



COMMISSION MEETING MINUTES
July 23, 2024

No. Topic

[Call to Order](#)

[Closed Meeting](#)

[Reconvened Meeting](#)

1. [Public Comments Not Related to the Agenda](#)
2. [Consent Agenda](#)
3. [Army Base Treatment Plant Administration Building Renovation \(2021\)
Additional Appropriation, Contract Award \(>\\$200,000\) and Task Order \(>\\$200,000\)](#)
4. [Atlantic Treatment Plant Digester Improvements
Alternative Project Delivery](#)
5. [Atlantic Treatment Plant Reliability and Odor Control Improvements \(ATP ROCI\)](#)
 - ATP Liquid Side Odor Evaluation and Improvements
 - ATP Gravity Belt Thickener and Pre-Dewatering Polymer Improvements
 - ATP Odor and Solids Improvements 2023
 - ATP Solids Curing Facility and Pad Improvements
 - ATP Digester Improvements
 - Initial Appropriation and Task Order
6. [Biosolids Data Visualization and Management Tool
Initial Appropriation – Non-Regulatory and Task Order \(>\\$200,000\)](#)
7. [Chesapeake Boulevard Pump Station \(PS 105\) Replacement and Norfolk Pump Station \(PS 57\) Rehabilitation
Initial Appropriation – Regulatory Required and Acquisition of Real Property for a Public Purpose – 5724 Chesapeake Boulevard Norfolk, Virginia](#)
8. [Chincoteague Treatment Plant Improvements
Memorandum of Agreement and Property Acquisition for Public Use](#)
9. [High Priority Inflow and Infiltration Reduction Program
Initial Appropriation and Interim Agreement](#)
10. [Digital Water Briefing](#)
11. [Capital Improvement Program \(CIP\) Update](#)



COMMISSION MEETING MINUTES
July 23, 2024

No. Topic

- 12. [Commission Governance Guidelines
Meeting Date Change](#)
- 13. [New Business](#)
- 14. [Unfinished Business](#)
- 15. [Commissioner Comments](#)
- 16. [Informational Items](#)



COMMISSION MEETING MINUTES
July 23, 2024

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

Name	Title	Present for Item Nos.
Rodriguez, Stephen C.	Commission Chair	1-16
Levenston, Jr., Willie	Commission Vice-Chair	1-16
Elofson, Frederick N.	Commissioner	1-16
Glenn, Michael E.	Commissioner	1-16
Lakdawala, Vishnu K.	Commissioner	Absent
Stern, Nancy J.	Commissioner	Absent
Taraski, Elizabeth	Commissioner	1-16
Templeman, Ann	Commissioner	1-16

Closed Meeting

Action: Motion to go into Closed Meeting for discussion with legal counsel and staff regarding probable litigation (Specific Exemption: Va. Code §2.2-3711.A7).

Moved: Willie Levenston

Ayes: 6

Seconded: Michael Glenn

Nays: 0

Exemption Description: Consultation with legal counsel and briefing(s) by staff members or consultants pertaining to actual or probable litigation, where such consultation or briefing in open meeting would adversely affect the negotiating or litigating posture of the public body.

Reconvened Meeting

Certification of Proceedings: Pursuant to Section 2.2-3712.D of the Code of Virginia, a roll call vote was conducted 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.

Roll Call Vote:

Ayes: 6

Nays: 0

Action: No action required.

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

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

2. **Consent Agenda**

Action: Approve the items listed in the Consent Agenda.

<u>Moved:</u>	Michael Glenn	<u>Ayes:</u>	6
<u>Seconded:</u>	Elizabeth Taraski	<u>Nays:</u>	0

Brief:

a. Approval of minutes from previous meeting.

b. Contract Awards (>\$200,000)

1. [Birchwood Trunk 24-Inch and 30-Inch Force Main at Independence Boulevard Replacement Phase II](#)

Contract Award	\$3,224,000
Task Order	\$380,013
Additional Appropriation-Regulatory	\$2,529,951

c. Task Orders (>\$200,000)

1. [Coliseum PRS Off-Line Storage Tank Odor Control Upgrades](#)

\$316,516

2. [Solids System Improvements for Army Base MHI Offline](#)

Task Order	\$264,662
Additional Appropriation-Non-Regulatory	\$251,439

Item(s) Removed for Discussion: None

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

3. **Army Base Treatment Plant Administration Building Renovation (2021)
Additional Appropriation, Contract Award (>\$200,000), Task Order (>\$200,000)**

Actions:

- a. **Appropriate additional funding in the amount of \$8,984,539.**
- b. **Award a contract to Syncon, LLC in the amount of \$8,345,764.**
- c. **Approve a task order with Guernsey Tingle Architects, P.C. (GTA) in the amount of \$438,899.**

Moved: Willie Levenston
Seconded: Elizabeth Taraski

Ayes: 6
Nays: 0

CIP Project: AB011900

Regulatory Requirement: None

Budget	\$1,014,800
Previous Expenditures and Encumbrances	(\$452,388)
Available Balance	\$562,412
Proposed Construction Contract to Syncon, LLC	(\$8,345,764)
Proposed Task Order to GTA	(\$438,899)
Proposed Contingency (5% of Construction)	(\$417,288)
Proposed HRSD Purchase FFE (Furniture, Fixtures, Equipment)	(\$345,000)
Project Shortage/Requested Additional Funding	(\$8,984,539)
Revised Total Project Authorized Funding	\$9,999,339

Contract Status with Task Orders:	Amount
Original Contract with GTA	\$57,020
Total Value of Previous Task Orders	\$391,582
Requested Task Order	\$438,899
Total Value of All Task Orders	\$830,481
Revised Contract Value	\$887,501
Engineering Services as % of Construction	10.6%

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 June 10, 2024, and three bids were received on July 9, 2024. The bids received are listed below:



COMMISSION MEETING MINUTES
July 23, 2024

Bidder	Bid Amount
E.T. Gresham Co., Inc. (bid withdrawn)	\$5,404,360
Syncon, LLC	\$8,345,764
Tazewell Contracting	\$403,739,200

Engineer Estimate: \$9,569,360

The low bidder was E.T. Gresham Co., Inc. in the amount of \$5,404,360. HRSD received notification from Gresham on July 9, 2024, indicating that they had made a material and substantial mistake in the preparation of the bid. Gresham requested to withdraw their bid in accordance with Article 16.03 of the Instructions to Bidders. The withdrawal was made in accordance with the requirements of the bid documents.

The bid submitted by Tazewell Contracting had an obvious error as well. Tazewell confirmed that they entered the total extended amount for each of the lines instead of the unit price amount for each line.

The design engineer, GTA, evaluated the bids based upon the requirements in the invitation for bid and recommends **that HRSD accept Gresham's request to withdraw their bid due to a math error** in accordance with 2.2-4330 of the Code of Virginia. **GTA further recommends** award to the lowest responsive and responsible bidder, Syncon, LLC, in the amount of \$8,345,764.

Project Description: This project will provide renovation of the existing administration and electrical and instrumentation buildings and construction of additional administrative spaces and new lab area.

Project Justification: Constructed in the 1940s, the Army Base Treatment Plant administration and electrical and instrumentation buildings require extensive renovation. Many of the areas also require electrical and HVAC replacement, with the existing systems having reached the end of their useful service life.

Contract Description: This contract is for construction phase services with Syncon, LLC, in the amount of \$8,345,764. The original CIP budget was estimated back in 2020. Construction costs, labor and materials, have escalated considerably since 2020 along with change in scope of work.

Task Order Description: This task order will provide services during construction including contract administration and field engineering and inspection services. HRSD and the design engineer, GTA, negotiated a fee in the amount of \$438,899 based on hourly rates in GTA's annual services contract for Architectural Mechanical and Electrical Services and an estimation of hours required for this effort. The fee proposal is comparable to other projects



COMMISSION MEETING MINUTES
July 23, 2024

of similar size and complexity and includes building commissioning, asbestos removal monitoring and special inspections.

Funding Description: The original CIP project estimate was created in 2020. The construction bid amount and the fee for construction related engineering services exceed the current balance available for the CIP project. This request also includes a 5% contingency to accommodate any unforeseen conditions and a budget for HRSD purchased furniture, fixtures and equipment.

Analysis of Cost: The cost for the construction contract has been reviewed by GTA and is within 13% (under) of the Engineer's Estimate and within 11% (under) the HRSD FY25 CIP estimate and has been found to be reasonable. The task order for GTA has been reviewed and is reasonable. The fee for the contract administration is 3.1% of the construction cost and the construction inspection is 2.1% of the construction cost which is lower than similar efforts for comparable projects.

<u>Schedule:</u>	Construction	August 2024
	Project Completion	January 2026

Public Comment: Ms. Kim Kendzora, Chief Financial Officer of Tazwell Contracting, shared their concerns regarding the bidding process. She stated she had met with HRSD's contracting team yesterday surrounding their concerns. They were only one of three contractors who submitted bids on the project. It wasn't until they submitted the bid that they realized the total response value grossly exceeded the bid value as they misinterpreted the online platform (ERP) versus the solicitation documents. The bid form provided in the solicitation for bids had columns labeled "unit price," "amount," and "promise date." The online submission platform contained columns labeled "response price" and "promise date." Given the layout of the online platform columns, they interpreted "response price" to mean the "line-item" total price. And therefore, inserted the values to do the work associated with each line item. Not until the bid was submitted did the amount appear and the value populate. At that time, they realized the system was doing the math and the "response price" was intended to be the "unit price." After notifying the HRSD contract specialist, Tricia Hartman, of their misunderstanding and input error, they were told that HRSD realized what they had done on the online platform submission, but unfortunately the number had to be considered at the value the system populated at \$403,739,200. Their total bid value for the work is value total of the "response price" plus base bid of \$6,509,000 totaling \$6,612,320. This is \$1.7 million less than the third bidder. Tazwell Contracting requested the Commission reconsider their actual bid value as allowed in Article 19 of the bid documents or rebid the project as the forms were not in alignment and therefore, led to the misunderstanding. Ms. Kendzora thanked the Commission for their time and said they stand by their bid number of \$6,612,320 and would like the opportunity to work with HRSD.



COMMISSION MEETING MINUTES
July 23, 2024

Discussion Summary: Mr. Husselbee, HRSD Chief Engineer, responded to the public comments. He acknowledged E.T. Gresham had a bid error and requested to withdraw their bid in the timeframe allowed in the procurement process. HRSD must award the contract to the lowest responsive and responsible bidder. Having a number that is significantly different is not considered a bid informality as allowed in Article 19.

Both Tazewell and Syncon are new to HRSD and are new to HRSD's online bidding process. This project contains both lump sum and unit price items.

Mr. Husselbee also explained ERP allows the bidder to withdraw a bid and submit a new one if time allows. Tazewell's bid was submitted at 1:58:30 pm just before the 2:00 pm deadline. Unfortunately, they did not have enough time to submit a new bid. The other two bidders were able to follow the bid process correctly and understood the intent. Although E.T. Gresham made a math mistake.

HRSD has received thousands of bids since instituting the online bid process. It is very rare to have this situation. Procurement staff evaluated the bid process and were unable to find a mistake in the system that would have caused this error.

Mr. Husselbee said he understands the mistake that was made, and it is unfortunate this occurred. HRSD would like to save a million dollars. However, HRSD is not able to change the bid that was entered.



COMMISSION MEETING MINUTES
July 23, 2024

4. **Atlantic Treatment Plant Digester Improvements
Alternative Project Delivery**

Action: Approve the Construction Management (CM) project delivery method for the Atlantic Treatment Plant Digester Improvements project.

Moved:	Michael Glenn	Ayes:	6
Seconded:	Ann Templeman	Nays:	0

CIP Project: AT016500

Regulatory Requirement: None

Project Description: This project will provide new fixed covers and new mixing systems for each of the four anaerobic digesters that process biosolids prior to final dewatering and disposal, concrete rehabilitation and associated piping and electrical modifications at the Atlantic Treatment Plant to increase treatment reliability and minimize offsite odors for the surrounding community.

Project Justification: The existing digesters were constructed 40 years ago and many of the components are at the end of their useful life. The floating covers do not provide a gas-tight seal and contribute to the off-site odor concerns at the plant. The mixing systems are no longer in production so obtaining parts for maintenance is difficult.

This project will be delivered using the Construction Management project delivery method.

Per HRSD's Procurement Policy, the competitive sealed bid process is the preferred method of construction procurement that reflects the Design-Bid-Build project delivery method. However, this project delivery method will not meet all of the critical needs for implementing this project. The competitive best-value Construction Management delivery method provides HRSD with the following benefits by:

1. The design, procurement, and installation of the CAMBI system is creating a project with a significant duration. The project includes several early win opportunities that could be done much earlier if we use multiple construction packages, including a bypass conveyor and storage hopper to eliminate that single point of failure, biogas flare, polymer improvements, and odor control improvements. The CM approach facilitates the bidding of multiple construction packages.
2. The CM delivery method will allow for contractor input during the design, which will be beneficial for the complex construction and sequencing of the work.



COMMISSION MEETING MINUTES
July 23, 2024

3. The CM delivery method will allow for contractor input to consider cost-saving alternatives during the design and a lump sum or guaranteed maximum price can be received during the final design stage.
4. The CM delivery method will allow for the early procurement of the CAMBI train that can be assigned directly to this Construction Manager instead of HRSD taking temporary ownership then reassigning at a later date. The most recent proposal from CAMBI included a 24-month delivery schedule, making early procurement a critical project need.
5. Contractor input will allow for certain aspects of the Program to be expedited limiting odor issues to the surrounding neighbors.

In November 2023, the Commission approved the use of Construction Management project delivery method for the four CIP projects in the Atlantic Treatment Plant Reliability and Odor Control Improvements (ROCI) program. Due to the addition of this project to the ROCI program, it is recommended to add this project to the CM delivery method.

<u>Schedule:</u>	Design	August 2024
	Construction	January 2026
	Project Completion	December 2031

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

5. **Atlantic Treatment Plant Reliability and Odor Control Improvements (ATP ROCI):**
ATP Liquid Side Odor Evaluation and Improvements
ATP Gravity Belt Thickener and Pre-Dewatering Polymer Improvements
ATP Odor and Solids Improvements 2023
ATP Solids Curing Facility and Pad Improvements
ATP Digester Improvements
Initial Appropriation and Task Order

Actions:

- a. **Appropriate total project funding in the amount of \$24,656,000 for the ATP Digester Improvements (AT016500) project.**
- b. **Approve a task order with Black and Veatch in the amount of \$18,000,607 for the following individual CIP projects:**
- (1) **\$210,012 for ATP Gravity Belt Thickener and Pre-Dewatering Polymer Improvements (AT015900)**
- (2) **\$14,660,724 for ATP Odor and Solids Improvements 2023 (AT016000)**
- (3) **\$1,542,007 for ATP Solids Curing Facility and Pad Improvements (AT016100), and**
- (4) **\$1,587,864 for ATP Digester Improvements (AT016500)**

Moved: Elizabeth Taraski
Seconded: Ann Templeman

Ayes: 6
Nays: 0

Regulatory Requirement: None

CIP Project: **AT015900** (ATP Gravity Belt Thickener and Pre-Dewatering Polymer Improvements)

Budget	\$6,395,000
Previous Expenditures and Encumbrances	(\$77,593)
Available Balance	<hr/> \$6,317,407



COMMISSION MEETING MINUTES
July 23, 2024

Contract Status with Task Orders:	Amount
Original Contract with Black & Veatch	\$77,593
Total Value of Previous Task Orders	\$0
Requested Task Order	\$210,012
Total Value of All Task Orders	\$210,012
Revised Contract Value	\$287,605
Engineering Services as % of Construction	14.3%

CIP Project: AT016000 (ATP Odor and Solids Improvements 2023)

Budget	\$55,103,000
Previous Expenditures and Encumbrances	(\$1,391,523)
Available Balance	\$53,711,477

Contract Status with Task Orders:	Amount
Original Contract with Black & Veatch	\$1,049,500
Total Value of Previous Task Orders	\$0
Requested Task Order	\$14,660,724
Total Value of All Task Orders	\$14,660,724
Revised Contract Value	\$15,710,224
Engineering Services as % of Construction	9%

CIP Project: AT016100 (ATP Solids Curing Facility and Pad Improvements)

Budget	\$11,730,000
Previous Expenditures and Encumbrances	(\$123,593)
Available Balance	\$11,606,407

Contract Status with Task Orders:	Amount
Original Contract with Black & Veatch	\$123,593
Total Value of Previous Task Orders	\$0
Requested Task Order	\$1,542,007
Total Value of All Task Orders	\$1,542,007
Revised Contract Value	\$1,665,600



COMMISSION MEETING MINUTES
July 23, 2024

CIP Project: AT016500 (ATP Digester Improvements)

Contract Status with Task Orders:	Amount
Original Contract with Black & Veatch	\$0
Total Value of Previous Task Orders	\$0
Requested Task Order	\$1,587,864
Total Value of All Task Orders	\$1,587,864
Revised Contract Value	\$1,587,864
Engineering Services as % of Construction	7.6%

Project Description: These projects will provide for treatment plant improvements to the Atlantic Treatment Plant to increase treatment reliability and minimize offsite odors for the surrounding community.

Project Justification: There has been an increase in odor complaints around the Atlantic Treatment Plant in calendar year 2022 and 2023 since the implementation of the new solids handling process and the diversion of all Chesapeake-Elizabeth Treatment Plant flow. These projects include design and construction to perform needed solids handling and odor control upgrades at the Atlantic Treatment Plant.

Task Order Description and Analysis of Cost: This task order is an extension of the previous preliminary engineering services and will provide design services. The task order for Black and Veatch will provide design and bid phase services and Construction Manager coordination. Black and Veatch and HRSD staff reviewed the scope of services and determined a fee of \$18,000,607 is reasonable when compared to other projects of similar size and scope.

<u>Schedule:</u>	PER	February 2023
	Emergency Declaration	June 2024
	Design	August 2024
	Construction	January 2026
	Project Completion	December 2031

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

6. **Biosolids Data Visualization and Management Tool
Initial Appropriation – Non-Regulatory and Task Order (>\$200,000)**

Actions:

- a. **Appropriate total project funding in the amount of \$300,000.**
- b. **Approve a task order with Hazen & Sawyer in the amount of \$295,602.**

Moved: Michael Glenn
Seconded: Ann Templeman

Ayes: 6
Nays: 0

CIP Project: GN021100

Regulatory Requirement: None

Project Description: This project will develop a data-based decision support tool to visualize aspects of HRSD's solids management systems for optimization and decision-making. This tool will include costs, material transfers, capacities, and performance. The envisioned deliverable of this project will be a dashboard built in Microsoft Power BI and an associated user guide that visualizes near real-time data related to solids production and management at HRSD's eight large treatment plants, interplant solids transfers, external solids end-use and disposal, and energy management impacts (where applicable).

Project Justification: HRSD operates a complex and networked solids management system that relies on varied processes at each facility, transfer and sharing of resources across facilities, and transfer of solids external to HRSD for further processing, beneficial use, and disposal. Additionally, recent and impending changes in overall biosolids management (i.e. closure of CETP in 2020, decommissioning of the ABTP incinerator in 2024, closure of BHTP in 2026, introduction of SWIFT residuals, etc.) have highlighted opportunities to better utilize HRSD's existing solids management capacities and risks that may be mitigated by proposed future operational enhancements and capital expenditures. The networked and diverse nature of HRSD's solids management system makes it difficult to make fully informed cost and risk-based decisions pertaining to current and future solids management. The dashboard tool delivered under this project will improve such decision making by associating costs of treatment, capacities and operational performance with solids management at HRSD's eight large treatment plants and allow for HRSD staff to query various scenarios for solids management. Dashboard visualizations will support the development and communication of future operational strategies, support scoping and business case evaluations of future solids management facilities. This project is in alignment with Strategic Plan Principles of Empowered and Data Driven decision-making and supports HRSD's Priorities of Innovation and Financial Stewardship. Additionally, the tool will provide critical data to support NP015400 - Nansemond Treatment Plant Solids Drying Feasibility and Site Study.



COMMISSION MEETING MINUTES
July 23, 2024

Task Order Description: This task order will provide engineering services for the creation of a dashboard to aid in decision-making related to HRSD solids management.

Analysis of Cost: The lump sum cost is based on a negotiated scope and an estimate of labor hours required to complete the work. Engineering services will be provided by Hazen & Sawyer under the General Engineering Annual Services Contract.

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

Schedule: Project Completion June 2025

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

7. **Chesapeake Boulevard Pump Station (PS 105) Replacement and Norfolk Pump Station (PS 57) Rehabilitation**
Initial Appropriation – Regulatory Required and Acquisition of Real Property for a Public Purpose – 5724 Chesapeake Boulevard Norfolk, VA

Actions:

- a. **Appropriate total project funding in the amount of \$20,566,000.**
- b. **Approve the purchase of a property located at 5724 Chesapeake Boulevard, further identified as GPIN: 1448293368, and the associated total acquisition costs of \$497,000 and \$15,000 for relocation assistance costs for a total price of \$512,000, in accordance with the terms and conditions of the Purchase Agreement with Tiffany M. Talley, owner of subject property; and authorize the General Manager to execute same and related acquisition documents in accordance with those terms and conditions substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary.**

Moved: Willie Levenston
Seconded: Elizabeth Taraski

Ayes: 6
Nays: 0

CIP Project: VP015430

Regulatory Requirement: Rehab Action Plan Phase 2 (May 2025)

Project Description: This project will construct a new Chesapeake Boulevard Pump Station to replace the old existing pump station. This project also includes the replacement of existing equipment at the HRSD acquired Norfolk Pump Station 57, which has been renamed to HRSD Pump Station 167 / Robinhood Road Pump Station. The new equipment will be installed in accordance with HRSD's standards.

This project was originally part of the overall VP015400 CIP effort to replace multiple pump stations within the City of Norfolk. This portion of the original CIP has been separated from the larger project to better align the timing of acquisitions for the various sites and ability to move some projects forward into construction sooner than others.

The acquisition of the new parcel adjacent to the existing Chesapeake Boulevard Pump Station will allow for the new pump station to be constructed nearby, minimizing costs and disruptions to the public. During construction of the new pump station, the existing pump station will go on bypass.



COMMISSION MEETING MINUTES
July 23, 2024

The acquisition of the Norfolk Pump Station (PS 57), now known as HRSD Pump Station 167 has already been secured, and no additional acquisitions or easements are required for this project.

Project Justification: The project will address aging infrastructure pertaining to the condition of the wet wells, pumps, motors, controls, appurtenances and emergency generator/pumps for the facility, all of which are reaching the end of their useful life.

Analysis of Cost: The cost for the acquisition is based on an appraisal by Dove Valuations, as well as negotiated settlement with the property owner for this preferred, adjacent to the existing pump station, parcel that reflects current fair market value acquisition costs in the area, expedited sale and move by the owner, as well as relocation assistance. Acquisition from a willing seller is critical to the overall project success.

Agreement Description: The [Purchase and Sale Agreement](#) is attached and was reviewed by HRSD staff and legal counsel. The deed of bargain and sale will also be reviewed by HRSD staff and real estate legal counsel before execution. The attached [map](#), existing pump station site [photo](#), and future pump station site [photo](#) depict the project location.

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

8. **Chincoteague Treatment Plant Improvements
Memorandum of Agreement and Property Acquisition for Public Use**

Action: Approve the terms of a Memorandum of Agreement (MOA) with the U.S. Coast Guard Cleveland on behalf of U.S. Coast Guard Sector Field Office Eastern Shore (USCG), for the transfer of real property and services; and authorize the General Manager to execute same, substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary.

Moved: Michael Glenn
Seconded: Ann Templeman

Ayes: 6
Nays: 0

CIP Project: ES010500

Regulatory Requirement: None

Project Description: This project will include the installation of two new packaged treatment plants, outfall and appurtenances, the demolition of the existing packaged plants (Sunset Bay wastewater treatment plants previously acquired from the Town of Chincoteague and transferred to HRSD) and site work needed to make new connections to the treatment plants.

Agreement Description: As part of continued strategic consolidation efforts on the Eastern Shore, HRSD staff have been working with USCG staff who operate a small, treatment plant onsite serving this facility, and which directly abuts the newly acquired HRSD packaged treatment plant property. Both parties have a desire to consolidate the two individual treatment plants and bring the USCG sewer flows to the HRSD treatment facility, allowing the USCG to decommission their plant.

This MOA summarizes the material terms of the transactions contemplated among the parties. Some key highlights of the agreement describe that:

- The goals of the parties is for HRSD to acquire, by conveyance, a portion of USCG property to build and operate a new wastewater treatment plant and in exchange, HRSD will tie-in and take over the sewer flows from the existing USCG site.
- HRSD will provide the design, materials and construction costs, to tie-in the USCG flows into the HRSD system.
- HRSD will provide pump and haul services, should the connection of USCG flows into the HRSD system not be completed prior to June 30, 2025.
- Once the USCG flows have been connected to the HRSD system, the USCG will pay a one-time facility connection charge and begin monthly billing as per the HRSD Rate Schedule.



COMMISSION MEETING MINUTES
July 23, 2024

- As soon as is practicable, the USCG will subdivide and transfer to HRSD the identified property, at no cost.

The attached [MOA](#) was reviewed by HRSD staff and general legal counsel. The deed of transfer will also be reviewed by HRSD staff and general legal counsel before execution. The attached [map](#) depicts the project location.

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

9. **High Priority Inflow and Infiltration Reduction Program
Additional Appropriation and Interim Agreement**

Action: Deferred to next meeting.



COMMISSION MEETING MINUTES
July 23, 2024

10. **Digital Water Briefing**

Action: No action required.

Brief: Jeff Sparks, PhD., Director of Digital Water, provided a [briefing](#) of current and future projects and initiatives in this emerging department organized within Water Technology and Research.

The presentation included an overview of the Digital Water department that covered the department's mission, organization chart and oversight team. The Nansemond Treatment Plant Digital Twin was also showcased. The Digital Twin was able to provide information about the facility previously unknown to plant staff and it was also used to improve control of ammonia. Three intern projects were then discussed that included the use of artificial intelligence to detect force main breaks, determine thickness of waste streams, and quickly locate textual information via Large Language Models like ChatGPT.

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

11. **Capital Improvement Program (CIP) Update**

Action: No action required.

Brief: Implementing the CIP continues to be a significant challenge as we address numerous regulatory requirements, SWIFT Program implementation and the need to replace aging infrastructure. Staff provided a [briefing](#) describing the status of the CIP, financial projections, projects of significance and other issues affecting the program.

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

12. **Commission Governance Guidelines
Meeting Date Change**

Action: Modify the Commission Governance Guidelines to permanently change the date for the November Commission from the fourth Tuesday in November to the third Tuesday in November.

Moved: Willie Levenston
Seconded: Frederick Elofson

Ayes: 6
Nays: 0

Brief: The Enabling Act requires the Commission to meet at least once every month “at such time and place as the Commission shall from time to time prescribe.” The Commission Governance Guidelines establish the regular meeting date as the fourth Tuesday of each month except for the December meeting which is held on the third Tuesday.

A change in the regular date of the November meeting will help with scheduling conflicts due to the holidays that usually fall during the same week.

Staff recommends the following change to the attached [Commission Governance Guidelines](#):

In Section 1, *Role and Function of the Commission*, revised paragraph D.2. as follows:

Unless otherwise announced, the Commission meets on the fourth Tuesday of each month January through ~~November~~ *October* and on the third Tuesday of *November and* December. Special meetings are held when necessary. The General Manager/CEO sets the meeting agendas with advice from the Division Chiefs and the Chair. Agendas, with any relevant accompanying information or reports, are distributed to the Commissioners prior to meetings for review. When circumstances require, items may be added to the agenda after it has been distributed.



COMMISSION MEETING MINUTES July 23, 2024

In addition, Section 3.B. *Commission Meeting Format* has been updated for Commission recognition of employee promotions or new hires in the following Careers Streams: Executive 1 (E1), Leadership >= 3 (L3 & L4), and Professional >= 4 (P4 & P5).

Career Stream Definitions

Executive 1 level	Executive roles focused on overall functional and business strategies and goals. The majority of time is spent strategizing and setting the vision of the organization, department, or job family. Sets broad goals and ensures business results are met through delegation to top-level management.	<ul style="list-style-type: none">• Primary responsibilities include setting the strategic direction of the area of responsibility with direct impact on business results• Establishes operational, functional and/or business plans that have short- to long-term impact on business results• Communicates and may negotiate with parties within and outside of own organization or job family, which may include external clients or partners
Leadership 4 levels	People leadership or supervisory roles focused on operationalizing strategy and activities within a specified area of responsibility. The majority of time is spent planning, prioritizing, and / or directing the work/responsibilities of teams/employees. Goal achievement is typically accomplished through strong management of others to ensure operational, functional, and / or business results.	<ul style="list-style-type: none">• Primary responsibilities include managing teams/employees; typically has three or more direct reports• Contributes to and/or establishes operational, functional and/or business plans that have short- to long-term impact on organization and/or departmental results• Communicates with parties within and outside of own organization or department, which may include external clients or partners• Responsible for coaching, leading and mentoring emerging talent and developing the talent pipeline
Professional 5 levels	Individual contributors focused on executing operational, functional and/or business strategy, with a range of responsibilities in a professional or technical discipline or specialty. The majority of time is spent on the delivery, implementation or design of processes, programs and policies using knowledge and skills normally acquired through advanced education and/or experience. May lead and/or organize the work of other employees or manage processes and programs.	<ul style="list-style-type: none">• Contributes to the design and execution of operational, functional and/or business plans and processes that impact the overall achievement of results for the area of responsibility• Responsible for improving upon existing systems and processes to solve problems• Requires theoretical knowledge, often gained through a combination of experience and/or advanced education
Specialist 4 levels	Individual contributors who support operational, functional or business strategy through tactical support of daily activities (clerical, administrative, and operational). The majority of time is spent in the delivery of services or activities, typically under direct supervision.	<ul style="list-style-type: none">• Works to deliver day-to-day objectives with impact typically limited to particular subject matter area• Makes minor adjustments to work methods to solve problems that are often routine and typically exist in current work processes and systems. Changes often require higher-level approval• Requires knowledge of operational, functional, and/or business systems and practices using data and coordination skills• No advanced education is typically required

Public Comment: None



COMMISSION MEETING MINUTES
July 23, 2024

13. **New Business**

14. **Unfinished Business**

15. **Commissioner Comments**

Commissioner Glenn said he met with the Executive Director of The Friends of Lambert's Point City Park and the General Manager to discuss the public green space at the former Lambert's Point Golf Course. He said HRSD has done a great job supporting the community and partnering with this civic league.

16. **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

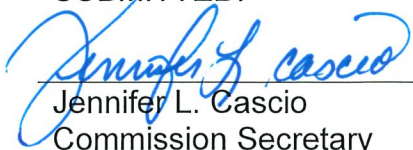
b. Strategic Measures Summary

Public Comment: None


Next Commission Meeting Date: August 27, 2024 at the HRSD South Shore Operations Complex, 1434 Air Rail Avenue, Virginia Beach, VA 23455

Meeting Adjourned: 11:35 a.m.

SUBMITTED:


Jennifer L. Cascio
Commission Secretary

APPROVED:


Stephen C. Rodriguez
Commission Chair

HRSD Commission Meeting Minutes
July 23, 2024
Attachment #1

2. Consent Agenda

AGENDA ITEM 2. – July 23, 2024

Subject: Consent Agenda

Recommended Action: Approve the Consent Agenda.

Brief: The items listed below are presented on the following pages for Commission action.

- a. Approval of Minutes - The draft minutes of the previous Commission Meeting were distributed electronically prior to the meeting.
- b. Contract Awards (>\$200,000)
 - 1. [Birchwood Trunk 24-Inch and 30-Inch Force Main at Independence Boulevard Replacement Phase II](#)

Contract Award	\$3,224,000
Task Order	\$380,013
Additional Appropriation-Regulatory	\$2,529,951
- c. Task Orders (>\$200,000)
 - 1. [Coliseum PRS Off-Line Storage Tank Odor Control Upgrades](#) \$316,516
 - 2. [Solids System Improvements for Army Base MHI Offline](#)

Task Order	\$264,662
Additional Appropriation-Non Regulatory	\$251,439

CONSENT AGENDA ITEM 2.b.1. – July 23, 2024

Subject: Birchwood Trunk 24-Inch and 30-Inch Force Main at Independence Boulevard
Replacement Phase II
Contract Award (>\$200,000), Task Order (>\$200,000), Additional Appropriation –
Regulatory Required Capital Improvement Project (<\$10,000,000)

Recommended Actions:

- a. Award a contract to Bridgeman Civil, Inc. in the amount of \$3,224,000.
- b. Approve a task order with Rummel, Klepper & Kahl, LLP (RK&K) in the amount of \$380,013.
- c. Appropriate additional funding in the amount of \$2,529,951.

CIP Project: CE011300

Regulatory Requirement: Rehab Plan Phase 2

Budget	\$1,702,700
Previous Expenditures and Encumbrances	(\$306,238)
Available Balance	\$1,396,462
Proposed Construction Contract to Bridgeman Civil, Inc.	(\$3,224,000)
Proposed Task Order to RK&K	(\$380,013)
Proposed Contingency (10% of Construction)	(\$322,400)
Project Shortage/Requested Additional Funding	(\$2,529,951)
Revised Total Project Authorized Funding	\$4,232,651

Contract Status with Task Orders:	Amount
Original Contract with RK&K	\$85,450
Total Value of Previous Task Orders	\$216,748
Requested Task Order	\$380,013
Total Value of All Task Orders	\$596,761
Revised Contract Value	\$682,211
Engineering Services as % of Construction	21%

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 June 3, 2024, and two bids were received on July 2, 2024. The bids received are listed below:

Bidder	Bid Amount
Bridgeman Civil, Inc.	\$3,224,000
Tidewater Utility Construction, Inc.	\$5,277,925

Engineer Estimate: \$2,480,930

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, Bridgeman Civil, Inc., in the amount of \$3,224,000.

Project Description: This project will replace approximately 170 linear feet of 24-inch HRSD force main, rehabilitate via Cured-in-place-pipe (CIPP) method approximately 200 linear feet of 24-inch HRSD force main and replace an associated City of Virginia Beach 12-inch force main crossing Independence Boulevard just south of Cleveland Street. The attached [map](#) depicts the project location.

Project Justification: In December 2009, a leak was identified on line SF-120 in Independence Boulevard just south of the abandoned railroad tracks south of Cleveland Street. The leak was excavated and repaired under an emergency declaration. Additional repairs on the line have been made since 2009.

Contract Description: This contract is for construction phase services with Bridgeman Civil, Inc. Inc., in the amount of \$3,224,000. The original CIP budget was estimated back in 2022 and costs have escalated considerably since that time. In addition, the project requires working in one of the busiest corridors in the City of Virginia Beach.

Task Order Description: This task order will provide services during construction including contract administration and field engineering and inspection services. HRSD and the design engineer, RK&K, negotiated a fee in the amount of \$380,013 based on hourly rates in RK&K's annual services contract for Linear Infrastructure Projects and an estimation of hours required for this effort. The fee proposal is comparable to other projects of similar size and complexity.

Funding Description: The original CIP project estimate did not foresee the current market conditions as they relate to inflation, labor shortages and long lead times for materials. The construction bid amount and the fee for construction related engineering services exceed the current balance available for the CIP project. This request also includes a 10% contingency to accommodate any unforeseen conditions.

Analysis of Cost: The cost for the construction contract has been reviewed by RK&K and is 26% over the Engineer's Estimate and 45% over the HRSD FY-2025 CIP estimate and has been found to be reasonable. The task order for RK&K has been reviewed and is reasonable. The fee for the contract administration is 6.9% of the construction cost and the construction inspection is 4.2% of the construction cost which agrees with similar efforts for comparable projects.

<u>Schedule:</u>	Construction	August 2024
	Project Completion	April 2025



CE011300

- 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 75 150 300 450 600 Feet

CE011300

Birchwood Trunk 24-Inch and 30-Inch Force Main at
Independence Boulevard Replacement Phase II



CIP Location



CONSENT AGENDA ITEM 2.c.1. – July 23, 2024

Subject: Coliseum PRS Off-Line Storage Tank Odor Control Upgrades
Task Order (>\$200,000)

Recommended Action: Approve a task order with Bridgeman Civil, Inc. in the amount of \$316,516.

CIP Project: YR014700

Regulatory Requirement: None

Budget	\$1,000,000
Previous Expenditures and Encumbrances	(\$253,324)
Available Balance	<u>\$746,676</u>

Contract Status with Task Orders:	Amount
Original Contract with Bridgeman Civil	\$0
Total Value of Previous Task Orders	\$ 16,142,767
Requested Task Order	\$316,516
Total Value of All Task Orders	\$16,459,283
Revised Contract Value	\$16,459,283

Project Description: The project will include the design and construction of an access platform and jib crane for the existing carbon scrubber systems. The attached [map](#) depicts the project location.

