	48%	47%
Interest Income	11,500,000	9,484,739	82%	150%
Other	1,545,000	708,222	46%	129%
Total Non Operating Revenue	19,665,000	13,384,491	68%	103%
Total Revenues	517,579,000	220,915,135	43%	46%
Transfers from Reserves	26,039,871	10,849,946	42%	42%
Total Revenues and Transfers	$ 543,618,871	$ 231,765,081	43%	46%
Operating Expenses				
Personal Services	$ 86,931,718	$ 35,719,813	41%	41%
Fringe Benefits	31,351,107	12,485,659	40%	37%
Materials & Supplies	16,542,501	5,598,092	34%	34%
Transportation	2,679,992	712,435	27%	32%
Utilities	18,037,260	6,249,378	35%	36%
Chemical Purchases	19,158,847	5,618,254	29%	33%
Contractual Services	62,040,179	17,665,312	28%	28%
Major Repairs	18,968,701	4,290,830	23%	17%
Capital Assets	2,280,197	851,043	37%	8%
Miscellaneous Expense	4,527,025	1,903,015	42%	55%
Total Operating Expenses	262,517,527	91,093,831	35%	34%
Debt Service and Transfers				
Debt Service	108,000,000	50,898,434	47%	51%
Transfer to CIP	173,101,344	72,125,560	42%	42%
Total Debt Service and Transfers	281,101,344	123,023,994	44%	45%
Total Expenses and Transfers	$ 543,618,871	$ 214,117,825	39%	40%

Notes to Operating Fund Interim Financial Report – Budget to Actual

The Operating Interim Financial Report – Budget to Actual is intended to summarize financial results on an accounting basis similar to the Annual Operating Budget. The basis of accounting differs from generally accepted accounting principles and from the Entity Wide Interim Financial Report. Revenues are recorded on an accrual basis, whereby they are recognized when billed, and expenses are generally recorded on a cash basis. No provision is made for non-cash items such as depreciation and bad debt expense.

C. Capital Fund – Project Length Summary of Activity

HRSD-PROJECT ANALYSIS **October 31, 2025**

Classification/ Treatment Service Area	Appropriated Funds	Project to Date Expenditures	Encumbrances	Available
Administration	$ 130,531,101	$ 52,044,907	$ 68,025,933	$ 10,460,261
Army Base	171,571,945	131,414,716	7,938,483	32,218,746
Atlantic	226,701,479	54,606,129	50,200,362	121,894,988
Boat Harbor	507,355,299	359,654,163	92,399,550	55,301,586
Ches-Eliz	29,279,118	14,195,661	1,593,412	13,490,045
Eastern Shore	63,870,076	46,222,892	1,956,456	15,690,728
James River	365,414,716	296,105,979	36,723,177	32,585,560
Middle Peninsula	98,199,389	22,841,369	7,682,516	67,675,504
Nansemond	538,267,185	362,552,024	118,777,308	56,937,853
Surry	57,978,543	50,876,846	2,353,868	4,747,829
VIP	321,078,690	133,886,254	92,818,699	94,373,737
Williamsburg	104,425,475	8,775,759	5,937,919	89,711,797
York River	115,439,557	71,968,830	10,897,427	32,573,300
General	1,685,276,072	592,137,322	723,783,956	369,354,794
	$ 4,415,388,645	$ 2,197,282,851	$ 1,221,089,066	$ 997,016,728

D. Summary of Debt Activity

HRSD- Debt Analysis — **November 30, 2025**

(in thousands)	Fixed Rate	Variable Rate	Line of Credit	Total
Beginning Balance 7/1/25	$ 1,757,250	$ 50,000	$ 92,462	$ 1,899,712
Add:				
Principal Draws	282,956	-	-	282,956
Capitalized Interest	3,829	-	-	3,829
Less:				
Principal Payments	(31,217)	-	-	(31,217)
Ending Balance 10/31/25	$ 2,012,818	$ 50,000	$ 92,462	$ 2,155,280
FY26 YTD Interest Payments	$ (17,702)	$ (512)	$ (1,467)	$ (19,681)

HRSD- Series 2016 Variable Rate Bond Analysis — **November 28, 2025**

	SIFMA Index	HRSD Series 2016VR	Deviation to SIFMA
Maximum	4.71%	4.95%	0.24%
Average	1.57%	1.06%	-0.51%
Minimum	0.01%	0.01%	0.00%
As of 11/28/25	2.79%	2.85%	0.06%

Since October 20, 2011 HRSD has averaged 106 basis points on Variable Rate Debt

Subsidised Debt Activity

Source	Funder	Loan Amount	Current Drawn Total	% Remain	Initial Draw Date - Projected
WIFIA Tranche 3	EPA	$ 346,069,223	$ -	100%	July 2026

E. Cash and Investment Summary

Operating Liquidity Accounts	Beginning Market Value July 1, 2025	YTD Contributions	YTD Withdrawals	YTD Income Earned	Ending Market Value Nov 30, 2025	Allocation of funds	Current Mo Avg Yield
BOA Corp Disbursement Account	$ 43,574,043	$ 627,259,699	$ 660,336,505	$ 182,800	$ 10,680,037	1.7%	1.71%
BOA Operating Accounts	14,339,684	516,353,151	517,338,069	105,528	13,460,294	2.1%	0.78%
BNY Mellon Account	7,892,401	32,414,907	38,848,941	32,257	1,490,624	0.2%	2.16%
SNAP Accounts	143,929,872	228,294,383	171,080,424	960,060	202,103,891	31.9%	0.48%
VIP Stable NAV Liquidity Pool	324,275,659	248,096,072	173,000,000	6,876,408	406,248,139	64.1%	4.18%
Operating Liquidity Accounts	**$ 534,011,659**	**$ 1,652,418,212**	**$ 1,560,603,939**	**$ 8,157,053**	**$ 633,982,985**	100.0%	

VIP Stable NAV Liquidity Pool performed 0.02% above to the Va Local Government Investment Pool's (the market benchmark) in the month of November 2025.

Total Return Account	Beginning Market Value July 1, 2025	YTD Contributions	YTD Withdrawals	YTD Income Earned & Realized G/L	Ending Market Value Nov 30, 2025	Allocation of funds	Yield to Maturity at Market
VIP 1-3 Year High Quality Bond Fund	69,597,188	-	5,856	1,156,690	70,919,017	71,298,569	3.55%
Total Return Account	**$ 69,597,188**	**$ -**	**$ 5,856**	**$ 1,156,690**	**$ 70,919,017**	**$ 71,298,569**	

VIP 1-3 Year High Quality Bond Fund performed equal to the ICE BofA ML 1-3 yr AAA-AA Corp/Gov Index (the market benchmark) in November 2025.

	Total	Fund Alloc
Operating Liquidity Accounts	$ 633,982,985	89.9%
Total Return Account	$ 70,919,017	10.1%
TOTAL	**$ 704,902,002**	**100.0%**

F. Financial Performance Metrics Adjusted Days Cash on Hand

HRSD - UNRESTRICTED CASH — **November 30, 2025**

Can be used for any purpose since it is not earmarked for a specific use.

		Days Cash on Hand	Adjusted Days Cash on Hand
Total Unrestricted Cash	**$ 465,538,669**		**647**
Risk Management Reserve	(4,799,555)	(6)	641
Capital (PAYGO only)	(224,801,482)	(313)	328
Adjusted Days Cash on Hand	**$ 235,937,632**		**328**

Risk Management Reserve as a % of Projected Claims Cost is 25% YTD compared to 25% Policy Minimum
Adjusted Days Cash on Hand Policy Minimum is 270-365 days.

