

HRSD Commission Meeting Agenda
9:00 a.m. – June 22, 2021

Location: Electronic Meeting via Zoom in Accordance with Chapter 1289, Virginia 2020 Acts of Assembly

Limited electronic observation is available by reservation and must be received by Jennifer Cascio at jcascio@hrsd.com by noon one business day prior to the meeting.

Public Comments to be made during the meeting should be submitted to Jennifer Cascio by email to jcascio@hrsd.com or by phone to 757.460.7003, and must be received by noon one business day prior to the meeting.

<u>No.</u>	<u>Topic</u>	<u>Resource</u>
	Call to Order	Elofson
	Roll Call of HRSD Commission	Cascio
1.	Awards and Recognition – Service Awards	Henifin
2.	Consent Agenda	Henifin
	a. Approval of Minutes	
	b. Contract Awards	
	c. Task Order	
	d. Sole Source	
	e. HRSD Use of Existing Competitively Awarded Contract Vehicle	
3.	Atlantic Treatment Plant Solids Storage Pad Improvements Initial Appropriation (>\$200,000)	Husselbee
4.	Berkley Trunk Sewer Section M Emergency Gravity Sewer Replacement New CIP and Initial Appropriation	de Mik
5.	Boat Harbor Treatment Plant Transmission Force Main Section 2 (Land) Initial Appropriation and Contract Award (>\$200,000)	Husselbee
6.	Great Bridge Interceptor Extension 16-inch Replacement Initial Appropriation and Task Order (>\$200,000)	Husselbee
7.	Morrison Pump Station Discharge Force Main Replacement and Capacity Enhancements Additional Appropriation, Contract Award (>\$200,000), and Task Order (>\$200,000)	Husselbee
8.	Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Phase II Proposal Compensation	Husselbee

<u>No.</u>	<u>Topic</u>	<u>Resource</u>
9.	<u>SWIFT Research Center Full-Scale Managed Aquifer Recharge (MAR) Well Integration</u> <u>Additional Appropriation and Contract Award (>\$200,000)</u>	Husselbee
10.	<u>Middlesex Interceptor System Program Phase II – Transmission Force Main Acquisition of Real Property – 215 Linden Avenue, Urbanna, VA</u>	Husselbee
11.	<u>Nansemond Treatment Plant Deed of Correction</u>	Husselbee
12.	<u>COVID-19 Wastewater Surveillance Study Update</u>	Gonzalez
13.	<u>Policies Review</u> <u>Operations and Nominations Committee Report</u>	Henifin
14.	<u>Election of Officers</u>	Henifin
15.	<u>Finance Committee Appointment for Fiscal Year 2022</u>	Henifin
16.	<u>Unfinished Business</u>	Henifin
17.	<u>New Business</u>	Henifin
18.	<u>Commissioner Comments</u>	
19.	<u>Public Comments Not Related to Agenda</u>	Cascio
20.	<u>Informational Items</u>	Henifin
a.	<u>Management Reports</u>	
b.	<u>Strategic Planning Metrics Summary</u>	
c.	<u>Effluent Summary</u>	
d.	<u>Air Summary</u>	
e.	<u>Emergency Declaration – Berkley Trunk Sewer Replacement</u>	

Next Regular Commission Meeting Date: **July 27, 2021 at 1434 Air Rail Avenue, Virginia Beach**

AGENDA ITEM 1. – June 22, 2021

Subject: Awards and Recognition

Recommended Action: No action is required.

Brief: The following service awards will be recognized:

a. Craig Forbes

The Commission Chairman will recognize Craig Forbes, Pretreatment and Pollution Prevention (P3) Manager, who marked his 25th year of service with HRSD on June 5, 2021. Craig was hired in April 1996 as a part-time helper in the Technical Services Division in the stormwater program and moved to full-time in June 1996. He was promoted to a Technical Services Assistant in July 1996, an Industrial Waste Assistant in January 1997, an Industrial Waste Technician in July 1997, a Water Quality Supervising Specialist in February 1999. In November 2004, Craig was promoted again to P3 Manager, the position he holds today. Craig manages the South Shore Field Office which includes oversight of industrial user sampling on the South Shore.