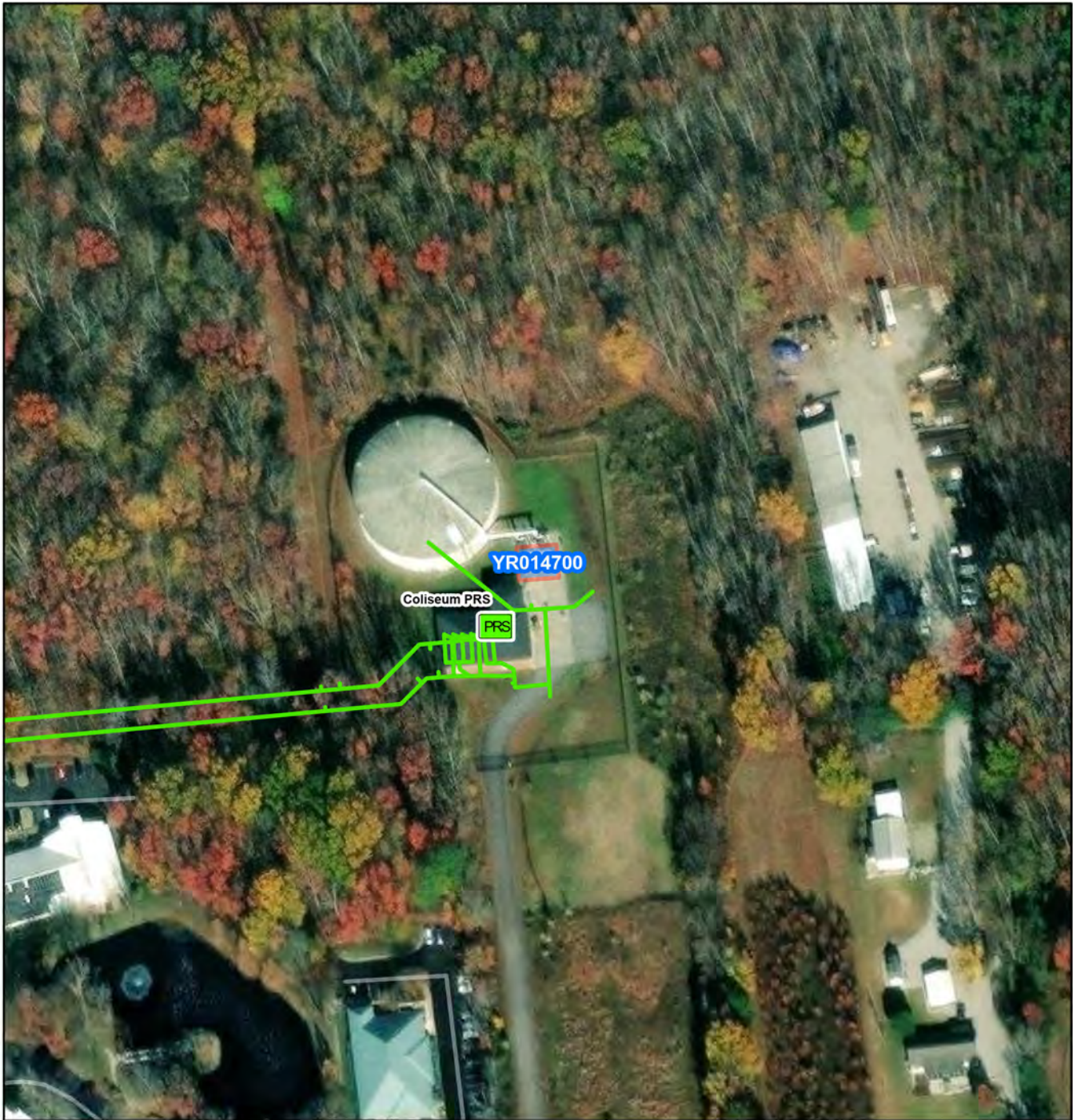
Project Justification: The platform and jib crane will provide a much-needed improvement to safety and access of the existing carbon units, both for carbon change out operations and for maintenance inspections.

Task Order Description: This task order is for the installation and construction of metal grating and a platform over the existing carbon odor control units for the Coliseum PRS and Off-Line Storage Tank project.

Analysis of Cost: The cost for this task order is based on the pre-negotiated rates under the Annual Sewer Repair and Condition Assessment Services Agreement.

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

<u>Schedule:</u>	Design	March 2022
	Bid	April 2024
	Construction	July 2024
	Project Completion	May 2025



YR014700

- 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 50 100 200 300 400 Feet

YR014700

Coliseum PRS Off-Line Storage Tank Odor Control Upgrades

N
W E
S

CIP Location

York

CONSENT AGENDA ITEM 2.c.2. – July 23, 2024

Subject: Solids System Improvements for Army Base MHI Offline
Additional Appropriation – Non Regulatory (<\$1,000,000) and Task Order (>\$200,000)

Recommended Actions:

- a. Appropriate additional funding in the amount of \$251,439.
- b. Approve a task order with HDR Engineering, Inc. in the amount of \$264,662.

CIP Project: GN017900

Regulatory Requirement: None

Budget	\$5,812,494
Previous Expenditures and Encumbrances	(\$5,671,081)
Available Balance	\$141,413
Proposed Task Order to HDR	(\$264,662)
Proposed Contingency	(\$128,190)
Project Shortage/Requested Additional Funding	(\$251,439)
Revised Total Project Authorized Funding	\$6,063,933

Contract Status with Task Orders:	Amount
Original Contract with HDR	\$650,830
Total Value of Previous Task Orders	\$675,013
Requested Task Order	\$264,662
Total Value of All Task Orders	\$939,675
Revised Contract Value	\$1,590,505
Engineering Services as % of Construction	36.6%

Project Description: This project will install thickened liquid solids load out facilities at the Army Base Treatment Plant (ABTP) and thickened liquid solids load in facilities at the Atlantic Treatment Plant (ATP) and the Virginia Initiative Plant (VIP). Completed facilities will leverage existing solids handling capacity at the receiving plants to remove solids handling facilities at the ABTP from operation including dewatering and multiple hearth incinerator (MHI) operations.

Project Justification: The project is projected to reduce net annual operating expenses for ABTP solids management by approximately \$100,000 per year. Removing ABTP solids handling systems from operation will reduce baseline operational staffing requirements at the ABTP by four Plant Operators, one Maintenance Operator, and one Maintenance Operator Assistant; reduce electrical energy requirements at the ABTP by 27% and reduce net carbon emissions associated with ABTP solids management (inclusive of contract hauling of thickened liquid sludge) by 2,880 tons CO₂e/year (35% of current ABTP net annual emissions). Removing the ABTP MHI from operation mitigates regulatory risk of CAA129 MACT standards non-compliance.

Task Order Description and Analysis of Cost: This task order will provide additional contract administration and field engineering and inspection services during the remainder of the construction period. Construction has been delayed due to supplier issues and delivery delays for ductile iron pipe that affected the schedule of work on the ABTP Nitrogen Enhancement Facility. A fee of \$264,662

was negotiated based on hourly rates in HDR's annual services contract for General Engineering Services and an estimation of hours required for this effort.

The task order for HDR has been reviewed and is reasonable. The total fee for contract administration is 11% of construction cost. Contract administration is typically 5% to 10% of construction cost; however, this project is funded by the Virginia Clean Water Revolving Loan Fund which requires extra administration to track American Iron and Steel requirements, De Minimis, Davis Bacon rates and MBE/WBE. Construction inspection is 10% of construction cost. The construction inspection is a not to exceed contract, so all of the inspection fee may not be utilized.

Funding Description: Due to a significant time extension on the construction contract, the Engineer has expended the budget for contract administration and inspection services. The proposed fee for construction related engineering services exceeds the current balance available for the CIP project. This request also includes a 3% contingency to accommodate any further unforeseen conditions.

<u>Schedule:</u>	Construction	August 2022
	Project Completion	February 2025

HRSD Commission Meeting Minutes
July 23, 2024
Attachment #2

7. Chesapeake Boulevard Pump Station (PS 105) Replacement and Norfolk Pump Station (PS 57) Rehabilitation
Initial Appropriation – Regulatory Required and Acquisition of Real Property for a Public Purpose – 5724 Chesapeake Boulevard Norfolk, Virginia

ADDRESS: 5724 CHESAPEAKE BOULEVARD
ACCT NO: 29478607
GPIN: 1448293368
PROJECT: Chesapeake Boulevard Pump Station Replacement
ROUTE/STREET: 5724 Chesapeake Boulevard
CITY/COUNTY: Norfolk, Virginia

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT (this "Agreement") made this 24th day of July 2024, by and between), **TIFFANY M. TALLEY**, whose mailing address is 5724 CHESAPEAKE BOULEVARD, Norfolk, Virginia, ("Landowner/Seller"), and **HAMPTON ROADS SANITATION DISTRICT** ("HRSD"), a political subdivision of the Commonwealth of Virginia, located at 1434 Air Rail Avenue, Virginia Beach, Virginia 23455, the ("Buyer"). Collectively, Buyer and Seller shall be referred to as the "Parties."

RECITALS

- A. Seller represents to Buyer that Seller is the owner in fee simple absolute of a certain parcel of property located on Chesapeake Boulevard in the City of Norfolk, Virginia, known and described generally as 5724 CHESAPEAKE BOULEVARD, City of Norfolk GPIN No. 1448293368, containing approximately 0.1353 AC, more or less, land and improvements; such property being more particularly described in **Exhibit A**, said Exhibit being attached hereto and made a part of this Agreement by this reference (such properties being hereinafter collectively referred to as the "Property").
- B. HRSD desires to purchase the Property and all structures and improvements thereon and appurtenances thereto from the Seller for the purpose of the Chesapeake Boulevard Pump Station Replacement project, CIP# VP015430.
- C. Seller is willing to sell the Property to HRSD subject to the terms and conditions set forth in this Agreement.
- D. These recitals are incorporated by this reference into this Agreement.

NOW, THEREFORE, in consideration of the purchase price and the mutual promises contained in this Agreement, the parties agree as follows:

1. **SALE.** Seller agrees to sell and HRSD agrees to purchase the Property, together with all rights, improvements, and appurtenances thereto,

including all right, title and interest of Seller in and to any land lying in the bed of any highway, street, road, or avenue, open or proposed, in front of or abutting, or adjoining such tract or piece of land and any riparian rights, if any, and any rights, easements, and appurtenances pertaining thereto, and any building and other property situated thereon, including all personal property, attached or appurtenant to, located in or on, or used in connection with the real property, if any. The real property, together with all such rights, improvements, and appurtenances thereto, and any such personal property, are hereinafter collectively referred to as "the Property".

2. PURCHASE PRICE. The purchase price (the Purchase Price) for the Property is **FOUR HUNDRED AND NINETY-SEVEN THOUSAND AND 00/100 DOLLARS (\$497,000)** and shall be paid by certified check or wired funds at closing.
3. CONVEYANCE.
 - a. At the Closing, Seller shall convey title to the Property in fee simple, by general warranty deed, free and clear of any and all liens, mortgages, deeds of trust, security interests, leases, covenants, conditions, restrictions, easements, rights-of-way, licenses, encroachments, judgments or encumbrances of any kind, except for the following permitted exceptions: (a) the lien of real estate taxes not yet due and payable; (b) zoning and building restrictions and other laws, ordinances, and regulations of governmental bodies having jurisdiction over the Property; and (c) matters of record affecting title to the property, as reviewed and approved (or deemed approved) by HRSD in accordance with this Agreement. Except as expressly stated in this Agreement, the Property shall be conveyed in "AS IS" condition.
 - b. Title to the Property shall be good and marketable and, if HRSD chooses to obtain title insurance, insurable by a nationally recognized ALTA title insurance company of HRSD's choice at or below normal rates. In the event that a title examination discloses defects of title or other matters unsatisfactory to HRSD at HRSD's sole determination, HRSD shall notify Seller in writing (an "Objection Notice"), prior to Closing of such title defects or other matters to which HRSD objects. Seller covenants that it shall cure all monetary encumbrances and all title objections which may be cured by execution of a document requiring the signature of no party other than Seller (including any affidavits which may reasonably be required by the title insurer). Seller may notify HRSD in writing (an "Objection Response"), within ten (10) business days after receiving an Objection Notice if it believes that

the Objection Notice makes reference to any title defect or other matter that Seller cannot or elects not to cure. Upon receipt of an Objection Response from Seller, HRSD shall have the option either to (i) terminate this Agreement by notice to Seller given within ten (10) business days of the Objection Response or (ii) accept the defects, exceptions or other matters referenced in such Objection Response and proceed to Closing hereunder with no reduction of the Purchase Price. Seller shall have the period until the Closing date within which to correct all defects, exceptions or other matters that it is required or elects to cure. Seller shall provide such documents (including evidence of authority), affidavits, and other instruments that may be reasonably required for the issuance of a title insurance policy to HRSD.

- c. Seller will deliver possession of the Property to HRSD at Closing, except that HRSD will have access to the Property prior to Closing for the purposes specified herein.
- d. Seller agrees to pay proration of real estate taxes and storm water fees. HRSD will pay all other fees charged in connection with preparation and recordation of the deed, including grantor's tax, and other applicable closing costs, if any.
- e. Seller and HRSD agree that the attorney selected by HRSD shall act as the Settlement Agent at HRSD's expense.

4. RIGHT OF ENTRY. HRSD and HRSD's authorized representatives may at any reasonable time and after giving reasonable notice to Seller, enter upon the Property for the purpose of making inspections, appraisals, surveys, including but not limited to the cutting of survey lines and putting up markers and driving stubs and stakes, site analysis, engineering studies, core sampling for engineering reports, and locating existing rights of way, easements, and utilities. HRSD will exercise this right of entry in such a way so as to not cause unreasonable damage to the Property.

5. CONDITIONS AND CONTINGENCIES.

- a. HRSD's obligations are expressly conditioned upon the waiver or satisfaction of each of the following conditions in the sole determination of HRSD. If any one of the following conditions are not or cannot be met prior to Closing, HRSD may unilaterally terminate this Agreement or, in HRSD's sole discretion, extend the date of Closing:

- i. Receipt of a satisfactory title commitment, with all unacceptable title exceptions, encumbrances, and conditions as deemed by HRSD removed or cured at Seller's cost; however, if Seller chooses not to remove or cure any such title exception, HRSD's sole remedy shall be to terminate this Agreement;
 - ii. Receipt of a Phase I Environmental Assessment and Report (Phase I Report) conducted and prepared by an environmental engineering and inspection company selected by HRSD at HRSD's expense and such other testing and reports as may be reasonably required by HRSD or recommended in the Phase I Report;
 - iii. Seller's compliance with all of Seller's obligations under this Agreement.
 - iv. Results of all surveys, testing, and inspections conducted by HRSD of the Property being to HRSD's satisfaction in HRSD's sole discretion.
- b. This Agreement is expressly conditioned upon the completion of all title and environmental "due diligence" by HRSD to the satisfaction of HRSD in HRSD's sole discretion.
 - c. Seller agrees that any mortgage, deed of trust, security agreement or monetary lien against the Property shall be removed and released as liens on the Property on or before Closing.
 - d. This Agreement is contingent on the review and approval of the purchase by the Hampton Roads Sanitation District Commission and upon such Commission granting authorization to the General Manager to proceed under the terms of this Agreement.

6. ENVIRONMENTAL AND RELATED MATTERS.

- a. As a condition precedent to HRSD's obligation to purchase, HRSD, at HRSD's expense, may have a Phase I Environmental Assessment of the Property performed by a qualified environmental consultant (the Consultant) selected by HRSD and reasonably acceptable to Seller, conducted in accordance with standard commercial practice at the time of the assessment. A copy of the Phase I Environmental Assessment will be made available to Seller, together with copies of any supplemental reports or assessments.

b. If the Consultant recommends soil, water, or structural remediation or further assessment activity after or as a result of performing a Phase I Environmental Assessment or if HRSD otherwise determines, in its reasonable judgment, that further assessment activity (including, but not limited to, a Phase II Environmental Assessment) is desirable, HRSD may at its option:

- (i) Terminate this Agreement; or
- (ii) Extend the time for closing for an additional period of sixty (60) days in order to perform any such additional assessment at HRSD's expense; or
- (iii) Waive the environmental defect and proceed to Closing.

In the event HRSD chooses to perform any additional assessment, such as a Phase II, and determines that the results of such assessment are not satisfactory, HRSD may at its option:

- (i) Terminate this Agreement; or
- (ii) Waive the environmental defect and proceed to Closing.

7. REPRESENTATIONS AND WARRANTIES BY SELLER. Seller represents and warrants as of the date of this Agreement and as of the date of Closing that: Seller has the right, title, and authority to enter into this Agreement and to perform its obligations hereunder.

Seller further represents and warrants, and shall deliver to HRSD at or prior to the Settlement, an Owner's Affidavit prepared by HRSD and all other documents required by the title company to issue an owner's policy evidencing, the following facts:

- (i) Other than this Agreement, there are no other contracts for sale or options involving the Property now in effect;
- (ii) To the best of Seller's knowledge, no other party has any right, title, or interest in the Property;
- (iii) There are no unrecorded leases, options, licenses or easements existing in connection with the property of which the Seller has knowledge;
- (iv) There are no adverse government notifications or proceedings and there is no pending or threatened litigation or any other potentially adverse claims affecting the property of which the Seller has knowledge.

- (v) Foreign Status. Seller is not a foreign corporation, person or entity and is a "United States Corporations, Person or Entity" as such terms is defined in Section 1445 and in Section 7701 (a)(30) of the Internal Revenue Code of 1986, as amended (the "Code") and shall deliver to HRSD at or prior to the Settlement an Affidavit prepared by HRSD evidencing such fact and such other documents as may be required under the Code.
 - (vi) From and after the date of this Agreement, Seller has not and shall not transfer any portion of the Property, or interest in the Property, or grant any easements or enter into any contractual agreement or understanding, written or oral, with respect to the Property or any portion thereof or make any changes at all that require recordation and therefore modifications to title, without the prior written consent of HRSD.
 - (vii) The Seller warrants that to the best of her knowledge there are no wetlands or hazardous wastes, which would prevent HRSD's intended use of the land. To the best of the Seller's knowledge: (i) none of the Property has been excavated (except for standard grading related to site development); (ii) no hazardous materials, toxic chemicals, or similar substances, as defined by 42 U.S.C. §1251, et seq. or 42 U.S.C. §6901, et seq. or 42 U.S.C. §9601, et seq., or 33 U.S.C. §1317(1), or 15 U.S.C. §2606(f), or 49 U.S.C. §1801, et seq., or regulations adopted pursuant thereto, or any similar provision of any applicable state, Federal, or local law (collectively "Hazardous Materials"), are or were stored or used on or under or otherwise were or are in existence or were in any way dealt with on or under the Property; and (iii) no owner or occupant of the Property has received any notice from any governmental agency with regard to such Hazardous Materials.
 - (viii) All of Seller's representations and warranties remain true and correct through the actual date of settlement.
8. NOTICES. All notices to the parties hereto will be delivered by hand, via certified mail return receipt requested, or via facsimile and all be deemed effective upon delivery if by hand and upon confirmation of receipt if by other means, to the following address until the address is changed by notice in writing to the other party:

HRSD: Jay Bernas, P.E., M.B.A.
General Manager
P.O. Box 5911
Virginia Beach, Virginia 23471-0911

Seller: Tiffany M. Talley
5724 Chesapeake Boulevard
Norfolk, Virginia

9. CLOSING. Unless this Agreement is terminated pursuant to its terms or by mutual agreement of the parties, or unless the Closing date is extended pursuant to the terms of this Agreement or by mutual agreement of the parties, Closing will be made at the offices of the Settlement Agent on or about July 29, 2024 but no later than 60 days from the Effective Date of this Agreement (Effective Date being defined as the date on which both the Seller and HRSD have endorsed this Agreement).
10. POST-CLOSING POSSESSION. Seller shall comply with all terms and conditions of the Post-Closing Possession Agreement attached hereto as **Exhibit B** and made part of this Agreement. If post-closing possession is still needed by Seller, Seller shall sign the Post-Closing Possession Agreement at closing. The terms and conditions of this paragraph shall survive closing and not merge with the deed.
11. USE OF SALE PROCEEDS: Seller acknowledges, agrees, and directs that proceeds from this sale be paid in certain ways at settlement, Seller's intent being to enable Seller to purchase a home at 5425 Port Royal Drive, Virginia Beach, VA 23462, hereinafter "New Home", which Seller has under contract. Seller agrees and directs that proceeds from the sale of the property which is the subject of this agreement, i.e. 5724 CHESAPEAKE BOULEVARD, be used to pay off the following debts of Seller, which are expected to be as follows, by way of identification:
- | | | |
|----|-------------|-------------------|
| a. | TOYOTA | 70401865462350001 |
| b. | DISCOVER | 601100218461 |
| c. | NFCU | 406095XXXXXX2297 |
| d. | Home Depot | 6035320980594491 |
| e. | NFCU | 379550XXXXX9447 |
| f. | NFCU | 403216XXXXXX6712 |
| g. | SYNC / PPC | 6044191051386516 |
| h. | CAPITAL ONE | 552869618326 |
| i. | CBNA | 4269380127214587 |
| j. | CAPITAL ONE | 517805833008 |
| k. | CHASE | 414740035196 |
| l. | CAPITAL ONE | 517805910713 |
| m. | NR/SMS/CAL | Current Mortgage |

Seller further agrees that Seller will not voluntarily increase the balance on any of the aforesaid debts after execution of this Agreement, and that Seller will not incur any additional debts prior to closing. Furthermore, Seller agrees and directs that the amount of \$187,000.00 is to be paid out of the proceeds as the down payment on her New Home.

12. PRORATIONS. All rents, interest, taxes, insurance premiums, utility bills, and fuel oil, if any, will be prorated as of the date of Closing.
13. RISK OF LOSS. All risk of loss or damage to the Property by fire, windstorm, casualty, or other cause is assumed by Seller until Closing. In the event of substantial loss or damage to the Property before Closing, HRSD will have the option of either:
 - a. Terminating this Agreement, or
 - b. Affirming this Agreement and proceeding to Closing.
14. RESERVED
15. BROKERS. Seller and HRSD both represent and warrant to the other that it has not hired, engaged, or consulted with any broker or agent in regard to this transaction. Seller agrees to indemnify and hold harmless HRSD from any and all costs, expenses, or damages resulting from any claim for brokerage fees or other similar forms of compensation made by any real estate broker or other person or entity with whom Seller has dealt, and who is not expressly named herein.
16. CONDEMNATION. Seller covenants and warrants that Seller has not heretofore received any notice of any condemnation proceeding or other proceeding in the nature of eminent domain in connection with the Property. If prior to Settlement any such proceeding is commenced or any change is made, or proposed to be made, to the Property or to the roads or driveways adjoining the Property, or to change such ingress or egress or to change the grade thereof, Seller agrees immediately to notify HRSD thereof. HRSD then shall have the right, at HRSD's option, to terminate this Agreement by giving written notice to Seller within thirty (30) days after receipt of such notice.
17. DEFAULT AND REMEDIES.
 - a. If the sale and purchase contemplated by this Agreement is not consummated because of Seller's default, HRSD may do the following:

- (i) Terminate this Agreement;
 - (ii) Seek and obtain specific performance of this Agreement;
 - (iii) Pursue all other rights or remedies available at law or in equity, including an action for damages.
 - b. If Seller defaults under this Agreement, Seller will be liable for any fees and expenses incurred by HRSD in connection with the enforcement of its rights under this Agreement, including but not limited to reasonably attorney's fees.
 - c. These remedies are cumulative and non-exclusive and may be pursued at the option of HRSD without a requirement of election of remedies.
 - d. If the sale and purchase contemplated by this Agreement is not consummated because of HRSD's default, Seller's sole and exclusive remedy shall be termination of this Agreement.
18. ENTIRE AGREEMENT. This Agreement contains the entire agreement of the parties and will supersede the terms and conditions of all prior written and oral agreements, if any, concerning the matters it covers. Seller acknowledges that HRSD has, in entering into this Agreement, relied upon Seller's representations, covenants, and warranties, and Seller agrees that Seller's representations, covenants, and warranties will survive settlement and will not merge into any deed or otherwise. The parties acknowledge there are no oral agreements, understandings, representations, or warranties that supplement or explain the terms and conditions contained in this Agreement. This Agreement may not be modified except by an agreement in writing signed by the parties.
19. WAIVER. Failure to insist upon strict compliance with any of the terms, covenants, or conditions hereof will not be deemed a waiver of the term, covenant, or condition, nor will any waiver or relinquishment of any right or power at any one time or more times be deemed a waiver or relinquishment of the right or power at any other time or times.
20. SEVERABILITY. This Agreement will be construed in its entirety and will not be divisible, except that the invalidity or unenforceability of any provision hereof will in no way affect the validity or enforceability of any other provision.
21. CAPTIONS. Captions are used in this Agreement for convenience only and will not be used to interpret this Agreement or any part of it.

22. GOVERNING LAW. This Agreement is to be construed in accordance with the laws of the Commonwealth of Virginia.
23. CHOICE OF FORUM/JURISDICTION. The parties hereby consent to the jurisdiction and venue of the courts of the Commonwealth of Virginia, specifically to the courts of the City of Norfolk, Virginia, and to the jurisdiction and venue of the United States District Court for the Eastern District of Virginia in connection with any action, suit, or proceeding arising out of or relating to this Agreement and further waive and agree not to assert in any action, suit, or proceeding brought in the City of Suffolk, Virginia, or the Eastern District of Virginia that the parties are not personally subject to the jurisdiction of these courts, that the action, suit, or proceeding is brought in an inconvenient forum or that venue is improper.
24. WAIVER OF TRIAL BY JURY. THE PARTIES WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING, OR COUNTERCLAIM BROUGHT BY EITHER PARTY AGAINST THE OTHER ON ANY MATTER WHATSOEVER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ANY RELATED AGREEMENTS OR INSTRUMENTS AND THE ENFORCEMENT THEREOF, INCLUDING ANY CLAIM OF INJURY OR DAMAGE TO ANY PARTY OR THE PROPERTY OF ANY PARTY.
25. SUCCESSOR/ASSIGNMENT. This Agreement will be binding upon and the obligations and benefits hereof will accrue to the parties hereto, their heirs, personal representatives, successors, and assigns. This Agreement is assignable by HRSD only upon written consent of the Seller, which consent will not be unreasonably withheld.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each will be considered an original, and together they will constitute one Agreement.
27. FACSIMILE SIGNATURES. Facsimile signatures will be considered original signatures for the purpose of execution and enforcement of the rights delineated in this Agreement.
28. ETHICS IN PUBLIC CONTRACTING. By executing this Agreement, the undersigned Seller or its representative, and the representative of HRSD, certify that the prices agreed to in this Agreement were arrived at without collusion or fraud and that they have not offered or received any payment, kickbacks or other inducement from any other party to this Agreement or its agent or employee in connection with this Agreement, and that they

have not conferred on any public employee having responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services (or anything of more than nominal value, present or promised) unless disclosed in this Agreement.

29. RELOCATION ASSISTANCE. As part of Seller's Relocation Assistance, HRSD agrees to pay Seller \$ 15,000.00 (fifteen thousand dollars and 00/100 cents) to assist with moving and relocation expenses. The parties acknowledge that this is a one-time lump sum payment associated with the purchase of 5724 Chesapeake Boulevard, Norfolk, Virginia but is not part of the purchase price. If closing does not occur due to Seller's fault or breach, Seller hereby agrees to refund and return to HRSD the Relocation Assistance paid by HRSD. Upon closing, in accordance with this Agreement, Buyer shall be entitled to retain all funds received as relocation assistance.

**Note: Per 49 CFR § 24.209, of the Uniform Relocation and Assistance act, Relocation Assistance payments for displaced persons are not considered as income.*

[THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Hampton Roads Sanitation District Commission has caused this Agreement to be signed on its behalf by its General Manager in accordance with authorization granted at its regular meeting held on July 23, 2024. This Agreement is expressly subject to approval by the HRSD Commission.

WITNESS the following signatures and seals:

BUYER:

HAMPTON ROADS SANITATION DISTRICT (HRSD)

By: [Signature] (SEAL) *Chief Engineer*
Date: July 24, 2024
Name: Jay Bernas, P.E., M.B.A. *Bruce W. Husselbee PhD, PE*
Title: ~~General Manager~~ *Chief Engineer*
Contact Address: 1434 Air Rail Avenue, Virginia Beach, Virginia 23455

COMMONWEALTH OF VIRGINIA

City of Virginia Beach, to-wit:

The foregoing purchase and sale agreement was acknowledged before me this 24 day of July, 2024, by ~~Jay Bernas, P.E., M.B.A., General Manager~~, Hampton Roads Sanitation District. *Bruce W. Husselbee PhD, PE Chief of Engineering*


[Signature: Kristen J. Wentworth]
Notary Public

Notary Public Registration No. 7813120
My commission expires: 09/30/2027

Kristen J. Wentworth
Notary Public - Reg. #7813120
Commonwealth of Virginia
My Commission Expires 09/30/2027

WITNESS the following signatures and seals:

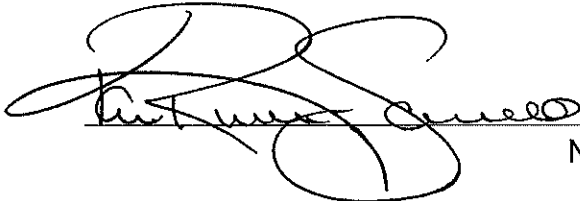
SELLER:


TIFFANY M. TALLEY

COMMONWEALTH OF VIRGINIA

City/County of Norfolk to-wit:

The foregoing purchase and sale agreement was acknowledged before me this 10 day of July, 2024, by TIFFANY M. TALLEY, who is personally known to me or has provided sufficient identification.


Notary Public

Notary Public Registration No. 7837081
My commission expires: April 30, 2027

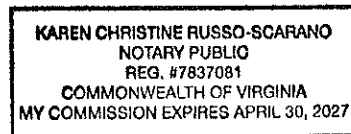


EXHIBIT A

5724 Chesapeake Boulevard
GPIN: 1448293368
Tax Account No.: 29478607

All that certain lot piece or parcel of land, with the buildings and improvements thereon and the appurtenances thereunto belonging, lying, being and situate in the City of Norfolk, Virginia, and being known, numbered and designated as Lot A, as shown on that

certain plat entitled, "Subdivision of "Estabrook Terrace" formerly known as Site on the East Side of Chesapeake Boulevard, being a portion of property shown in Deed Book 1164, page 666, Norfolk, Virginia", which said plat is duly recorded in the Clerk's Office of the Circuit Court of the City of Norfolk, Virginia in Map Book 46, page 147.

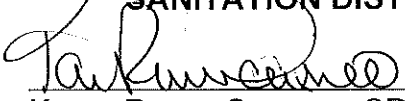
It being the same properly conveyed to Charles Anderson by Deed from The Secretary of Housing and Urban Development dated September 11, 2014, recorded September 11, 2014, in the Clerk's Office of the Circuit Court of Norfolk City, Virginia as Instrument No. 140018497.

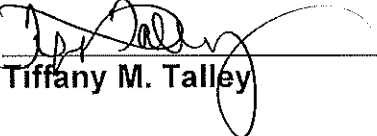
expenses of Purchaser in any legal proceedings to evict Seller from premises, to include all attorney's fees and costs.

6. The Seller agrees to pay all expenses in connection with her occupancy of the subject property, including, but not limited to, utilities and fuel, if applicable, during possession.
7. The Seller agrees to maintain the property in good condition keeping it free and clear of any City or State code ordinance violations, which shall include but not limited to yard maintenance and cutting the grass.
8. This agreement may be executed in counterparts.

IN WITNESS WHEREOF, the parties have caused their hands and seals to be affixed this 10th day of July, 2024.

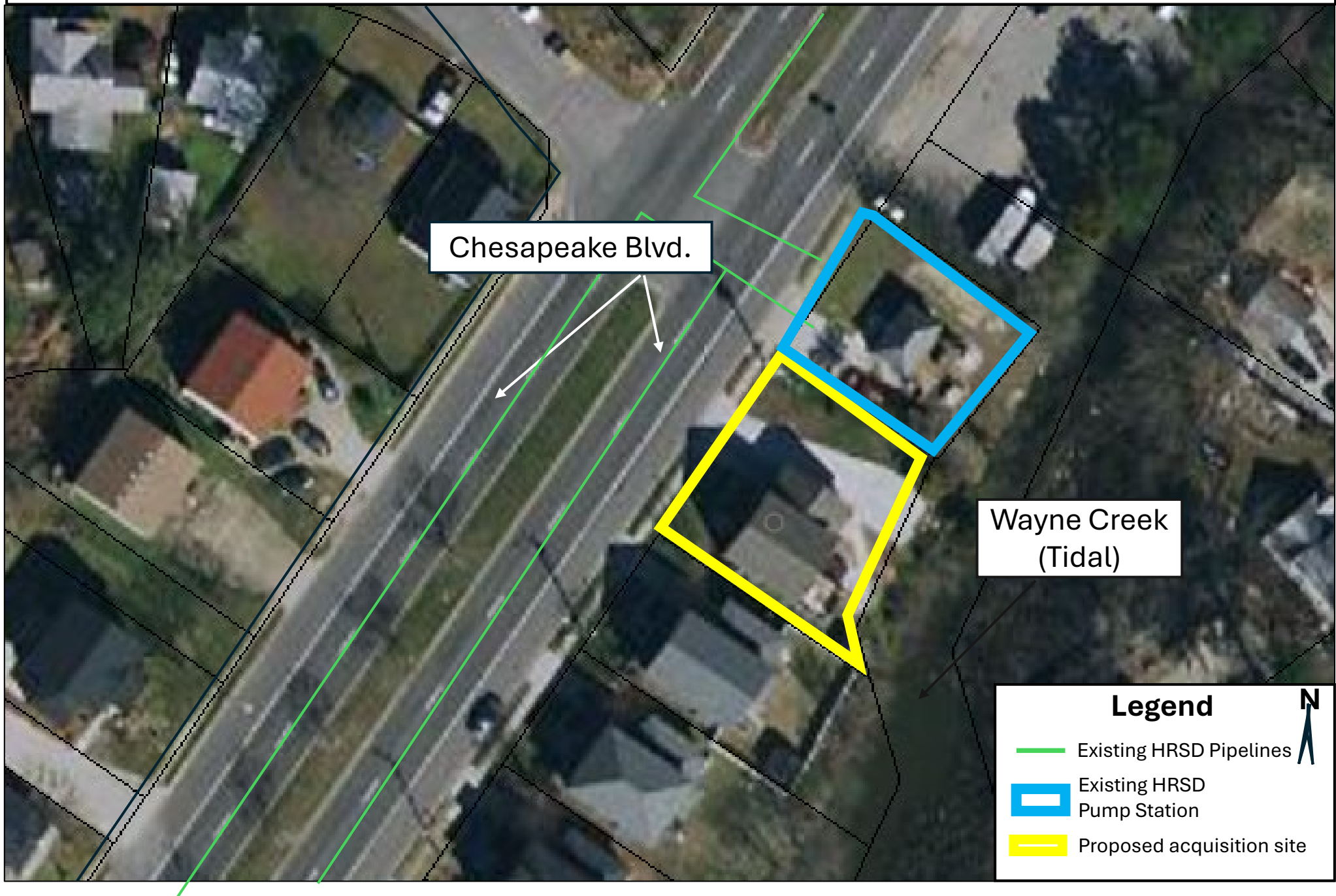
Purchaser: **HAMPTON ROADS
SANITATION DISTRICT**

By: 
Karen Russo-Scarano, SR/WA
Real Estate Manager, HRSD

Seller: 
Tiffany M. Talley

LOCATION MAP

5724 Chesapeake Blvd., Norfolk



Existing Chesapeake Boulevard Pump Station Site



LOCATION MAP

5724 Chesapeake Blvd., Norfolk



HRSD Commission Meeting Minutes
July 23, 2024
Attachment #3

8. Chincoteague Treatment Plant Improvements
Memorandum of Agreement and Property Acquisition for Public Use

MEMORANDUM OF AGREEMENT (MOA)
BETWEEN
U.S. COAST GUARD SECTOR FIELD OFFICE EASTERN SHORE
AND
HAMPTON ROADS SANITATION DISTRICT
REGARDING
SEWAGE CONNECTION AND LAND TRANSFER

1. **PARTIES.** The Parties to this MOA are the United States Coast Guard (USCG) CEU Cleveland on behalf of USCG Sector Field Office (SFO) Eastern Shore at Chincoteague, VA and the Hampton Roads Sanitation District (HRSD), a political subdivision of the Commonwealth of Virginia.
2. **AUTHORITY.** The USCG is authorized to enter this Memorandum under the provisions of 14 U.S.C. § 701(a).
3. **BACKGROUND.** The USCG is seeking to terminate its responsibility for the maintenance of its wastewater treatment system while HRSD is looking to expand their wastewater treatment facilities. A license agreement was executed on 22 March 2024 to grant HRSD permission to utilize the SFO's multi-purpose court property for construction purposes related to the conveyance of the wastewater treatment system.
4. **PURPOSE.** The purpose of this MOA is to set forth terms by which:
 - a. HRSD will acquire by conveyance, a portion of SFO Eastern Shore's property to build and operate a new wastewater treatment plant ("WWTP").
 - b. HRSD will tie-in the USCG's sewage to HRSD's new WWTP to eliminate the need for SFO Eastern Shore to own and operate a treatment plant.
5. **RESPONSIBILITIES.**

The USCG will transfer the parcel of land known as the Multi-purpose Court from USCG to HRSD ownership. This transfer will be accomplished by conducting a public benefit conveyance through the U.S. General Services Administration (GSA) pursuant to 40 U.S.C. § 543. The GSA will survey and subdivide the parcel such that the dividing line continues a straight run from the USCG's property line running along the north-west side of the Multi-purpose Court. Thus, all but a small portion of the land which the existing Multi-purpose Court occupies will be transferred to HRSD for the purpose of a new WWTP being installed. This is further shown on Exhibit A.

HRSD will remove a portion of the USCG's existing fence line, currently surrounding the exterior Multi-purpose Court. HRSD will then re-establish the new fence line along the proposed new boundary line along the south-western length of the court, and as shown on Exhibit A.

HRSD will provide the design and construction work to tie-in the USCG sewage flows, as part of the HRSD system. HRSD will pay for the design, materials, and construction costs associated with this effort. The decommissioning and demolition of the existing USCG sewage facilities are not part of this effort and is the sole responsibility of the USCG.

Upon connection of USCG's sewage system to the HRSD treatment plant, the USCG will pay a one-time HRSD facility connection charge consistent with HRSD policy, then will pay HRSD the rates published in the HRSD Rate Schedule, as amended annually, for wastewater service provided, and which are billed monthly.

Should the connection of USCG's sewage into the HRSD treatment plant not be made prior to June 30, 2025, HRSD will manage and cover costs for temporary pump and haul activities if the USCG system fails after that date.

6. POINTS OF CONTACT. The Parties may change its point of contact upon reasonable notice as detailed below: .

USCG: LT Justin Davis, Planning and Real Property Branch Chief
Email: justin.s.davis@uscg.mil
Office: 216-902-6271
Mobile: 216-849-6097

HRSD: Mr. John Dano, Director of Planning and Analysis
Email: jdano@hrsd.com
Office: 757-460-7001
Mobile: 757-353-0380

7. MODIFICATION. This MOA may be modified upon the written mutual consent of the Parties.
8. FUNDS. This MOA does not document the obligation of funds between the Parties with the exception of item 5, the HRSD one-time facility connection charge and monthly billable rate due to HRSD. No provision in this MOA will be interpreted to require obligation or payment of funds in violation of the Anti-deficiency Act, 31 U.S.C. § 1341.
9. SEVERABILITY. Nothing in this Memorandum is intended to conflict with current law or regulation or the directives of the United States Coast Guard or the United States Department of Homeland Security (DHS) or the other Party. If a term of the MOA is inconsistent with such authority, then that term shall be invalid, but the remaining terms and conditions of the MOA shall remain in full force and effect.

10. EFFECTIVE DATE. This MOA will become effective upon the last signature of the Parties.
11. TERMINATION. The terms of this MOA, as modified with the consent of both Parties, will remain in effect until HRSD's acceptance and completion of stated construction activities and USCG's recordation of conveyance of real property to HRSD.
12. CONTINGENCIES. This MOA is contingent on the review and approval of this acquisition by the HRSD Commission and upon such Commission granting authorization to the General Manager to proceed under the terms of this MOA, if such review, approval, and/or authorization is required by the policies or procedures of HRSD as determined by HRSD.
13. APPROVING OFFICIALS.