G. Summary of Grant Applications, Awards and Activity

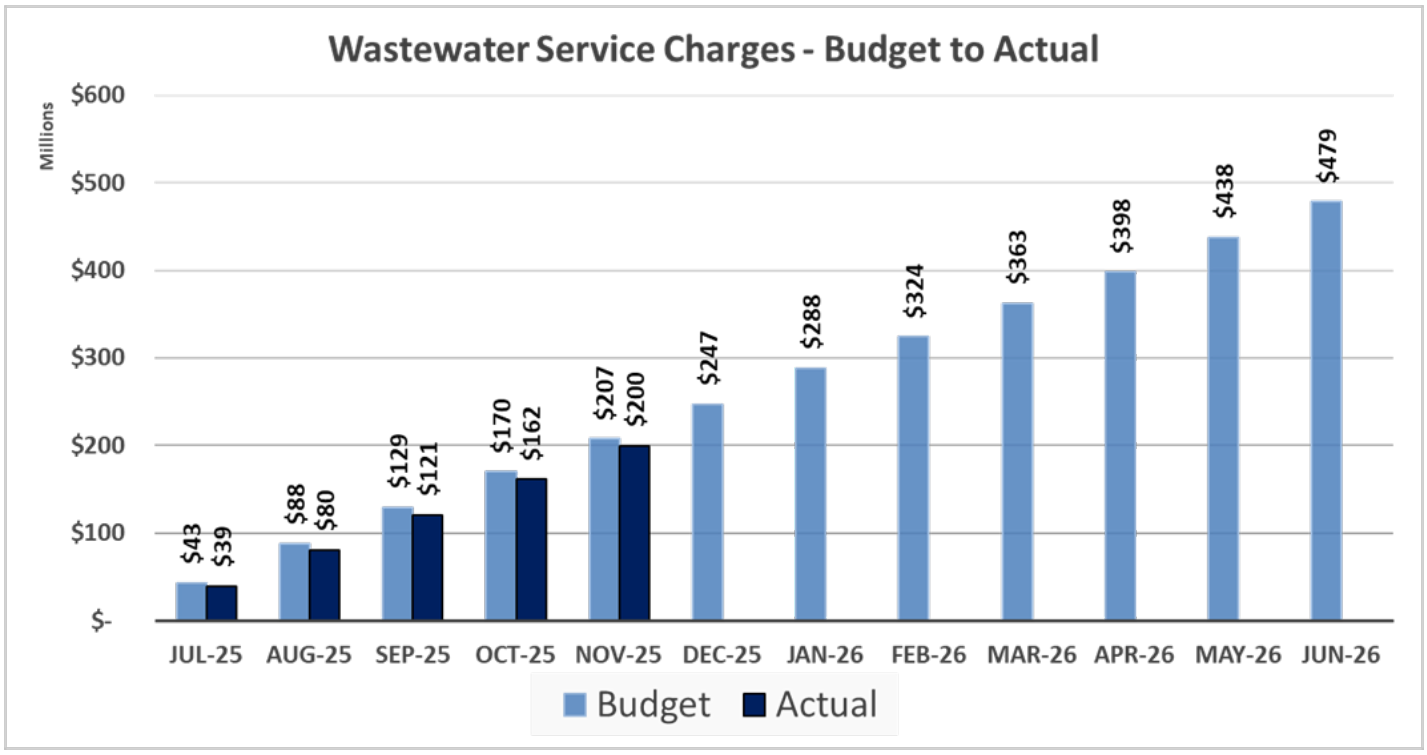
Active Capital Grants

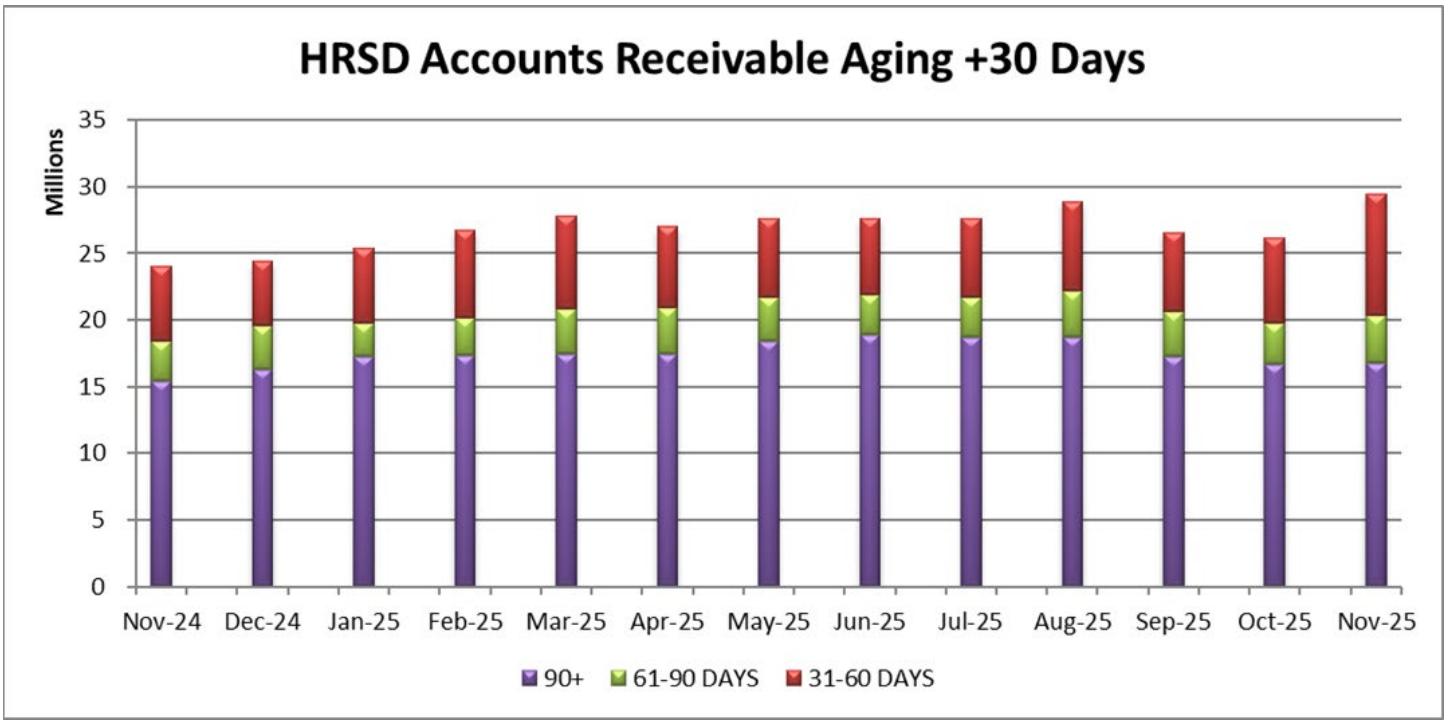
Grant Name	Funder	Project	CIP#	Application Submitte	Amount Requested	HRSD Award Amount	Reimbursement Rcvd 11/30/
Community Flood Preparedness Fund	VDCR	Dozier's Corner Pump Station Replacement	AT015400	12/4/2024	$ 6,265,669	$ 6,265,669	$ -
Community Flood Preparedness Fund	VDCR	Onancock Treatment Plant Administrative Building Design	ES010300	10/30/2024	$ 374,400	$ 374,400	$ -