Craig holds a Bachelor of Science degree in Environmental Health from Old Dominion University. He has been involved in early research and piloting of Fats, Oils and Grease (FOG) programs at the local and national level. He has also worked on several method development programs for EPA for parameters such as low-level mercury and oil and grease.

Craig was a charter member of the HRSD Toastmasters club and has represented HRSD on the National Environmental Field Activities Program (NEFAP) committee and the National Association of Clean Water Agencies (NACWA) Pretreatment Committee. Craig has recently served as a representative on the new Water Quality Services Building project.

b. Mike Martin

The Commission Chairman will recognize Mike Martin, Chief of Pretreatment and Pollution Prevention (P3), who will mark his 20th year of service with HRSD on June 25, 2021. Mike was hired in June 2001 as a Water Quality Investigator and was promoted in June 2004 to P3 Technician and promoted again in January 2005 as a Water Quality Supervising Specialist. In April 2007 he was promoted to P3 Manager, then to Chief of P3 in August 2019, the position he holds today.

Mike holds a Bachelor of Science degree in Fisheries Science with a minor in Environmental Science from NC State. He is active in the following professional organizations:

- NACWA Pretreatment Committee – Active member
- WEF – Active Member
- VWEA – Active Member
- Member of HRPDC Fats, Oils and Grease (FOG) subcommittee

Mike served as Change Manager on the ERP project for HRSD and has presented on pretreatment topics and issues at the state and national levels. Mike was a charter member of the HRSD Toastmasters Club.

AGENDA ITEM 2. – June 22, 2021

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

1.	Alarm Management and High-Performance Human-Machine Interface	
	<ul style="list-style-type: none"> • Contract Award • Task Order 	\$2,500,000 \$436,259
2.	General Engineering Services	\$6,000,000
3.	Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements Phase II – Emerson	\$1,059,938
4.	Petersen Bag Stops	\$346,383.50
5.	Premier Distributed Control Systems (DCS), Enterprise Data Servers (EDS) and Ovation Security Centers (OSC) SureService Support Agreement	\$1,434,380
6.	West Point Pump Station No. 2 Rehabilitation	\$244,898

c. Task Orders

1.	James River Land Improvements	\$539,340
2.	Larchmont Area Sanitary Sewer Improvements	\$4,660,234
3.	Lucas Creek-Woodhaven Interceptor Force Main Replacement Phase II	\$255,391
4.	Nansemond Treatment Plant Regional Residuals Facility Upgrade	\$240,806

d. Sole Source

1.	Respondus LockDown Browser® and Respondus Monitor®	
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e. HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award

1.	Microsoft Premier Support Services	\$276,770
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CONSENT AGENDA ITEM 2.b.1. – June 22, 2021

Subject: Alarm Management and High-Performance Human-Machine Interface
Contract Award (>\$200,000) and Task Order (>\$200,000)

Recommended Actions:

- a. Award a contract to provide engineering, field, and implementation services for alarm management rationalization and high-performance graphics development to Emerson Process Management Power & Water Solutions Inc. in the estimated amount of \$436,259 for year one with four annual renewal options and an estimated cumulative value in the amount of \$2,500,000.
- b. Approve a task order with Emerson Process Management Power & Water Solutions Inc. in the amount of \$436,259 for the Atlantic and Williamsburg Treatment Plants.

Type of Procurement: Competitive Negotiation

Proposers	Technical Points	Recommended Selection Ranking
Emerson Process Management Power & Water Solutions Inc.	87	1
Wunderlich Malec Engineering Inc.	79	2
CEC Controls Company Inc.	61	3

Contract Status:	Amount
Original Contract with Emerson Process Management Power & Water Solutions Inc.	\$0
Total Value of Previous Task Orders	\$0
Requested Task Order	\$436,259
Total Value of All Task Orders	\$436,259
Revised Contract Value	\$436,259

Contract Description: This contract is an agreement for engineering, field, and implementation services for alarm management rationalization and high performance Level 1, 2, 3, and 4 fully built control system graphics for the Emerson Ovation Control System for HRSD treatment facilities.