For the USCG:



Digitally signed by
SYMANSKY.COLLEEN.ANNE.1248446176
Date: 2024.07.10 12:06:40 -04'00'

Signature

Printed Name: CDR Colleen Symansky

Position: Commanding Officer, CEU Cleveland

Date: 10 July 2024

IN WITNESS WHEREOF, the HRSD Commission has caused this Agreement to be signed on its behalf by its General Manager in accordance with authorization granted at its regular meeting held on July 23, 2024. This Agreement is expressly subject to approval by the HRSD Commission.

For HRSD:



Digitally signed by Jay Bernas
Date: 2024.07.31 07:11:07
-04'00'

Signature

Printed Name: Jay Bernas, P.E.

Position: General Manager

Date: July 31, 2024

LOCATION MAP

USCG Chincoteague, Eastern Shore



HRSD Commission Meeting Minutes
July 23, 2024
Attachment #4

10. Digital Water
Briefing

The background of the slide features a serene sunset scene over a calm body of water. The sun is a bright orange orb on the horizon, casting a long, shimmering reflection across the water's surface. The sky transitions from a deep orange near the horizon to a soft blue at the top. In the foreground, tall green reeds are visible along the water's edge. The entire image is framed by decorative blue wavy borders at the top and bottom, which are adorned with numerous realistic water droplets of varying sizes.

HRSD

HRSD Digital Water Update by: Jeff Sparks

7/23/2024



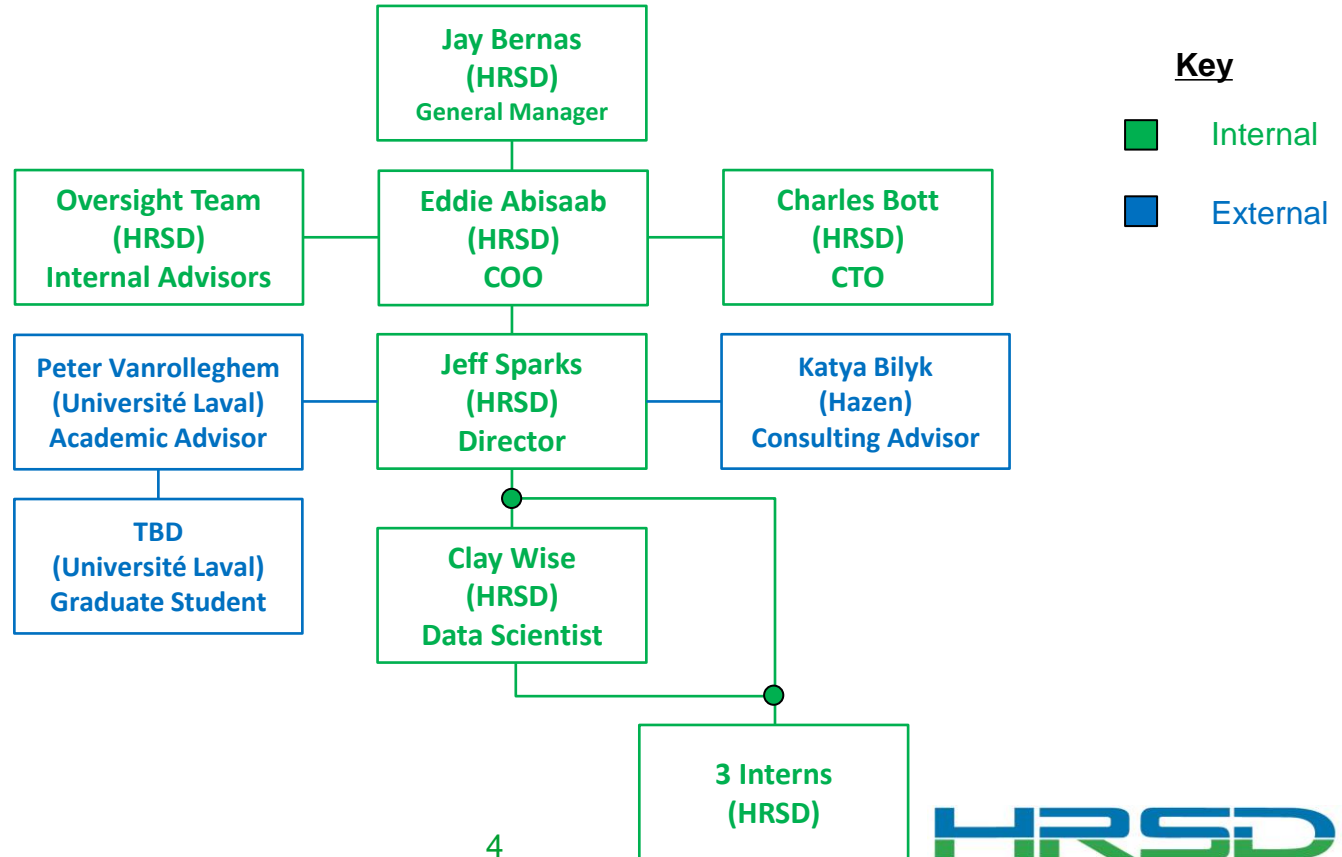
Digital Water Department

1. Mission Statement
2. Org Chart
3. Oversight Team

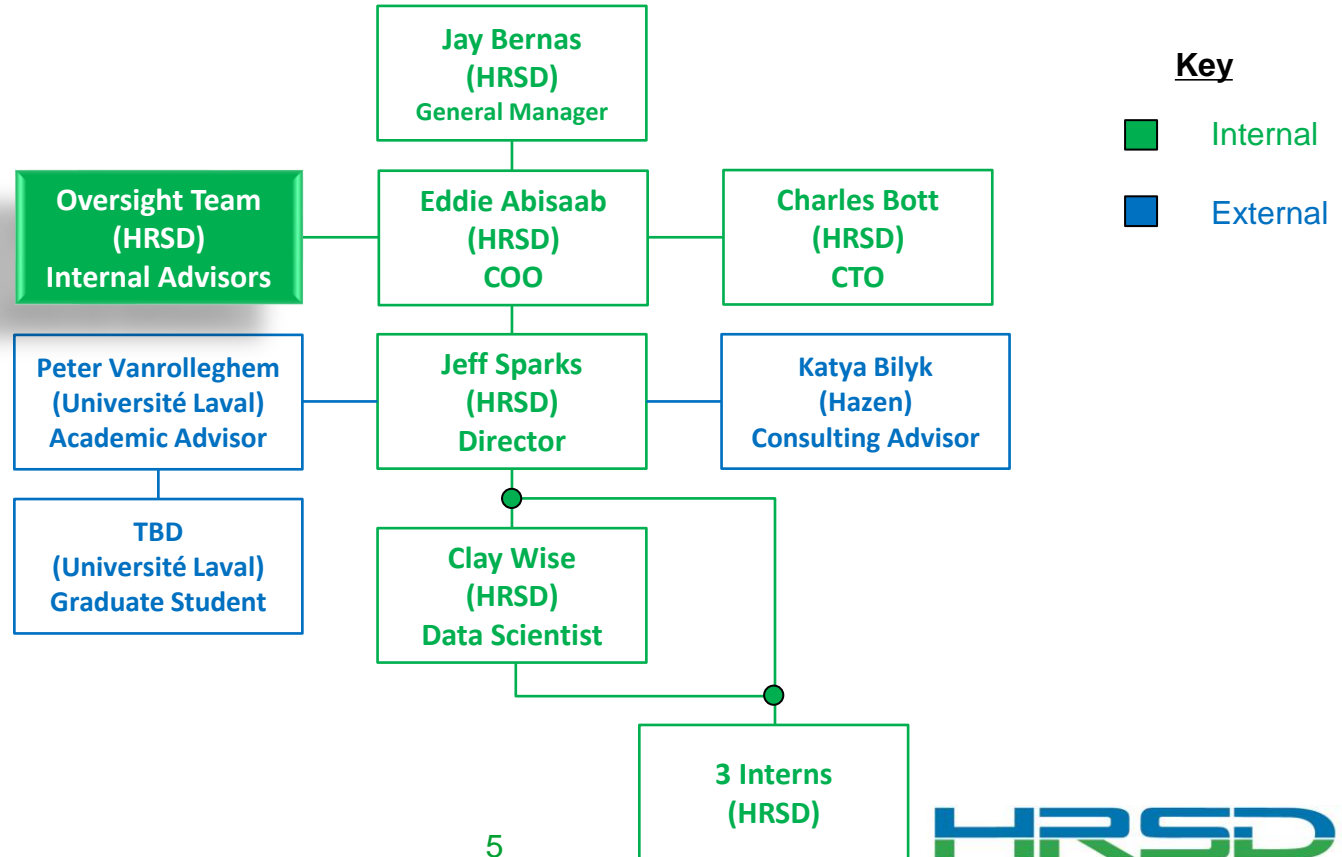
- Digital Water Mission Statement:
 - “HRSD Digital Water harnesses the power of *mechanistic models, Machine Learning, Artificial Intelligence, and Digital Twins* to optimize wastewater operations, reduce costs, and safeguard the environment. Our commitment is to contribute towards innovation, sustainability, and optimization, ensuring a resilient and efficient wastewater management system.”



Digital Water Organization



Digital Water Organization

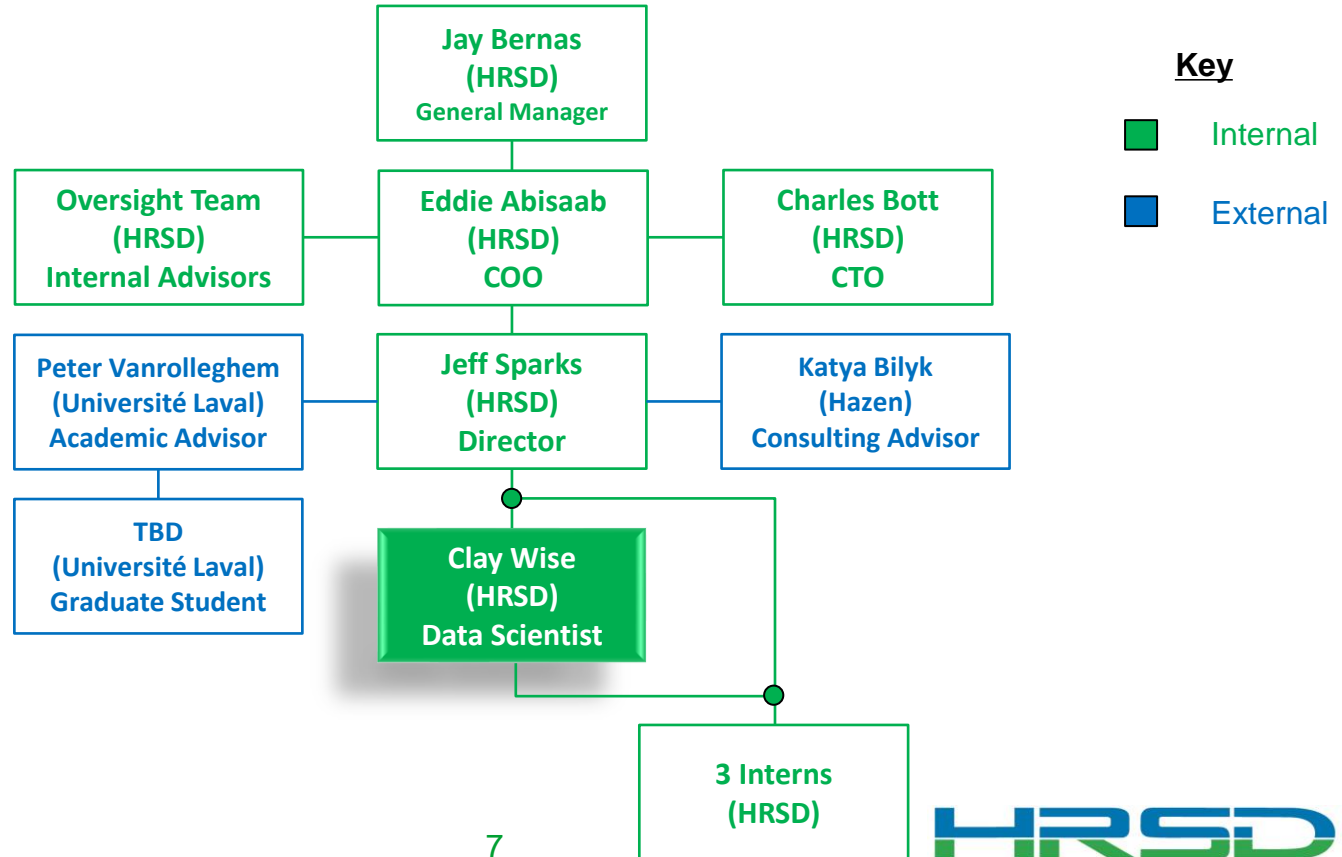


- Oversight Team:

1. **Charles Bott, Chief of Water Technology and Research** – oversees the program and helps in identifying low-hanging fruit at the TPs.
2. **Don Corrado, Chief of IT** – provides insight on topics like on vs. off-prem. computing, selection of HRSD's data science software, and workflows for automatic data pulls from disparate data sources.
3. **Roger Caslow, Director of Cybersecurity** – ensures that new efforts to integrate AI/ML into active control of equipment is not introducing vulnerabilities.
4. **Eddie Abisaab, Chief of Operations** – disseminates info related to Digital Water to key TP and Interceptor staff.
5. **Chris Stephan, Director of North Shore Operations** – helps in identifying low-hanging fruit in the Interceptor System; leads the deployment of advanced control via SCADA.
6. **J. Dano, Director of Planning & Analysis** – assists in integration of the hydraulic model into Digital Water efforts; coordinates Digital Water support by the HAMs and Data Analysis staff.



Digital Water Organization

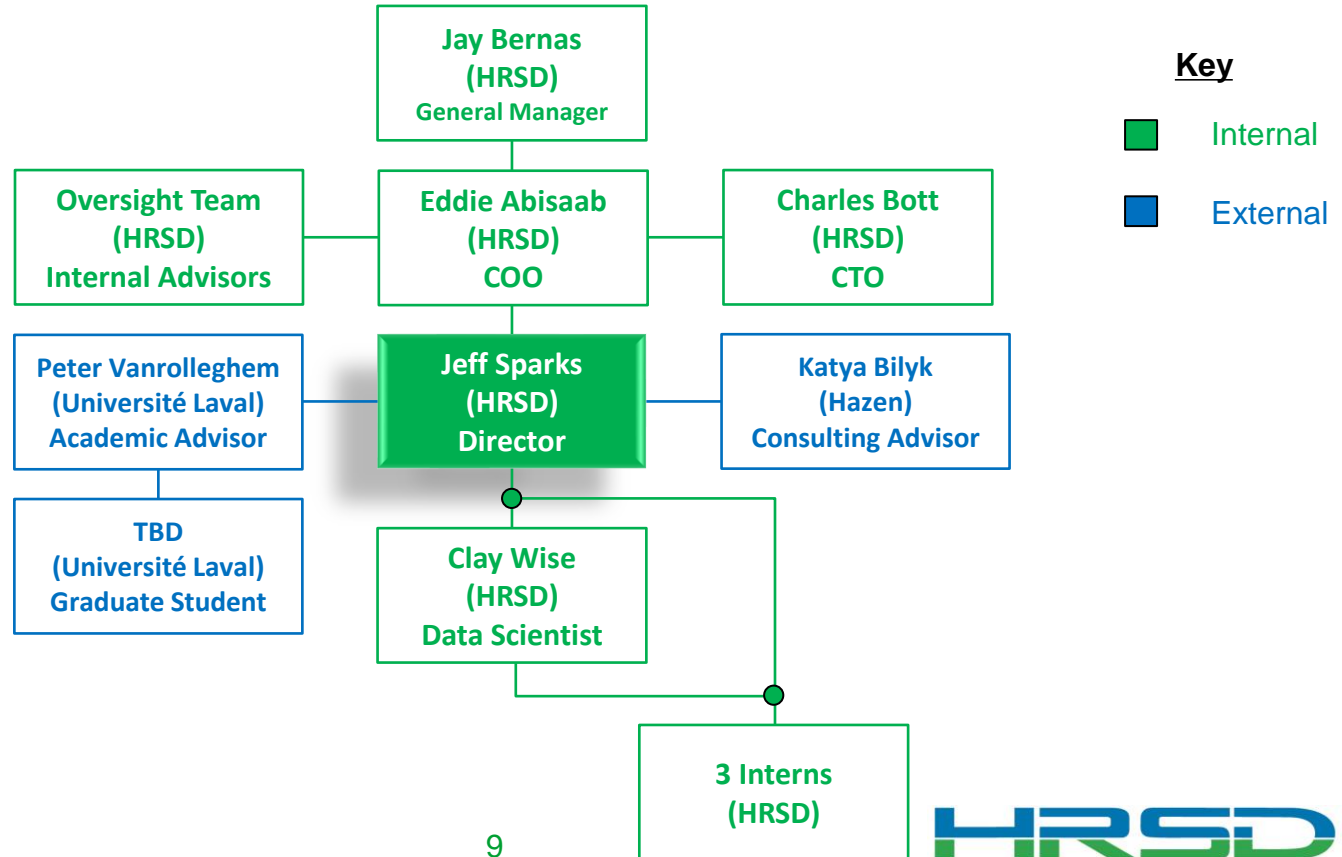


- Clay's Role

- In addition to spearheading his own projects, Clay will either be the lead or an active contributor to the following:
 1. Selection of HRSD's data science software.
 2. Selection of hardware, to include on-prem computing leveraging GPUs.
 3. Extract, Transform, and Load tasks.
 - a) Data pipelines, workflows, and task scheduling.
 4. Interfacing between Digital Water and IT.
 5. Model output visualization.
 6. All projects with spatial components (we will come back to this one).



Digital Water Organization

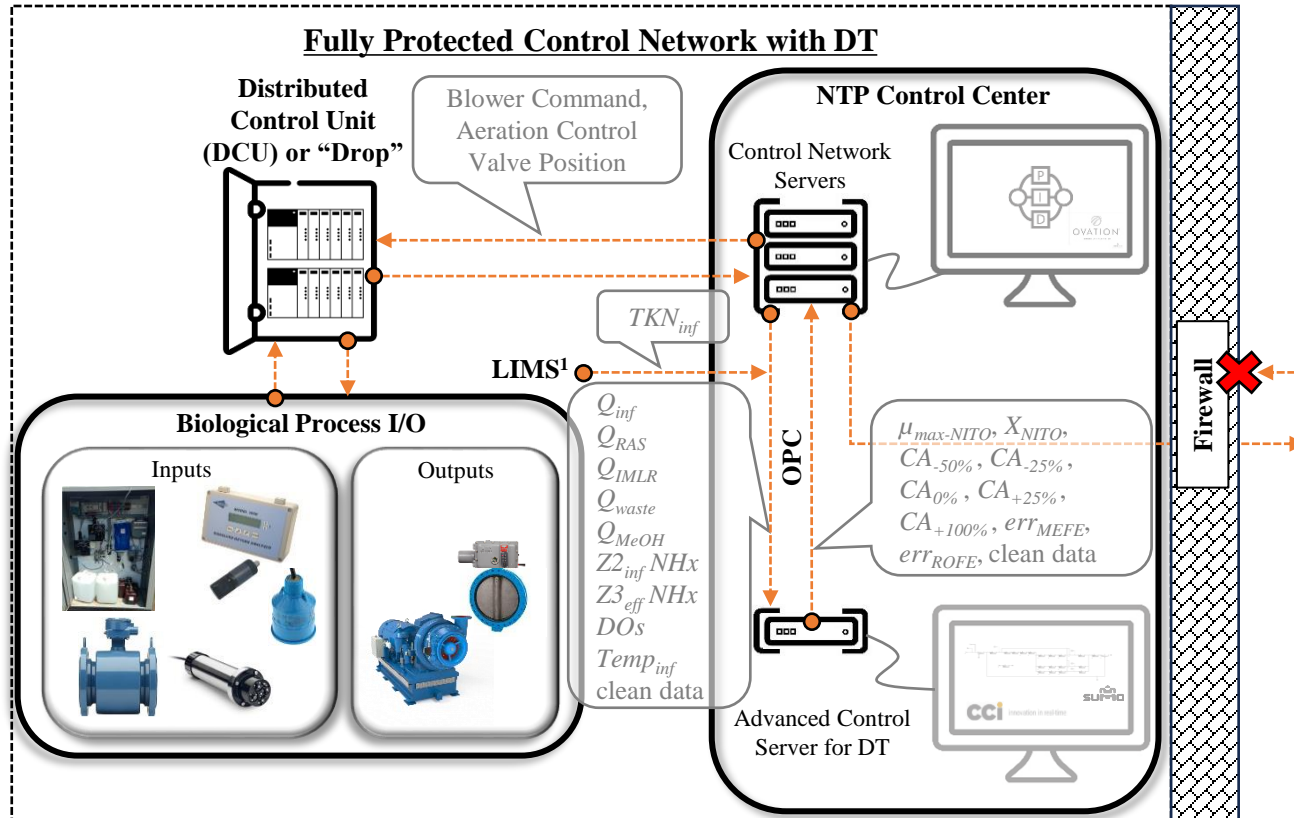




Digital Twin at the HRSD Nansemond Treatment Plant

1. Digital Twin (DT) and soft sensor definitions
2. DT architecture
3. DT function
4. DT for control

- **Digital Twin** – “A digital twin is a *model* of a physical entity with an *automated, bidirectional live data connection* to that real entity that allows for dynamic updating to maintain an accurate description of that entity as it evolves over time.”
- **Soft Sensor** – “A virtual or computational sensor used to estimate or infer the value of a physical quantity that is typically either impossible, difficult, or expensive to measure directly.”



Digital Twin

Nitrifier Population & Kinetics Estimations

X_{NITO} based on known NHx removal across the facility and $\mu_{max-NITO}$ estimated through Nelder-Mead optimization

Mechanistic Model Error Determinations

$$err = NHx_{mod} - NHx_{obs}$$

2.a

Waste Rate Scenario Analyses

Identify the ideal waste rate to maximize CA based on # of PCs in-service, possible NHx/TKN_{inf} Fractions, and $Temp_{fcst}$

NHx_{mod} at 5 different waste rate changes

3.a.ii

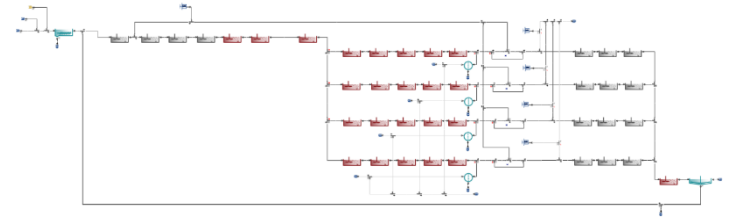
3.a.i

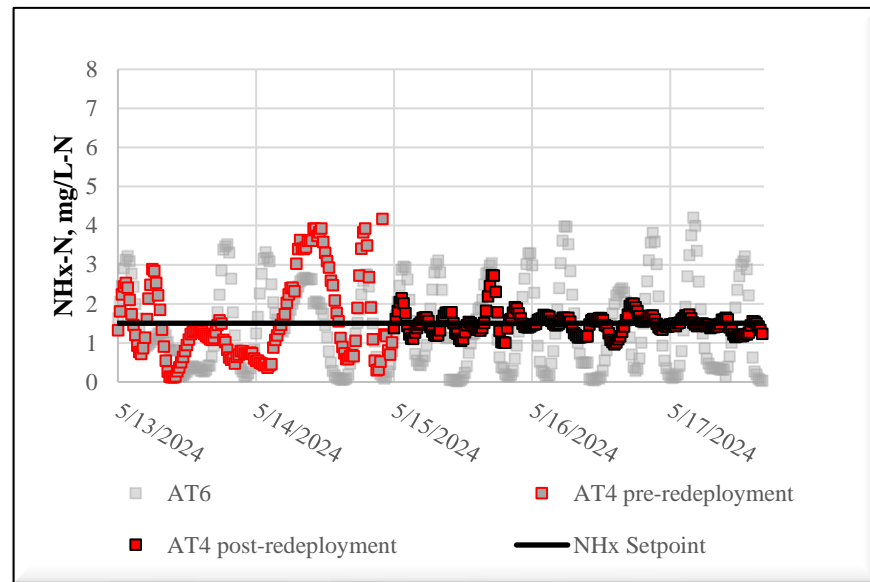
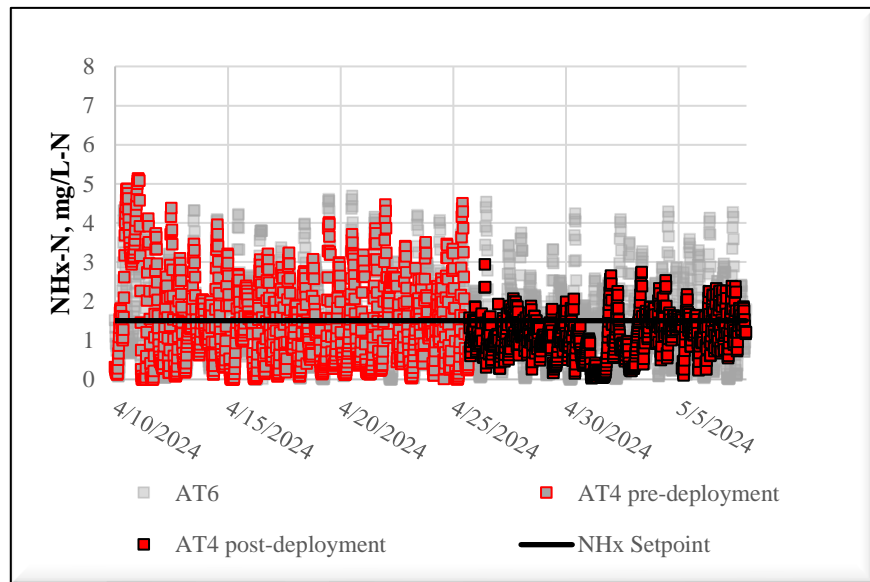
X_{NITO}
 $\mu_{max-NITO}$

CA Estimations

$\mu_{max-NITO}$

Control System

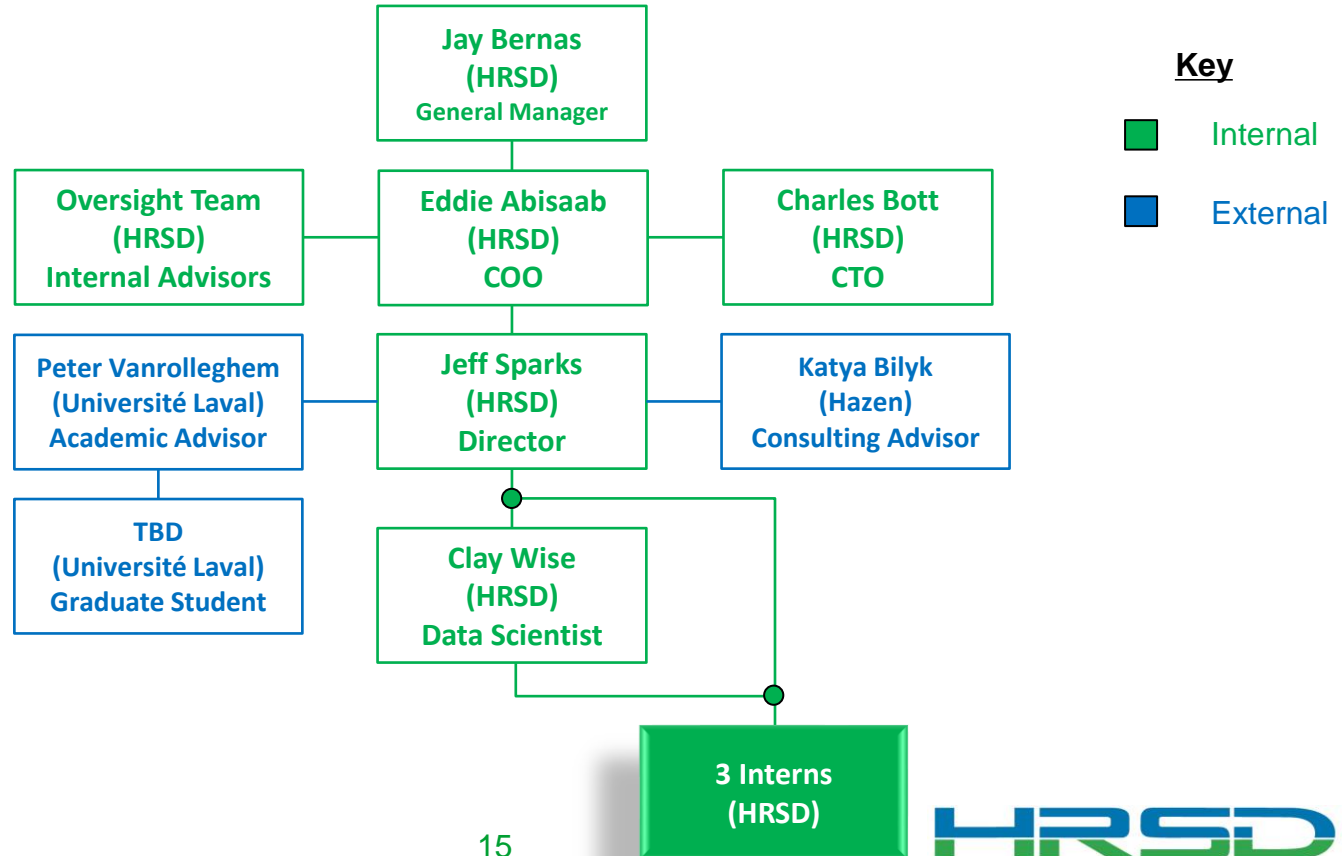


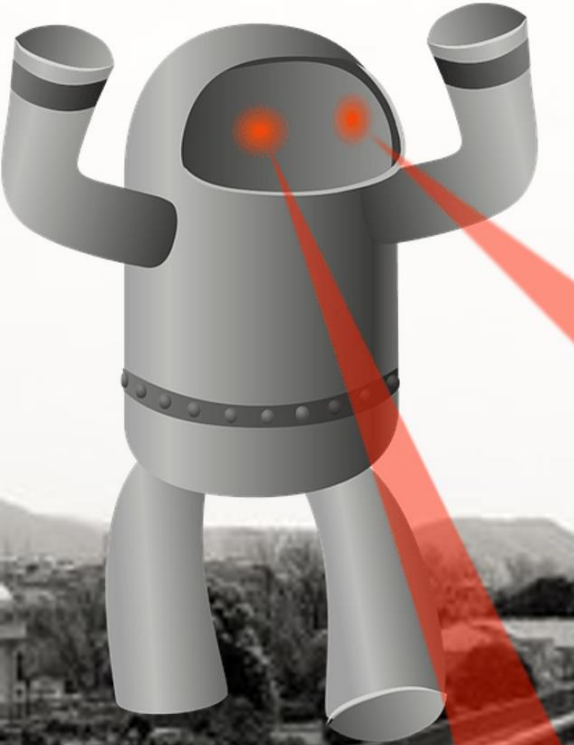


Results

AT 6 Controller MAE = 0.81 mg/L-N
AT 4 MAE before tuning = 0.55 mg/L-N
AT 4 MAE after tuning = 0.20 mg/L-N

Digital Water Organization





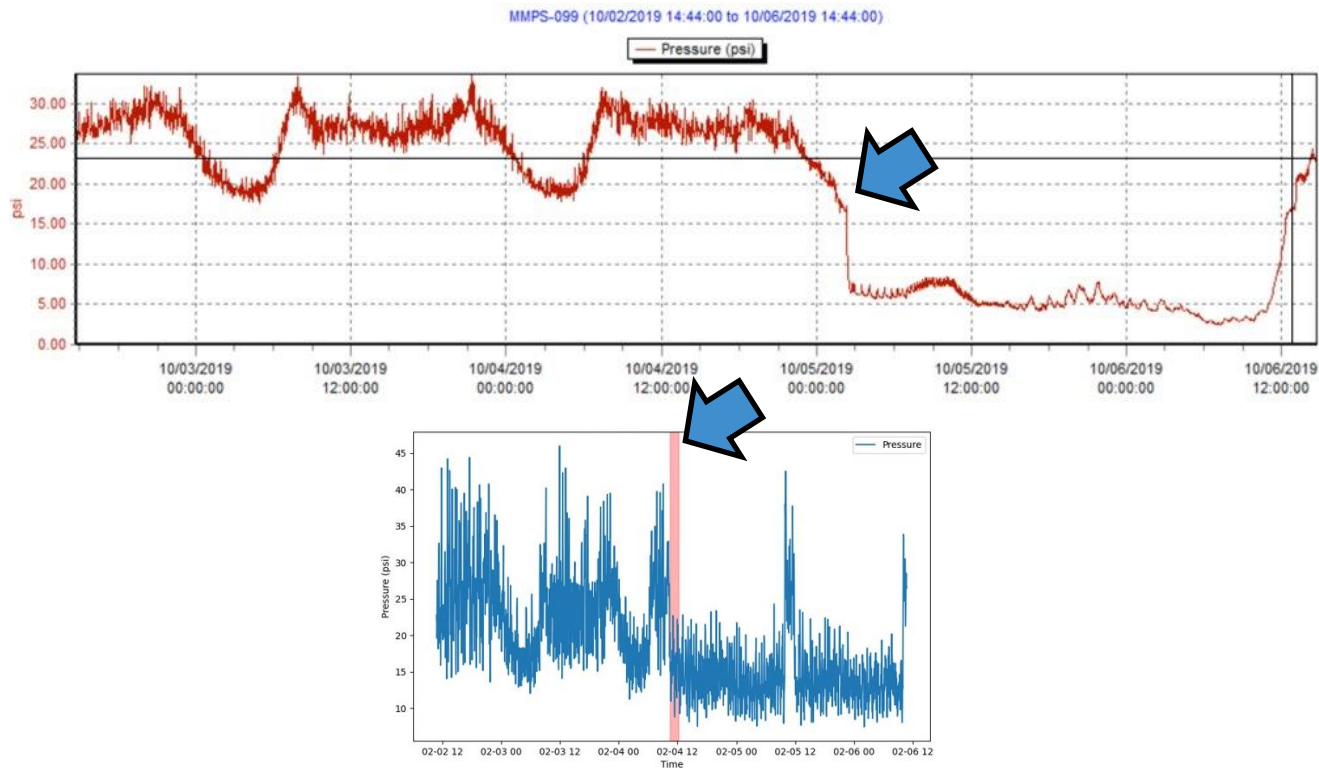
Summer Intern Projects

1. Force Main Break Detector
2. Thickened Solids TS Soft Sensor
3. HRSD Large Language Model (LLM)



- **Who:** Tristen Gambito, Villanova Chemical Engineering Student
- **What:** Automatically detect force main breaks based on pressure sensor signals and what we're trying to identify as a break signature.
 - **Application:** Time Series Anomaly (Fault) Detection
 - **Algorithm:** Isolation Forest (Unsupervised Learning)
- **Data:** ~20 years of pressure sensor data from shortly before and after FM breaks
- **Objective:** Quick response

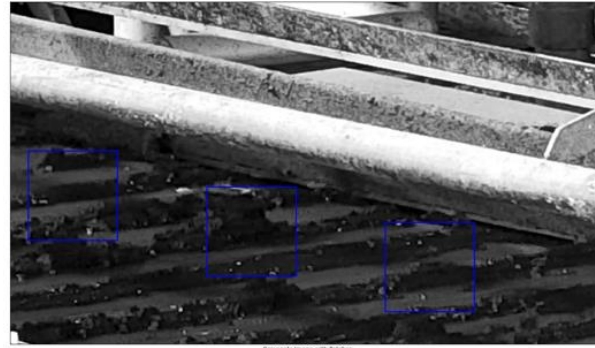
Force Main Break Detector



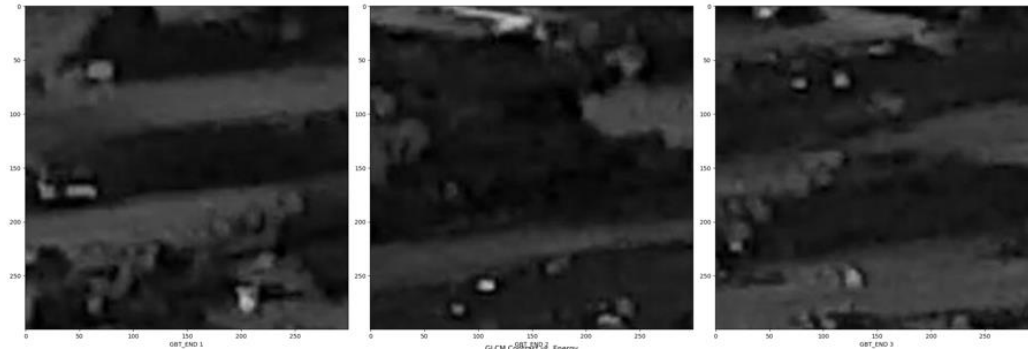


- **Who:** Nicholas Stephan, VCU Chemical Engineering Student
- **What:** Predict the Total Solids concentration coming off the end of the Gravity Belt Thickener based on the video feed from the camera already installed in the thickening room.
 - **Application:** Image Recognition
 - **Algorithm:** Random Forest (Supervised Learning)
- **Data:** ~ 1,000 samples collected from the end of the Gravity Belt Thickener
- **Objective:** Polymer savings

Thickened Solids Total Solids Soft Sensor



Grayscale Image with Patches





- **Who:** David (Elliot) Hong, UVA Computer Science Student
- **What:** Custom chatbot for HRSD tailored for things we care about.
 - **Application:** Natural Language Processing
 - **Algorithm:** Deep Neural Network using a Generative Pre-trained Transformer
- **Data:** Journal articles and O&M manuals
- **Objective:** Training, efficiency, quick response



How much energy and external carbon can I expect to save by pe PdNA?

Use Case 1 – H

I'm working on a Flygt dry-pit submersible pump, Model 3300, with a the impeller is spinning What do I do?

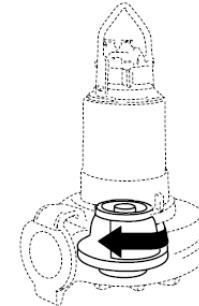
Use Case 2 – HR

What is happening at my plant today?

Use Case 3 – HRSD

Advancing the understanding of mainstream shortcut nitrogen removal: resource efficiency, carbon redirection, and plant capacity†

4 Installation



The correct direction of impeller rotation is clockwise when you look at the pump from above.

4. If the impeller rotates in the wrong direction, then do one of these steps:
 - If the motor has a 1-phase connection, then contact a sales or authorized service representative.
 - If the motor has a 3-phase connection, then transpose two phase leads and do this procedure again.