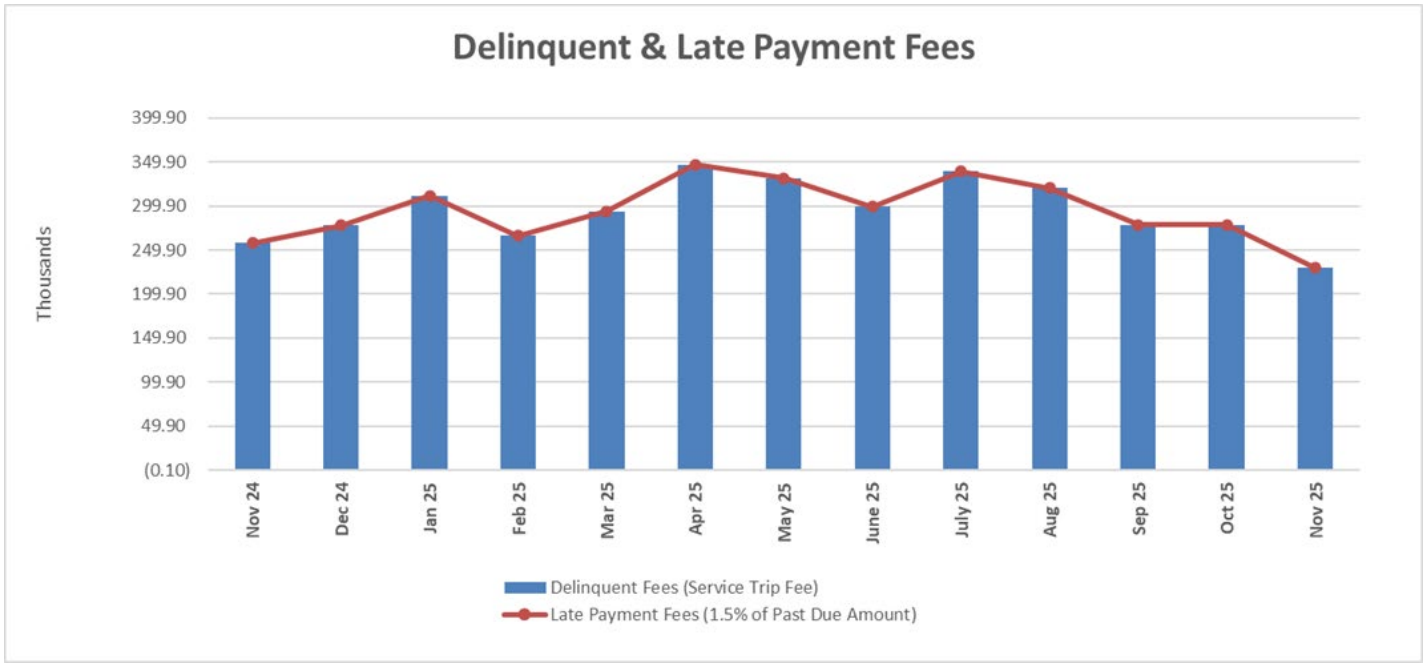
Active Non-Capital Grants

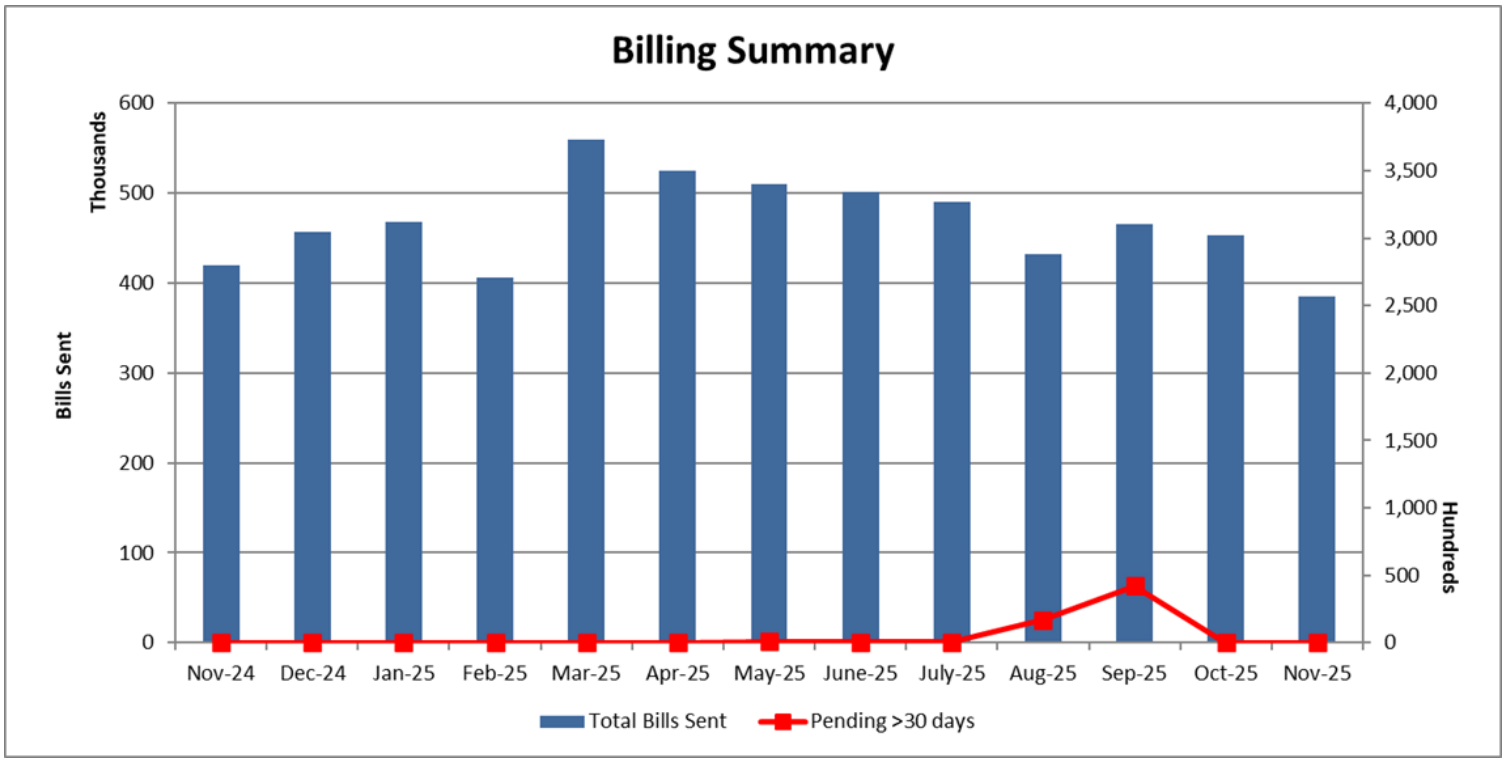
Grant Name	Funder	Project	CIP#	Application Submitted	Amount Requested	HRSD Award Amount	Reimbursement Rcvd 11/30/25
Non-Point Source Funding	VDEQ	Gloucester Septic to Sewer (Pay for Performance)	n/a	2/3/2024	$ 1,180,000	$ 1,180,000	$ -
					$ 1,180,000	**$ 1,180,000**	**$ -**

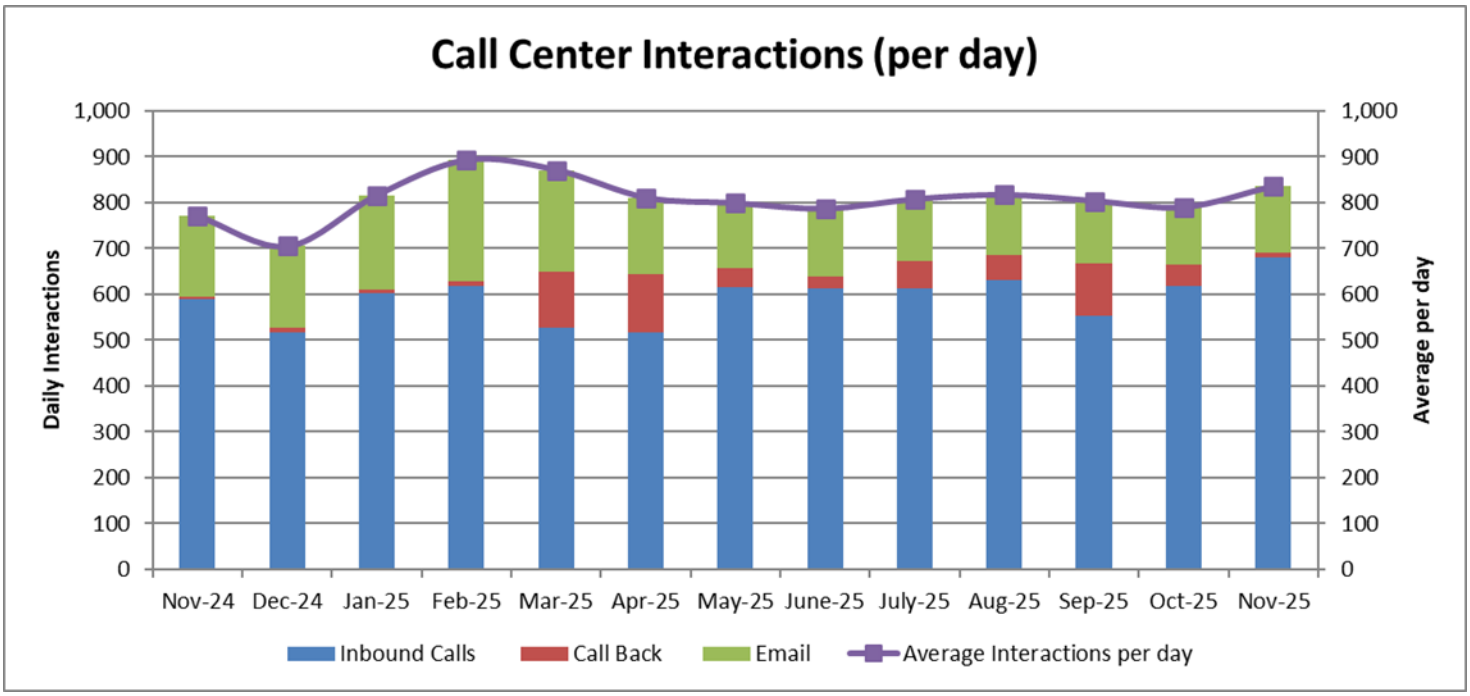
H. Customer Care Center – Key Statistics