A Public Notice was issued on March 15, 2021. Four firms submitted proposals on April 16, 2021 and three firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the requirements in the Request for Proposals. Three firms were short listed, interviewed and technically ranked. The proposal submitted by Emerson Process Management Power & Water Solutions Inc. was ranked by technical points to be the highest qualified.

HRSD's major treatment plants currently have Emerson Ovation control systems. In 2020, HRSD developed standards and best practices for both high-performance distributed control system (DCS) operator interfaces and an alarm management philosophy for use at our major treatment plants. With the significant expansion of our treatment facilities as part of our Sustainable Water Initiative for Tomorrow (SWIFT) effort, the complexity and automation of those operations will grow. This contract will improve the Treatment Plant Operators' (PO) situational awareness and response by facilitating the rationalization and management of existing alarms and providing new contextual human-machine interfaces (HMI) at the plant operator's control stations.

HRSD's current graphics are piping and instrumentation diagram based, not uniform across the facilities, and require the POs to heavily rely on memory to understand the current operating condition. In addition, the "Emergency" vs. "Alert" state is unclear and color use is inconsistent and distracting. The goal is to provide contextualized data, highlight abnormal conditions, distinguish between alarms and alerts, reduce critical alarm frequency to less than 10 per hour, minimize color variation, and optimize for color blindness. The services provided will be in accordance with HRSD's Alarm Management Philosophy Guide and the Operator Display Guide.

Task Order Description: This task order will provide engineering, field, and implementation services for alarm management rationalization and HMI Level 1 and Level 2 fully built control system graphics for the Emerson Ovation Control System for the Atlantic Treatment Plant and Williamsburg Treatment Plant.

CONSENT AGENDA ITEM 2.b.2. – June 22, 2021

Subject: General Engineering Services
Contract Award (>\$200,000)

Recommended Action: Award a professional services annual contract for General Engineering Services to Gannett Fleming, Inc. to become effective July 1, 2021, with a maximum allowable limit of \$2,500,000 per single task and accumulated \$6,000,000 per each year with three years annual renewal options.

Type of Procurement: Competitive Negotiation

A Public Notice was issued on March 21, 2021. Seven firms submitted proposals on April 15, 2021 and all seven firms were determined to be responsive and deemed fully qualified, responsible and suitable to the Committee. Two firms were short listed, interviewed and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
Gannett Fleming, Inc.	88	1
CDM Smith, Inc.	84	2

The Professional Services Selection Committee recommends award of the General Engineering Services annual services contract to Gannett Fleming, Inc., whose professional qualifications and proposed services best serve the interest of HRSD.

Contract Description and Analysis of Cost: This contract is an agreement for engineering services to be provided by the firm listed on a task-by-task basis to serve the entire organization on numerous technical matters and to support the Engineering Department to deliver CIP projects. Tasks or projects will be assigned to this firm based on their expertise, availability and experience in similar assignments. Funding for the services will be from the Engineering Department Contractual Services budget or from the Capital Improvement budget associated with identified capital projects. The work force categories, rates, and direct reimbursable costs were negotiated for the first contract year of the renewable contract. These costs are comparable to rates used by other firms for similar efforts.

CONSENT AGENDA ITEM 2.b.3. – June 22, 2021

Subject: Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements
Phase II
Contract Award (>\$200,000)

Recommended Action: Award a contract to Emerson Automation Solutions in the amount of \$1,059,938.

CIP Project: GN017200

Budget	\$10,505,000
Previous Expenditures and Encumbrances	(\$3,090,312)
Available Balance	<u>\$7,414,688</u>

Type of Procurement: Sole Source

All services were previously approved as a sole source with Emerson Automation Solutions in January 2015.

Contract Description: This contract is an order for Emerson to provide Top-End Ovation programming, testing, and startup services associated with the SCADA Upgrades and Enhancement project. This will include new programming for 81 sites, factory demonstration testing for 85 sites, and site demonstration testing for 154 sites.

Project Description: This project provides for implementation of Phase II of the Interceptor System Supervisory Control and Data Acquisition System (SCADA). This project will replace control panels at all existing remote HRSD facilities. The project will also provide replacement of the current top-end SCADA software and hardware.