HRSD LLM Use Case 3 – Operator AI Assistant

Automatic ingestion on a schedule at shift change

- Sensor 1

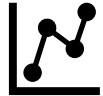


normal



last 24-hr

- Sensor 2



normal



last 24-hr

- Sensor 3



normal



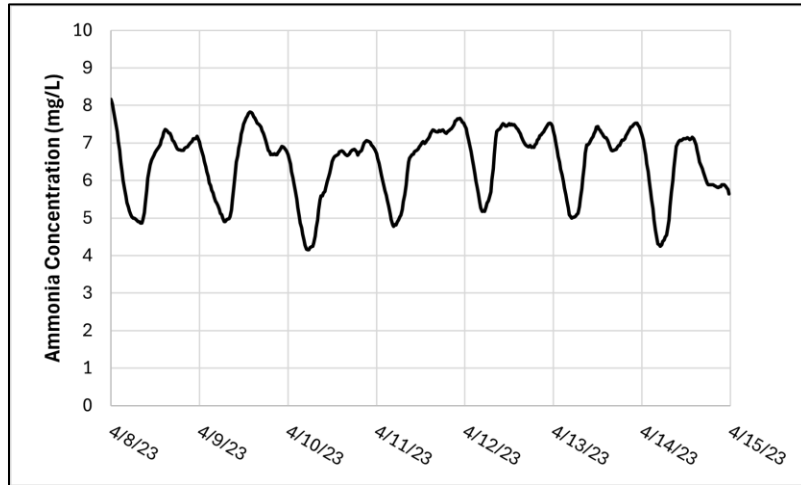
last 24-hr

etc.

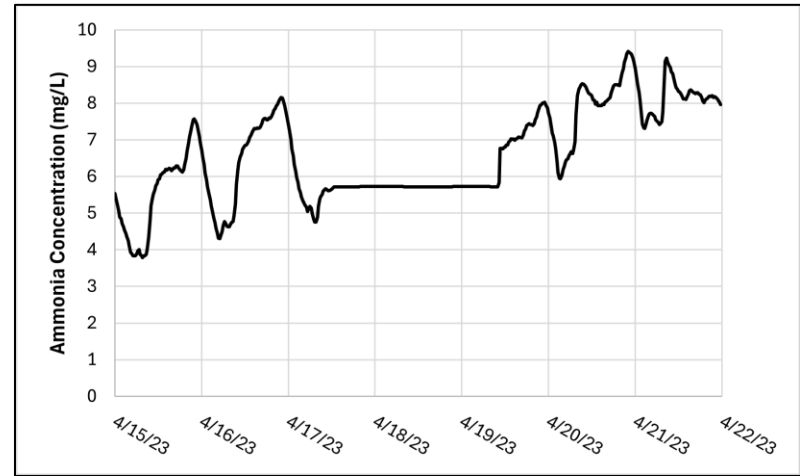


HRSD LLM Use Case 3 – Operator AI Assistant

“Normal”



Elevated with Fault



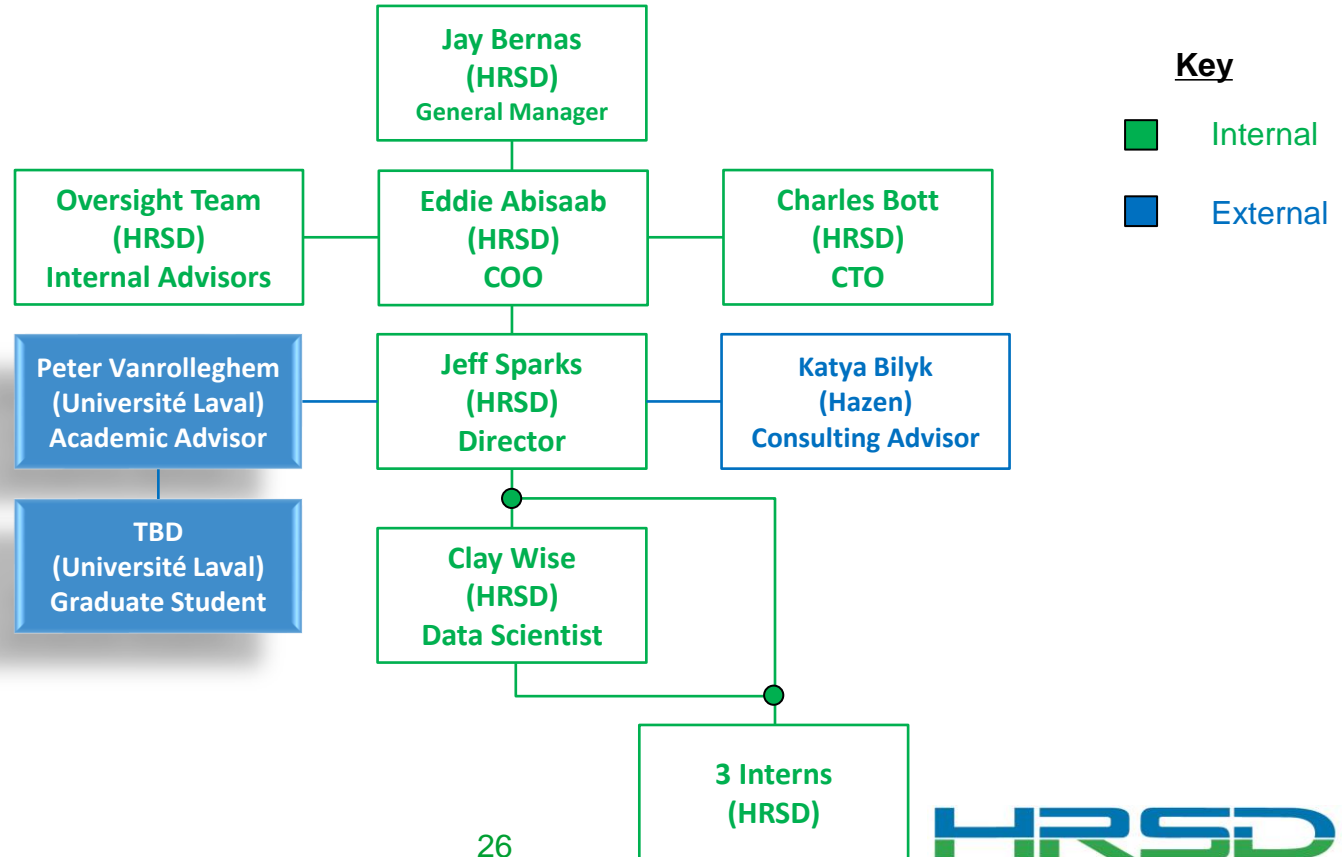
HRSD LLM Use Case 3 – Operator AI Assistant

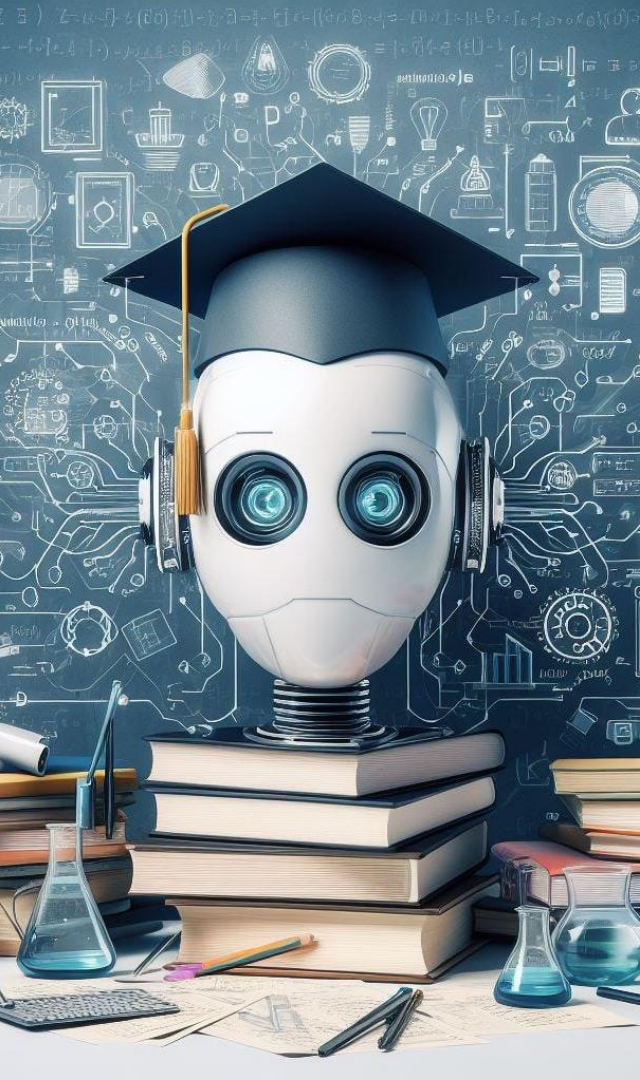


You've been provided two trends for the influent ammonia concentration from an aeration tank at a wastewater treatment plant. The first trend is considered normal. The second trend is from this past week. In 3 sentences or less, tell me what is happening with the influent ammonia this week, paying particular attention to the peaks in the trend and any potential sensor faults.



Digital Water Organization





Academic Support

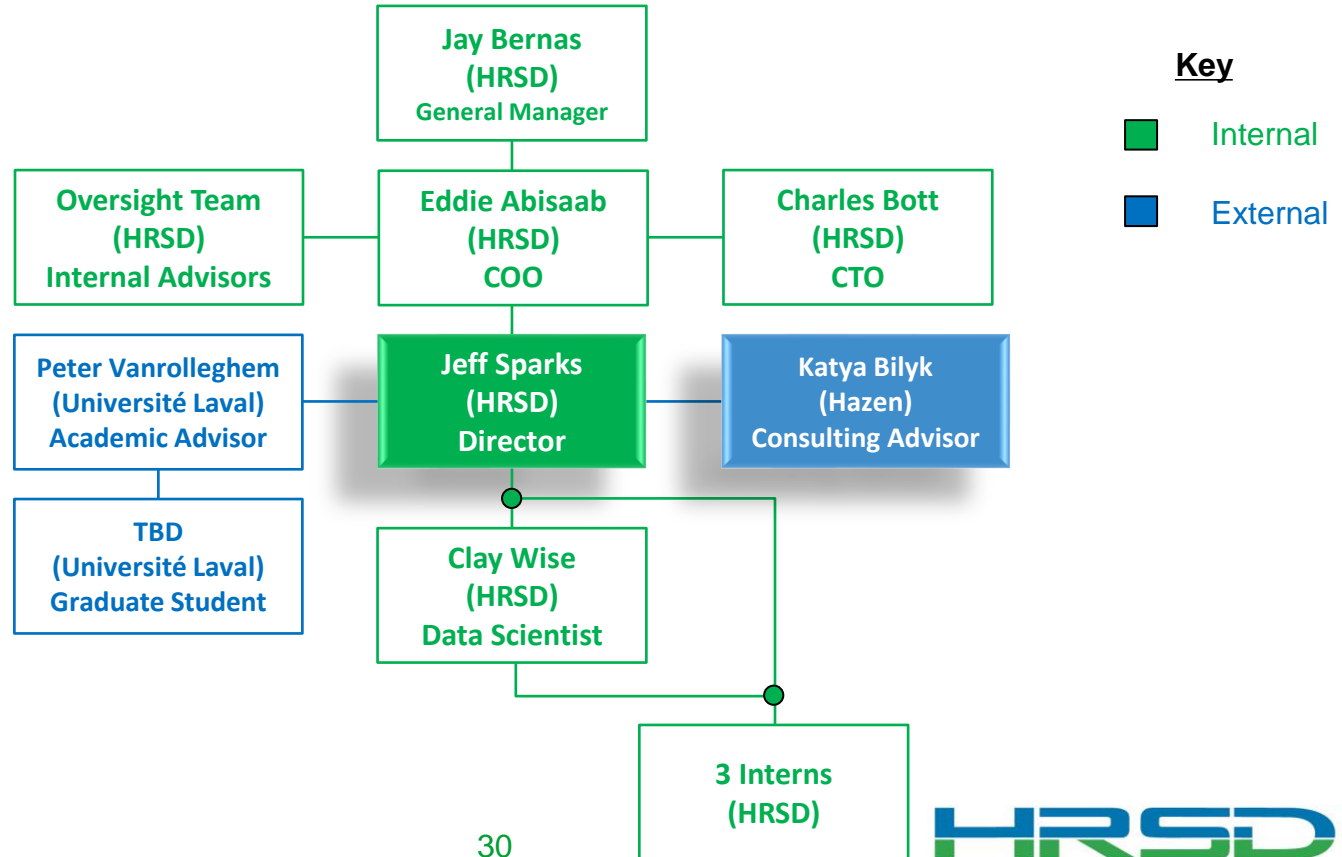
1. UrbanBEATS
 - a. Biophysical Environments and Technologies Simulator

- A scientific approach to accommodating new development is needed.
- Factors to consider for the “cost function”:
 - Capital cost of new infrastructure.
 - Where is it cheapest to treat the flow?
 - Age and condition of nearby infrastructure.
 - Wet weather impacts from new development. This is impacted by:
 - interceptor valving
 - storage
 - PRS operation
 - etc.
- The possible number of solutions are numerous and cumbersome to evaluate manually.

cost function eval



Digital Water Organization



- 1) **Force main break detector**
- 2) **Thickened solids Total Solids soft sensor**
- 3) **HRSD Large Language Model**
- 4) Ozone control for Swift Research Center, James River Treatment Plant, and Nansemond Treatment Plant
- 5) Machine Learning-based hypochlorite feed and disinfection control
- 6) Pump station Preferred Operating Range operation
- 7) General Treatment Plant instrument fault detection
- 8) Treatment Plant, storage tank, and equalization tank flow forecasting
- 9) DT-informed biological process control, including recycle pumping, aeration, and wasting
- 10) Interceptor Digital Twin
- 11) York River Treatment Plant Ammonia-versus-Total Inorganic Nitrogen control



HRSD Commission Meeting Minutes
July 23, 2024
Attachment #5

11. Capital Improvement Program (CIP)
Update



HRSD

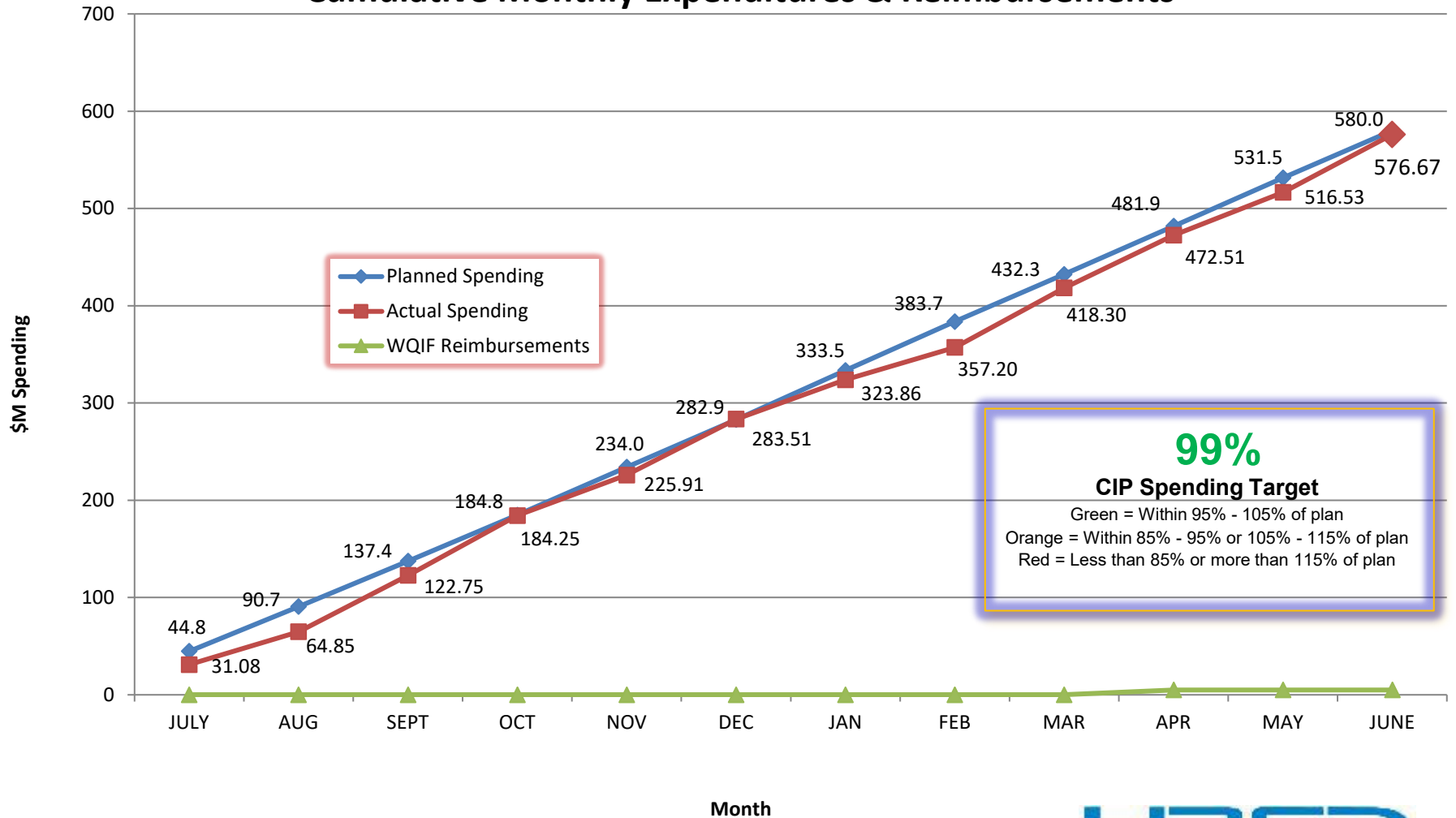
Capital Improvement Program
Commission Briefing

July 23, 2024

- CIP Expenditures for FY-2024
- CIP Performance Metrics
- Engineering Division Staffing
- Firms Used for Engineering and Construction Efforts
- Consent Decree/Sewer Rehabilitation Plan – Project Status
- SWIFT Program Summary
- Significant Project Updates
- Focus: Eastern Shore Transmission Force Main

CIP Expenditures for FY-2024

FY2024 Capital Improvement Program Cumulative Monthly Expenditures & Reimbursements



CIP Expenditures for FY-2024

CIP Projects with Largest Spending Projections in FY-2024

Project Name	Planned FY-2024 CIP Spending	Actual FY-2024 Spending	Differential
Nansemond TP ANRI Improvements Phase II	\$118,923,000	\$87,761,000	-\$31,162,000
James River SWIFT & ANRI Improvements	\$95,370,000	\$124,423,000	+\$29,053,000
Boat Harbor TP Transmission FM (JRX)	\$67,330,000	\$62,748,000	-\$4,582,000

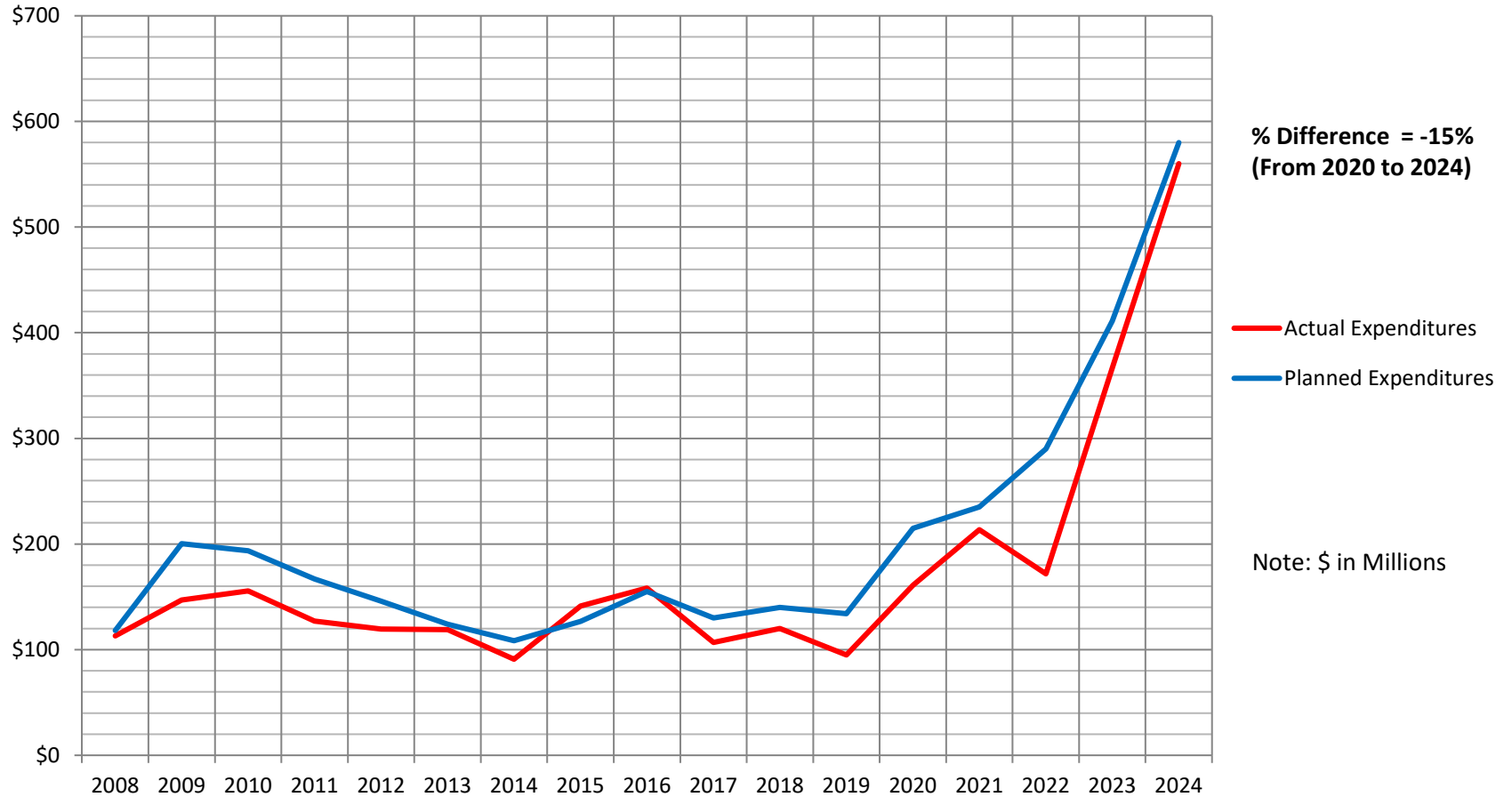
CIP Expenditures for FY-2024 (cont.)

CIP Projects with Largest Spending Projections in FY-2024

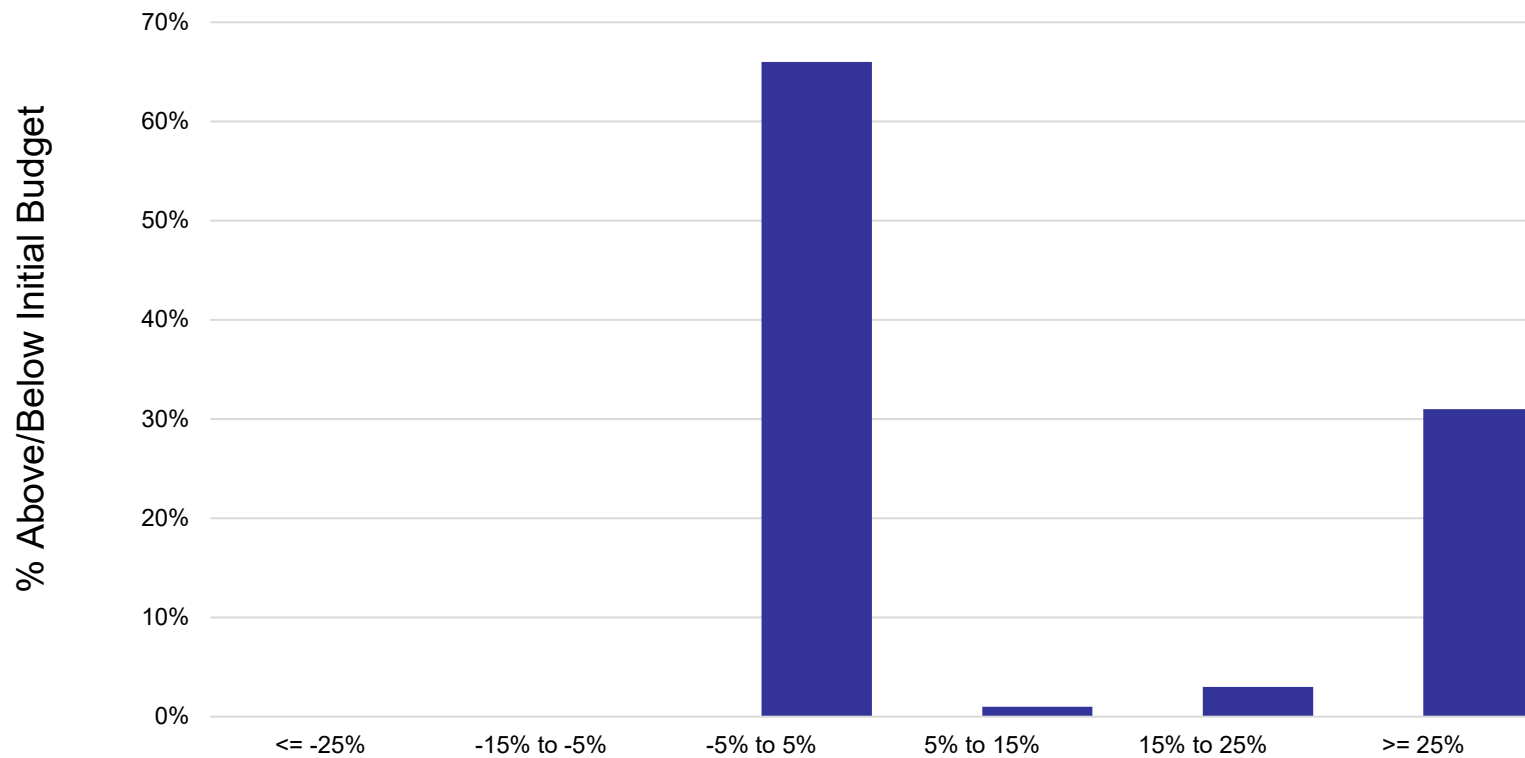
Project Name	Planned FY-2024 CIP Spending	Actual FY-2024 Spending	Differential
Boat Harbor TP Pump Station Conversion	\$35,094,000	\$40,955,000	+\$5,861,000
Nansemond TP Struvite Recovery and Digester Upgrades	\$34,241,000	\$26,052,000	-\$8,189,000
Total:			-\$9,019,000

CIP Expenditures for FY-2024 (cont.)

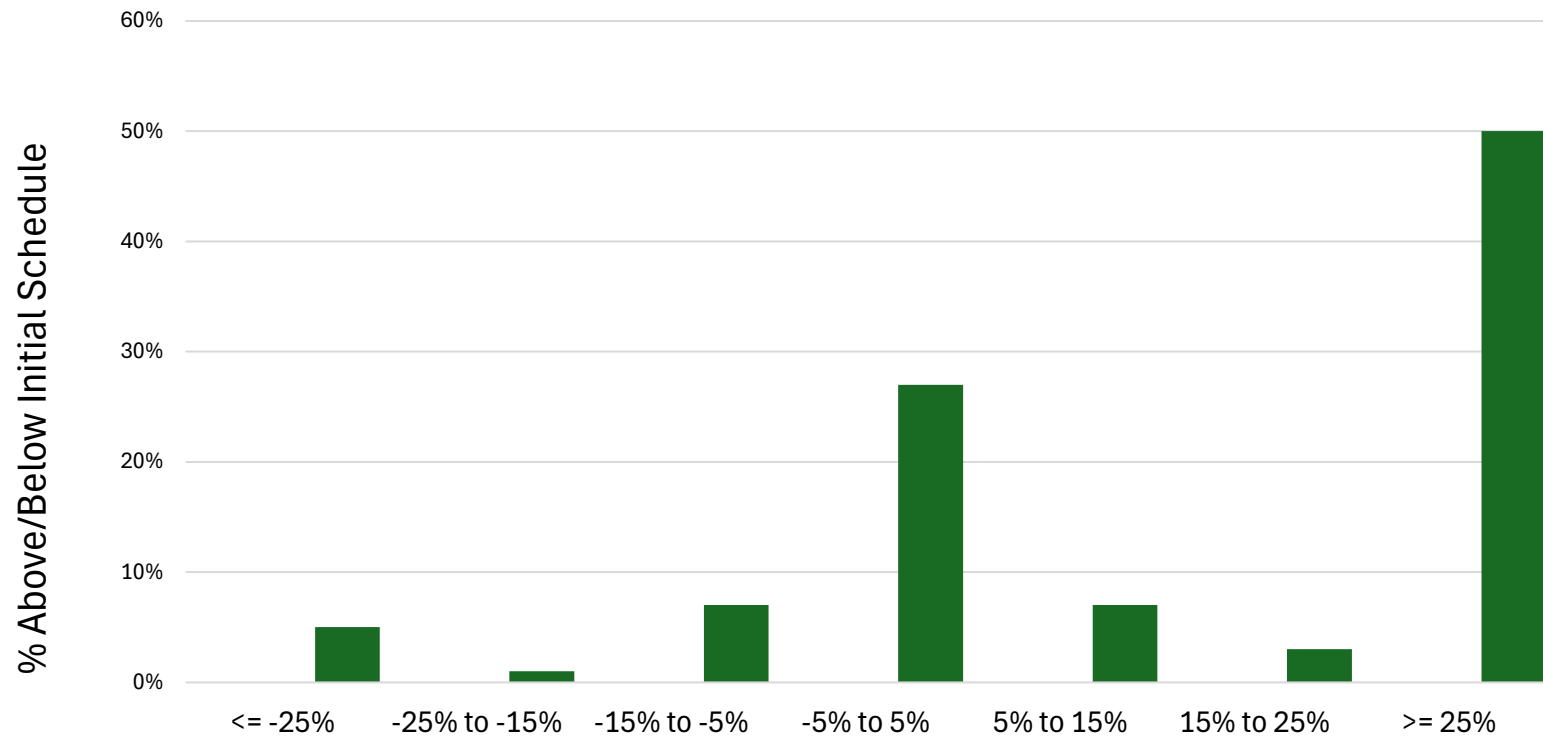
Planned vs. Actual CIP Spending



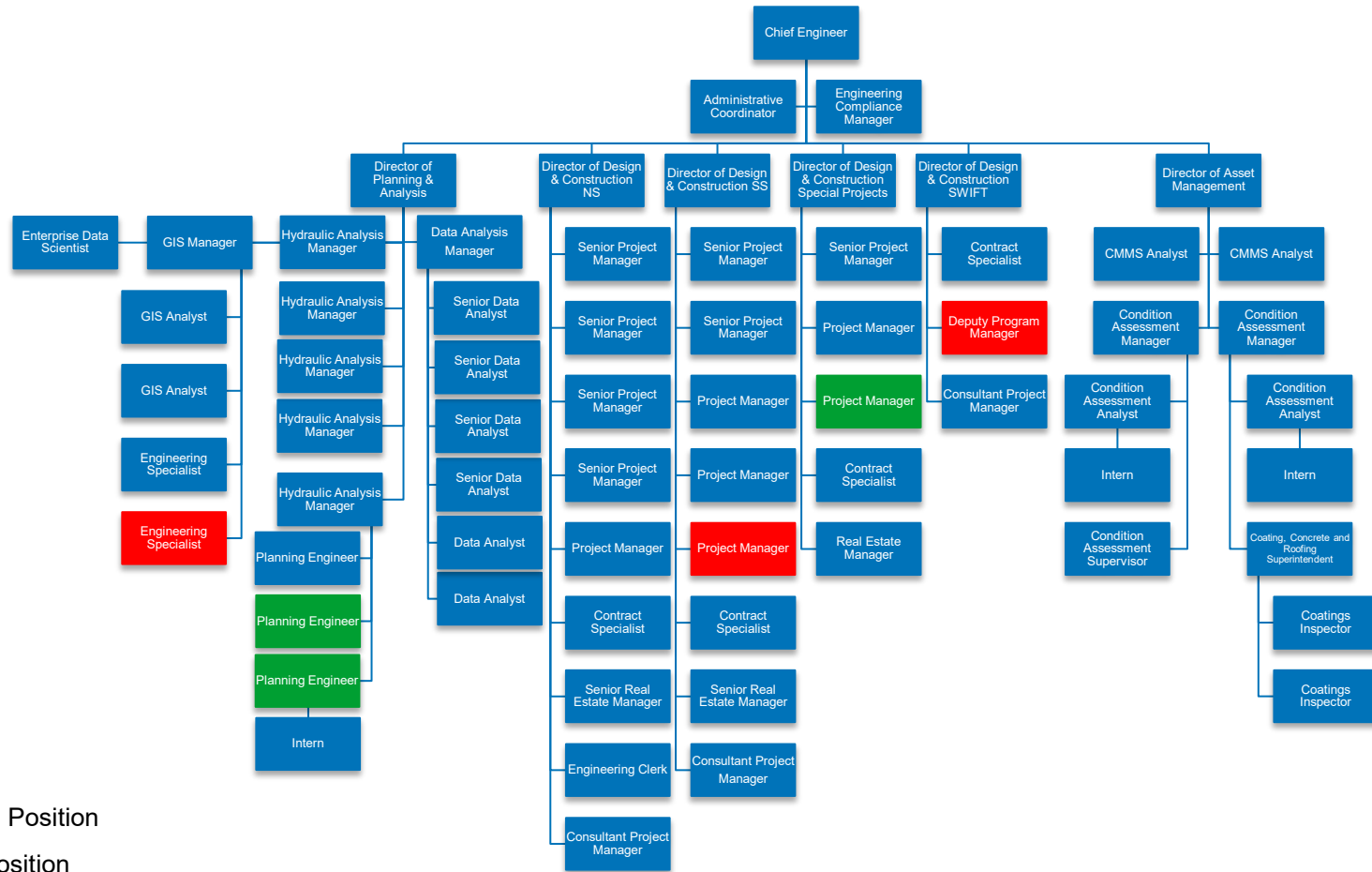
CIP Project Budget Performance



CIP Project Schedule Performance



Engineering Division Staffing



Firms Used for Engineering Services Annual Contracts

Contract	Firm	SWAM	Term	# Task Orders	Active Contract Value	Remaining Balance
Architectural Mechanical Electrical Projects	Guernsey Tingle	X	2/5	14	\$2,836,848.75	\$471,972.55
Condition Assessment	Hazen and Sawyer		1/4	42	\$4,384,783.72	\$1,174,295.08
Construction Inspection	McDonough Bolyard Peck Inc.		N/A	2	\$189,686.38	\$2,151.20
Construction Inspection	Whitman Requardt & Associates LLP		1/4	3	\$236,368.50	\$210,732.40
Environmental Services	Kimley Horn		1/4	1	\$27,740.00	\$22,425.00
Environmental Services	Tetra Tech, Inc.		N/A	3	\$1,322,598.13	\$219,021.74
General Engineering Services	CH2M Hill		N/A	1	\$1,309,063.00	\$8,019.17
General Engineering Services	Gannett Fleming, Inc.		3/4	12	\$1,785,367.68	\$420,744.50
General Engineering Services	Hazen and Sawyer		4/5	16	\$11,066,923.45	\$2,466,747.38
General Engineering Services	HDR Engineering, Inc.		4/5	38	\$23,179,009.71	\$8,701,759.14
Interceptor Systems Projects	Whitman Requardt & Associates LLP		N/A	1	\$678,521.00	\$8,168.40
Linear Infrastructure Projects	Rummel Klepper & Kahl LLP		1/4	33	\$17,295,104.44	\$4,222,254.94
Land Surveying and Related Work	Rice Associates Inc.	X	N/A	2	\$154,292.84	\$4,957.78
Land Surveying and Related Work	Timmons Group		1/4	1	\$37,405.00	\$13,857.37
Real Estate Services	Johnson Mirmiran and Thompson, Inc.		2/5	9	\$572,290.50	\$261,194.04
Real Estate Services	Timmons Group		2/5	1	\$5,000.00	\$3,652.50
Structural Projects	Collins Engineers	X	4/5	16	\$467,617.86	\$231,546.66
				195	\$65,548,620.96	\$18,443,499.85

Firms Used for Engineering Services Individual Contracts

CONSULTANT	#CONTRACT	VALUE	REMAINING
AECOM TECHNICAL SERVICES INC	5	\$66,951,722.49	\$22,932,565.88
AH ENVIRONMENTAL CONSULTANTS, INC	1	\$2,334,052.00	\$263,580.17
BLACK AND VEATCH CORP	4	\$2,141,597.00	\$105,000.00
BOWMAN CONSULTING GROUP, LTD.	1	\$412,567.50	\$16,777.97
BROWN AND CALDWELL	6	\$8,881,168.00	\$2,107,193.31
CDM SMITH INC	2	\$6,959,401.18	\$1,126,290.84
Dewberry Engineers Inc.	1	\$909,372.53	\$216,990.01
Earth Data Incorporated	3	\$7,592,986.37	\$3,092,010.08
GANNETT FLEMING INC	5	\$19,804,456.17	\$7,647,648.08
HAZEN AND SAWYER PC	7	\$11,987,706.58	\$4,563,442.58
HDR Engineering, Inc.	1	\$2,116,124.95	\$1,887,942.31
KIMLEY HORN AND ASSOCIATES INC	11	\$11,465,627.00	\$1,378,726.54
MICHAEL BAKER INTERNATIONAL INC	1	\$729,486.00	\$170,151.00
RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.	2	\$2,647,734.85	\$28,018.00
RUMMEL KLEPPER AND KAHL LLP DBA RK AND K	8	\$28,271,978.02	\$13,887,880.82
TETRA TECH INC	1	\$1,109,847.00	\$82,338.91
VANASSE HANGEN BRUSTLIN, INC (VHB)	2	\$2,359,982.22	\$168,164.60
WHITMAN REQUARDT AND ASSOCIATES LLP	1	\$218,995.00	\$7,991.64
	62	\$176,894,804.86	\$59,682,712.74

Firms Used for Construction Services Annual Contracts

CONTRACTOR	SWAM	#TASK ORDERS	VALUE	REMAINING
BRIDGEMAN CIVIL CONSTRUCTION INC	X	48	\$15,270,011.87	\$7,969,387.51
TIDEWATER UTILITY CONSTRUCTION INC	X	40	\$6,127,890.47	\$1,608,526.76
		88	\$21,397,902.34	\$9,577,914.27