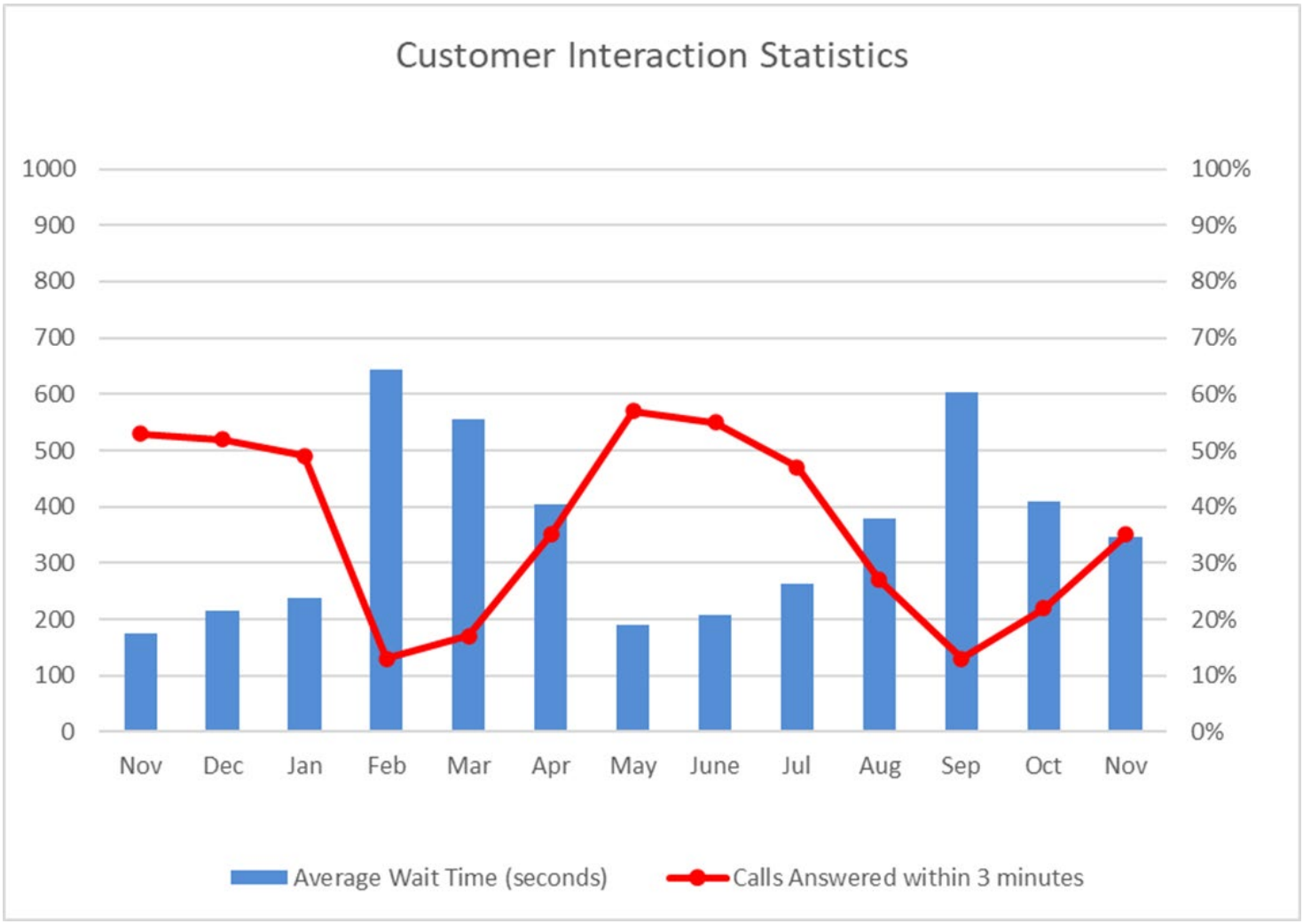




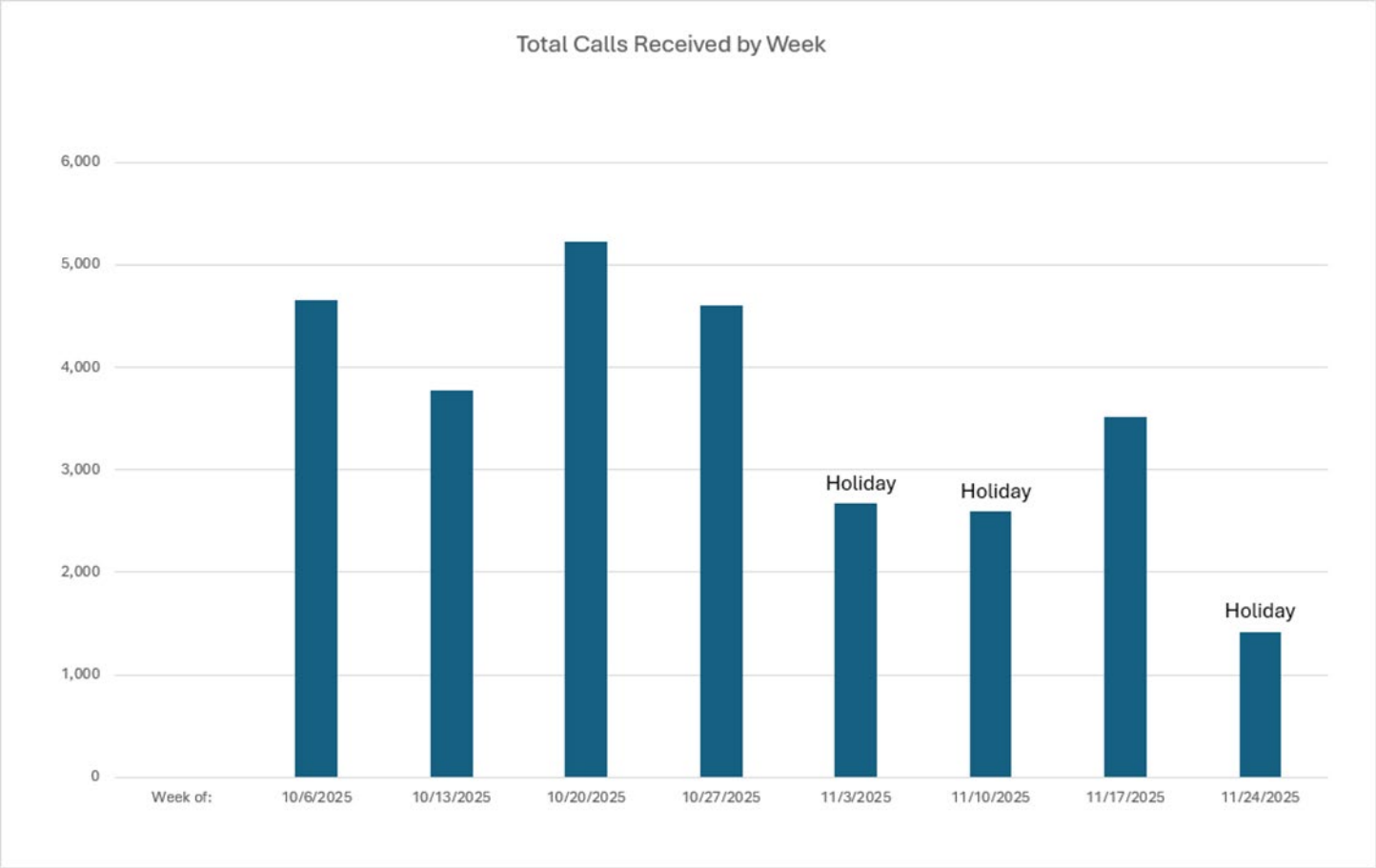

Delinquent & Late Payment Fees
Thousands
399.90
349.90
299.90
249.90
199.90
149.90
99.90
49.90
(0.10)
Nov 24
Dec 24
Jan 25
Feb 25
Mar 25
Apr 25
May 25
June 25
July 25
Aug 25
Sep 25
Oct 25
Nov 25
Delinquent Fees (Service Trip Fee)
Late Payment Fees (1.5% of Past Due Amount)


Billing Summary
Bills Sent
Thousands
600
500
400
300
200
100
0
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Hundreds
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
June-25
July-25
Aug-25
Sep-25
Oct-25
Nov-25
Total Bills Sent
Pending >30 days


Call Center Interactions (per day)
Daily Interactions
Average per day
1,000
900
800
700
600
500
400
300
200
100
0
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Apr-25
May-25
June-25
July-25
Aug-25
Sep-25
Oct-25
Nov-25
Inbound Calls
Call Back
Email
Average Interactions per day


Customer Interaction Statistics
1000
900
800
700
600
500
400
300
200
100
0
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Nov
Dec
Jan
Feb
Mar
Apr
May
June
Jul
Aug
Sep
Oct
Nov
Average Wait Time (seconds)
Calls Answered within 3 minutes

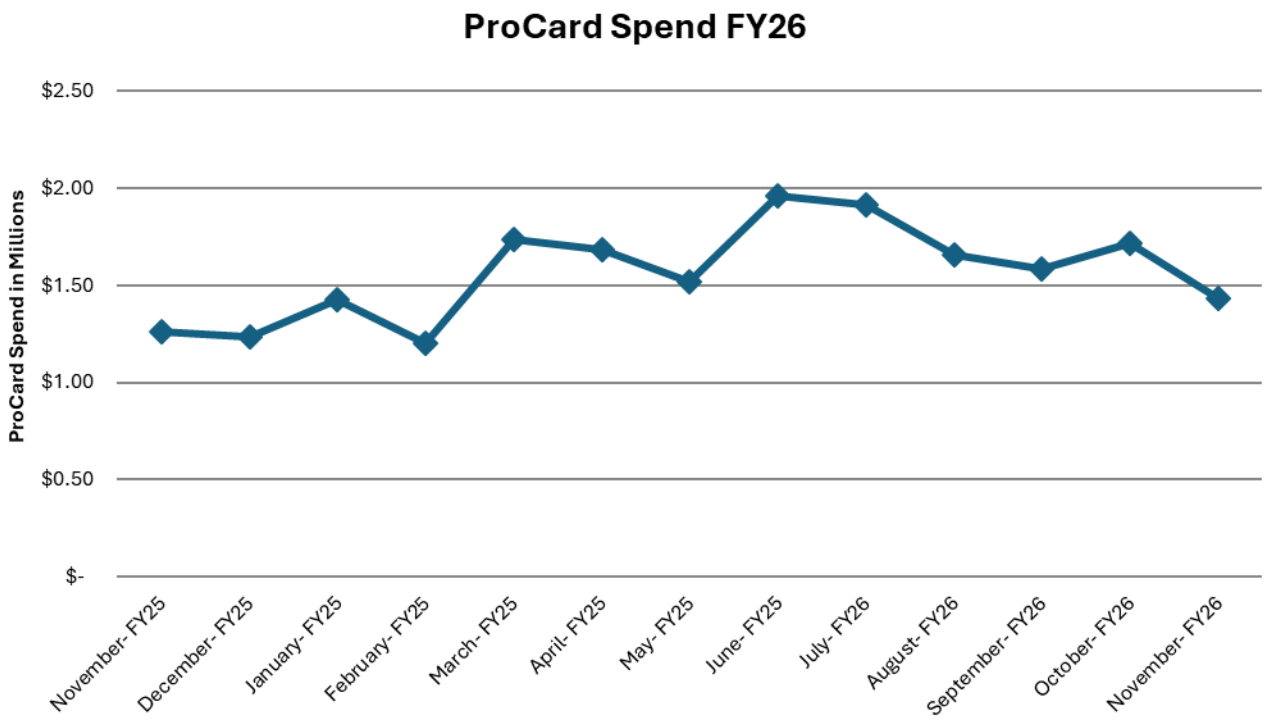
Customer Interaction Statistics	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov
Calls Answered within 3 minutes	53%	52%	49%	13%	17%	35%	57%	55%	47%	27%	13%	22%	35%
Average Wait Time (seconds)	176	214	237	643	556	403	190	208	262	379	604	409	346
Calls Abandoned	16%	19%	21%	45%	44%	30%	16%	19%	22%	28%	42%	33%	25%



Item #	Strategic Planning Measure	Unit	November 2025
	Accounts Receivable (HRSD)	Dollars	$62,057,081
	Aging Accounts Receivable	Percentage of receivables greater than 90 days	27.4%

I. Procurement Statistics

Savings	Current Period	FYTD
Competitive Savings[1]	$90,063	$3,251,953
Negotiated Savings[2]	$9,185	$14,760
Salvage Revenues	$9,676	$24,390
Corporate VISA Card - Estimated Rebate	$21,292	$123,635



Respectfully,

Steven G. de Mik

Steven G. de Mik
Deputy General Manager/Chief Financial Officer

TO: General Manager/ Chief Executive Officer

FROM: Chief Information Officer

SUBJECT: Information Technology Division (ITD) Report for November 2025

DATE: December 8, 2025

Innovation

The IT Help Desk processed 280 work orders and requests for assistance in November.

IT staff are currently working on 69 active projects, with 41 new projects on the intake cue.

Senior Systems Engineers completed upgrades to workstation endpoint management software and deployment of HRSD's new Virtual Private Network (VPN) appliance.