Analysis of Cost: Costs are considered fair and reasonable based on previous similar SCADA projects with Emerson.

CONSENT AGENDA ITEM 2.b.4. – June 22, 2021

Subject: Petersen Bag Stops
Contract Award (>\$200,000)

Recommended Action: Award a contract to Petersen Resources LLC DBA Petersen Product Co LLC for Petersen Pipe Plug Insertion System parts in the amount of \$346,383.50.

Type of Procurement: Sole Source

Petersen bag stop parts were previously approved as a sole source with Petersen Resources LLC DBA Petersen Product Co LLC in May 2019.

HRSD Estimate: \$346,383.50

Contract Description: This contract is for the purchase of Petersen® plugs and accessories for South Shore Interceptors Division. South Shore Interceptors currently owns multiple towers of varying size pipe plugs. This purchase will be for elbow and adapter assemblies and different size pipe plugs ranging from 30-inch to 54-inch. The intention is to share these systems and pipe plugs with North Shore Interceptors, Small Communities Division and other work centers as needed for projects at HRSD.

Analysis of Cost: Negotiations were conducted which provided HRSD with a savings of \$2,880. Costs are considered fair and reasonable based on previous purchase prices of similar equipment.

CONSENT AGENDA ITEM 2.b.5. – June 22, 2021

Subject: Premier Distributed Control Systems (DCS), Enterprise Data Servers (EDS) and Ovation Security Centers (OSC) SureService Support Agreement Contract Award (>\$200,000)

Recommended Action: Award a contract to Emerson Process Management Power & Water Solutions, Inc. for Premier DCS, EDS and OCS SureService support for HRSD Ovation Sites in the amount of \$286,876 for year one with four annual renewal options and an estimated cumulative value in the amount of \$1,434,380.

Type of Procurement: Sole Source

All services were previously approved as a sole source with Emerson Process Management Power & Water Solutions, Inc. in June 2016.

HRSD Estimate: \$290,000

Contract Description: This contract is an agreement for Emerson SureService support for HRSD's eight Emerson Ovation Distributed Control Systems and 10 Emerson Enterprise Data Servers. The current SCADA project will add three additional Ovation Distributed Control Systems and three Emerson Ovation Security Centers. Support includes 24-hour telephone support, internet information/guardian support, scheduled on-site service and software updates.

Analysis of Cost: Pricing structure includes 10 percent discount in accordance with the HRSD - Emerson Preferred Customer Agreement (PCA) and an additional 12 percent Annual Volume and Corporate discount.

CONSENT AGENDA ITEM 2.b.6. – June 22, 2021

Subject: West Point Pump Station No. 2 Rehabilitation
Contract Award (>\$200,000)

Recommended Action: Award a contract to Shaw Construction Corp in the amount of \$244,898.

Type of Procurement: Competitive Bid

Bidder	Bid Amount
Shaw Construction Corp	\$244,898

HRSD Estimate: \$150,000

Contract Description: This contract is for the purchase of materials, labor, and supervision for the rehabilitation of the West Point No. 2 Pump Station. The rehabilitation includes the complete replacement of the pump station electrical system, controls, pumps, and all internal piping and valving. Additional updates will include a flow and pressure metering system, permanent piping for the standby pump, a water connection for station washdown, and a new safety ladder for drywell access.

This work is a part of the continued effort by the Small Communities Division to evaluate and update aging pump stations.

Analysis of Cost: Costs are considered fair and reasonable based on similar projects.

CONSENT AGENDA ITEM 2.c.1. – June 22, 2021

Subject: James River Land Improvements
Task Order (>\$200,000)

Recommended Action: Approve a task order with Vanasse Hangen Brustlin, Inc. (VHB) in the amount of \$539,340.