Firms Used for Construction, Design-Build and CM Services Individual Contracts

A.C. Schultes of Md., Inc.		2	\$57,447,600.00	\$14,497,650.00
Allan Myers VA, Inc.		1	\$4,945,137.04	\$0.00
BASIC CONSTRUCTION COMPANY LLC	X	1	\$4,400,528.58	\$238,370.53
BRIDGEMAN CIVIL INC	X	15	\$100,128,923.53	\$35,813,370.73
COASTAL DESIGN & CONSTRUCTION INC	X	1	\$2,381,679.00	\$0.00
CROWDER CONSTRUCTION COMPANY		4	\$68,371,070.45	\$5,223,076.30
ET GRESHAM CO INC	X	1	\$6,524,110.93	\$110,550.79
GARNEY COMPANIES, INC.		5	\$1,147,633,389.72	\$893,395,882.00
HENDERSON INC	X	1	\$17,587,994.55	\$349,486.15
HOWARD BROTHERS CONTRACTOR INC	X	1	\$8,868,288.70	\$1,913,386.38
J SANDERS CONSTRUCTION	X	2	\$3,046,218.99	\$807,660.44
KIEWIT INFRASTRUCTURE SOUTH CO.		3	\$36,660,231.95	\$19,569,474.25
MEB GENERAL CONTRACTORS INC	X	10	\$333,153,659.96	\$183,285,785.34
PARKWAY GRADING, INC.	X	1	\$931,512.72	\$0.00
PC CONSTRUCTION COMPANY		1	\$257,000.00	\$115,345.00
SHAW CONSTRUCTION, CORP.	X	2	\$13,216,084.37	\$6,565,355.65
STRUCTURAL PRESERVATION SYSTEMS, LLC		1	\$5,976,968.25	\$0.00
TIDEWATER UTILITY CONSTRUCTION INC	X	9	\$54,722,042.11	\$14,713,864.82
ULLIMAN SCHUTTE CONSTRUCTION LLC		1	\$622,477.00	\$63,543.55
ULLIMAN SCHUTTE - ALBERICI JOINT VENTURE		2	\$534,500,298.00	\$247,407,442.27
WM SCHLOSSER COMPANY INC		2	\$35,722,000.00	\$35,722,000.00
		66	\$2,437,097,215.85	\$1,459,792,244.20

Consent Decree/Sewer Rehabilitation Plan – Project Updates

- Consent Decree Condition Assessment Program (CAP) identified condition defects in the regional sanitary sewer system.
- EPA/VDEQ approved the Rehabilitation Action Plan (RAP) in May 2015.
- RAP addresses improvements to gravity mains, force mains, pump stations and associated system components.
- RAP will be implemented in three phases:
 - Phase 0 (June 2017)
 - Phase 1 (May 2021)
 - Phase 2 (May 2025)

Consent Decree/Sewer Rehabilitation Plan Project Updates (Phase 2)

CIP	Project Name	Project Status	Total CIP Cost
AB010500	Section W Force Main Replacement	Design	\$27,343,000
AT011510	Shipp's Corner Interim Pressure Reducing Station	Complete	\$3,691,148
AT011520	Shipp's Corner Pressure Reducing Station Modifications	Construction	\$1,826,426
AT011900	Great Bridge Interceptor Extension 16-Inch Replacement ³	Design	\$11,915,000
AT013000	Washington District Pump Station Area Sanitary Sewer Improvements ⁴	Construction	\$12,188,492
AT013010	Washington District Pump Station Replacement ²	Design	\$9,400,000
AT013100	South Norfolk Area Gravity Sewer Improvements Phase 1	Complete	\$968,005
AT013110	South Norfolk Area Gravity Sewer Improvements Phase 2 ⁴	Design	\$10,566,000
AT015400	Dozier's Corner Pump Station Replacement ²	Design	\$17,121,868
BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	Complete	\$4,404,011
BH014500	Ivy Home-Shell Road Sewer Extension Division I Replacement	Construction	\$2,243,200
BH014600	46th Street Diversion Sewer Rehabilitation Replacement	Construction	\$12,178,333
BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvements	Construction	\$4,644,400
BH015900	Bloxoms Corner Force Main Replacement	Complete	\$6,391,596
CE011300	Birchwood Trunk 24-Inch 30-Inch Force Main at Independence Boulevard Replacement Phase II	Design	\$1,702,700
CE011600	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements	Design	\$2,262,394
CE012000	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements (I-264 VDOT Betterment)	Complete	\$233,180
GN010730	Horizontal Valve Replacement Phase III	Complete	\$0
GN014900	North Shore Gravity Sewer Improvements Phase I	Construction	\$13,095,613
GN015000	South Shore Gravity Sewer Improvements Phase I	Construction	\$3,751,057
GN015300	Interceptor System Valve Improvements Phase I	Construction	\$4,968,888
GN015400	South Shore Aerial Crossing Improvements	Design	\$290,758

Consent Decree/Sewer Rehabilitation Plan Project Updates (Phase 2)

CIP	Project Name	Project Status	Total CIP Cost
GN018600	North Shore Galvanic Cathodic Protection System Rehabilitation	Design	\$2,323,860
GN018800	South Shore Galvanic Cathodic Protection System Rehabilitation	Design	\$3,102,235
JR013500	Lucas Creek Pump Station Replacement ⁴	Construction	\$26,076,376
NP010620	Suffolk Pump Station Replacement ²	Design	\$12,049,000
NP012400	Western Branch Sewer System Gravity Improvements ⁴	Design	\$5,100,000
NP012500	Shingle Creek and Hickman's Branch Gravity Sewer Improvements	Complete	\$1,230,006
VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 2 ⁴	Construction	\$5,271,121
VP014010	Ferebee Avenue Pump Station Replacement ¹	Design	\$5,852,747
VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24-Inch & 18-Inch Gravity Replacement	Complete	\$7,179,000
VP014021	Sanitary Sewer Project 1950 FM Replacement Part 1	Complete	\$4,225,819
VP014022	Sanitary Sewer Project 1950 FM Replacement Part 2 ⁴	Construction	\$24,287,289
VP014700	Ingleside Road Pump Station Replacement ⁴	Design	\$3,810,449
VP014800	Lee Avenue-Wesley Street Horizontal Valve Replacement	Design	\$4,081,470
VP015320	Larchmont Area Sanitary Sewer Improvements ²	Design	\$38,734,000
VP015400	Lafayette Norview-Estabrook Pump Station Replacements ²	Design	\$18,495,895
VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement ⁴	Construction	\$5,400,927
VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement Phase III ⁴	Construction	\$4,222,901
VP017110	Central Norfolk Area Gravity Sewer Improvements Phase I	Complete	\$136,403
VP017120	Central Norfolk Area Gravity Sewer Improvements Phase II ¹	Construction	\$7,160,000
VP018000	Park Avenue Pump Station Replacement ⁴	Construction	\$15,366,578
YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and Woodland Road Fox Hill Road Gravity Sewer Rehabilitation	Construction	\$6,503,390

\$404,038,133

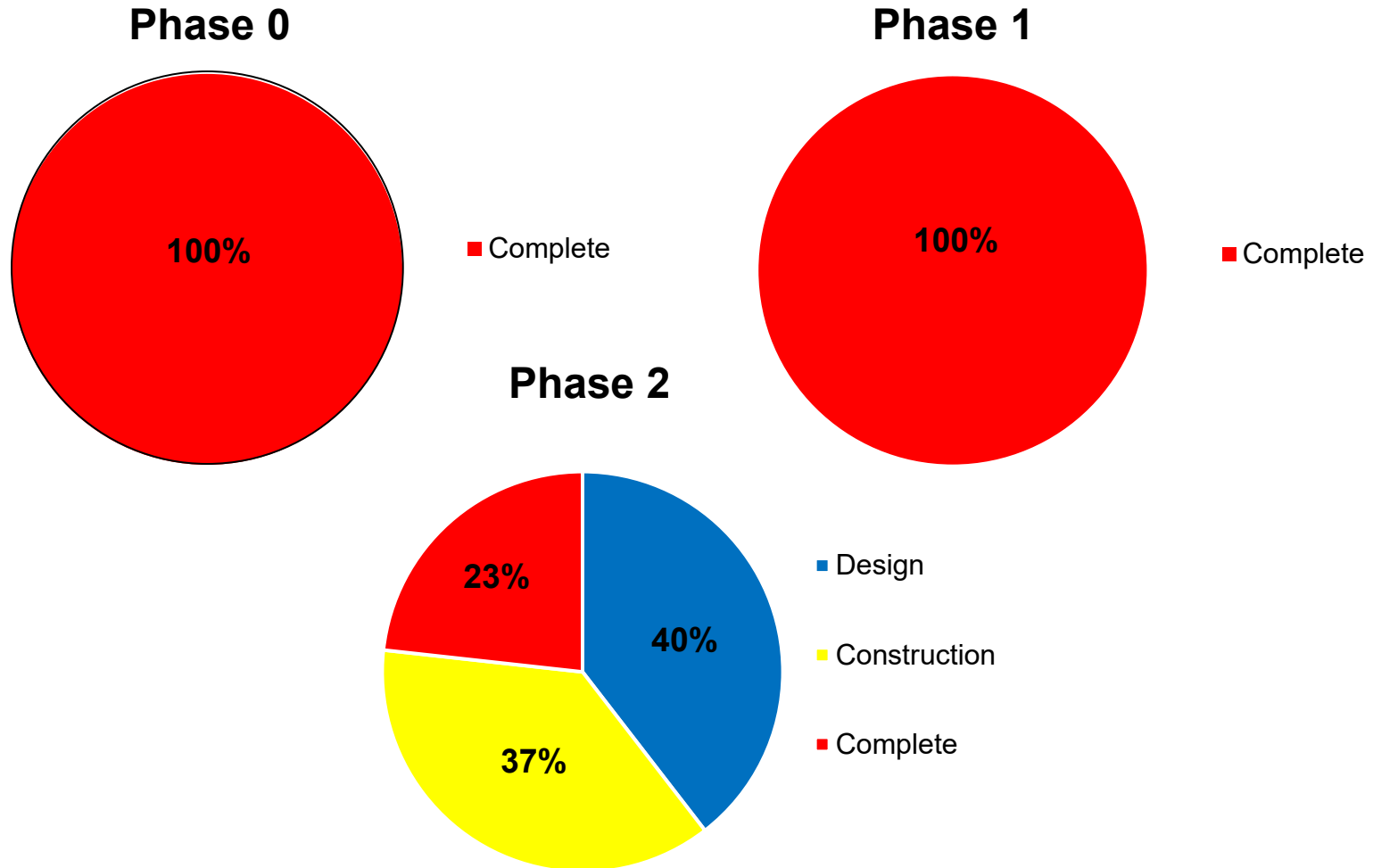
¹ Projects approved by the USEPA with one-year time extension

² Projects approved by the USEPA with two-year time extension

³ Project delayed due to emergency declaration. Time extension requested.

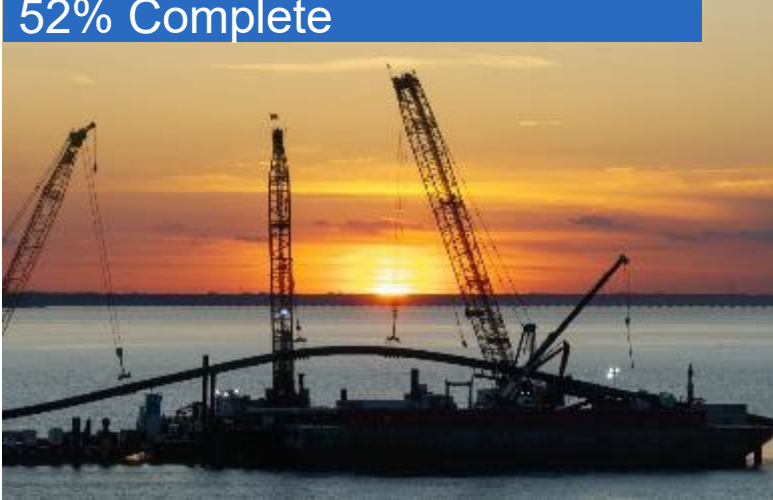
⁴ Projects with a 7-month time extension requested.

Consent Decree / Sewer Rehabilitation Plan – Project Updates



SWIFT Program Update – Major Projects Under Construction

Boat Harbor FM1 (JRX)
52% Complete



James River ANRI/SWIFT
53% Complete



Boat Harbor PS Conversion
26% Complete



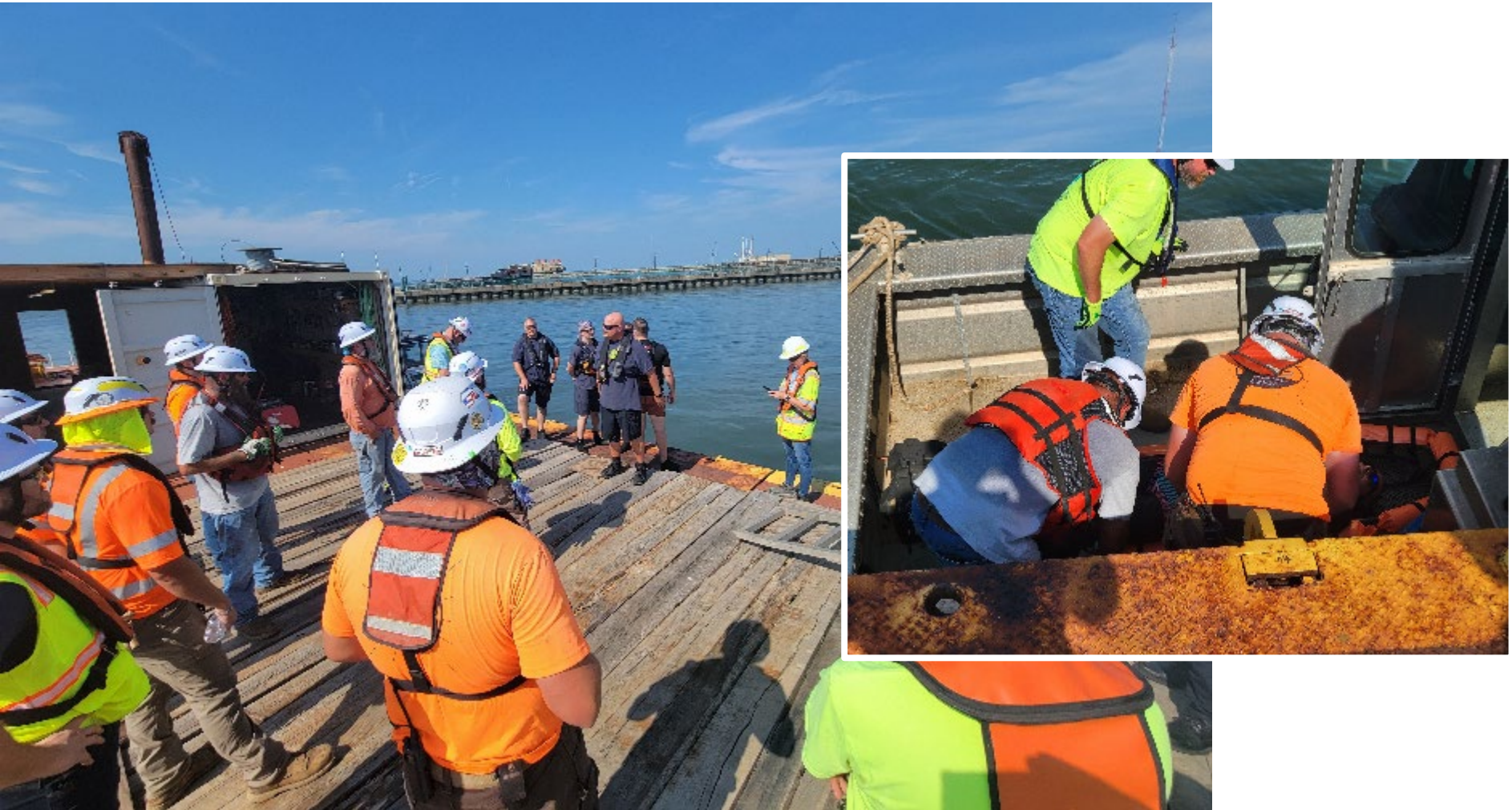
Nansemond ANRI
43% Complete



26% 52% 53% 43%

Percentage Complete

Newport News Fire Department – Rescue Training



SWIFT Partners Continue Their Commitment to the Community



Clean the Bay Day

- Annual event demonstrating environmental stewardship by collecting trash and reducing pollution in the Chesapeake Bay. **Teams collected over 231.6 pounds, helping to reduce pollution and preventing habitat destruction**



Green Run Collegiate Business Internship

- **Students from Green Run Collegiate** spent a few hours each day to learn from volunteers who shared their college and career success tips, career paths taken, and how engineering is involved in everyday life



Touch-a-Truck

- Team members helped create a fun-filled day for **children from Kindergarten to sixth grade**, offering them the opportunity to explore and learn about construction vehicles through the Junior League of Norfolk-Virginia Beach

Nansemond Advanced Nutrient Reduction Improvements Phase II

Owner's Consultant:

AECOM with Hazen & Sawyer

Design-Build Team:

Garney with Tetra Tech

Schedule Completion: April 2026

Project Value: \$318M

Funding:

WIFIA Loan = \$156M

WQIF Grant = \$127M (Requested)

Cash/Debt = \$35M



Installing wall forms at Aeration Tanks 8 & 9.

James River SWIFT and Advanced Nutrient Reduction Improvements

Owner's Consultant:

AECOM with Hazen & Sawyer

Design-Build Team:

Ulliman & Schutte - Alberici
with HDR and Black & Veatch

Schedule Completion: Oct. 2026

Project Value: \$579M

Funding:

WIFIA Loan = \$284M

SRF Loan = \$100M

WQIF Grant = \$345M (Requested)

Cash/Debt = Remainder



Aerial View of SWIFT Construction

James River Crossing - JRX a.k.a.(Boat Harbor Treatment Plant Subaqueous Crossing)

Owner's Consultant:

AECOM with Hazen & Sawyer

Design-Build Team:

Garney with Dewberry

Schedule Completion: Dec. 2025

Project Value: \$168M

Funding:

WIFIA Loan = \$82M

SRF Loan = \$10M

WQIF Grant: \$311M Requested

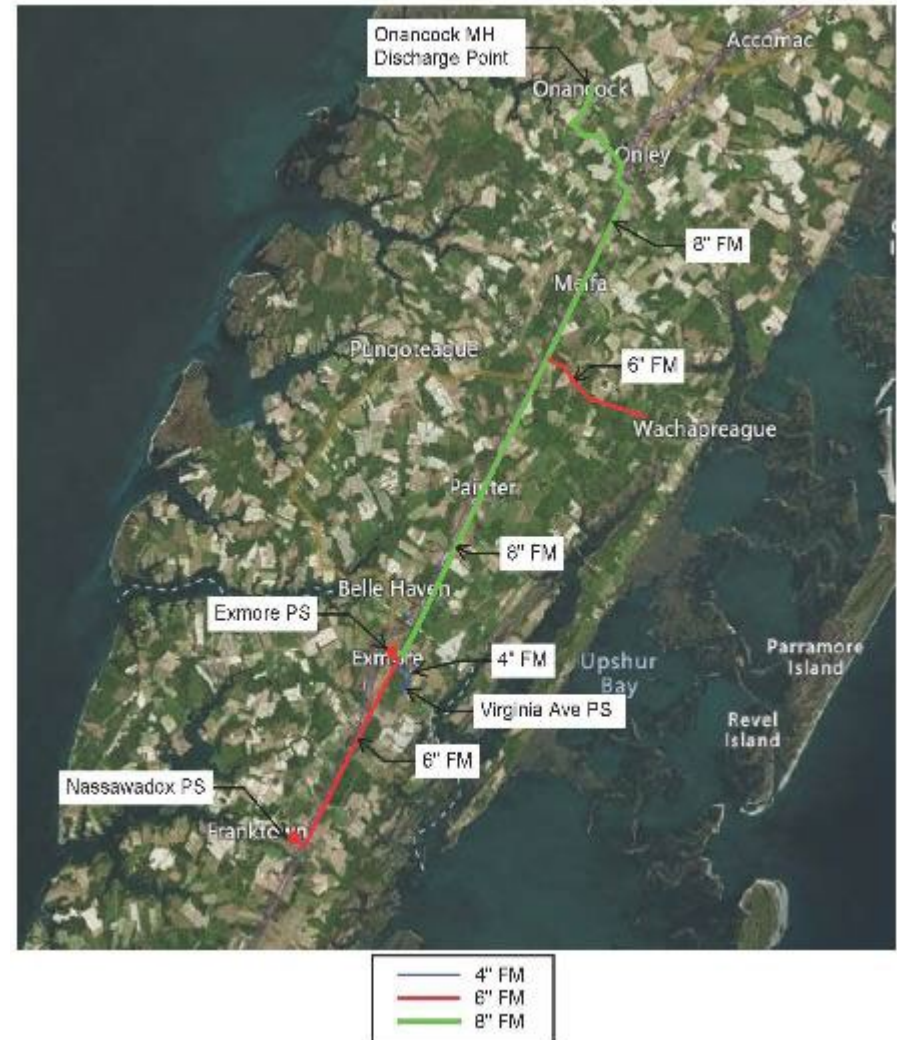
Cash/Debt = Remainder



HDPE Pipe Fusing Operations

Focus: Eastern Shore Transmission Force Main Project

This project installed 110,000 feet of force main, three above grade pump stations (Nassawadox, Exmore and Onancock), two submersible pump stations (Accomac and Wachapreague) and the closure of the Nassawadox Treatment Plant. Sewage flows from these areas are now conveyed to the Onancock Treatment Plant. After award of this contract, additional work was added to serve sections of Accomack County and Wachapreague. A Design-Build delivery method was used to complete this project.



Design-Build Project Total = \$39.86M

State Revolving Loan Fund = \$24.55M

ARPA Funding = \$4.13M

Town of Accomac = \$4.50M

Town of Wachapreague = \$3.88M

WQIF Grant = \$4.94M

Planning Phase : Jan. 2021 – June 2021

Selection of Design-Build Team : July 2021

Design Complete : Mar. 2022

Construction Complete : Sept. 2023 (Original Scope of Work)

Final Project Completion: Sept. 2024

Construction Photos



HDPE pipe installation
along Railroad Right-of-
Way

Construction Photos



Nassawadox Pump Station



Exmore Pump Station

Construction Photos



Submersible pump station construction in Wachapreague

Questions?

HRSD Commission Meeting Minutes
July 23, 2024
Attachment #6

12. Commission Governance Guidelines
Meeting Date Change

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

The Commission is charged with managing and controlling the functions and affairs of Hampton Roads Sanitation District (HRSD). HRSD's operations are accomplished by its employees under the supervision of the General Manager/CEO.

These governance guidelines are intended to support the Commission in its oversight role, which is set forth in the Acts of Assembly 1960, as amended (the Enabling Act). Some additional Commission responsibilities are specified in HRSD's Trust Agreements or required by federal or state laws.

The Commission and HRSD's management recognize that the interests of HRSD are advanced by responsibly addressing the concerns of constituencies, including employees, customers and the communities in which HRSD provides services. The Commission will review these Guidelines regularly in its continuing effort to achieve this goal.

SECTION 1. ROLE AND FUNCTION OF THE COMMISSION

A. Composition

1. The Commission consists of eight members appointed by the Governor of Virginia to four-year terms.
2. At the time of their appointment and throughout their term of appointment, Commissioners must reside in the territory within the District from which they were appointed. Moving from this territory terminates that Commissioner's appointment.
3. Unless otherwise terminated in accordance with the Enabling Act, a Commissioner's term continues until the successor is appointed. Any person appointed to fill a vacancy shall serve for the unexpired term.
4. Commissioners are eligible for reappointment without limitation to the number of terms. Members may be suspended or removed at the Governor's pleasure.
5. Commissioners receive no salary but are compensated for travel and expenses associated with meeting attendance or while otherwise engaged in the discharge of their duties at the rate paid to members of the Commonwealth Transportation Board.
6. Each Commissioner shall be covered by a public official's liability policy paid for by HRSD.

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

B. Commissioner Principles

1. Commissioners are expected to devote as much time and attention as necessary to discharge their duties. This includes attending monthly Commission meetings and the meetings of any committees on which they may serve. Commissioners should notify the Commission Secretary whenever they are unable to attend a scheduled meeting. Commissioners may participate remotely in accordance with the Remote Participation Policy. Commissioners must notify the Chair of their desire to participate remotely prior to the meeting. Commissioners also may be asked to participate in special events and to represent HRSD at public meetings.
2. Commissioners shall be mindful of the best interest of the HRSD service area at large as opposed to those of the localities in which they reside.
3. Individual Commissioners may serve as liaisons to officials in the communities in which they reside or other localities within HRSD's service area.
4. Commissioners are expected to recuse themselves from discussion and abstain from voting on matters in which they may have a personal or professional conflict, and to announce the recusal or abstention in advance.

C. Structure

1. The Commission shall annually elect one of its members as Chair and another as Vice-Chair.
2. The Commission's advisory committees are (1) Finance and (2) Operations and Nominations (O&N). These committees report to the Commission as needed. The Commission may elect to form a new standing or special committee or to disband an existing committee. The Commission Chair annually appoints the members and chairs of these committees. Committees are composed of three Commissioners and two are required for a quorum. All Commissioners are invited to participate in Committee meetings.
3. Committee meetings shall be scheduled as needed. The Commission Chair shall be an ex-officio member of all committees, with voice and vote. However, the Commission Chair shall not be counted in determining the number required for a Committee quorum or in determining whether or not a quorum is present.

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

a. The Finance Committee shall:

- Review the financial forecast, annual operating and capital budgets, and rate schedules and report to the Commission prior to adoption
- Select both internal and external auditors
- Review the work plan and receive reports from the internal auditor
- Ensure the audit of the financial statements is completed and receive the audit report from the external auditor
- Receive the Annual Comprehensive Financial Report; and
- Review other financial related matters as may be referred to the Finance Committee by the Commission Chair.

b. The O&N Committee shall:

- Nominate officers for consideration annually and
- Review Commission policies as required or directed by the Commission, including, but not limited to:
 - (1) Commission Governance Guidelines
 - (2) Ethics Policy
 - (3) Virginia Freedom of Information Act Policy
 - (4) Remote Participation Policy

D. Operation

1. The Commission has the authority to adopt bylaws and to make rules and regulations for the management of its affairs and the conduct of its business.
2. Unless otherwise announced, the Commission meets on the fourth Tuesday of each month January through October and on the third Tuesday of November and December. Special meetings are held when necessary. The General Manager/CEO sets the meeting agendas with advice from the Division Chiefs and the Chair. Agendas, with any relevant accompanying information or reports, are distributed to the Commissioners prior to meetings for review. When circumstances require, items may be added to the agenda after it has been distributed.
3. Four members shall constitute a quorum and the affirmative vote of four members shall be necessary for any action taken by the Commission. No vacancy in the membership of the Commission shall impair the right of a quorum to exercise all the rights and perform all the duties of the Commission.

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

4. The rules contained in the current edition of ***Rosenberg's Rules of Order*** shall govern the Commission in all cases to which they are applicable and in which they are not inconsistent with state law or any special rules of order the Commission may adopt.
5. All meetings of the Commission, including Committee Meetings and Workshops, are public meetings and shall be held in conformance with the Virginia Freedom of Information Act. Remote participation in meetings shall be in accordance with the Remote Participation policy.
6. Workshops shall be scheduled as needed to allow informal dialogue on a topic or narrow range of topics. Appropriate staff shall be available to brief and facilitate as well as provide subject matter expertise. No official actions shall be taken during workshops.

E. Enabling Act Authorizations

The Acts of Assembly authorize and empower the Commission to perform a variety of specified acts by means of its own officers, agents and employees or by contracts with any persons. Some of the most significant authorizations are:

1. To construct, improve, extend, enlarge, reconstruct, maintain, equip, repair and operate a sewage disposal system or systems, with or without associated water systems.
2. To issue revenue bonds, notes or other obligations.
3. To fix and collect rates, fees and other charges for HRSD services and facilities.
4. To acquire land, structures, property, rights, rights-of-way, easements, and other property interests by purchase, lease, grant or the exercise of the right of eminent domain in connection with sewage disposal systems or associated water systems.
5. To employ, at its discretion, consulting engineers, attorneys, accountants, construction and financial experts, managers and other such officers, employees and agents as may be necessary, and to fix their compensation.
6. To sue and to be sued.

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

7. To prevent any person, jurisdiction or corporation from discharging into District waters any sewage, industrial wastes or other refuse that would pollute these waters.
8. To seek civil penalties or civil charges against owners in violation of pretreatment standards in permits or other requirements of HRSD's approved industrial waste control program.
9. To make and enter into all contracts and agreements necessary or incidental to the performance of its duties and execution of its powers.
10. The Commission does not have the power to mortgage, pledge, encumber or otherwise dispose of any part of the sewerage system or associated water systems except that which may no longer be necessary or useful for the Commission's purposes.

SECTION 2. HRSD MANAGEMENT AND THE COMMISSION

Newly appointed Commissioners will receive a briefing from the General Manager/CEO and Division Chiefs regarding matters related to HRSD's mission and core services. At a minimum, Commissioners are briefed on Commission adopted policies, operations, financial matters and strategic directions. The Commission Secretary will provide information related to the Virginia [Freedom of Information Act](#) and Commission membership. In addition, new Commissioners may tour HRSD facilities as their schedules permit and be introduced to the chief elected officials of their localities as appropriate and practical to facilitate effective working relationships.

Commissioners have complete access to the General Manager/CEO and the Deputy General Manager, who each may refer them to Division Chiefs or other appropriate resources for assistance. The Secretary and Assistant Secretary of the Commission shall assist Commissioners with matters related to scheduling, expense reimbursement, access to information and meeting attendance.

A. Staff Relations

1. The Commission appoints a General Manager/CEO, who serves at the pleasure of the Commission. As the chief executive officer, the Commission delegates day-to-day operations to the General Manager/CEO within the broad framework of Commission established policies, budget and strategies. The Commission shall review the General Manager/CEO's performance and set compensation at least annually.

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

2. The Commission appoints a Secretary, Assistant Secretary and a Treasurer who serve in these roles at the pleasure of the Commission. These appointments are made from existing staff positions. The Commission fixes their compensation through the annual budget process as these positions are in the HRSD position classification and compensation system.
3. The Commission periodically reviews and assesses the compensation paid to all HRSD employees as part of the annual budget process.
4. The Commission has delegated to the General Manager/CEO the responsibility to establish and maintain appropriate human resource policies.

B. Financial Oversight

1. The Commission approves HRSD's Financial Policy.
2. The Commission approves the Annual Operating and Capital Budgets, Capital Improvement Program (CIP), Financial Forecast and Rate Schedules. HRSD's CIP is the result of significant work by all the departments in evaluating and recommending Capital Improvement Projects that ensure regulatory compliance, provide for adequate infrastructure reinvestment and meet the future growth needs of Hamptons Roads.
3. The Finance Committee meets as required to perform their financial oversight duties, including overseeing its auditors, and reports to the Commission regarding these activities.

C. Signatory Authorization

Documents requiring the signature of HRSD shall be signed by such officer or officers as the Commission may from time to time designate. If signature is authorized by a vote of the Commission, the authorization should also include the identification of the officer, or officers permitted to sign the approved document on behalf of HRSD. The General Manager/CEO and the Deputy General Manager/CFO are authorized to sign on behalf of HRSD in the ordinary course of business any and all documents not requiring specific Commission approval. Additionally, the Commission has authorized the General Manager/CEO to delegate formal signatory authority to Senior Management and their staff as necessary for the effective operations of HRSD.

The Commission Secretary shall maintain a record of all specific signatory authorizations.

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

SECTION 3. COMMISSION MEETINGS

A. Commission Meeting Agenda

1. The Commission shall approve policies that govern HRSD business processes, significant financial practices, or service to localities except for those policies specifically delegated to the General Manager/CEO.
2. The Commission Meeting agenda shall be structured to ensure efficient and effective use of Commissioner's time and expertise.
3. The Commission Meeting agenda shall be prepared by the General Manager/CEO and distributed to the Commission typically five calendar days prior to the meeting date. Public notice of the meeting and posting of the agenda shall be in accordance with the Virginia Freedom of Information Act (§ 2.2-3700 et. Seq. of the Code of Virginia). The General Manager/CEO shall review the agenda with the Commission Chair prior to the meeting.
4. The Commission Meeting agenda is comprised of Regular Agenda, Consent Agenda and Informational Items.
 - Regular Agenda Items each require an individual vote by the Commission.
 - Consent Agenda Items generally reflect more routine business items and are grouped and may be voted on by the Commission in a singular vote. Consent Agenda items shall be limited to items meeting the requirements for Commission approval as detailed herein but not typically warranting a full briefing due to the nature of the action or previous communication with the Commission. Any item may be moved from the Consent Agenda to the Full Agenda when determined by the General Manager/CEO or any Commission member to be significant or warrant a discussion.
 - Informational Items are for information purposes and do not require an action by the Commission.

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

B. Commission Meeting Format

Item	Regular Agenda	Consent Agenda	No Action Required/ Informational/ Recognition
Agreements*	<ul style="list-style-type: none"> • Design or Construction >\$50,000 • Real property - Permanent use of • Real property - Temporary use of >1 year • HRSD Assets use of >\$200,000 • Multiple years and >\$200,000 • Obligates financial or personnel resources >\$200,000 • Cost Sharing or Reimbursement Agreements > \$200,000 • Intellectual Property Rights, Royalties and Licenses • Service Area Expansion • Sewer Service Agreements • Transfer of Assets to other entity • Transfer of Assets to HRSD 		
Agreements – Grants or contributions of value (Receipt and Award)*	>\$200,000	<\$200,000 if required by granting agency	
Agreements – Nutrient Trading Agreements*	>\$200,000 per year		
Agreements – Purchasing* <ul style="list-style-type: none"> • Contract Awards • Purchase Orders • Task Orders 		>\$200,000 or initial award when future awards are expected to exceed \$200,000	
Change Orders		>25% of original contract value or \$50,000	
Alternative Project Delivery Methods	<ul style="list-style-type: none"> • Use of Delivery Method • Comprehensive Agreement • Guaranteed Maximum Price • Stipulated Price • Vendor Proposal Compensation >\$200,000 (Approval and Payment) 		
Audit Reports and Updates			✓
Awards and Recognition Earned or Granted			✓

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

Item	Regular Agenda	Consent Agenda	No Action Required/ Informational/ Recognition
Budget	<ul style="list-style-type: none"> • Operating Budget • Capital Budget • Capital Improvement Program – 10-year program without authorization of specific projects • Financial Forecast • Rate Schedule 		
Capital Improvement Project – Non-Regulatory	<ul style="list-style-type: none"> • New CIP • Initial Appropriation • Additional Appropriation $\geq \\$1,000,000$ • Reduction in Scope and/or Appropriation $>25\%$ 	Additional Appropriation $< \$1,000,000$	
Capital Improvement Project – Regulatory	<ul style="list-style-type: none"> • New CIP • Initial Appropriation $\geq \\$10,000,000$ • Additional Appropriation $\geq \\$10,000,000$ • Reduction in Scope and/or Appropriation $>25\%$ 	Initial or Additional Appropriation $< \$10,000,000$	
Debarment of a Vendor	✓		
Emergency Declaration			✓
Monthly Reports			✓
Personnel	<ul style="list-style-type: none"> • Selection of General Manager/CEO, Secretary, Treasurer 		<ul style="list-style-type: none"> • Employee length of service ≥ 20 years • Employee promotion (E1, L3, L4, P4, P5) • New employee (E1, L3, L4, P4, P5)
Policies – New, Modified, Amended or Reissued	✓		
Real Property	<ul style="list-style-type: none"> • Public Hearing for Acquisition by Condemnation or other means • Easement Acquisition, Dedication or Disposition $> \\$50,000$ 	Vacation of Easement	
Real Property – Sale, Lease or Conveyance of HRSD property	✓		
Regulations	<ul style="list-style-type: none"> • HRSD Enforcement Response Plan • HRSD Industrial Wastewater Discharge Regulations 		
Rejection of Bids	$> \$200,000$		
Selection of Commission Consultants	<ul style="list-style-type: none"> • Auditors • Legal Counsel 		

HRSD Commission Governance Guidelines

Adopted May 22, 2007

Revised July 23, 2024

* Addendums or other changes where the Commission has authorized the General Manager/CEO to execute same, substantially as presented, together with such changes, modifications and deletions as the General Manager/CEO may deem necessary will not be presented for Commission approval unless recommended by legal counsel.

SECTION 4. ANNUAL CALENDAR OF COMMISSION TOPICS

Topic	Schedule	Frequency
EPA Consent Decree Update and Public Meeting	January	Annually
Capital Improvement Program Update	January	Quarterly
Evaluate General Manager/CEO's Performance	January	Annually
Commission Work Session to review Budget	February	Annually
Finance Committee Meeting to review CIP	March	Annually
Commission Work Session to review Budget	March	Annually
Capital Improvement Program Update	April	Quarterly
Finance Committee Meeting to review Budget	April	Annually
Receive Finance Committee report on Budget	April	Annually
Appoint Operations & Nominations (O&N) Committee	May	Annually
Approve Annual Operating and Capital Budgets, Capital Improvement Program, Financial Forecast and Rate Schedules	May	Annually
O&N Committee Meeting after Regular Meeting	May	Annually
O&N Committee Meeting before Regular Meeting	June	Annually
Election of Officers	June	Annually
Appoint Finance Committee	June-July	Annually
Capital Improvement Program Update	July	Quarterly
Commission Work Session – Ethics, FOIA and Governance Guidelines Training	August	Annually
Water Technology and Research Update	August	Annually
Finance Committee Meeting to Review Annual Comprehensive Financial Report (ACFR)	October	Annually
Capital Improvement Program Update	October	Quarterly
Diversity Procurement Report	October	Annually
Accept Finance Committee's Report on ACFR	October	Annually

HRSD Commission Governance Guidelines

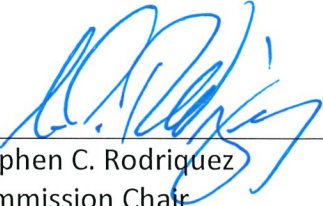
Adopted May 22, 2007

Revised July 23, 2024

SECTION 5. ADVISORY ROLE OF FORMER COMMISSIONERS

So as not to lose the benefit of the insights gained during their years of service, former Commissioners may be asked to serve in an advisory role following the end of their term. Equipment required to facilitate communications with the General Manager/CEO and Commission officers may be provided to those serving in an advisory role.

Approved:

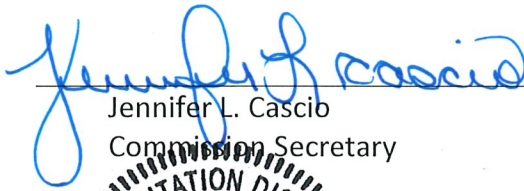


Stephen C. Rodriguez
Commission Chair



Date

Attest:



Jennifer L. Cascio
Commission Secretary



Date

Commission Seal



HRSD Commission Meeting Minutes
July 23, 2024
Attachment #7

16. 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](#)

July 11, 2024

Re: General Manager/Chief Executive Officer's Report



Environmental Responsibility

Staff has been assisting Neuse River Plant in North Carolina by providing them with digestate to see their digesters, which should enhance our curing process at the Atlantic Treatment Plant and reduce plant odor.