Senior Systems Engineers continued to work on Cisco equipment refreshes, Firewall replacements and retiring of old network hardware infrastructure. They also performed upgrades on several storage platforms, monitoring systems and firewalls.

New Server builds for the upcoming Sample Manager upgrade have been completed.

Senior Systems Engineers participated in planning meetings related to various construction projects at HRSD treatment plants and pump stations to provide input on technology items.

IT Operations staff worked on new fiber runs at the former Chesapeake-Elizabeth treatment plant and moving of technology equipment in preparation of the demolition of several structures at the plant site. This work is expected to continue over the next two months.

Linux Administrators continue to perform regular operating system patching to maintain current security baselines and mitigate vulnerabilities.

Linux Administrators continue their focused effort on operations efficiency, ensuring that automated processes remained reliable and performance across all environments were unaffected by security or platform updates.

Cybersecurity staff and Senior System Engineers continue their work with HRSD Operations staff in efforts to enhance security on operational technology systems.

ServiceNow project implementation workshops completed. System configuration is expected to begin in early December.

IT staff continue to engage in workshops related to Data Governance and Data Loss Prevention (DLP) with a heavy focus on Microsoft 365 Purview configurations.

Programming staff continue to work with Customer Care staff and the City of Portsmouth staff in ongoing stabilization of data being received from the City of Portsmouth's new billing system. Big improvements have been made in this effort over the past month.

Talent

Ms. Tina Nelson was selected for the Desktop Support Analyst – Telecommunications position. She will begin her new position in December 2025.

Roger Caslow, CISO, attended the Schneider Electric Innovation Summit. Mr. Caslow participated in a panel discussion with Pat Ford, Americas Cybersecurity VP & CISO for Schneider Electric, Kevin Morley, Federal Relations Manager for AWWA, Jennifer Walker, Director-WateriSAC. The topic discussed was "Security the Flow: Cyber Resilience for Water Utility of the Future".

I attended the Schneider Electric Innovation Summit and participated in a panel discussion on "Digital by Design: Building the Next-Gen Water Utility" with Hari Krup, CIO/CTO-Prince William Water, Darrell Eilts, CIO-Sewerage and Water Board of New Orleans, Alex Shannon, Senior Vice President-WSP, Greg Fischer-Executive Vice President of Operations Management, Facilities Services and Design-Build Americas-Jacobs Engineering and Sielen Namdar, Head of Water and Environment, US-Schneider Electric.

Recruiting efforts continue for the Senior Systems Engineer Manager, and Senior Systems Engineer – Systems Administration positions.

Respectfully,

Mary Corby
Chief Information Officer

TO: General Manager/Chief Executive Officer

FROM: Chief Operating Officer

SUBJECT: Operations Monthly Report for November 2025

DATE: December 08, 2025

Community Engagement

Staff participated in several community events as follows:

1. South Shore (SS) Interceptor Operations held locality collaboration meetings with the City of Chesapeake and Portsmouth Operations staff to discuss operational issues, initiatives, and projects.

2. On November 25, Ms. Mackenzie Rickard, Engineering Specialist with SS Interceptor Operations, gave a virtual presentation on career opportunities in the water sector to Herbert J. Saunders Middle School in Prince William County, in cooperation with the Career Investigations Team, the Virginia Water Environment Association (VWEA), and the Virginia Section of the American Water Works Association (VA AWWA).

Environmental Responsibility

Treatment and Interceptor System Reportable Items:

There were multiple events reported this month. Additional details are available in the Air and Effluent Summary in the Water Quality monthly report.

Internal Air and Odor Compliance:

There were multiple events reported this month. Additional details are available in the Air and Effluent Summary in the Water Quality monthly report.

1. The James River Treatment Plant (JRTP) had five odor scrubber exhaust exceptions for scrubber hydrogen sulfide (H_2S) levels above two parts per million. One exception occurred due to the installation of a new odor scrubber pump. Two were caused by control interruption related to upgrades as part of the overall plant Automation Upgrade Project. One resulted from a loss of power to the odor control system during operation of the new emergency generators. The final exception was due to a planned loss of power to the chemical feed pumps while connecting to the new advanced nutrient removal south electrical building.

2. The Williamsburg Treatment Plant had one odor scrubber exhaust exception for scrubber H_2S levels above eight parts per million due to higher-than-normal odor scrubber influent H_2S levels. Chemical feed to the scrubber was increased to reduce the effluent H_2S levels.

3. The Virginia Initiative Plant (VIP) had one event in which the total hydrocarbon (THC) monitor failed to record two valid THC readings per hour due to an analyzer sample pump malfunction.

4. The York River Treatment Plant (YRTP) had one odor scrubber exhaust exception for scrubber H_2S levels above two parts per million due to a planned power outage to perform electrical maintenance.

5. Atlantic Treatment Plant (ATP) received six odor complaints in November, with the meteorological conditions being unfavorable on those days. The most likely source for the odor complaints was digester gas and related high gas pressure alarms. Staff adjusted the regulators at the flares to help regulate pressure, and operators drained condensate on a regular basis. This odor source should be resolved through a capital improvement program (CIP) project, with the installation of new gas flares, and new digester covers.

Additional Topics of Interest:

1. For the Advanced Nutrient Removal Improvements (ANRI) and Sustainable Water Initiative for Tomorrow (SWIFT) Project, work on the ANRI side focused on laying pipe and connecting the junction-splitter box to the contact tanks. On the SWIFT side, crews continued installing piping, conduit, wire, duct, and instrumentation in SWIFT Buildings #1 and #2. Pipe and floor coating in both buildings were also completed. Sandblasting of the flocculation-sedimentation tanks canopy began in preparation for coating. Final testing of the methanol fire suppression system was completed. Work continued on all ten well buildings, including installation of under slab piping and conduit, construction building foundations, erection of structural components, and interior finishing.

2. Electrical and Instrumentation (E&I) staff, in coordination with consultants AECOM and HDR, and Dominion Energy (DE) staff were onsite for witness testing of the paralleling system at JRTP. This system allows the plant's generators to synchronize with the utility company for a designated period and is part of the interconnection agreement with DE. The system performed as designed, and DE will issue a Notice to Operate.

3. The total volume of SWIFT recharge into the Potomac aquifer for the month of November was 11.79 million gallons (MG) (42.3 % Recharge Time based on 650gpm).

4. A contractor vehicle drove over a square manhole cover, causing it to flip up and fall into the communications duct bank, damaging fiber optic cables used for HRSD Wide Area Network (WAN) and Plant Distributed Control System (DCS) communication at ATP. The HRSD WAN fibers were damaged, resulting in a loss of connectivity to the Dewatering Building. E&I staff temporarily restored service by locating a functioning fiber pair, however, the connection later failed again. On November 14, HRSD Informational Technology (IT) and E&I staff met Shorecom, a fiber contractor, to inspect and plan next steps. The current plan is to replace the entire 900 foot fiber cable. IT is coordinating this effort, with E&I staff supporting as needed alongside Shorecom.

5. Small Communities Department (SCD) staff performed a full Clean-in-Place with both citric and hypochlorite on train one at the King William Treatment Plant (KWTP). The plant is operating at or above 100% of its design flow rate, requiring staff to perform special maintenance and cleaning activities to keep the treatment plant operating properly under the high flow conditions. A CIP project will replace the existing membranes with a new Kubota Membrane System in early 2026.

6. North Shore (NS) Interceptor Operations staff continues to assist and lead the development of functional descriptions, graphics, and controls testing for both Boat Harbor Pump Station (PS) and Tabb Pressure Reducing Station and Off-Line Storage Tank facilities. These large-scale projects are anticipated to be completed in early 2026. Efforts to minimize the operational learning curve are currently underway as part of the factor demonstration testing.

7. On November 19, SS Interceptor Operations supported Norfolk Naval Operating Base (NOB) with the installation of a new manhole adjacent to the HRSD Taussig Avenue PS. Staff operated the station to reduce the wet well level to allow Navy staff to complete the work.

Financial Stewardship

1. On November 12, SS Interceptor Operations partnered with NTP staff to clean the Regional Residuals Facility (RRF) removing approximately five cubic yards of material from the grit traps and bar screen trough to maintain peak operating efficiency. By working together and utilizing internal resources, this effort resulted in daily cost savings of approximately $5,000.

2. The Machine Shop (MS) completed 15 work orders in November, including two full pump rebuilds, and a rapid emergency valve operator repair that restored service within one week, avoiding costly replacement and extended downtime. This successful rebuild prompted SS Interceptor Operations to stock multiple spare gearboxes for proactive future repairs, reducing risk and long-term costs. The shop also completed fabricating an eye wash / shower station for the Technical Services Department avoiding third party expenses and project delays.

Innovation

1. Wastewater alkalinity enhancement (WAE) offers a potential strategy for reducing carbon dioxide (CO2) emissions by converting dissolved CO2 into bicarbonate, thus preventing its volatilization. These carbon credits have value in the voluntary markets, and agreements are in progress to monetize this for HRSD. Calcium carbonate (CaCO3) is a low-cost alternative, although its slower dissolution rate limits its effectiveness. Improvements in retention may allow CaCO3 more time to dissolve fully. HRSD is investigating whether pairing CaCO3 addition with hydrocyclones (inDENSE) at the Army Base Treatment plant improves the effectiveness of CaCO3 as a viable option for WAE. Preliminary results suggest that CaCO3 addition can be a viable solution not only for reducing CO2 volatilization from biological treatment at WRRFs but also for improving process stability and settling behavior.

2. SCD Eastern Shore Staff developed a new setup for the Onancock Treatment Plant's bio system, utilizing a portable pump and installed piping to allow for a faster and easier cleaning process. The new piping will also be utilized as a suction header during dewatering.