CIP Project: GN016344

Budget	\$2,095,000
Previous Expenditures and Encumbrances	(\$198,855)
Available Balance	\$1,896,145

Contract Status:	Amount
Original Contract with VHB	\$197,658
Total Value of Previous Task Orders	\$0
Requested Task Order	\$539,340
Total Value of All Task Orders	\$539,340
Revised Contract Value	\$736,998
Engineering Services as % of Construction	20.4%

Project Description: This project will provide for the construction of improvements to the land surrounding the James River Treatment Plant, including development of a linear park and trail system to fulfill commitments to the City of Newport News associated with purchasing land adjacent to the treatment plant and shoreline restoration efforts to protect James River Treatment Plant assets from shoreline erosion.

Task Order Description: This task order will provide engineering design services for the Phase I Trails required as part of the Land Purchase Agreement with the City of Newport News. The expected duration of this design effort is 12 months. The Phase II Trails and the Shoreline Restoration efforts are also part of this project and will be addressed as part of a separate task order.

Analysis of Cost: The cost for this task order is based on a detailed estimate of labor hours and direct costs required to execute the negotiated scope of work. The total hours budgeted are appropriate for the proposed services. The lump sum fee plus proposed additional services is 11.3 percent of the estimated construction cost. This ratio for services compares well with other HRSD projects with similar construction costs. This task order will be issued as an amendment to the Professional Services Agreement with VHB.

Schedule:	PER	November 2020
	Design	June 2021
	Bid	February 2022
	Construction	April 2022
	Project Completion	April 2026

CONSENT AGENDA ITEM 2.c.2. – June 22, 2021

Subject: Larchmont Area Sanitary Sewer Improvements
Task Order (>\$200,000)

Recommended Action: Approve a task order with Gannett Fleming in the amount of \$4,660,234.

CIP Project: VP015320

Budget	\$38,734,000
Previous Expenditures and Encumbrances	(\$817,902)
Available Balance	\$37,916,098

Contract Status:	Amount
Original Contract with Gannett Fleming	\$361,938
Total Value of Previous Task Orders	\$0
Requested Task Order	\$4,660,234
Total Value of All Task Orders	\$4,660,234
Revised Contract Value	\$5,022,172
Engineering Services as % of Construction	15%

Project Description: This project involves design and construction of five new sanitary sewer pump stations, approximately 3,700 linear feet of 6-inch, 8-inch, and 10-inch force mains, and approximately 10,000 linear feet of 8-inch and 10-inch gravity mains and appurtenances. The new infrastructure will replace:

- (a) five existing HRSD pump stations: Monroe Place PS#114, Powhatan Avenue PS#122, Richmond Crescent PS#124, Hanover Avenue PS#141, and Jamestown Crescent PS#142,
- (b) three City of Norfolk pump stations: Larchmont Eleanor Court PS#112; Larchmont Walnut Hill Street PS#113; and Larchmont Westwood Terrace PS#114, and
- (c) install new gravity trunk lines to divert the flow to the new pump station locations.

This project is part of the EPA Rehabilitation Action Plan Phase 2 with a required substantial completion date of May 5, 2025.

Task Order Description: This task order will provide final engineering design services including surveys and design studies, preparation of design documents, and preparation of construction plans and specifications and other contract documents.

Analysis of Cost: A total fee of \$4,660,234 was negotiated with Gannett Fleming. The design fee to construction ratio is on the higher end but is on par with other HRSD Construction Manager delivered projects. The average raw workforce rate is higher than comparable projects but not out of range of projects we have historically seen. The number of hours for the design is almost twice as much as the Lafayette Norview-Estabrook Pump Station Replacements project which consisted of three pump stations replaced and one rehabilitated. The Larchmont Area Sanitary Sewer Improvements Program will demolish eight pump stations and replace them with five new pump stations with associated pipeline work. This effort is twice the scope and therefore is considered reasonable for this complex project.

Schedule:	PER	July 2020
	Design	June 2021
	Bid	May 2022
	Construction	September 2022
	Project Completion	February 2026

CONSENT AGENDA ITEM 2.c.3. – June 22, 2021

Subject: Lucas Creek-Woodhaven Interceptor Force Main Replacement Phase II
Task Order (>\$200,000)

Recommended Action: Approve a task order with Michael Baker (Baker) in the amount of \$255,391.