Construction is going well at the ANRI/SWIFT plants. At the James River Treatment Plant, the new secondary clarifier #1 was brought online. At the Nansemond Treatment Plant, concrete is flowing as slabs and walls continue to be poured. The casing pipe from the directional drill is being removed and work will begin on the underwater pipe trenching for the James River Crossing.

There were multiple events reported this month, including a fiber optic contractor hitting our 30-inch force main, but staff was able to repair it quickly. Additional details are available in the Air and Effluent Summary in the Water Quality (WQ) monthly report.

Treatment Compliance and System Operations:

- From Fiscal Year (FY) 2024 to date, there have been eight Permit Exceedances out of 56,527 Total Possible Exceedances.
- Pounds of Pollutants Removed in FY 2024 to date: 189.7 million pounds.

Water Quality: One civil penalty for \$3,000 was issued to U.S. Amines – Portsmouth and paid on June 17, 2024. This was for a Cyanide exceedance due to inadequate equalization tank mixing.



Financial Stewardship

Interim year-end results show revenues exceeded expenses on a cash basis primarily due to higher-than-expected water consumption and efficient operations. In addition, Interest Income far exceeded budget as inflation remains stubborn and the Federal Reserve has yet to lower short term interest rates.

In July 2022, the Atlantic Treatment Plant's Odor Control Scrubber "D" (OCSD) suffered a fire due a motor bearing failure. Our insurance company recently sent us a check for almost \$1.7 million for this claim which represents the cost of repair/replacement less our \$50,000 deductible.

At VIP, Mr. Jacob Holgard, Lead Operator, ran several field trials in an effort to save money on polymer. As a result of his optimization work, we are estimating that we will save approximately \$136,000 per year.



Talent

Staffing continues to remain strong as we are at 98% staffing level with our fiscal year to date turnover at 6.9% with retirements and 4.4% without. With the new fiscal year, these metrics will be reset as new positions were approved on July 1st.

There has been a significant amount of work heading into Fiscal Year End (FYE). With implementation of the compensation study, including 34 work center trainings and change of health care insurance to Sentara/Metlife, our Talent Management team and other key staff have been working overtime to get everything done. Kudos to their hard work!

In 2016, the General Assembly declared June 30th Water and Wastewater Professionals Appreciation Day. Each year, every work center takes time to recognize and show appreciation to our amazing staff that works hard every day to protect public health and the environment.

I participated in the following meetings/activities with HRSD personnel:

1. Worked with staff on potential exhibit ideas.
2. Saw a presentation on a consulting firm's Community Commitment Plan.
3. Attended our Wastewater Professional's Day celebration.



Community Engagement

I provided the opening welcome and keynote speech at NACWA's Strategic Communications conference that was held in Virginia Beach from June 4-6. My keynote described why Community Engagement was a key strategic priority for HRSD.

Staff held a Community Day in partnership with Lynnhaven River NOW at the Atlantic Treatment Plant where 22 residents attended including the Vice-Mayor of Virginia Beach. The event included tours and water quality learning activities. In addition, staff created a Community Task Force and provided them a tour focused on potential odor sources.

Staff spent some time with Accomack, Mathews, Middlesex and King William on serving their wastewater needs to support future growth.

I was one of six General Managers/CEOs from the United States selected by the National Association of Clean Water Agencies (NACWA), the Water Environment Federation (WEF), and the Water Research Foundation (WRF) for the Singapore International Water Week (SIWW) scholarship. The purpose for the scholarship is to interface with global innovation and learn from peers across the globe. The SIWW scholars provided a panel session on the circular water economy where I discussed SWIFT. In addition to the technical sessions and NEWater plant tour I attended, I was invited to attend two roundtables: Resiliency and Utility CEOs. The resiliency roundtable focused on climate change mitigation and adaptation. The Utility CEO roundtable was attended by 98 CEOs from the largest utilities from around the world (Saudi Arabia, Manila, Sydney, Tokyo, etc) and I had the opportunity to talk about SWIFT. Based on their reactions, I don't think any of them had heard of our project. It was a great experience, and I took advantage of making global networking connections.



I participated in the following external meetings/activities:

1. Attended the monthly Director of Utilities meeting and had staff present a summary of our Granular Activated Carbon (GAC) regeneration study.
2. Attended the monthly VAMWA meeting in Richmond.



Innovation

The Asset Management Department is evaluating new technology for buried pipeline condition assessment called Impact Echo Assessment (IEA). This technology uses sound waves to identify pipeline issues. This technology has been tested on two buried pipe segments and we will know its effectiveness in the coming months.

Staff had a journal article published: Samantha Hogard, Robert Pearce, Kathleen Yetka, Raul Gonzalez, and Charles Bott. 2024. *Virus inactivation in low ozone exposure water reuse applications*, Water Research, <https://doi.org/10.1016/j.watres.2024.121536>

I look forward to seeing you in person in Newport News at 9:00 a.m. on Tuesday, July 23, 2024.

Respectfully submitted,

Jay Bernas, P.E.
General Manager/Chief Executive Officer

TO: General Manager

FROM: Chief Communications Officer

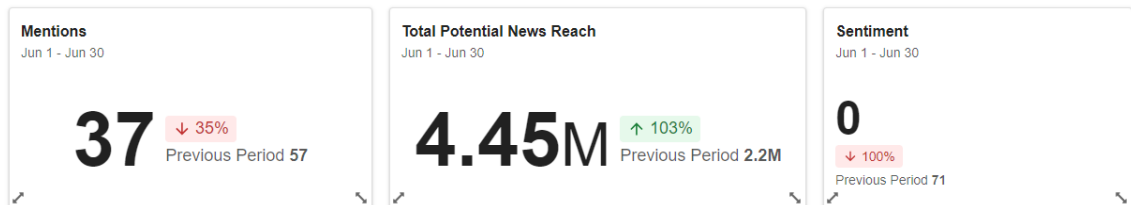
SUBJECT: Monthly Report for June 2024

DATE: July 10, 2024

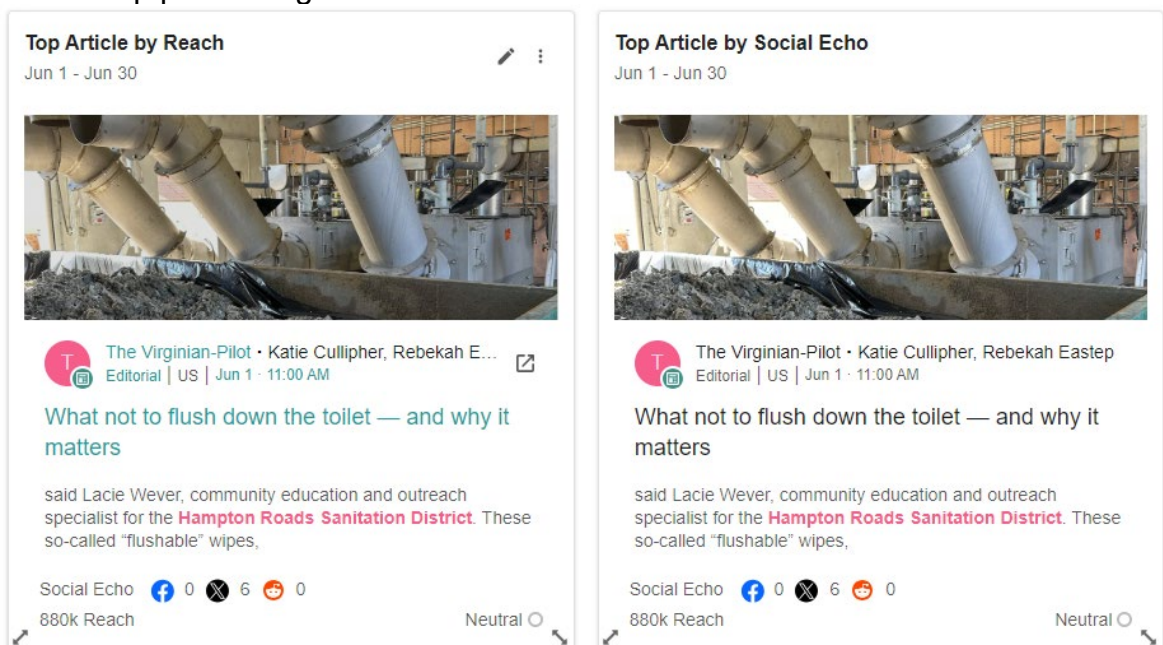
A. Publicity and Promotion

1. HRSD and Sustainable Water Initiative For Tomorrow (SWIFT) were mentioned or featured in two stories this month. Topics included:
 - a. What not to flush and why it matters
 - b. Employee Input Improves Utilities (Jay Bernas featured in TPO Magazine)
2. Analysis of Media Coverage

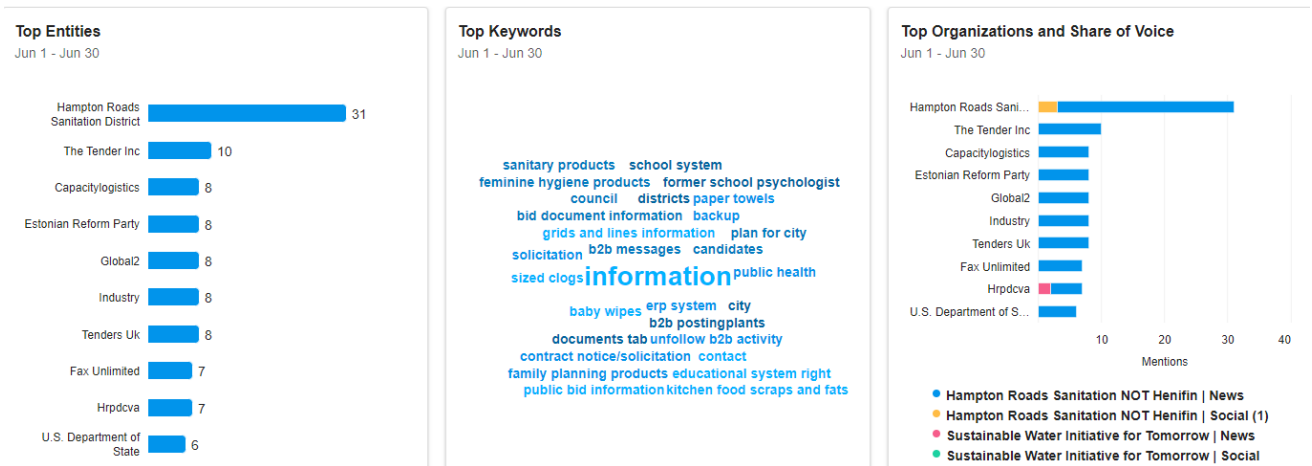
a. Key results for June



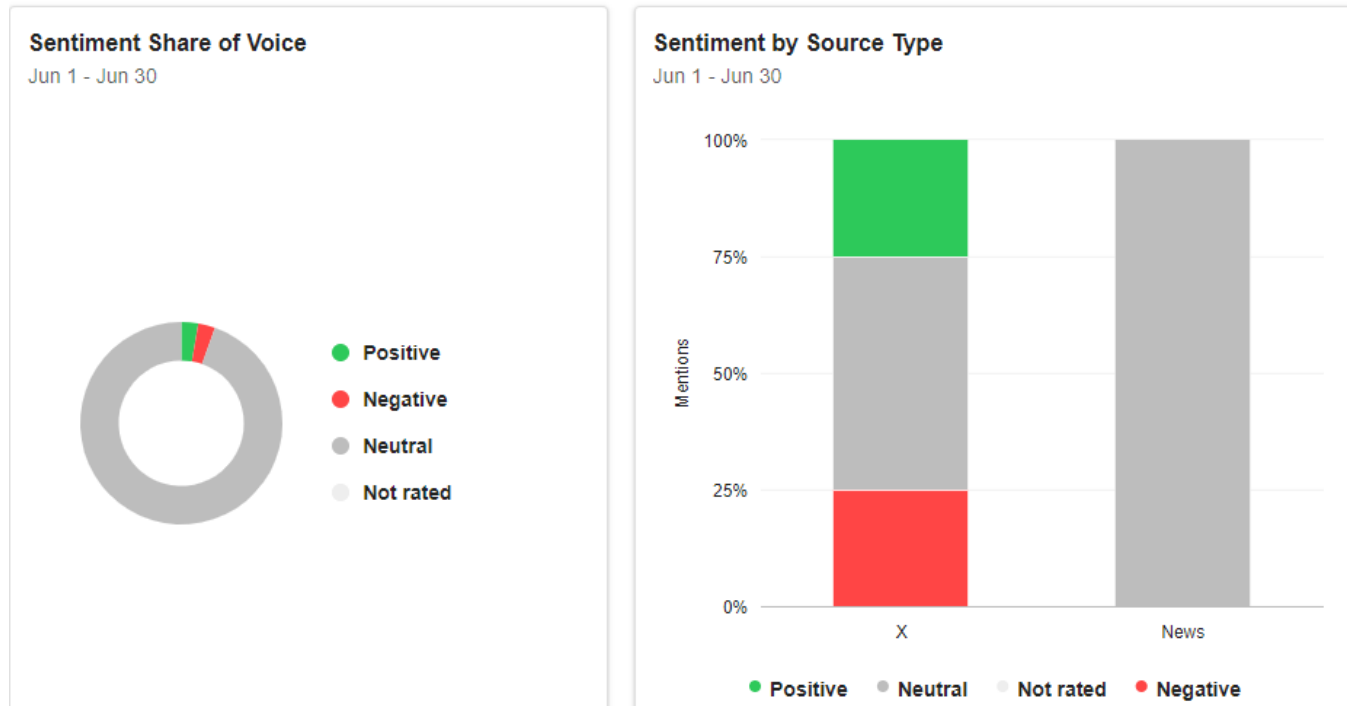
b. Top performing news content



c. Top entities and keywords

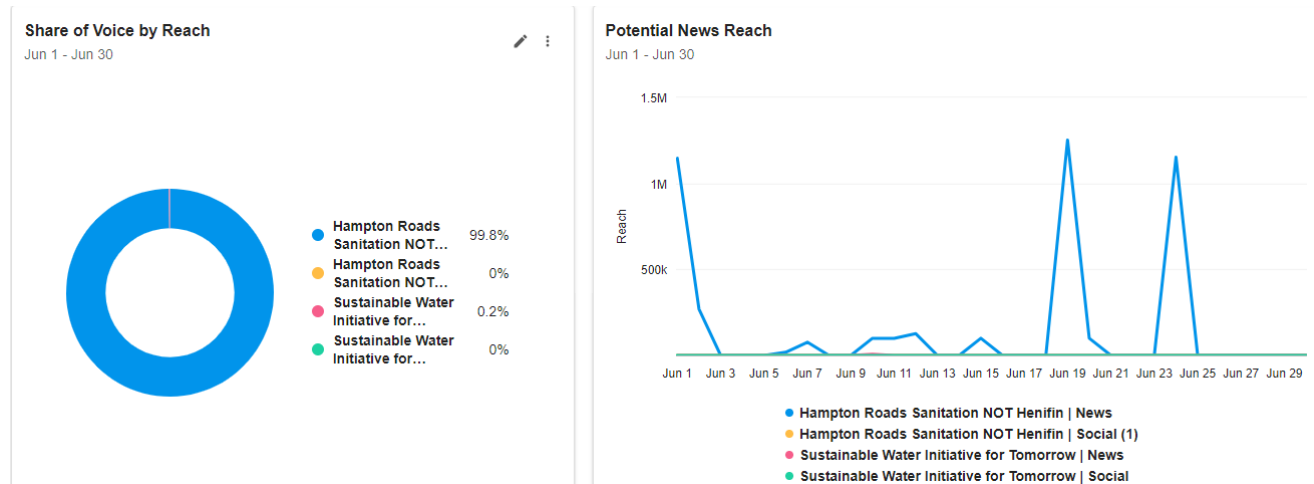


d. How favorable is the content?

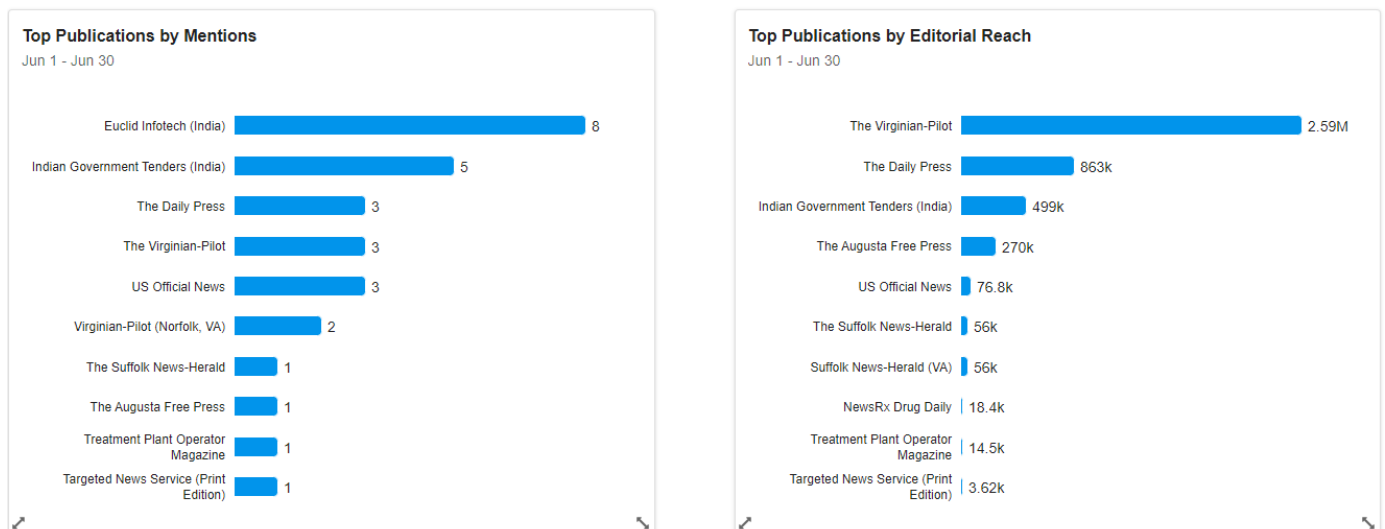


(Negative sentiment attributed to an X post related to JCSA billing split from HRSD)

e. What is the potential reach?



f. Top publishers



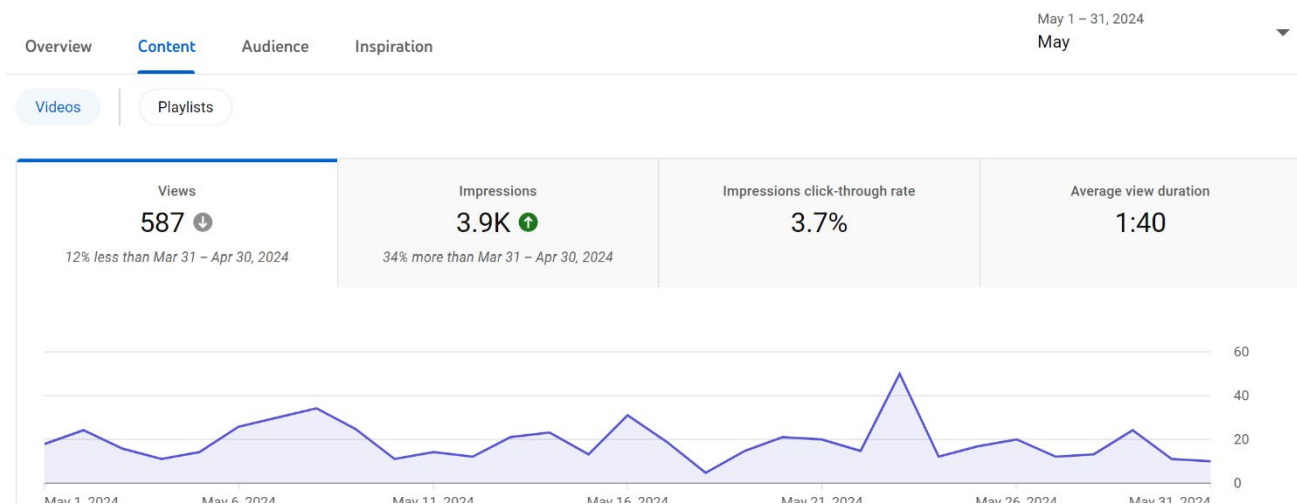
Community Engagement

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 Tweet



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

- (1) [The Wastewater Treatment Process](#)

- (2) [SWIFT Research Center: What Is the Potomac Aquifer](#)
- (3) [HRSD Atlantic Treatment Plant Cambi THP Tour](#)
- (4) [HRSD Employee Testimonials - Robert](#)
- (5) [Why SWIFT Matters](#)

4. Website and Social Media Impressions and Visits

a. Facebook:

- (1) 12,786 page impressions
- (2) 8,747 post impressions reaching 8,165 users.
- (3) Facebook Engagement of 334 (296 reactions, 22 shares, and 16 comments)

b. X: 4.9% engagement rate

c. HRSD.com/SWIFTVA.com: 920 page visits

d. LinkedIn Impressions:

- (1) 21,341 page impressions
- (2) 17,839 post impressions

e. YouTube: 430 views

f. Next Door unique impressions: 37,300 post impressions from 28 targeted neighborhood postings and one region-wide posting sent to 689,155 total residents across the service region.

g. Blog Posts (1): [Showing Appreciation To Our Water Heroes On Wastewater Professionals Day](#)

h. Construction Project Page Visits – 2,128 total visits (not including direct visits from home page, broken down as follows:

- (1) 1,880 visits to individual pages
- (2) 248 to the status page

C. Education and Outreach Activity Highlights

Community Outreach and Education Specialists and HRSD Ambassadors provided and participated in eight different outreach events this month. Community partners included Christopher Newport University, the Elizabeth River Project, the Hampton Roads Planning

District Committee (HRPDC) Community Advisory Committee, the League of Women Voters of Williamsburg Area, Lynnhaven River NOW, Newport News Public Schools and the Virginia Peninsula Rotary.

Project notices were distributed to 278 customers for 10 different projects across the service area this month. The department distributed and posted 13 construction or work notices, two news releases and one traffic advisory to the HRSD.com Newsroom.

Director and staff participated in the Atlantic Treatment Plant open house event held in partnership with Lynnhaven River NOW. The event featured plant tours, water quality learning activities, children's crafts and the AskHRGreen learning trailer.

D. Internal Communications

Director participated in the following internal meetings and events:

1. Atlantic Treatment Plant monthly communications check-in meeting
2. Virginia aquarium exhibit concepting meeting
3. SWIFT Strategic Communications monthly meeting
4. Rebranding meetings
5. SWIFT Community Commitment Plan steering committee meeting
6. Atlantic Treatment Plant Odor taskforce check-in meeting
7. Bi-weekly General Manager (GM) briefings
8. Discharge Monitoring Report (DMR), SWIFT Quality Steering Team (QST), and HRSD QST meetings
9. Check-in meetings with Deputy General Manager (DGM)
10. Monthly collaboration meeting with Director of Talent Management
11. Director also conducted biweekly Communications department status meetings and weekly one-on-one check-in meetings.
12. Staff participated in 17 project progress and/or construction meetings and communication planning meetings with various project managers, plant staff and external stakeholders.



Talent

The Communications department is currently fully staffed. Professional development activities and pursuits for June included the following:

- Communications staff attended the National Association of Clean Water Agencies (NACWA) Strategic Communications Conference held in Virginia Beach this year. Staff also participated in panel discussions and provided a SWIFT Research Center tour to conference attendees.

Respectfully,

Leila Rice, APR

Chief Communications Officer

TO: General Manager

FROM: Chief Engineer

SUBJECT: Engineering Monthly Report for June 2024

DATE: July 11, 2024



Environmental Responsibility

The City of Norfolk is working closely with the U.S. Army Corps of Engineers to study and make improvements to address climate change through coastal resiliency known as “Resilient Norfolk”. This is a huge effort (\$2.6B) impacting large parts of Norfolk. The project includes storm-surge barriers, nearly 9 miles of floodwalls and levees, 11 tide gates, and ten pump stations, along with hundreds of non-structural projects that include home elevations, basement fills, and commercial floodproofing. HRSD has numerous assets in Norfolk impacted by this potential work. This project could impact buried pipes, pump stations and two treatment plants (Army Base and VIP). We have created an internal task force to coordinate with Norfolk and their various consultants. An initial task has been to conduct assessments of HRSD buried infrastructure near the proposed Norfolk improvements. It will be important to know the condition of these assets and determine if conflicts exist with the proposed work.

Hurricane season officially started on June 1st. NOAA predicts an above-average year for storm events with an anticipated 13 storms that will reach hurricane strength. There has already been one named storm so far this year. To be prepared for possible severe storms in our region, staff have been busy updating the HRSD Hurricane and Recovery Plan. Updates have also been made to the Damage Assessment software tool for both office and field use. This program is available for use by staff to quickly and efficiently assess and document damage to HRSD infrastructure after a severe storm event.



Financial Stewardship

Capital Improvement Program (CIP) spending for the eleventh month of FY 2024 was below the planned spending target.

CIP Spending (\$M):

	Current Period	FYTD
Actual	44.03	516.53
Plan	49.60	531.50

Final CIP invoices for FY 2024 are still being received but estimates indicate that total CIP spending will be approximately \$562M. The CIP spending target for FY 2024 was \$580M. This plan-to-actual-spend ratio is 97%, which is above recent years and is a strong indicator that HRSD is implementing the CIP in accordance with planning projections. This is by far HRSD’s largest CIP spend in one fiscal year. This high level of spending will continue for the next few years as the Sustainable Water

Initiative for Tomorrow (SWIFT) Program continues to be delivered. Operating costs for the Engineering Division were below planned levels in FY 2024. We ended the FY at 96% of the planned Operating Budget spending. This spending limitation was primarily due to unfilled positions over the FY.



Talent

Recruitment will continue to be an important effort in the coming months. The Engineering Division has three vacancies and three new positions to fill in July. We are excited to add Ms. Kathy Robinson as a SWIFT Design & Construction Department Contract Specialist. Kathy brings a wealth of experience and will add value to the SWIFT Program Team.

Training and continuous learning are critical to the success of the Engineering Division. Each year our target is to provide each staff member with 40 hours of training. We have ended FY 2024 with a combined average of 40 hours of training/employee. This metric has extra importance since we have added many new staff members in the past year.



Community Engagement

HRSD's Capital Improvement Program and our various facilities in the region play an important role in addressing water quality and improving the quality of life for our citizens. Our presence in certain areas can also create certain nuisances to the public. One issue that can be a concern is the traffic we generate at each treatment plant. The Atlantic Treatment Plant Road access is provided using public roads through the Ocean Lakes neighborhood. As our use of the Atlantic Treatment Plant has grown over the years, so has the volume of staff and contractor traffic to and from the plant. To address this issue, HRSD has been working with the U.S. Navy at Dam Neck to provide a new vehicle access route. The needed property has been acquired and HRSD is working with the Navy to address environmental and other permitting issues. We hope to begin the final design later this year with construction of a new roadway to begin when the design is completed.

The James River Treatment Plant SWIFT project includes several amenities that will benefit the public. A new road was completed earlier this year to provide access to the adjacent City Gymnastic Center and Dog Park. This new access road will provide improved access to these facilities and limit impacts caused by the construction efforts. In addition, a new trail is under construction to provide public access around the plant site and to connect two adjoining parts of the City's Park property. This initial phase of the trail project will be completed later this year after a overlook requested by the City of Newport News is finished.



Innovation

One way to innovate is to learn new ideas from others. An in-house team has been formed to study the option of creating a Project Management Office (PMO) here at HRSD. This "office" would not be a physical space but a concept to better align Engineering, Finance and Operations to deliver Capital Improvement Program (CIP) projects. The PMO study will include a benchmarking effort with other large utilities. We recently had a valuable discussion with King County, Washington. Their CIP is larger than HRSD's, so we are trying to learn best practices as we manage our ever-growing efforts.

The study will also recommend ways to improve the CIP and assure compliance as we continue to grow the size of the projects and complexity of the program.

Condition assessment of buried pipelines continues to be a focus here at HRSD. Since many of our existing gravity sewer pipelines and sewer force mains cannot be taken out of service for inspection, new technologies continue to be explored. One technology that is promising is known as Impact Echo Assessment (IEA). Impact-echo is a method for nondestructive testing of concrete and masonry structures that is based on the use of impact-generated stress (sound) waves that propagate through concrete and masonry and are reflected by internal flaws and external surfaces. Impact-echo can be used to determine the location and extent of flaws such as cracks, delaminations, voids, honeycombing, and debonding in concrete pipes and tanks. The IEA method has been recently tried on two buried pipe segments. We should learn more about the effectiveness of this non-destructive test method in the coming months.

Bruce W. Husselbee

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

TO: General Manager

FROM: Chief Financial Officer

SUBJECT: Monthly Report for June 2024

DATE: July 10, 2024



Financial Stewardship

Interim year-end financial results for the year are favorable with estimated revenues exceeding budgetary projections by four percent and expense below budget by five percent. Billed consumption, which is the driver for the vast majority of HRSD's revenues, exceeded budgetary projections by a marginal 1.3 percent. Debt service payments exceeded budgetary estimates because HRSD received \$4.9 million in grant revenues that was specifically earmarked for debt service related to an Eastern Shore capital project. Cash payments for capital projects totaled a record \$555.9M for the year.

HRSD received nearly \$1.7M in property insurance reimbursements for fire damage that occurred in July 2022 at the Atlantic Treatment Plant (ATP). The reimbursement represents the cost of repair/replacement of the facilities less HRSD's \$50,000 deductible.

Field staff delivered 3,566 warning door tags and disconnected water service to 1,115 accounts during June 2024. Staff will be temporarily reassigned to other work centers during July and August to comply with a new legislative requirement effective July 1, of suspending disconnection activities when the forecasted temperature is 92 degrees or higher within 24 hours of scheduled disconnection. Strategies to deal with the new legislative requirement include temporary work assignments for field staff, increasing outbound collections calls, arranging pay plans, leaving additional financial assistance information without a warning tag, and third-party collections for closed accounts.

A. Interim Financial Report

1. Operating Budget for the Period Ended June 30, 2024.

			Current YTD as % of Budget (100% Budget to Date)	Prior YTD as % of Prior Year Budget
	Amended Budget	Current YTD		
Operating Revenues				
Wastewater	\$ 405,832,000	\$ 409,618,278	101%	101%
Surcharge	1,600,000	1,545,818	97%	89%
Indirect Discharge	4,400,000	4,635,486	105%	139%
Fees	2,894,000	3,713,870	128%	117%
Municipal Assistance	800,000	1,098,116	137%	98%
Miscellaneous	1,295,000	1,925,477	149%	128%
Total Operating Revenue	416,821,000	422,537,045	101%	102%
Non Operating Revenues				
Facility Charge	6,095,000	7,154,145	117%	100%
Interest Income	3,000,000	13,609,286	454%	381%
Build America Bond Subsidy	1,954,000	1,953,615	100%	100%
Other	620,000	535,303	86%	565%
Total Non Operating Revenue	11,669,000	23,252,349	199%	153%
Total Revenues	428,490,000	445,789,394	104%	103%
Transfers from Reserves	17,120,789	17,120,789	100%	100%
Total Revenues and Transfers	\$ 445,610,789	\$ 462,910,183	104%	103%
Operating Expenses				
Personal Services	\$ 70,450,193	\$ 70,758,493	100%	104%
Fringe Benefits	28,487,963	28,037,183	98%	99%
Materials & Supplies	16,073,465	13,574,509	84%	97%
Transportation	2,003,573	1,718,633	86%	86%
Utilities	16,843,498	17,593,441	104%	103%
Chemical Purchases	17,688,997	15,374,935	87%	104%
Contractual Services	53,541,285	39,772,963	74%	70%
Major Repairs	13,696,912	7,270,628	53%	60%
Capital Assets	1,258,970	511,685	41%	38%
Miscellaneous Expense	3,938,563	3,609,023	92%	79%
Total Operating Expenses	223,983,419	198,221,493	88%	90%
Debt Service and Transfers				
Debt Service	76,150,000	81,555,085	107%	98%
Transfer to CIP	145,217,370	145,217,370	100%	100%
Transfer to Risk management	260,000	260,004	100%	100%
Total Debt Service and Transfers	221,627,370	227,032,459	102%	99%
Total Expenses and Transfers	\$ 445,610,789	\$ 425,253,952	95%	94%

2. Notes to Interim Financial Report

The Interim Financial Report summarizes the results of HRSD's operations on a basis of accounting that differs from generally accepted accounting principles. 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.

This interim report does not reflect financial activity for capital projects contained in HRSD's Capital Improvement Project (CIP).

Transfers represent certain budgetary policy designations as follows:

- a. Transfer to CIP: represents current period's cash and investments that are designated to partially fund HRSD's capital improvement program.
- b. Transfers to Reserves: represents the current period's cash and investments that have been set aside to meet HRSD's cash and investments policy objectives.

3. Reserves and Capital Resources (Cash and Investments Activity) for the Period Ended June 30, 2024.

HRSD - RESERVE AND CAPITAL ACTIVITY

June 30, 2024

	General Reserve				Capital		
	General	CARES - ARPA	Debt Service	Risk Mgmt Reserve	Paygo	Debt Proceeds	
	Unrestricted	Restricted	Restricted	Unrestricted	Unrestricted	Restricted	
Beginning - July 1, 2023	\$ 203,718,301	\$ 4,406	\$ 33,830,226	\$ 4,539,551	\$ 3,115,384	\$ -	
Current Year Sources of Funds							
Current Receipts	456,164,297						
Line of Credit						31,420,145	
VRA Draws						65,950,133	
WIFIA Draws						318,590,153	
Grants						29,084,935	
Transfers In				260,004	145,217,370		
Sources of Funds	456,164,297	-	-	260,004	145,217,370		445,045,366
Total Funds Available	\$ 659,882,598	\$ 4,406	\$ 33,830,226	\$ 4,799,555	\$ 148,332,754	\$ -	\$ 445,045,366
Current Year Uses of Funds							
Cash Disbursements	286,192,454				110,863,831		445,045,366
CARES Transfer Out		4,406					
Transfers Out	145,477,374						
Uses of Funds	431,669,828	4,406	-	-	110,863,831		445,045,366
End of Period - June 30, 2024	\$ 228,212,770	\$ -	\$ 33,830,226	\$ 4,799,555	\$ 37,468,923	\$ -	\$ -
Unrestricted Funds	\$ 270,481,248						

4. Capital Improvements Budget and Activity Summary for Active Projects for the Period Ended June 30, 2024.

HRSD - PROJECT ANALYSIS

June 30, 2024

Classification/ Treatment Service Area	Appropriated Funds	Expenditures prior to 7/1/2023	Expenditures Year to Date FY2024	Total Project Expenditures	Encumbrances	Available Funds
Administration	\$ 76,193,950	\$ 25,407,455	\$ 7,394,024	\$ 32,801,479	\$ 3,008,844	\$ 40,383,627
Army Base	167,458,058	125,866,880	371,608	126,238,488	551,876	40,667,694
Atlantic	238,176,729	81,665,064	11,458,224	93,123,288	12,779,793	132,273,648
Boat Harbor	539,481,266	75,596,057	132,883,102	208,479,159	220,846,382	110,155,725
Ches-Eliz	87,859,516	34,995,850	626,915	35,622,765	1,254,789	50,981,962
Eastern Shore	65,012,749	26,927,768	14,745,853	41,673,621	4,352,507	18,986,621
James River	377,728,708	104,382,910	94,939,939	199,322,849	136,560,100	41,845,759
Middle Peninsula	98,206,116	23,493,172	6,867,425	30,360,597	3,799,238	64,046,281
Nansemond	488,559,100	83,702,138	128,425,870	212,128,008	208,301,008	68,130,084
Surry	60,391,465	41,079,533	4,448,680	45,528,213	7,182,644	7,680,608
VIP	250,660,629	34,150,127	33,951,409	68,101,536	80,584,463	101,974,630
Williamsburg	83,022,019	21,441,839	957,637	22,399,476	6,179,150	54,443,393
York River	117,618,863	21,027,494	26,991,476	48,018,970	40,464,268	29,135,625
General	1,558,759,659	201,364,418	146,544,413	347,908,831	851,440,323	359,410,505
	\$ 4,209,128,827	\$ 901,100,705	\$ 610,606,575	\$ 1,511,707,280	\$ 1,577,305,385	\$ 1,120,116,162

5. Active Capital Grants

Active Capital Grants Activities							
Grant Name	Funder	Project	CIP#	Application Submitted	Amount Requested	HRSD Award Amount	
American Rescue Plan Act	VD EQ	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase II	ES010200	11/28/2022	\$ 8,367,000	\$ 4,183,500	
American Rescue Plan Act	VD EQ	(Accomac Sewer Collection James River Treatment Plant Advanced Nutrient Reduction Improvements	JR013400	10/7/2022	\$ 50,000,000	\$ 36,124,859	
American Rescue Plan Act	VD EQ	Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Phase II	NP013820	10/7/2022	\$ 50,000,000	\$ 31,693,207	
FY2024 Congressionally Directed Funding Warner-Kaine	CDF FY24	Eastern Shore Wastewater Improvements	ES010100	3/9/2023	\$ 9,677,112	\$ 1,250,000	
Water Quality Improvement Fund, Conveyance	VD EQ	Chesapeake-Elizabeth Treatment Plant Conveyance	Multiple	2/7/2023	\$ 100,647,746	\$ -	
Water Quality Improvement Fund, Conveyance	VD EQ	Eastern Shore TFM Phase 1	ES010100	5/2/2022	\$ 4,900,000	\$ 4,936,538	
Water Quality Improvement Fund, Nutrient Reduction	VD EQ	James River SWIFT - Advanced Nutrient Reduction Improvements	JR013400	3/23/2023	\$ 344,741,547		
Water Quality Improvement Fund, Nutrient Reduction	VD EQ	Boat Harbor Pump Station and Conveyance	BH015700, BH015710, BH015720 BH015730	3/4/2024	\$ 311,286,392		
Water Quality Improvement Fund, Nutrient Reduction	VD EQ	Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Phase II	NP013820	3/4/2024	\$ 127,657,505		
FY2025 Congressionally Directed Funding, Warner/Kaine, Kiggans	CDS	Onancock Treatment Plant Solids Handling Improvements	ES010800	3/21/2024	\$ 6,624,248	\$ 1,000,000	
Climate Pollution Reduction Grant - Implementation	EPA	PdNA Implementation to Reduce GHG	AB011800	4/1/2024	\$ 59,540,142		
FY23 Building Resilient Infrastructure and Communities (BRIC), under Hazard Mitigation Grant Program	VD EM-FE MA	Dozier's Corner Pump Station and Washington District Pump Station Resiliency Improvements	AT013000, AT015400	2/6/2024	\$ 18,988,629		
FHWA Recreational Trails Program	VD CR	Flax Mill Creek Trail at James River Treatment Plant	GN016344	6/1/2021	\$ 300,000	\$ 300,000	
					\$ 1,092,730,321	\$ 79,188,104	

6. Debt Management Overview

HRSD - Debt Outstanding (\$000's)						June 30, 2024	
	May 2024	June 2024					
	Principal	Principal Activity				Principal	Interest
	Balance	Bond Series	Payments	Draws	Capitalized Interest	Balance	Payments
Fixed Rate							
Senior	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subordinate	1,234,065	-	(6,474)	16,432	301	1,244,324	(1,223)
Variable Rate							
Subordinate	50,000	-	-	-	-	50,000	(157)
Line of Credit	100,000	-	-	-	-	100,000	(362)
Total	\$ 1,384,065	\$ -	\$ (6,474)	\$ 16,432	\$ 301	\$ 1,394,324	\$ (1,742)

HRSD- Series 2016VR Bond Analysis				June 28, 2024
	SIFMA Index	HRSD Series 2016VR	Spread to SIFMA	
Maximum	4.71%	4.95%	0.24%	
Average	1.26%	0.87%	-0.39%	
Minimum	0.01%	0.01%	0.00%	
As of 6/28/24	3.88%	3.78%	-0.10%	

Since October 20, 2011 HRSD has averaged 87 basis points on Variable Rate Debt

Subsidised Debt Activity						
Source	Funder	Loan Amount	Current Drawn Total	% Remain	Initial Draw Date - Projected	
WIFIA Tranche 1	EPA	\$ 225,865,648	\$ 187,976,770	17%	Ongoing	
WIFIA Tranche 2	EPA	\$ 476,581,587	\$ 167,060,472	65%	Ongoing	
WIFIA Tranche 3	EPA	\$ 346,069,223	\$ -	100%	July 2025	
Clean Water Program 2022	DEQ	\$ 100,000,000	\$ 88,296,641	12%	Ongoing	
Clean Water Program 2024	DEQ	\$ 80,000,000	\$ -	100%	March 2024	

7. Financial Performance Metrics for the Period Ended June 30, 2024.

HRSD - UNRESTRICTED CASH

Can be used for any purpose since it is not earmarked for a specific use and is extremely liquid

		Days Cash on Hand	Adjusted Days Cash on Hand
Total Unrestricted Cash	\$ 270,481,248		441
Risk Management Reserve	\$ (4,799,555)	(8)	433
Capital (PAYGO only)	\$ (37,468,923)	(61)	372
Adjusted Days Cash on Hand	\$ 228,212,770		372

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.