3. NS Interceptor Operations continued to make progress on the addition of an odor control system and flow augmentation changes for Lodge Road PS. These are in-house HRSD projects being constructed by NS Interceptor Operations staff.

Talent

1. At YRTP plant operator Ms. Crystal Culbreth obtained her Class 3 Virginia Wastewater Works License.

2. Mr. Jason Hobor, Plant Operator at VIP, was promoted to a Lead Operator for the ONTP on the Eastern Shore.

3. Mr. Jeremiah Burford, SCD Operations Manager, passed his Professional Engineering Exam.

4. NS Interceptors Operations bids a fond farewell and would like to congratulate Mr. Mike Johnson, Operations Manager, on his new role with the City of Portsmouth as the Director of Public Utilities.

5. NS Interceptors Operations bids a fond farewell and would like to congratulate Mr. Leon Graves on his retirement after 36+ years of dedicated HRSD service.

6. SS Interceptor Operations welcomed Mr. Spencer Wise, Maintenance Assistant, on November 10 and Mr. Chris Blanchard, Maintenance Technician, and Mr. Anthony East, Maintenance Technician, on November 24.

7. SS Interceptor Operations has promoted Mr. Brandan Hallman from Maintenance Operator to Maintenance Technician on November 1.

Respectfully submitted,

Eddie M. Abisaab, PE, PMP, ENV SP
Chief Operating Officer

Attachment: MOM Reporting

MOM Reporting Numbers

MOM #	Measure Name	Measure Target	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
2.7	# of PS Annual PMs Performed (NS)	37	3	2	3	4	1							
2.7	# of PS Annual PMs Performed (SS)	53	3	3	3	1	2							
2.7	# of Backup Generator PMs Performed	4.6	11	14	14	24	7							
2.8	# of FM Air Release Valve PMs Performed (NS)	234	307	401	318	362	217							
2.8	# of FM Air Release Valve PMs Performed (SS)	1,550	232	58	147	90	39							
2.9	# of Linear Feet of Gravity Clean (NS)	2,417	4,434	3,606	3013	2246	5828							
2.9	# of Linear Feet of Gravity Clean (SS)	2,417	1,070	1112	1774	171	1400							

TO: General Manager
FROM: Chief People Officer
SUBJECT: Talent Management Monthly Report for October 2025
DATE: November 10, 2025

Talent

In November, HRSD's Human Resources (HR), Learning and Development (L&D) and Safety and Security (S&S) teams advanced major organizational priorities through active recruitment, policy updates, and employee development efforts. HR launched new hiring campaigns, continued revising key policies, and evaluated Oracle Cloud capabilities. L&D supported strategic planning, strengthened workforce programs, and earned national recognition for its Career Pathways initiative. S&S completed comprehensive inspections, expanded training, enhanced physical security measures, and reported zero injuries requiring medical attention.

Human Resources (HR)

Talent Acquisition

- Launched **11 new recruitment campaigns**.
- Secured **18 accepted job offers**.

Policy Review & Development

- Advanced review and revision of key HRSD policies:
  - Corrective Action
  - Progressive Discipline
  - Grievance Procedures

Technology & Systems Review

- Participated in Oracle Cloud platform demonstration to:
  - Assess capabilities
  - Evaluate alignment with organizational needs
  - Determine ability to address current system gaps

Wellness Program Engagement

- Continued increase in employee participation.
- Program offerings remain active and well-received, including:
  - Plan education

    - Wellness presentations
    - Individual and group coaching
    - Virtual guided meditation sessions

Learning & Development (L&D)

Strategic Planning & Collaboration

- Focused on strategic planning and platform development.
- Collaborated across departments to support upcoming initiatives and long-term workforce objectives.
- Participated in Oracle Cloud Demo Day to explore:
    - Process efficiencies
    - Workflow integration opportunities

Employee Development & Presentation Support

- Partnered with Toastmasters SpeakEasy Club to host a presentation practice session for the LAMA cohort, providing:
    - Structured coaching
    - Targeted practice for capstone presentations

Programs & Outreach

- Hosted ATP's SPARC Session and participated in a work center presentation to highlight current programs and future opportunities.
- Participated in ATP facility tour with City of Virginia Beach Public Works Academy students.

Apprenticeship Program

- **13 classes in progress**.
- **166 total enrollments** this term.
- **124 active, registered apprentices**.
- Additional apprentices scheduled for the next enrollment day.

Career Pathways Program

- Awarded the **NACWA Workforce Development Award** for excellence in workforce growth and career advancement.
- November outcomes:
    - **7 new participants** welcomed

- **4 employee promotions** celebrated

Safety and Security

Safety Division

Inspections & Field Support

- Conducted **three unscheduled safety inspections** within the Operations Division — all satisfactory.
- Completed inspections of all **North Shore and South Shore pump stations** — no discrepancies.
- Continued contractor support through:
  - Safety briefings
  - Weekly construction safety walks
  - Hot work permits

Safety Training

- Delivered **14 tailored safety training sessions** across various work centers.
- Developed new training modules within Cornerstone (LMS):
  - Pilot module ready for testing
  - Rollout delayed due to back-end issues related to new employee setup
  - Coordinating with L&D to resolve issues before testing

Security Division

Physical Security Enhancements

- Added additional **HRSD private property signs** at treatment facilities including:
  - Atlantic Treatment Plant
  - Nansemond Treatment Plant
- Additional sign placements scheduled for remaining facilities.

Procurement & Technology Initiatives

- Continued follow-up on procurement for Body-Worn Cameras.
- iLOQ contract nearing finalization.
- Scheduled meeting with Motorola to discuss new physical security software.
- Met with Security 101 regarding grant options for new security equipment.

Policy & Administrative Improvements

- Created an **Unauthorized Visitor Response policy**.
- Developed a new incident report format aligned with Safety department standards.

November Incident Summary	
Event	**Count**
Auto accident/property damage incident	**3**
Work-related injuries requiring medical attention	**0**
Accident resulting in lost time	**0**

Respectfully submitted,

Christina Gibson

Chief People Officer

TO: General Manager/ Chief Executive Officer

FROM: Chief of Water Quality (CWQ)

SUBJECT: Monthly Report for November 2025

DATE: December 3, 2025

Environmental Responsibility

HRSD's Regulatory Activities:

- Monthly Discharge Monitoring Report (DMR) Summary and Items of Interest: Effluent and Air Emissions Summary.
- 6 Permit Exceedances out of 23,277 Total Possible Exceedances to date in FY2026.
- 72.3 million pounds of pollutants removed to date in FY2026.
- A draft Central Middlesex permit was received on November 5, with owner comments submitted on November 20.

Pretreatment and Pollution Prevention (P3) Program Highlights:

- No civil penalties were issued in November.

Environmental and Regulatory Advocacy

Chief participated in the following advocacy and external activities:

- Chesapeake Bay Total Maximum Daily Load (TMDL) tracking team, comprised of representatives from Virginia, Maryland and DC and hosted by AquaLaw.
- National Association of Clean Water Agencies (NACWA) fall leadership meeting for board members and committee chairs. Also attended NACWA's Clean Water Law and Enforcement Symposium, participating on a panel discussing regionalization experiences.
- Water Quality representatives provided the Rappahannock River Basin Commission's Technical Committee a presentation on biosolids research occurring in Virginia.

Financial Stewardship

- HRSD's Municipal Assistance Program (MAP)
    - Provided sampling and analytical services on a cost-reimbursement basis to the following:
        - Northumberland County
        - Westmoreland County

Talent

- The quarterly Water Quality Uncovered included a presentation from Kerri Williams on the laboratory's history, organizational structure, and capabilities.
- Jack Denby was promoted to Director of Quality Assurance, forming a new Department within Water Quality focused on advancing quality system implementation throughout the Water Quality workcenters and HRSD's wastewater treatment facilities.

Community Engagement

- Microbial Source Tracking (MST) partnering localities and projects.
    - City of Chesapeake (Southern Branch)
    - City of Hampton (southeast)
    - City of Newport News (Hilton Beach)
    - City of Suffolk (downtown)
    - City of Virginia Beach (Thalia Creek)
    - James City County

Respectfully submitted,

Jamie Heisig-Mitchell
Chief of Water Quality

EFFLUENT SUMMARY FOR NOVEMBER 2025

PLANT	FLOW mgd	% of Design	BOD mg/l	TSS mg/l	FC #/UBI	ENTERO #/UBI	TP mg/l	TP CY Avg	TN mg/l	TN CY Avg	CONTACT TANK EX
ARMY BASE	8.49	47%	3	2.6	2	2	0.20	0.34	3.5	4.8	19
ATLANTIC	43.32	80%	11	11	2	<1	NA	NA	NA	NA	6
BOAT HARBOR	10.07	40%	5	5.4	7	1	0.27	0.67	12	19	3
CENT. MIDDLESEX	0.015	61%	<2	<1.0	<1	<1	NA	NA	NA	NA	NA
JAMES RIVER	10.66	53%	5	4.3	1	5	0.45	0.71	6.8	7.2	11
KING WILLIAM	0.098	98%	<2	<1.0	NA	<1	0.044	0.14	1.9	3.0	NA
NANSEMOND	15.76	53%	5	5.4	4	14	1.5	1.5	4.1	5.0	9
ONANCOCK	0.245	33%	<2	0.13	1	7	0.63	0.23	3.4	2.8	NA
CHINCOTEAGUE (SB)	0.012	31%	<2	7.5	6	2	NA	NA	NA	NA	0
URBANNA	0.049	49%	6	13	4	6	5.7	4.9	21	18	NA
VIP	25.21	63%	2	1.7	1	4	0.20	0.57	3.3	4.6	2
WEST POINT	0.273	46%	14	21	1	1	1.4	2.3	21	16	0
WILLIAMSBURG	7.75	34%	7	3.3	2	2	0.42	0.61	2.8	2.9	28
YORK RIVER	10.97	73%	3	0.40	1	<1	0.094	0.39	8.4	4.4	8
	132.94										

	% of Capacity
North Shore	48%
South Shore	65%
Small Communities	39%

AIR EMISSIONS SUMMARY FOR NOVEMBER 2025

	No. of Permit Deviations below 129 SSI Rule Minimum Operating Parameters							Part 503e Limits		
MHI PLANT	Temp 12 hr ave (F)	Venturi(s) PD 12 hr ave (in. WC)	Precooler Flow 12 hr ave (GPM)	Venturi Flow 12 hr ave (GPM)	Tray/PBs Flow 12 hr ave (GPM)	Scrubber pH 3 hr ave	Any Bypass Stack Use	THC Mo. Ave (PPM)	THC DC (%)	BZ Temp Daily Ave Days >Max
BOAT HARBOR	2	0	0	0	0	0	2	13	70	0
VIP	0	0	0	0	0	0	0	27	97	0
WILLIAMSBURG	0	2	0	1	0	0	5	23	70	0

ODOR COMPLAINTS

ARMY BASE	0
ATLANTIC	6
BOAT HARBOR	0
JAMES RIVER	0
NANSEMOND	0
VIP	0
WILLIAMIBURG	0
YORK RIVER	0
NS OPS	0
SS OPS	0
SCD	0
NON-HRSD	0

Items of Interest – November 2025

MULTIPLE HEARTH INCINERATION (MHI)

Total Hydrocarbon (THC) monthly averages (not to exceed 100 ppm) were met by all three MHI plants (Boat Harbor, Virginia Initiative, and Williamsburg). The THC continuous emissions monitoring (CEM) valid data capture was 70% or more.

The three operating MHI plants had five (5) 129 operating parameter deviations and four (4) minor uses of the emergency bypass stack (<60 minutes), and three (3) reportable uses of the MHI bypass (>60 minutes).

HRSD submitted the final Williamsburg Treatment Plant PM only stack test results to both DEQ and EPA on 11/12/25 and demonstrated compliance with 129 emission limits.

On 11/13/25 DEQ approved the stack test protocol for the full 129 emission limits stack test for Boat Harbor Treatment Plant's MHI #1 that will occur on 12/9/25.

AIR PERMITS and ODOR CONTROL

Atlantic Treatment Plant's Odor Station D had inlet damper valves installed by Crowder on all four OCS trains overnight on 11/17/25. This work was originally estimated to take two nights but only ended up requiring one, lowering potential offsite odor impacts. TSD used the damper valves to balance air flows across the in-service trains to more effectively distribute and treat the odorous air.

To continue our efforts of minimizing offsite odors at Atlantic Treatment Plant prior to ROCI upgrades, ATP Ops and TSD discussed and are considering testing Atmos odor controlling foam on the digester annular space. An Atmos representative is scheduled to visit ATP on Tuesday 12/9/25 to assess the applicability of their product on the digester annular space.

There was a total of six (6) odor complaints this month.

Atlantic Plant received six (6) odor complaints from our Ocean Lakes neighbors. Worst case meteorological conditions were occurring at the time of all these complaints. Plant staff respond to these complaints and take corrective action as needed. Digester gas pressures have been running high, which is believed to have contributed to most of these complaints. ATP Ops are working diligently to empty condensate traps and equalize gas across the system. Communications personnel provides responses to our neighbors as appropriate. TSD records the complaints in the air permit required odor complaint log.

TREATMENT

Atlantic

On November 19, non-potable water (NPW) was discovered coming from the ground onto the street due to a line break. NPW lines were de-energized and isolation valves closed to stop the leak so the area of the line break could be excavated for repair. Of the 11,000 gallons of chlorinated NPW released, only 900 gallons were unrecoverable from the ground.

Nansemond

On November 12-13, five chlorine residual samples were invalid from 1742-0633 after the plant operator switched the reporting Cl-17 without validating the analyzer. During this period chlorination was constant and the invalid residuals were within normal operational limits.

Virginia Initiative

On November 26, a loss of chlorination and dechlorination for approximately one hour occurred when the motor control center (MCC) feeder to the process pumps tripped, shutting down both the hypochlorite and bisulfite pumps. At the time of the event, suspected smoke/chemical fumes in the room prevented the operator from entering to manually start the backup pumps. After the breaker was reset, hypochlorite and bisulfite pumps were restarted, and chemical feed was restored. No substantial leaks were identified, and no visible evidence of arc flash was found during the inspection. After initial investigations staff believe a unit heating element failure was the cause of the electrical fault that tripped the MCC feeder. A chlorine residual of 0.04 mg/L was recorded after the event.

HRSD received a warning letter dated November 18 for low chlorine residuals reported in July.

SYSTEM

On November 6, while staff performed maintenance on an inoperable valve, raw wastewater was released shortly after removing the valve gear box in James City County. Crews isolated the force main and reinstalled the gear box, returning the system to normal. Approximately 19,725 gallons of raw wastewater were released to the ground and a residential pond. The Technical Services Division (TSD) sampled the pond on November 7 and found no visible signs of the SSO. Water quality measurements indicated that one of three sampling points had low dissolved oxygen levels (<1.0 mg/L), while the other two showed values within normal ranges. E. coli results ranged from 909 MPN/100 mL to 10 MPN/100 mL. TSD returned to the pond on November 10 and found all parameters showing rapid recovery of the water quality.

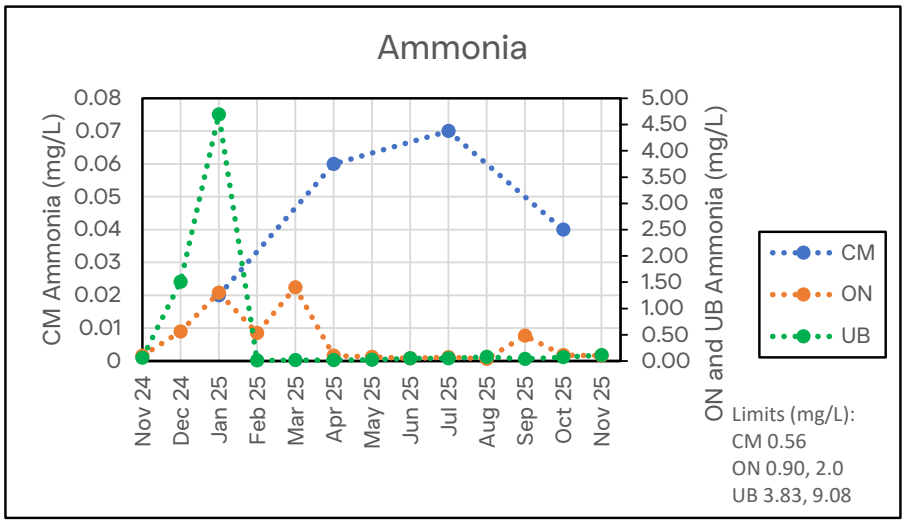
SYSTEM/TREATMENT, SMALL COMMUNITIES, AND EASTERN SHORE

HRSD received warning letters dated November 18 and 19 for a King William SSO reported in September and the Sunset Bay TKN and cBOD exceedances reported in July.

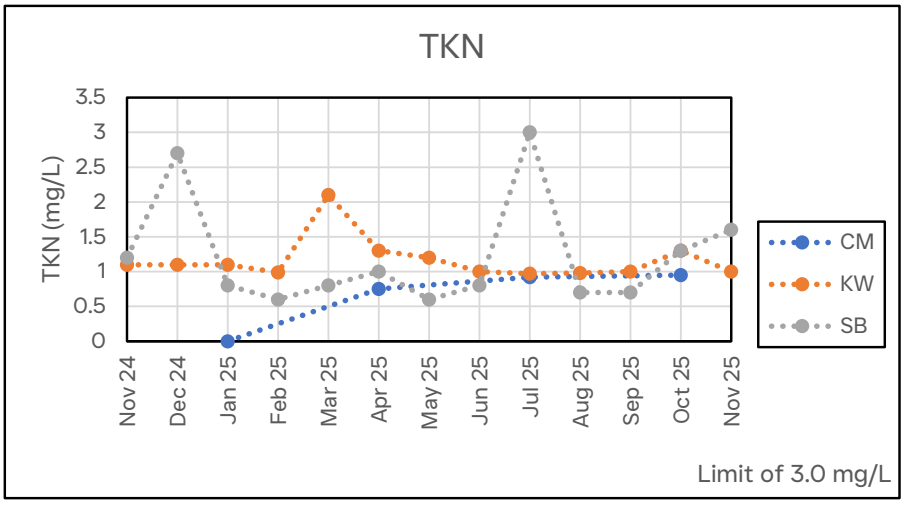
Nassawadox Collection System

On November 7, a line blockage resulted in an overflow of a manhole located on Hospital Ave in Nassawadox. Staff observed the overflow and successfully cleared the blockage. Approximately 3,000 gallons of raw wastewater were recovered with the remaining 1,865 gallons unrecoverable from the storm drain and Warehouse Creek.