HRSD - SOURCES OF FUNDS

June 30, 2024

Primary Source	Beginning Market Value July 1, 2023	YTD Contributions	YTD Withdrawals	YTD Income Earned	Ending Market Value June 30, 2024	Allocation of Funds	Credit Quality	Current Mo Avg Yield
BOA Corp Disbursement Account	30,761,730	890,218,266	890,423,997	1,230,394	31,786,393	15.1%	N/A	0.55%
VIP Stable NAV Liquidity Pool	129,511,237	60,000,000	20,000,000	9,277,813	178,789,050	84.9%	AAAm	5.42%
Total Primary Source	\$ 160,272,967	\$ 950,218,266	\$ 910,423,997	\$ 10,508,207	\$ 210,575,443	100.0%		

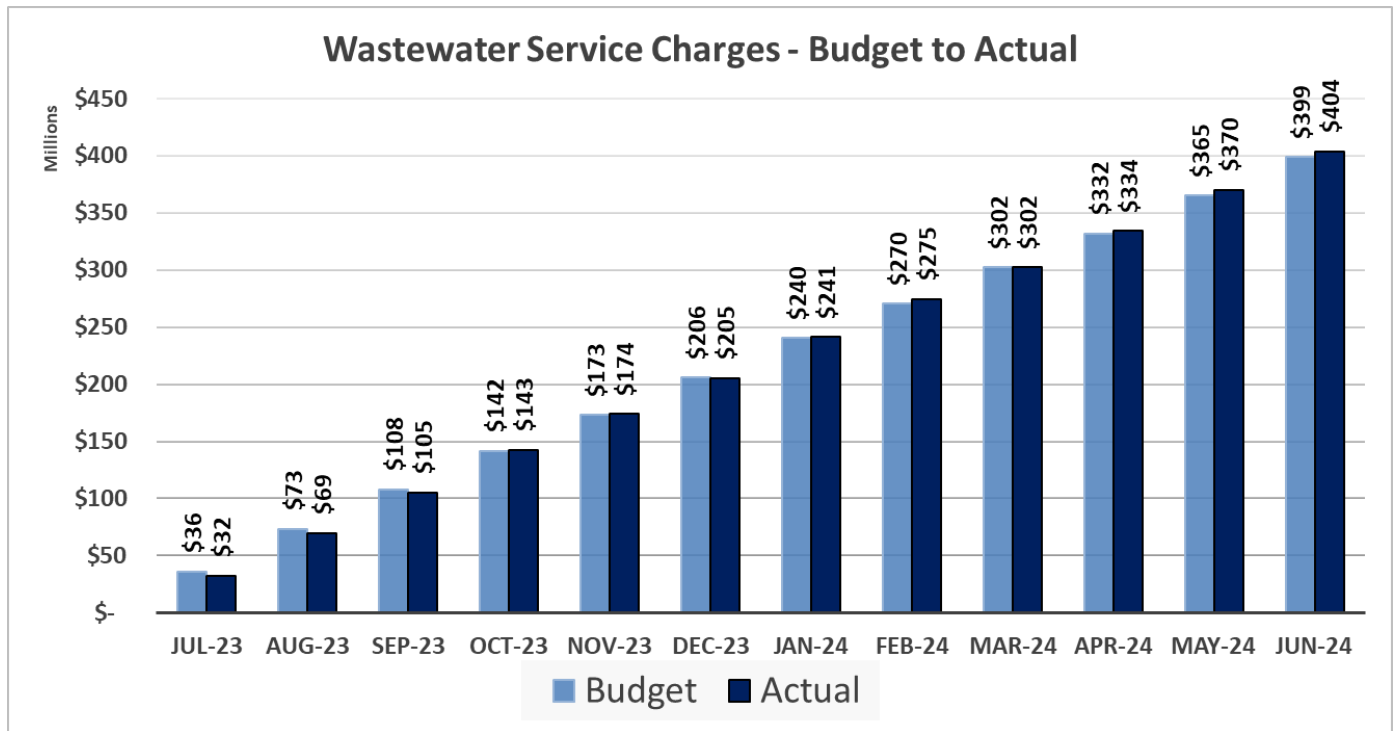
VIP Stable NAV Liquidity Pool performed 0.01% above Va Local Government Investment Pool's (the market benchmark) in the month of June 2024.

Secondary Source	Beginning Market Value July 1, 2023	YTD Contributions	YTD Withdrawals	YTD Income Earned & Realized G/L	Ending Market Value June 30, 2024	Ending Cost	LTD Mkt Adj	Yield to Maturity at Market
VIP 1-3 Year High Quality Bond Fund	63,074,075	-	12,880	2,430,166	65,915,924	67,306,126	(1,390,201)	4.81%
Total Secondary Source	\$ 63,074,075	\$ -	\$ 12,880	\$ 2,430,166	\$ 65,915,924	\$ 67,306,126	\$ (1,390,201)	

VIP 1-3 Year High Quality Bond Fund performed 0.02% below ICE BofA ML 1-3 yr AAA-AA Corp/Gov Index (the market benchmark) in June 2024.

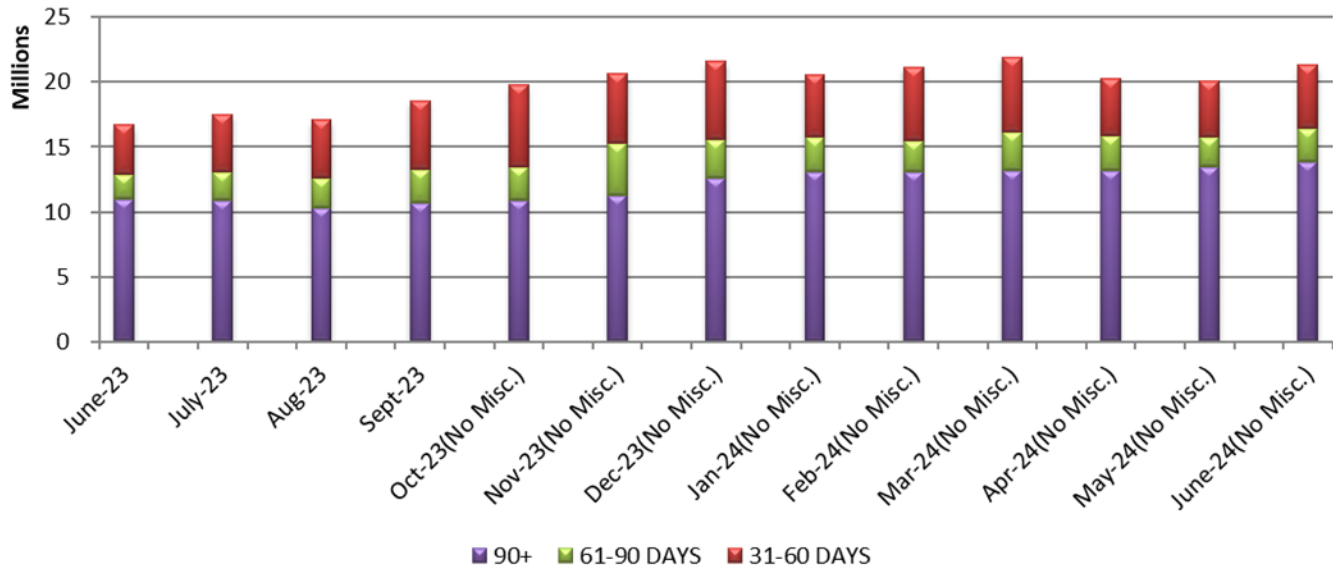
	Total	Fund Alloc
Total Primary Source	\$ 219,327,496	77.0%
Total Secondary Source	\$ 65,518,470	23.0%
TOTAL SOURCES	\$ 284,845,966	100.0%

8. Summary of Billed Consumption



Summary of Billed Consumption (,000s ccf)							
			<u>% Difference</u>		<u>% Difference</u>		<u>% Difference</u>
	<i>FY2024</i>			<i>Cumulative</i>			
	<i>Cumulative</i>	<i>FY2024</i>		<i>FY2023</i>	<i>From</i>	<i>Cumulative 3</i>	<i>From 3 Year</i>
<i>Month</i>	<i>Budget</i>	<i>Cumulative</i>	<i>From</i>	<i>Actual</i>	<i>FY2023</i>	<i>Year Average</i>	<i>Year Average</i>
	<i>Estimate</i>	<i>Actual</i>	<i>Budget</i>				
July	4,678	4,504	-3.7%	4,682	-3.8%	4,803	-6.2%
Aug	9,644	9,432	-2.2%	9,652	-2.3%	9,543	-1.2%
Sept	14,196	13,965	-1.6%	14,208	-1.7%	14,297	-2.3%
Oct	18,663	18,854	1.0%	18,680	0.9%	18,863	0.0%
Nov	22,756	23,004	1.1%	22,777	1.0%	22,307	3.1%
Dec	27,109	27,127	0.1%	27,133	0.0%	27,430	-1.1%
Jan	31,641	31,819	0.6%	31,669	0.5%	32,004	-0.6%
Feb	35,568	36,182	1.7%	35,601	1.6%	35,952	0.6%
March	39,770	39,826	0.1%	39,807	0.0%	40,351	-1.3%
Apr	43,694	44,054	0.8%	43,735	0.7%	44,473	-0.9%
May	48,027	48,760	1.5%	48,072	1.4%	48,548	0.4%
June	52,500	53,206	1.3%	52,549	1.2%	53,329	-0.2%

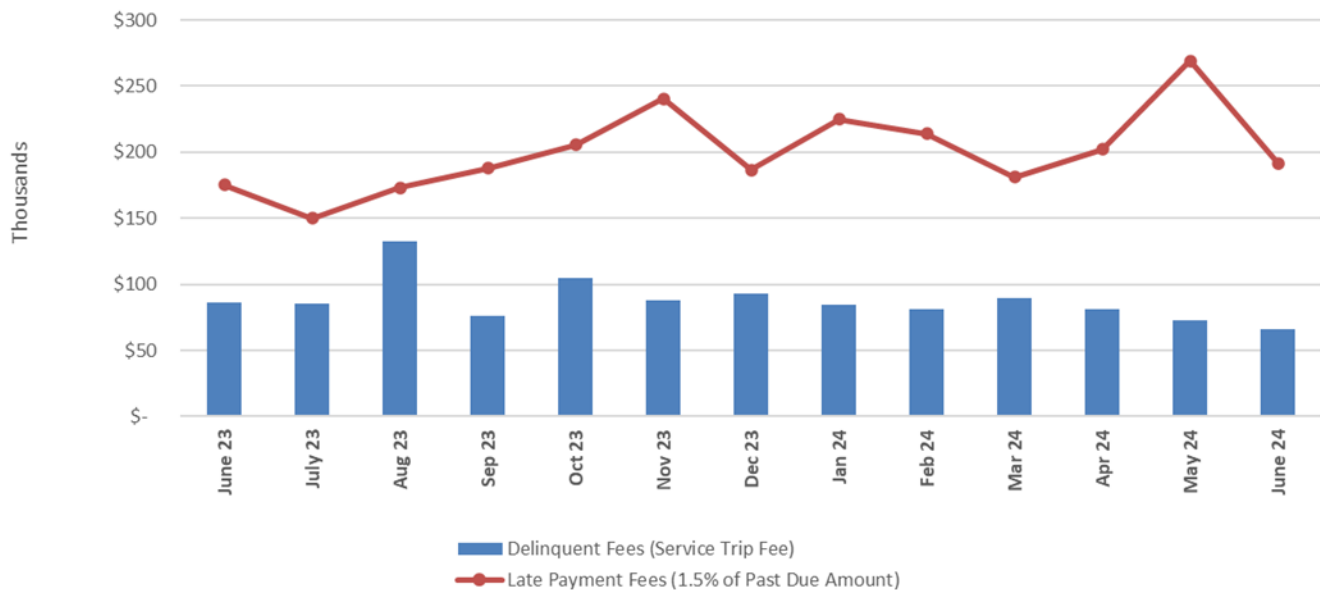
HRSD Accounts Receivable Aging +30 Days



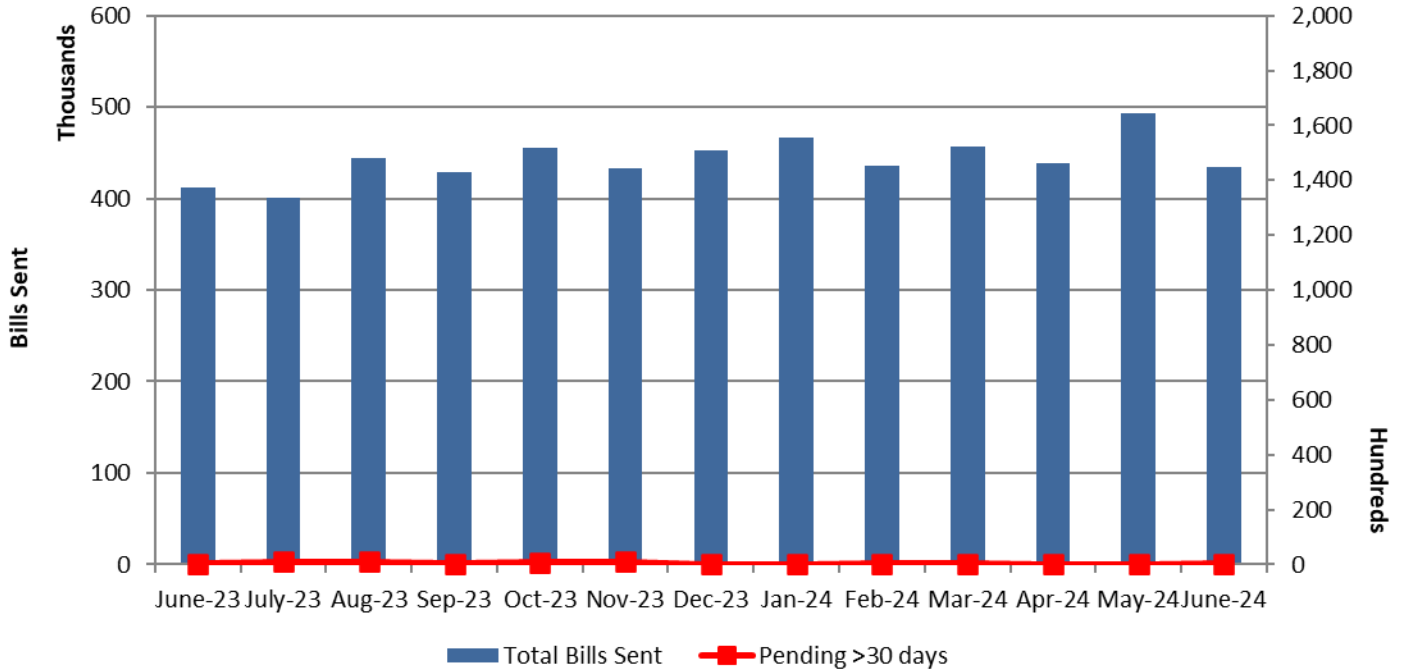
B. Customer Care Center

1. Accounts Receivable Overview

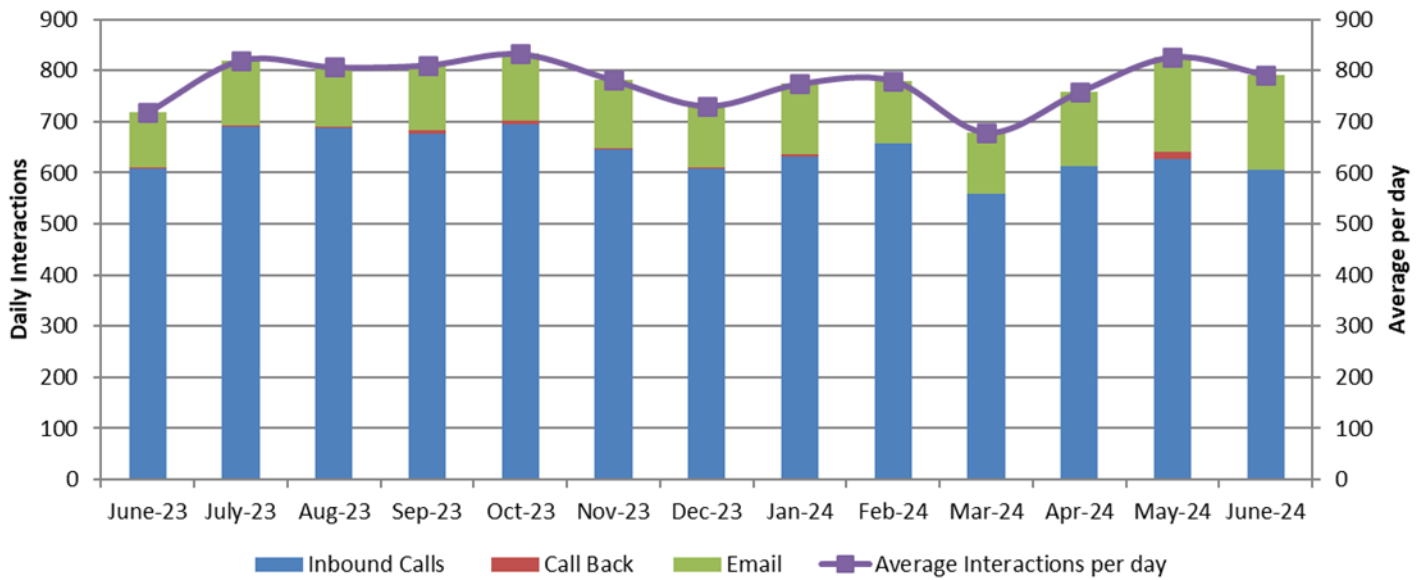
Delinquent & Late Payment Fees



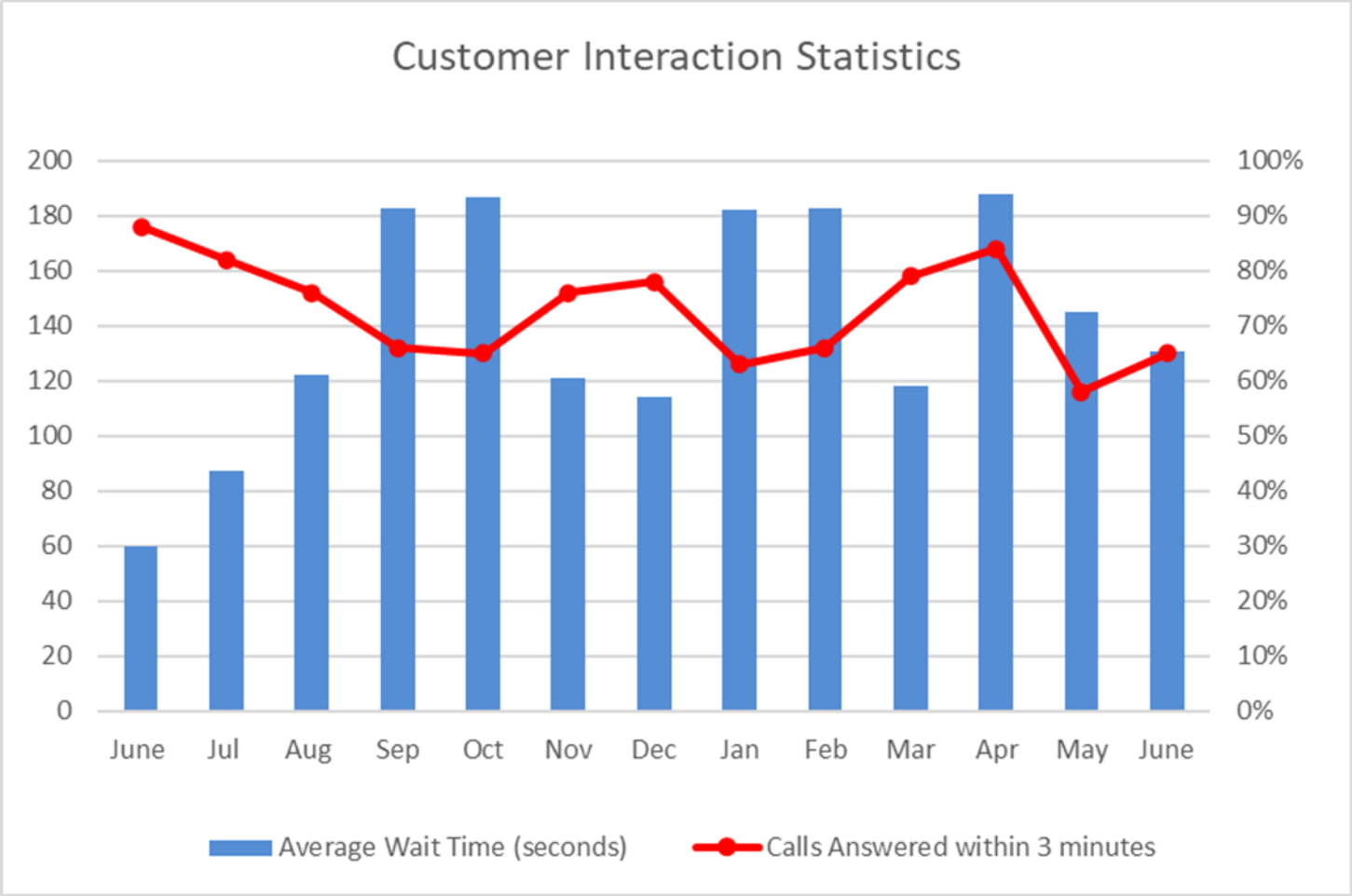
Billing Summary



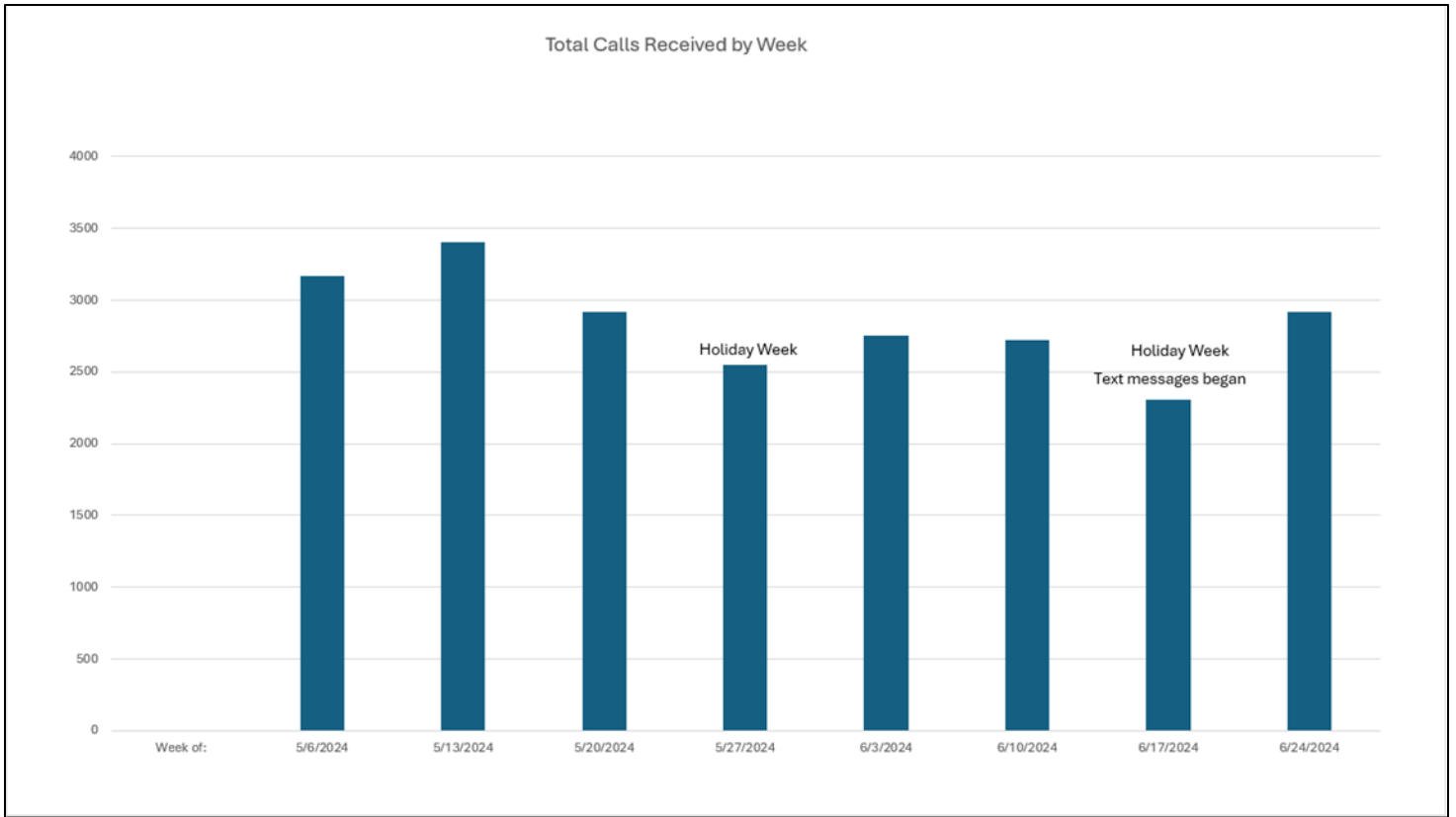
Call Center Interactions (per day)



2. Customer Care Center Statistics



Customer Interaction Statistics	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Calls Answered within 3 minutes	88%	82%	76%	66%	65%	76%	78%	63%	66%	79%	84%	58%	65%
Average Wait Time (seconds)	60	87	122	183	187	121	114	182	183	118	188	145	131
Calls Abandoned	5%	7%	8%	11%	12%	10%	9%	13%	12%	10%	8%	15%	11%

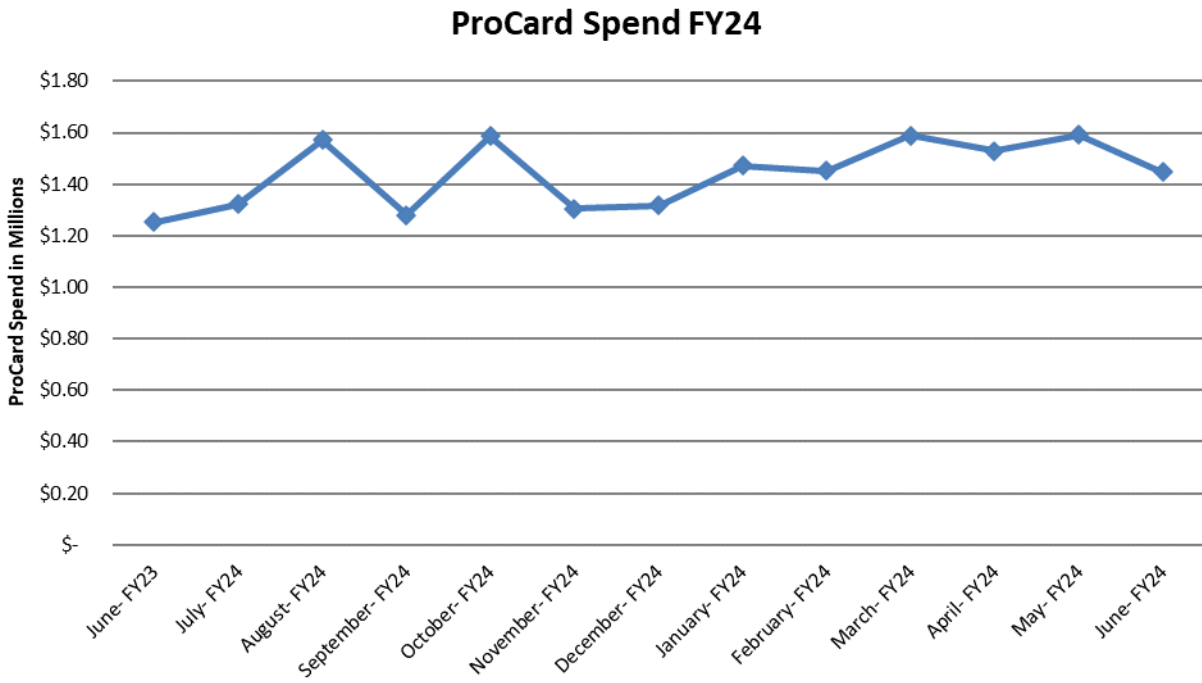


C. Procurement Statistics

Savings	Current Period	FYTD
Competitive Savings ¹	\$361,813	\$2,381,346
Negotiated Savings ²	\$12,354	\$112,684
Salvage Revenues	\$575	\$153,219
Corporate VISA Card - Estimated Rebate	\$21,570	\$260,193

¹ Competitive savings are those savings obtained through the informal/formal bidding process. All bids received (except for the lowest responsive/responsible bid) added together and averaged. The average cost is subtracted from the apparent low responsive/responsible bidder.

² Negotiated savings are savings obtained during a Request for Proposal process, or if all bids received exceed the budgeted amount, or if only one bid is received.



Respectfully,

Steven G. de Mik

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

TO: General Manager

FROM: Chief Information Officer

SUBJECT: Information Technology Department (ITD) Report for June 2024

DATE: July 10, 2024



Innovation

The Cybersecurity staff continues enhancing incident response procedures covering both the business and operational technology networks. Through standardization of practices and procedures, response to cybersecurity incidents occurs in a methodical, structured, and effective manner.

HRSD's primary backup platform was successfully upgraded, enhancing secure data management capabilities, both on-premises and in the cloud.

Hat's off to the IT Help Desk and all those who contributed to making the Surface Pro rollout a success. The project is near complete and loose ends should be tied-up by the end of July.

The IT Help Desk processed 345 work orders and requests for assistance in June, ensuring availability of computing resources to those working locally and remotely.



Community Engagement

The billing model conversion for the Town of Smithfield is underway and progressing smoothly. While playing a critical role in the conversion process, Smithfield staff is also learning how to use CC&B as its utility billing platform.

Respectfully,

Don Corrado

TO: General Manager/Chief Executive Officer

FROM: Chief Operating Officer

SUBJECT: Operations Monthly Report for June 2024

DATE: July 10, 2024



Community Engagement

Staff participated in several community events as follows:

1. On June 17, North Shore (NS) Interceptor Operations conducted an in-person meeting with the City of Williamsburg Public Works and Engineering Departments' staff. The purpose of the meeting was to review existing planning and development projects and to address ongoing operational and organizational matters.
2. Atlantic Treatment Plant (ATP) staff, along with a host of other HRSD employees and volunteers participated in the June 8, Atlantic Treatment Plant Community Outreach Day. Staff provided tours and information to attendees. 25 people visited and attended this event.
3. On June 19, Ms. Holly Anne Matel, ATP Treatment Process Engineer assisted in the Odor Control Task Force plant tour. The tour assisted in identifying odor sources by committee members.
4. Mr. Sam McAdoo, Director of Small Communities met with Accomack County staff to discuss expanding service for several projects and options for the National Aeronautics and Space Agency's need for wastewater service in the northern part of the county.
5. On June 10, Small Communities Division (SCD) staff met with Mathews County administrator Ms. Romana Wilson, and new board supervisor Ms. Janice Phillips, to discuss service area expansions and wastewater needs in Mathews County.
6. Mr. Sam McAdoo attended the Surry County Planning Commission Meeting on June 24 and presented the Surry Force Main and Pump Station Dominion Power Extension project (SU010400) for Substantial Accord Determination under the county's Comprehensive Plan. The Planning Commissioners unanimously approved the project.
7. SCD staff met with King William County staff to discuss upcoming developments and updates related to the King William Treatment Plant (KWTP).
8. SCD staff met with Middlesex County staff to discuss pausing the Middlesex Transmission Force main project (MP013730) until the bidding environment improves.



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.

1. There was one Sanitary Sewer Overflow (SSO) on NS caused by a contractor damaging HRSD's 30-inch force main while installing a fiber optic line at Doolittle Rd. and Salem St. in Hampton, VA.

Approximately 2,360 gallons of sewage leaked from the pipe. Staff responded promptly, containing the leak within two hours and fully diverting the system until a tapping saddle was installed by the following morning. Staff were recognized for their swift and effective response to the incident.

2. Army Base Treatment Plant (ABTP) had two uses of the emergency bypass stack on June 6 and June 13. Both were caused by power outages.
3. BHTP had two reportable events for the Odor control system that occurred in the month of June. The odor control stations were swapped due to fouling of the online train. The deviations occurred during startup of the other system and managing the caustic addition.
4. The Williamsburg Treatment Plant (WBTP) had ten incinerator deviations. Nine deviations were failures of the Total Hydrocarbon Analyzer to record two valid readings in an hour due to calibration issues. One was a use of the incinerator emergency bypass stack after a power blip during a thunderstorm tripped out the induced draft fan.

Internal Air and Odor Compliance:

1. There were multiple events reported this month. Additional details are available in the Air and Effluent Summary in the Water Quality monthly report.
2. ATP continues to put a large focus on reducing off site odors.
 - a. Staff raised the Ferric Feed rate to 4.0 mg/l to try to help reduce odors around plant sites to include the final dewatered biosolids at the storage pads.
 - b. Staff also repurposed the spray header used to spray the trucks down and started to use it on the digester roof to help mask digester odors. This does seem to aid in reducing the offsite odors and replacing the odor with the eucalyptus scent.
 - c. Work continues by plant staff in upgrading equipment and replacing media on Odor D. This work should be completed by late July.
 - d. The HRSD Project Team continues to make excellent progress in installing the misting system on the digesters. This work should be completed by July 12 and is expected to aid in reducing odors associated with the digester annular space.
 - e. HRSD received a total of 21 odor complaints related to the ATP odors.

Additional Topics of Interest:

1. Thermal Hydrolysis Process digestate from ATP is provided to assist with the startup of the Neuse River Plant in North Carolina. The seeding will take three to four weeks to complete, with ATP providing the plant with over 500,000 gallons of digestate to seed their digesters. This effort will enhance the curing process at ATP and may allow for a reprieve in odor complaints associated with pad operations.
2. Construction continues on the Advanced Nutrient Removal Improvement (ANRI)/Sustainable Water Initiative for Tomorrow (SWIFT) Project at the James River Treatment Plant (JRTP). The new #1 Secondary Clarifier is online. The existing #3 and #4 secondary clarifiers were taken out of service, cleaned, and preparations were made by the contractor to start demolishing #3 secondary clarifier. Concrete walls and structures continue to be formed and poured on SWIFT building #2, the moving bed biofilm reactor, and the SWIFT equalization tank.

3. Repair of the #3 primary effluent pipe at WBTP from the break that occurred in May is scheduled for the second week of July. The plan is to replace corroded sections of pipe and apply coatings where needed.
4. Renovation of the administration building at the York River Treatment Plant (YRTP) is complete. Featured in the renovation is a new control room and laboratory designed so plant operators can more effectively monitor and control treatment plant processes while performing laboratory analysis and preserving samples.
5. SCD continues working on transitioning plant data entry from Enterprise Data Solutions to Hach Water Information Management Solution. The dual entry period for the West Point Treatment Plant (WPTP) and KWTP will occur in July. Urbanna Treatment Plant (URTP) and Central Middlesex Treatment Plant (CMTP) Hach WIMS are currently in development and, once completed, will undergo a dual entry period as well.
6. The Industrial Automation Programmers (IAP's) participated in the successful completion of cutover testing for the new Ovation Supervisory Control and Data Acquisition (SCADA) System at Coliseum PRS and Offline Storage Tank, Morrison PS, and Surry #6 PS. The final site testing was completed, and these sites are now active on the new Ovation SCADA systems.
7. Electrical and Instrumentation (E&I) staff worked with Electric Power Systems (EPS), the contractor, to perform preventative maintenance testing for the Medium Voltage Switchgear, circuit breakers and transformers at Nansemond Treatment Plant (NTP).
8. Staff managed the conveyance and treatment of over 131 million gallons (MG) of wastewater this month.



Financial Stewardship

1. The Operations Project Team completed several projects around the service area and continue to provide substantial cost savings to HRSD.
 - a. Staff completed Nitrate Pump replacements at ONTP and troubleshooting of the dewatering trailer.
 - b. Staff continues to work on the ATP Vaporization project, which involves installing mister and piping around digesters 1-4 and is scheduled to be complete by July 12.
2. The Transportation Team is currently supporting SCD with transferring digester solids from the WPTP to WBTP. This effort ensures all SCD treatment plant operations are not affected by not having adequate digester capacity to waste Mixed Liquor Suspended Solids and other settleable solids from treatment processes and saves HRSD money by not having to contract pump and hauler efforts.
3. The Machine Shop had 19 projects during the month of June. Some of the more notable projects included three pump rebuilds, fenders on all pumps and haul trucks, and the fabrication of coolant flanges that are leaking at the Atlantic PRS.
4. Mr. Jacob Holgard, Lead Operator at VIP, led efforts to decrease polymer usage at the plant. With support from staff, he ran several field trials by adjusting polymer flow rates to the units and using the readings from the distributed control system to anticipate how the solids/centrate will be impacted. He continued to manipulate the polymer dosage over several days until the centrate worsened. This resulted in bringing down the annual polymer dosage average to the centrifuges from 315 pounds /ton prior to testing to 250 pounds/ton. Based on the cost of polymer, this will result in annual savings of roughly \$136,000.



Innovation

1. The SCADA program continues to make progress as Surry PS #6, Surry PS #7, Coliseum PRS and Morrison Ave PS were cut over and brought on-line this month. This nearly completes the Surry and NS Systems with just a few sites remaining. Emerson, the contractor, struggled at the Coliseum PRS site to get their controller to fully communicate and operate with their own provided panel and top-end systems. This resulted in a large amount of HRSD staff time to assist working through the technical issues. The new Advance Prime Guard control changes were implemented and tested at Artic Ave PS.
2. Virginia Initiative Plant (VIP) staff assisted WesTech with the startup of a ballasted filtration pilot process for phosphorus and suspended solids removal from plant effluent, to evaluate different processes needed to meet lower phosphorus permit levels.
3. ABTP continues to work to implement the CL-17 disinfection meters. Regular training for plant operators is scheduled.
4. The total volume of SWIFT recharge into the Potomac aquifer for the month of May was 3.43 MG (12.3% Recharge Time based on 650gpm).
 - a. On June 7, contractors finalized the coating work on the ozone contactor. This work lasted about five weeks.
 - b. On June 1, SWIFT staff assisted with the replacement of new Granular Activated Carbon (GAC) media. After delivery, SWIFT staff performed several backwashes to remove fine particles that might cause issues with turbidity in the future.
 - c. On June 18, a new Jarbalyzer was installed at the SWIFT influent to be able to keep monitoring Total Inorganic Nitrogen. Previous analyzer from Trescon (Germany company) will not support troubleshooting or parts in the future.
5. The electrical Motor Control Center for the raw influent pumps at BHTP was found in poor shape during an inspection last year. The corrosion on the ground bus needed to be addressed for the plant to successfully make it to closure at the end of 2026. Plant and E&I staff determined it was best to bring in temporary equipment to allow for the installation of new panels. A Godwin pump is now installed onsite to pump around the raw influent to the grit tanks, and staff successfully tested the equipment, with everything expected to be ready for use in July. The plant will be going through three shutdowns with a potential for a fourth shutdown while tying in new electrical panels for the Raw Influent Pumps, which are critical to the operation of the BHTP.
6. Testing began for the startup of the new Greasezilla process at NTP, where the plant will receive fats, oils, and grease (FOG) waste, and convert it to a bunker fuel to be hauled by a third party offsite as a renewable fuel source. This system should be fully functional by the end of August, which will aid in the amount of FOG impacting the main process at the plant.
7. SCD and E&I staff have been working on a system that will allow remote monitoring of the Mathews County Vacuum System. Remote monitoring will aid operations staff in troubleshooting the vacuum system and help minimize after-hours alarm calls.
8. SCD and E&I staff have been working on a project to set up a radar level measurement device for the storage pond at the WPTP. This device will allow us to use the pond for influent flow equalization.

9. Staff recently had the following journal article published:

- a. Samantha Hogard, Robert Pearce, Kathleen Yetka, Raul Gonzalez, and Charles Bott. 2024. Virus inactivation in low ozone exposure water reuse applications, *Water Research*, <https://doi.org/10.1016/j.watres.2024.121536>



Talent

1. NS Interceptor Operations has two open Interceptor Technician positions. Candidates for the Interceptor Technician positions, and the Interceptor Assistant position have been received and interviews are scheduled in mid-July.
2. Mr. Tyree Casteel joined NS Interceptor Operations on June 10 as an interceptor assistant.
3. Mr. Po Young, who served HRSD for 31 years, retired, and NS Interceptor Operations extends congratulations on his retirement.
4. On June 4, Mr. Shawn Heselton, Director of SS Interceptor Operations –, hosted and moderated a Water Environment Federation (WEF) Water Leadership Institute (WLI) webinar on Diversity, Equity, and Inclusion.
5. One June 5, Mr. Shawn Heselton and Mrs. Leila Rice, Chief Communications Officer, presented at the National Association of Clean Water Agencies (NACWA) Strategic Communications Conference in Virginia Beach. They presented on the HRSD Learning, Innovating, and Fostering Excellence (LIFE) Conference and how it bolsters internal communication, collaboration, and connectedness.
6. Ms. Megan Ludy filled the vacant Maintenance Operator Assistant position at ABTP.
7. Mr. Tyler Burch has started as a Systems Operator at SCD.
8. There are two System Operator vacancies currently open in SCD. Interviews are scheduled for the Middle of July 2025.

Respectfully submitted,

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

[Attachment: MOM Reporting](#)

MOM Reporting Numbers

[illegible]

TO: General Manager

FROM: Chief People Officer

SUBJECT: Talent Management Monthly Report for June 2024

DATE: July 10, 2024



Staff retention and recruitment remain significant priorities for the Talent Management (TM) Department. Human Resources filled the Talent Acquisition Specialist position, and the new hire will start on July 22nd.

Human Resources (HR): After a successful open enrollment process, HR staff continued to meet weekly with the new benefit carriers to complete the transition and implementation of our benefits starting July 1, 2024.

HR staff attended their first annual HR retreat hosted Hicks-Carter-Hicks. The goal for this retreat was to create a space where staff could reflect on achievements, address challenges, and strategize for the future.

Compensation study salary statements were distributed in June. HR answered numerous questions regarding the salary information employees received.

HR staff coordinated and participated in two Open House/Career Events at HRSD. Each department was represented along with the UNIFIED council to provide information to external candidates on the variety of careers fields and opportunities at HRSD. 30 job seekers attended the North Shore event, and 53 job seekers attended the South Shore event.

Participation in HRSD's Wellness Program continues to grow. Plan education, wellness related presentations, individual and group coaching, and virtual guided meditation sessions continue. Wellness also started a weekly boot camp session at Air Rail.

Learning and Development (L&D): In June, L&D hosted several impactful training sessions, continued to support work center training initiatives, and delivered our scheduled programs, including leadership training for the Leadership and Management Academy (LAMA).

Compensation Study Training Sessions: L&D conducted 34 work center training sessions related to the HRSD comprehensive compensation study. The goal of this effort was to provide information related to changes resulting from the compensation study and to provide employees with an opportunity to ask clarifying questions.

Civility & Respect in the Workplace: L&D successfully hosted Hicks-Carter-Hicks for an in-person pilot program with the ABN work group focused on promoting a culture of

civility and respect within our work groups. Participants gained valuable insights and were introduced to several available resources to foster positive workplace interactions.

Isolation Training for Shift Workers: Partnering with Hicks-Carter-Hicks for another pilot program, L&D completed training aimed at shift workers who routinely experience isolation. This initiative aimed to enhance readiness and skills for handling feelings of isolation because of alternate work schedules.

Regularly scheduled programs: L&D hosted the 2024 LAMA cohort for Emotional Intelligence (EQi) training, conducted Your Role in Quality half-day training for project presentations, and held our Quarter Facilitator Meeting to discuss upcoming SPARC Sessions.

These monthly highlights reflect L&D's commitment to continuous learning and to providing work center support. We look forward to continuing our efforts to assist with work center SPARC Sessions, employee development, and continuous innovation.

Safety: Staff conducted required safety trainings and medical monitoring. Weekly, monthly, and quarterly safety inspections, and testing and monitoring were performed at various work centers and construction sites. There were two reported work-related injuries requiring medical attention and one auto/property damage accident.

The Safety Division celebrated National Safety Month, organized by the National Safety Council, with various engaging activities each week. Safety staff encouraged all HRSD work centers to participate in the weekly safety-themed events.

- **Week 1: Safety Engagement** - Work centers created videos demonstrating their commitment to safety.
- **Week 2: Roadway Safety** - A Safety Jeopardy game was distributed for completion.
- **Week 3: Risk Reduction** - A Safety Scavenger Hunt was conducted.
- **Week 4: Slips, Trips, and Falls** - Work centers designed posters addressing slip, trip, and fall prevention.

The Safety Division was thrilled with the enthusiastic participation from work centers during this inaugural National Safety Month.



Community Engagement

Staff provided outreach at career events. This outreach was focused on the variety of career fields represented at HRSD. Information was shared about our open positions, the Apprenticeship Program, how we positively impact the local waterways and our generous benefits. Staff also explained how to apply for a position at HRSD and answered questions about what it's like to work at HRSD.

Respectfully submitted,

Dorissa Pitts-Paige

TO: General Manager

FROM: Chief of Water Quality (CWQ)

SUBJECT: Monthly Report for June 2024

DATE: July 10, 2024



Environmental Responsibility

1. HRSD's Regulatory Activities:

- a. Monthly Discharge Monitoring Report (DMR) Summary and Items of Interest: [Effluent and Air Emissions Summary](#).
- b. From Fiscal Year (FY) 2024 to date, there have been eight Permit Exceedances out of 56,527 Total Possible Exceedances.
- c. Pounds of Pollutants Removed in FY 2024 to date: 189.7 million pounds.
- d. The draft Boat Harbor VPDES permit was finalized and submitted for a 30-day public notice beginning on June 24, 2024.

2. Pretreatment and Pollution Prevention (P3) Program Highlights:

- a. One civil penalty was paid in June by U.S. Amines – Portsmouth.

U.S. Amines - Portsmouth

After the first enforcement order issued in May was paid, a second Enforcement Order was issued to U.S. Amines for a technical violation for a Cyanide exceedance in April 2024 associated with the facility's PRET sample point. This Order contained an invoice for a \$3,000 Civil Penalty. The permittee attributed the limit exceedance to inadequate equalization tank mixing and they temporarily ceased discharges from the tank to prevent further limit exceedances.

The Enforcement Order was accepted, and the Civil Penalty was paid in full on June 17, 2024.

- b. P3 staff met with Town of Exmore staff to walk through the New Ravenna Tile manufacturing facility. Several recommendations will be provided to Town staff for implementation at the facility. A discussion regarding Fats, Oils and Grease (FOG) and the implementation of a FOG program also took place during this meeting.

- c. P3 staff worked with the City of Chesapeake on collection system issues associated with wastewater discharges from Total Fiber Recovery at Chesapeake LLC. P3 required the wastewater discharge to be ceased due to excessive solids material being discharged from the process. The facility developed a plan for a partial discharge and the request was approved. The facility was shut down completely for two days.

3. Environmental and Regulatory Advocacy

- a. The Sustainability Environment Advocacy (SEA) Group reported the following activities for the month of June:
 - 1) The SEA Team hosted four clean up events on Saturday, June 1st to coincide with the Chesapeake Bay Foundation's Clean the Bay Day. Events were held at the Boat Harbor, VIP, and Nansemond treatment plants as well as an event at the former Lambert's Point Golf Course. Over two hours at these four locations, 33 volunteers collected 39 bags of trash and other large items that collectively weighed nearly 585 lbs.
 - 2) The SEA Team organized a plant swap that was held during Water and Wastewater Professional's Day on June 27th. Dozens of employees donated numerous plants that found new homes. Participants also donated planters, jars, and other containers to be reused for propagation of the plants. The Sea Team would like to expand this initiative as an annual event.
 - 3) The Sea Team continues to collect gently used uniforms for employees to take and use under the "HRSD Closet" initiative. Since it's inception in 2022, 2,662 items of clothing have been collected and there continues to be an interest from employees in taking donated items.
- b. Chief participated in the following advocacy and external activities:
 - 1) Provided a briefing on HRSD's SWIFT program to the board of Virginia Forever and attended a meeting of the board as a member. Virginia Forever is a coalition of businesses, environmental organizations and outdoor enthusiasts that advocates for increased government funding for water quality improvements and land conservation across the Commonwealth. It is the only statewide organization that has a primary focus on increasing funding for natural resources protection.
 - 2) Attended the Executive Board meeting for the Virginia Association of Municipal Wastewater Agencies (VAMWA) as well as the quarterly membership meeting.

- 3) Participated in a planning for an upcoming meeting of the National Association of Clean Water Agencies (NACWA) Water Quality Committee. The Chief has been nominated as co-chair of this committee and will be transitioning off as co-chair of the NACWA Biosolids Committee at NACWA's July Utility Leadership Meeting.
- 4) Attended a meeting of the Eastern Virginia Groundwater Management Advisory Committee. HRSD's Hydrogeologist is a member of this committee, representing HRSD's interests in management of the aquifer.



Financial Stewardship

Staff supported the generation of high-quality data for use in permitting and environmental management decisions through our Municipal Assistance Program (MAP), which offers services to other municipal and regional authorities throughout the state. HRSD costs for this program are reimbursed by the customer. Below are program highlights for the month.

1. HRSD provided sampling and analytical services to the following to support monitoring required for their respective Virginia Permit Discharge Elimination System (VPDES) permits:
 - a. Northumberland County
 - b. Westmoreland County
2. [MAP Billed Reimbursements](#) for service provided from April 1 to June 30, 2024.
3. [MAP Invoice Summary](#) for the second Quarter 2024 calendar year.



Talent

Kevin Parker graduated from the Virginia Natural Resources Leadership Institute, a 10-month program that engages natural resource leaders across the Commonwealth, fostering collaborative problem solving within this field across agencies, utilities and environmental advocacy organizations.



Community Engagement

Staff supported Microbial Source Tracking (MST) investigations in partnership with Hampton Roads localities. This work is required as part of HRSD's Integrated Plan. Sampling and analytical services were provided for the localities and projects identified below:

1. City of Chesapeake (Southern Branch)
2. City of Hampton (New Market Creek)
3. City of Newport News (Southeast Newport News)
4. City of Norfolk (Mason Creek)
5. City of Suffolk (downtown)
6. City of Virginia Beach (Thalia Creek)
7. James City County



Innovation

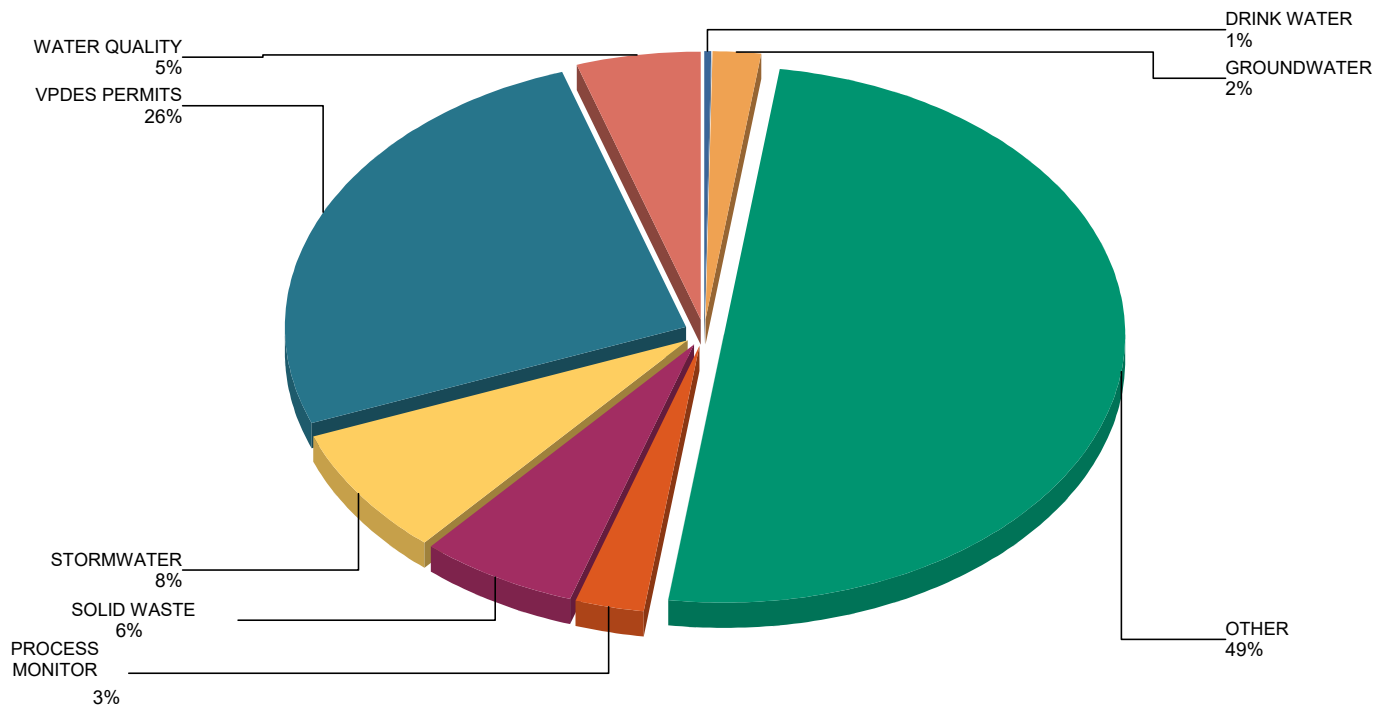
1. Chief participated in an Environmental Subcommittee meeting of the Norfolk Innovation Corridor (NIC). The NIC is a designated technology zone within Norfolk, providing business and tax incentives to attract and retain technology companies focused on resilience products, services, and technologies. The Environmental Subcommittee is focused on attracting and recognizing efforts in environmental resiliency. The Chief is a member of the subcommittee and HRSD SWIFT is recognized in the NIC Environmental Innovations and Assets StoryMap, [NIC: Environmental Innovations & Assets \(arcgis.com\)](https://arcgis.com).
2. Chief attended a webinar hosted by the Virginia Biosolids Council in which Dr. Linda Lee of Purdue provided a research update on the fate and transport of per- and polyfluoroalkyl substances (PFAS) in the land application of biosolids. HRSD is a participant in this research effort.

Respectfully submitted,

Jamie Heisig-Mitchell
Chief of Water Quality

Municipal Assistance Billed Reimbursements per Service From 04/01/2024 to 06/30/2024

Attachment 1



Notes: Other = Equipment purchase, consultation, validation studies, boater pump-out program, etc.

Municipal Assistance Invoice Summary

From 04/01/2024 - 06/30/2024

Municipality	Reimbursements	Reimbursements Fiscal Year 2024
Accomack County	\$4,480.72	\$13,520.52
Buckingham County	\$249.90	\$992.09
Chesterfield County	\$0.00	\$9,660.81
City of Chesapeake	\$7,830.62	\$20,302.46
City of Emporia	\$271.83	\$1,058.10
City of Franklin	\$1,914.45	\$9,218.41
City of Fredericksburg	\$18,538.81	\$19,449.72
City of Hampton	\$3,439.44	\$21,317.14
City of Norfolk	\$2,855.86	\$36,877.11
City of Norfolk-Dept of Utilities	\$993.05	\$2,958.90
City of Portsmouth	\$2,896.61	\$14,311.82
City of Roanoke	\$1,125.00	\$9,600.00
City of Suffolk	\$142.05	\$12,076.10
City of Virginia Beach	\$6,070.73	\$26,496.90
DCLS Wastewater Surveillance	\$103,917.76	\$240,225.76
Exmore WWTP	\$0.00	\$2,149.08
HRPDC	\$16,819.42	\$181,352.45
Hanover County	\$0.00	\$22,881.95
Henrico County	\$1,981.68	\$7,919.97
Hopewell RWTF	\$6,335.12	\$17,074.02
James City County Service Authority	\$0.00	\$1,289.70
Lynnhaven River NOW	\$443.08	\$1,446.48
New Kent County	\$9,268.72	\$41,339.94
Northampton County WWTP	\$1,684.54	\$6,230.10
Northumberland Co. - Callao WWTP	\$2,280.84	\$8,574.58
Portsmouth Stormwater	\$0.00	\$94.05
Prince William County	\$4,450.76	\$4,450.76
Rivanna Water and Sewer Authority	\$0.00	\$1,995.02
ST BRIDES CORRECTIONAL CENTER	\$482.86	\$4,041.07
Spotsylvania County	\$0.00	\$3,727.12
Spotsylvania County FMC	\$1,217.78	\$1,217.78
St Brides Corr Ctr WWTP	\$2,487.82	\$34,041.09
Stafford County	\$106.64	\$7,033.61
Town of Cape Charles-VAW	\$9,448.66	\$36,578.62
Town of Grottoes WWTP	\$0.00	\$5,937.98

Upper Occoquan Service Authority	\$10,545.60	\$16,282.12
Virginia Aquarium & Marine Science Ctr	\$3,134.58	\$44,472.54
Virginia Department of Health	\$4,023.18	\$202,275.98
Virginia Department of Health-Shellfish	\$1,125.00	\$1,125.00
Western VA Water Authority	\$0.00	\$174.86
Westmoreland County	\$1,982.60	\$6,504.91
<i>Totals:</i>	<u>\$232,545.71</u>	<u>\$1,098,276.62</u>

EFFLUENT SUMMARY FOR JUNE 2024

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	8.20	46%	2	2.4	2	<1	0.58	0.79	4.9	4.0	11
ATLANTIC	43.72	81%	13	6.3	5	1	NA	NA	NA	NA	13
BOAT HARBOR	8.96	36%	14	5.1	13	3	1.3	0.63	34	22	6
CENT. MIDDLESEX	0.014	56%	<2	2.4	<1	<1	NA	NA	NA	NA	NA
JAMES RIVER	10.39	52%	8	6.7	1	<1	0.36	0.62	9.4	9.6	12
KING WILLIAM	0.091	91%	<2	0.65	NA	<1	0.15	0.18	1.9	2.3	NA
NANSEMOND	15.85	53%	4	4.2	1	<1	2.1	1.4	4.3	4.0	4
ONANCOCK	0.222	30%	<2	1.5	1	1	0.51	0.18	2.5	2.6	NA
SUNSET BAY	0.021	52%	4	<1.0	1	2	NA	NA	NA	NA	0
URBANNA	0.059	59%	8	18	3	4	6.4	2.3	27	14	NA
VIP	25.17	63%	3	2.0	2	1	0.38	0.32	3.6	3.7	3
WEST POINT	0.326	54%	19	15	1	2	3.8	2.5	17	14	0
WILLIAMSBURG	7.80	35%	8	2.6	4	2	1.3	0.93	2.1	2.9	16
YORK RIVER	10.14	68%	3	1.1	<1	1	0.14	0.24	5.2	5.2	5
	<u>130.98</u>										

% of
Capacity

North Shore	45%
South Shore	65%
Small Communities	41%

AIR EMISSIONS SUMMARY FOR JUNE 2024

	No. of Permit Deviations below 129 SSI Rule Minimum Operating Parameters								Part 503e Limits		
	Temp	Venturi(s) PD	Precooler Flow	Spray Flow	Venturi Flow	Tray/PBs Flow	Scrubber	Any	THC	THC	BZ Temp
	12 hr ave	12 hr ave	12 hr ave	12 hr ave	12 hr ave	12 hr ave	pH	Bypass	Mo. Ave	DC	Daily Ave
MHI PLANT	(F)	(in. WC)	(GPM)	(GPM)	(GPM)	(GPM)	3 hr ave	Stack Use	(PPM)	(%)	Days >Max
ARMY BASE	1	0	0	0	0	0	0	2	45	88	0
BOAT HARBOR	0	0	0	n/a	0	0	0	0	11	36	0
VIP	0	0	0	n/a	0	0	0	0	22	100	0
WILLIAMSBURG	0	0	0	n/a	0	0	0	1	24	63	0

Items of Interest – June 2024

MULTIPLE HEARTH INCINERATION (MHI)

Total Hydrocarbon (THC) monthly averages (not to exceed 100 ppm) were met by all four MHI plants (Army Base, Boat Harbor, Virginia Initiative, and Williamsburg) with a THC continuous emissions monitoring (CEM) valid data captured of greater than 36%.

The MHIs had one (1) deviation from the required 129 SSI rule minimum operating parameters and three (3) minor bypass events (< 60 minutes).

Army Base's MHI # 1 final stack test report was submitted to DEQ on June 28, 2024, that demonstrated compliance with all required 129 emission limits including HCl.

AIR PERMITS and ODOR CONTROL

There were a total of twenty-nine (29) odor control complaints during the month of June of which 24 complaints were HRSD related, 3 non-HRSD related, and 2 undetermined.

Atlantic Plant received twenty-one (21) odor complaints from Ocean Lakes and Lago Mar neighbors. Plant Staff responded to all complaints. Odors from land app solids, THP system leaks, digesters, and general plant odors occurred. Plant staff took corrective action where possible. Communications followed up and responded to each neighbor's complaint.

The three (3) other HRSD complaints received included one at Powhatan Avenue pump station, one from force main air venting on Elbow Road, and one from the Onancock plant. All complaints were investigated, and responses provided to our neighbors. No further complaints have been received.

TREATMENT

DEQ was notified of the following reportable events:

Atlantic

On June 1, a chlorine residual sample collected at 10:00 was recorded outside the calibrated range of the instrument. The operator forgot to retest with a diluted sample so no valid data was available for the 2-hour period. The oversight was discovered during a data review on June 12 and the sample was deemed invalid at that time.

On June 7, two digester mixers failed causing a rapid rise event which overflowed onto the ground. The digester level was brought down and a defoaming agent was added to reduce the foam level. An estimated 100 gallons of foam were unrecoverable from the ground.

On June 13, Digester 2 overflowed when a hose spraying non-potable water (NPW) used to knock down foam was left running. Approximately 300 gallons of digested solids were unrecoverable from the ground and storm water ditch.

Boat Harbor

On June 17, four (4) consecutive TRC sample collection and analyses were missed during an evening shift due to the lack of performance of the operator. The midnight

shift operator collected and analyzed the next sample at 00:45 on June 18 and measured 1.32 mg/L. The plant was operating normally, and chlorine dosing was consistent. The evening shift operator was disciplined as outlined in the HRSD Human Resources Manual.

James River

On June 24, a chlorine residual of 0.06 mg/l was recorded at 00:02 and a loss of chlorination was reported due to a broken barb fitting on the sodium hypochlorite feed line. While retrieving the 30-minute sample, the Operator discovered sodium hypochlorite pumping from the broken line directly onto the floor within the building containment sump. Sodium hypochlorite feed was restored when an alternative line was placed in service at 00:15.

SYSTEM

On June 4 a contractor performing a conduit install via boring struck the HRSD force main and reamed a hole in the side of the pipe. The contractor did not take the necessary excavation precautions as required by VA-811 resulting in 2,360 gallons of raw wastewater to be released to the ground.

SYSTEM/TREATMENT, SMALL COMMUNITIES, AND EASTERN SHORE

Onancock

During the week of June 2, the Total Phosphorus (TP) monitoring frequency of 2 days/week was not met. Two samples were collected for the week on June 4 and 5 and analyzed, but one sample did not meet the Quality Control requirements of the method, resulting in an invalid analysis. The samples were inadvertently discarded and there was not sufficient time to collect another TP composite sample during the week. All other subsequent weekly TP monitoring requirements were met and in permit compliance for the month.

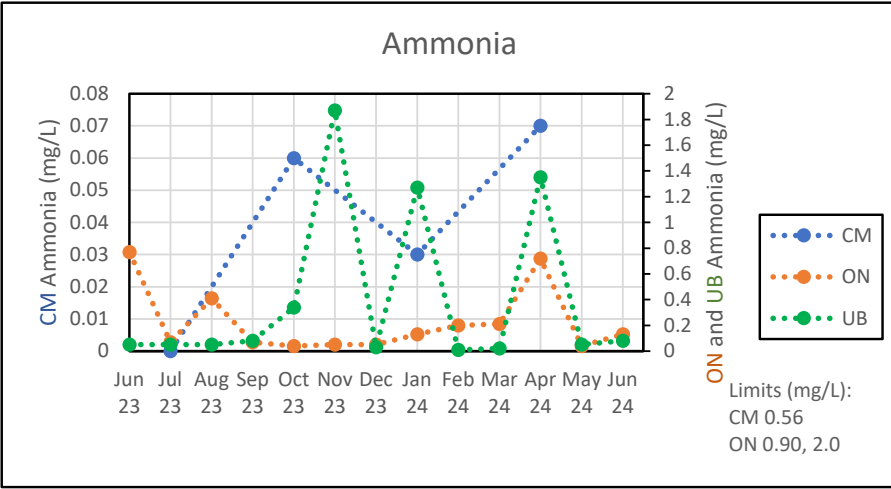
West Point

During the reporting period of January – June 2024, West Point did not meet the permit requirement of 85% removal of TSS nor the 73% removal of BOD. Reliably meeting these percent removal limits is challenging with trickling filters, and was not possible with atypically high influent flows and low TSS and BOD influent concentrations occurring during the month of March.

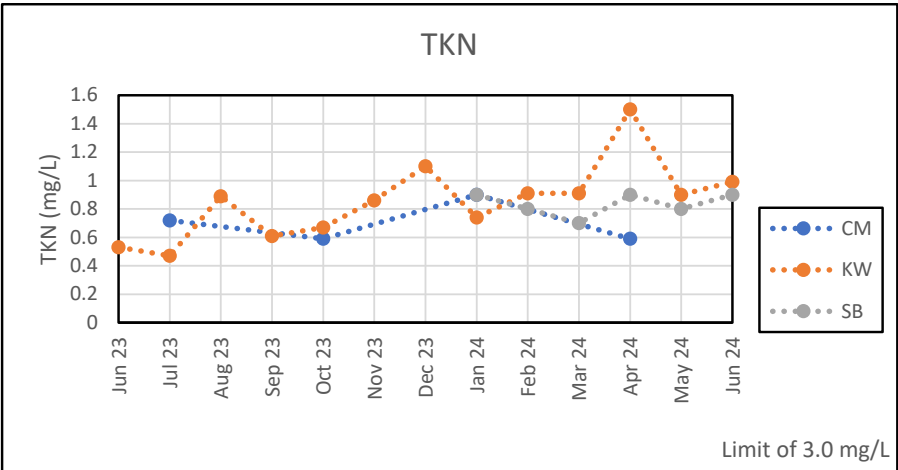
Flow summaries, nutrient data, and rainfall information is located here:

[DMR - Power BI \(powerbigov.us\)](https://powerbigov.us)

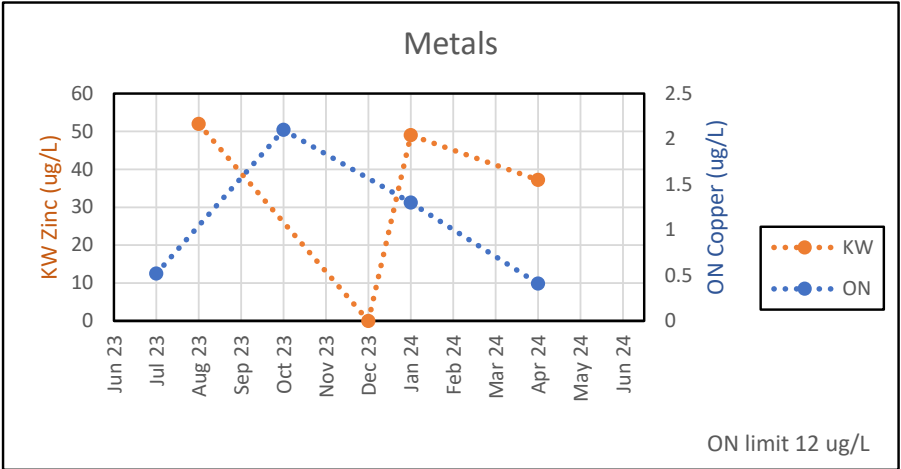
	Ammonia		
	CM	ON	UB
Jun 23		0.77	0.05
Jul 23	<0.02	0.07	0.05
Aug 23		0.41	0.05
Sep 23		0.07	0.08
Oct 23	0.06	0.04	0.34
Nov 23		0.05	1.87
Dec 23		0.05	0.03
Jan 24	0.03	0.13	1.27
Feb 24		0.20	0.01
Mar 24		0.21	0.02
Apr 24	0.07	0.72	1.35
May 24		0.04	0.05
Jun 24		0.13	0.08



	TKN		
	CM	KW	SB
Jun 23		0.53	
Jul 23	0.72	0.47	
Aug 23		0.89	
Sep 23		0.61	
Oct 23	0.59	0.67	
Nov 23		0.86	
Dec 23		1.1	
Jan 24	0.90	0.74	0.90
Feb 24		0.91	0.80
Mar 24		0.91	0.70
Apr 24	0.59	1.5	0.90
May 24		0.90	0.80
Jun 24		0.99	0.90



	Zinc	Copper
	KW	ON
Jun 23		0.52
Jul 23		
Aug 23	52	
Sep 23		
Oct 23		2.1
Nov 23		
Dec 23	<5.0	
Jan 24	49	1.3
Feb 24		
Mar 24		
Apr 24	37	0.41
May 24		
Jun 24		





The following Internal Audit Status document has been prepared by SC&H for the HRSD Commission. Below is a summary of projects in process, upcoming projects, and the status of current management action plan monitoring.

I. Projects in Process

Operational Technology Security and Resilience

- **Completed Tasks (June 2024)**
 - Completed onsite observations.
 - Continued to communicate fieldwork document request list/follow-ups and reviewed documentation as obtained.
 - Initiated Manager review on testing/documentation performed.
- **Upcoming Tasks (July 2024)**
 - Continue to request/obtain documentation and perform testing.
 - Finalize Manager Review on testing.
 - Initiate Director Review on testing.
 - Communicate exceptions/issues identified as part of testing.

Design and Construction Estimating

- **Completed Tasks (June 2024)**
 - Provided sample selection for project comparison.
 - Researched organizations for benchmarking exercise.
- **Upcoming Tasks (July 2024)**
 - Review sample selection for project comparison.
 - Continue data analytics on prior year bids received.
 - Meet with external engineering firms and organizations for benchmarking.

Accounts Payable and ProCards

- **Completed Tasks (June 2024)**
 - Submitted final report.

Billing, Accounts Receivable, and Aging

- **Audit placed on hold until CY2025**

II. Upcoming Projects

- IT governance: ~Fall CY2024
- Model 3: ~Fall/winter CY2024
- Talent management investigations: ~Fall/winter CY2024

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.

Audit / Project	Next Follow-up	Recommendations		
		Closed	Open	Total
Personally Identifiable Information	July 2024	0	3	3
Safety Division	July 2024	2	1	3
Freedom of Information Act	August 2024	0	1	1
Family Medical Leave Act (FMLA)	July 2024	0	4	4
Succession Planning	July 2024	2	2	4
Closed Audit/Projects (x16)	Closed	127	0	127
Totals		131	11	142

Strategic Measures
June 2024

Strategic Planning Measure	Department	May-24	Jun-24	FY-24
Educational and Outreach Events	Communications	13	12	224
Number of Community Partners	Communications	9	10	158
Number of Technical Presentations	All	11	1	87
Revenue vs. Budget	Finance	95%	104%	57%
Wastewater Expenses vs. Budget	Finance	81%	88%	46%
Accounts Receivable (HRSD)	Finance	\$41,694,350	\$47,302,526	\$44,431,665
Aging Accounts Receivable	Finance	32.00%	29.00%	29.30%
Turnover Rate wo Retirements	Talent Management	0.12%	0.35%	4.36%
Turnover Rate w Retirements	Talent Management	0.58%	0.35%	6.94%
Avg Time to Hire	Talent Management	3 months 2 days	2 months 11 days	3 months 9 days
Number of Vacancies	Talent Management	42	43	53
Average number of applicants per position	Talent Management	7.4	11.3	9.0
Percentage of positions filled with internal applicants	Talent Management	30.8%	13.3%	28.2%
Recruitment source Return on Investment	Talent Management	*	*	*
Average time required (days) to onboard new employees, including from initial posting of position to candidates' first day	Talent Management	*	*	*
Customer Call Wait Time (mins)	Finance	2.42	2.18	2.51
Capacity Related Overflows with Stipulated Penalties (Reported Quarterly)	Water Quality / ENG	0	**	1
Non-Capacity Related Overflows with Stipulated Penalties (Reported Quarterly)	Water Quality / ENG	0		1
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.	Operations	*	6 months 19 days	*
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.	Operations	*	*	*
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.	Operations	*	4392	*
Monthly CIP Spending	Engineering	\$87,001,598		\$50,890,401

*Not currently tracking due to constraints collecting the data.

** Updated after EPA Quarterly Report submittal.

***Billing is one month behind

Strategic Measures
June 2024

Technical Presentations			
Date	Department	Presenter	Presentation
06/18/2024	Operations	Klaus, Stephanie	Full-Scale Implementation of Mainstream Partial Denitrification/Anammox (PdNA) at HRSD at Singapore International Water Week

Education Outreach and Community Partners			
Date	Event	Community Partner	Department(s)
06/01/2024	Newport News Public Schools & CNU STEM Community Day	Newport News Public Schools, CNU	Communications
06/03/2024	SWIFT Research Center tour for NACWA StratComm Conference attendees	NACWA	Communications
06/08/2024	Atlantic Treatment Plant Open House event with Lynnhaven RiverNOW	Lynnhaven River NOW	Communications, Operations, Water Quality
06/12/2024	SWIFT presentation to Virginia Peninsula Rotary	Virginia Peninsula Rotary	Communications
06/13/2024	Guest Panel Participation - Annual Meeting 2024 League of Women Voters of Williamsburg Area	League of Women Voters of Williamsburg area	Engineering
06/13/2024	SWIFT Research Center tour for HRPDC Community Advisory Committee	HRPDC Community Advisory Committee	Communications
06/18/2024	VDC Webinar and Panel Discussion	DBIA	Engineering
06/19/2024	Atlantic Treatment Plant Task Force Tour	AECOM	Operations
06/21/2024	Reducing Claims Against Engineers on Alternative Delivery Projects Panel	ASCE	Engineering
06/26/2024	Presentation on HRSD's CIP	HRUHCA	Engineering
06/27/2024	SWIFT Research Center tour for Elizabeth River Project staff and interns	Elizabeth River Project	Communications
06/27/2024	SWIFT Research Center tour for Shutte Construction	Shutte Construction	Communications

Community Partners		
Date	Community Partner	Department
06/01/2024	Ocean Lakes High School	Operations
06/01/2024	Ocean Lakes Neighborhood	Operations
06/01/2024	ODU	Operations
06/01/2024	Waste Management	Operations
06/05/2024	HRPDC Directors of Utilities Committee	Engineering
06/18/2024	HRPDC FOG Subcommittee	Water Quality