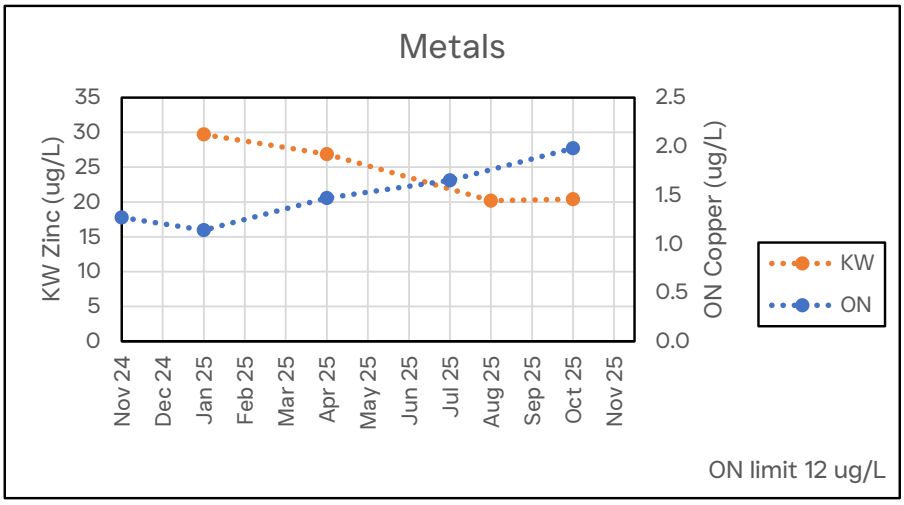
	Ammonia		
	CM	ON	UB
Nov 24		0.10	0.06
Dec 24		0.56	1.5
Jan 25	0.02	1.3	4.7
Feb 25		0.53	0.01
Mar 25		1.4	0.02
Apr 25	0.06	0.10	0.02
May 25		0.08	0.02
Jun 25		0.05	0.05
Jul 25	0.07	0.07	0.05
Aug 25		0.04	0.08
Sep 25		0.48	0.04
Oct 25	0.04	0.11	0.07
Nov 25		0.10	0.11



	TKN		
	CM	KW	SB
Nov 24		1.1	1.2
Dec 24		1.1	2.7
Jan 25	<0.50	1.1	0.80
Feb 25		0.99	0.60
Mar 25		2.1	0.80
Apr 25	0.75	1.3	1.0
May 25		1.2	0.60
Jun 25		1.0	0.80
Jul 25	0.92	0.97	3.0
Aug 25		0.98	0.70
Sep 25		1.0	0.70
Oct 25	0.95	1.3	1.3
Nov 25		1.0	1.6



	Zinc	Copper
	KW	ON
Nov 24		1.3
Dec 24		
Jan 25	30	1.1
Feb 25		
Mar 25		
Apr 25	27	1.5
May 25		
Jun 25		
Jul 25		1.7
Aug 25	20	
Sep 25		
Oct 25	20	2.0
Nov 25		



Hampton Roads Sanitation District
Internal Audit Status
November 30, 2025

SC&H prepared the following Internal Audit Status document for the HRSD Commission. The status includes a summary of projects in process, upcoming projects, and management action plan updates.

I. Projects in Process

CEL Bid Assessment

- **Completed Tasks (November 2025)**
  - Provided final deliverables to HRSD (11/3).
  - Present assessment results to Commission and finalized the assessment (11/18).

Aging and Arrears Assessments

- **Completed Tasks (November 2025)**
  - Provided updated deliverables to HRSD senior management (11/24).
- **Upcoming Tasks (November 2025)**
  - Submit documentation for Commission reporting finalizing the assessment.

Grants Management

- **Completed Tasks (October 2025)**
  - Discussed assessment with HRSD senior management to confirm scope.
  - Continued preparing entrance material documentation.
- **Upcoming Tasks (November 2025)**
  - Conduct internal audit kickoff meeting (12/8).
  - Request and review initial documentation.
  - Conduct process understanding meetings.

II. Upcoming Internal Audits

- Risk Assessment (December 2025, January 2026)
- ProCards and Employee Expenses (February 2026)
- AI Governance and Operations (April 2026)

III. Management Action Plan Status

SC&H performs on-going management action plan (MAP) monitoring for completed internal audits/projects.

- SC&H begins MAP follow-up approximately one year following the completion of each audit and periodically follows up until conclusion.
- For each recommendation noted in an audit report, SC&H gains an understanding of the steps performed to address the action plan and obtains evidence to confirm implementation, when available.
- The following describes the current project monitoring status. This listing does not include audits which were determined by HRSD Management and the Commission to include confidential or sensitive information.

Hampton Roads Sanitation District
Internal Audit Status
November 30, 2025

		Recommendations		
Audit / Project	**Next Follow-up**	**Closed**	**Open**	**Total**
Safety Division	December 2025	2	1	3
Personally Identifiable Information (PII)	December 2025	0	3	3
AP, ProCard	December 2025	1	2	3
CEL Assessment	March 2026	0	5	5
Closed Audit/Projects (x22)	Closed	136	0	136
	Totals	139	11	145

Strategic Measures
November 2025

Strategic Planning Measure	Oct-2025	Nov-26	FY-26
Educational and Outreach Events	12	3	66
Number of Community Partners	18	8	77
Number of Technical Presentations	7	6	16
Number of Technical Publications	0	0	1
Revenue vs. Budget	35%	43%	43%
Wastewater Expenses vs. Budget	28%	35%	35%
Accounts Receivable (HRSD)	$54,731,603	$62,057,081	$56,750,605
Aging Accounts Receivable	30.90%	27.40%	31.60%
Turnover Rate wo Retirements	0.33%	0.44%	1.99%
Turnover Rate w Retirements	0.33%	0.55%	2.76%
Avg Time to Hire (Posting to Acceptance)	2 months 28 days	3 months 24 days	3 months 6 days
Number of Vacancies	59	71	219
Average number of applicants per position	2.3		5.3
Percentage of positions filled with internal applicants	26.3%	44.0%	30.2%
Recruitment source Return on Investment	*	*	*
Avg Time to Hire (Acceptance to NEO)	31.42	*	*
Customer Call Wait Time (mins)	6.81	5.46	5.80
Capacity Related Overflows with Stipulated Penalties (Reported Quarterly)	*	*	*
Non-Capacity Related Overflows with Stipulated Penalties (Reported Quarterly)	*	*	*
TONS OF CARBON: Tons of carbon produced per million gallons of wastewater treated Energy consumed (gas (scfm) and electricity (kWh)) per million gallons of wastewater treated.	N/A	N/A	0
GAS CONSUMPTION: Tons of carbon produced per million gallons of wastewater treated Energy consumed (gas (scfm) and electricity (kWh)) per million gallons of wastewater treated.	N/A	N/A	*
ELECTRICITY CONSUMPTION: Tons of carbon produced per million gallons of wastewater treated Energy consumed (gas (scfm) and electricity (kWh)) per million gallons of wastewater treated.	N/A	N/A	0
Cumulative CIP Spend	$232,760,000		$232,760,000

*Not currently tracking due to constraints collecting the data.
** Updated after EPA Quarterly Report submittal.
***Billing is one month behind

Strategic Measures
November 2025

Technical Presentations			
Date	**Presentation**	**Presenter**	**Departments**
11/09/2025	Leveraging AI for soft sensing water quality when there are sensors	Jeff Sparks	Operations
11/10/2025	Evaluating Effects of Backwashing GAC on PFAS and TOC Breakthrough During Indirect Potable Reuse	Erin Love	Operations
11/10/2025	Intensifying, Optimizing, and Innovating: Wastewater Design and Operation at HRSD	Charles Bott	Operations
11/12/2025	PFAS Removal During Indirect Potable Reuse: A Comparative Evaluation of RSSCT and Pilot-Scale Performance for IX and SMC	Erin Love	Operations
11/17/2025	Mechanistic insights for nitrogen and phosphorus removal under low dissolved conditions	Lilian McIntosh	Operations
11/19/2025	Pure Water DC	Charles Bott	Operations

Educational Outreach			
Date	**Division**	**Event**	**Community Partner**
11/7/2025	Operations	VIP Tour to ODU Engineering	Old Dominion University
11/19/2025	Operations	SWIFT Tour to Christopher Newport University	Christopher Newport University
11/20/2025	Operations	ATP Tour to Virginia Beach Public Works Academy	Virginia Beach Public Works Academy

Strategic Measures
November 2025

Community Partners		
Date	**Division**	**Event**
11/01/2025	Operations	City of Chesapeake
11/01/2025	Operations	Prince Williams County's - Herbert J. Saunders Middle School
11/13/2025	Operations	DCWater
11/18/2025	Engineering	York Hall
11/19/2025	Operations	Christopher Newport University
11/19/2025	Engineering	Virginia Economic Development Partnership
11/19/2025	Engineering	National Association of Black Women in Construction (NABWIC)
11/24/2025	Operations	New Kent County

NACWA's Peak Performance Awards recognize member facilities for outstanding compliance with their National Pollutant Discharge Elimination System (NPDES) permits. *Silver Awards* recognize facilities that have received no more than five permit violations per calendar year. *Gold* Awards honor those who have achieved perfect permit compliance for an entire calendar year, while *Platinum* Awards recognize 100 percent compliance for at least five consecutive years.

The following treatment plants were recognized for outstanding compliance during calendar year 2024, a remarkable accomplishment:

Award	Plant
Platinum 10	Atlantic Treatment Plant
Platinum 23	Boat Harbor Treatment Plant
Platinum 6	Central Middlesex Treatment
Platinum 11	James River Treatment Plant
Platinum 23	Nansemond Treatment Plant
Platinum 29	Virginia Initiative Plant
Platinum 30	Williamsburg Treatment Plant
Platinum 17	York River Treatment Plant
Gold	Army Base Treatment Plant
Gold	Urbanna Treatment Plant
Silver	King William Treatment Plant
Silver	Onancock Treatment Plant
Silver	Sunset Bay Treatment Plant
Silver	West Point Treatment Plant