CIP Project: JR013200

Budget	\$2,445,000
Previous Expenditures and Encumbrances	(\$113,027)
Available Balance	\$2,331,973

Contract Status:	Amount
Original Contract with Baker	\$112,225
Total Value of Previous Task Orders	\$0
Requested Task Order	\$255,391
Total Value of All Task Orders	\$367,616
Engineering Services as % of Construction	19%

Project Description: This project involves the replacement of approximately 1,500 linear feet of Ductile Iron (DI) pipe between Denbigh High School and Epes Elementary School in Newport News. This section of pipe will be replaced with a 30-inch Horizontal Directional Drilled (HDD) High-Density Polyethylene pipe underneath Stony Run. This under water crossing represents the most difficult section of force main to access and repair. Stony Run is a salt marsh, which based on past experiences, causes a risk of severe external pipe corrosion.

Task Order Description and Analysis of Cost: This task order will provide design and bid phase services for the project. The cost for this task order is based on a negotiated price between Baker and HRSD. The design phase services as a percentage of construction cost is 12 percent. This compared well to similar HDD projects.

Schedule:

Design	July 2021
Bid	July 2022
Construction	October 2022
Project Completion	September 2023

CONSENT AGENDA ITEM 2.c.4. – June 22, 2021

Subject: Nansemond Treatment Plant Regional Residuals Facility Upgrade
Task Order (>\$200,000)

Recommended Action: Approve a task order with Hazen and Sawyer, P.C. (Hazen) in the amount of \$240,806.

CIP Project: NP014500

Budget	\$1,920,000
Previous Expenditures and Encumbrances	(\$43,125)
Available Balance	\$1,876,875

Contract Status:	Amount
Original Contract with Hazen	\$43,125
Total Value of Previous Task Orders	\$0
Requested Task Order	\$240,806
Total Value of All Task Orders	\$283,931
Engineering Services as % of Construction	17%

Project Description: This project includes the installation of a new mechanical screen, pump station and Fats, Oils, & Grease (FOG) separator at the Nansemond Treatment Plant Regional Residuals Facility (RRF). The screen will be installed upstream of the new pump station, which will pump up to the FOG separator. Concentrated FOG will be conveyed to a dumpster and the underflow will drain to the RRF's existing pump station. The existing pump station will also be upgraded to handle additional channel, bay, and equipment washdown water. Regional pump station wet well cleaning produces a significant number of truckloads per month that carry primarily grease and water and are light on residuals (grit). The number is significant enough that plant staff has had to dedicate bays at the RRF strictly for grease loads, and bays strictly for heavy residual (grit) loads. The heavy grease loads complicate RRF operations, plugging up drains and leading to increased manpower and a greater presence of grease in downstream processes.

Task Order Description and Analysis of Cost: This task order will provide design and bid phase services for the project. The cost for this task order is based on a negotiated price between Hazen and HRSD. The design phase services as a percentage of construction cost is 11.6 percent. This compared well to similar plant process upgrade projects.

Schedule:	Design	June 2021
	Bid	February 2022
	Construction	May 2022
	Project Completion	December 2022

CONSENT AGENDA ITEM 2.d.1 – June 22, 2021

Subject: Respondus LockDown Browser® and Respondus Monitor®
Sole Source (>\$10,000)

Recommended Actions: Approve the use of Respondus LockDown Browser® and Respondus Monitor® by the current authorized distributor for HRSD's apprenticeship exam proctoring.

Sole Source Justification:

- Compatibility with existing equipment or systems is required
- Support of a special program in which the product or service has unique characteristics essential to the needs of the program
- Product or service is covered by a patent or copyright
- Product or service is part of standardization program to minimize training for maintenance and operation, and parts inventory

Details: Product includes the purchase of Respondus LockDown Browser® and Respondus Monitor®. The LockDown Browser® is a custom browser that locks down the testing environment within HRSD's learning management system for the apprenticeship students. Respondus Monitor® is a fully automated proctoring solution that allows the students to take online assessments from a remote location while ensuring the integrity of the exam process and is an add-on to Respondus LockDown Browser®. The original purchase was made in May 2020 and was under the purchasing threshold for the first year as a trial.

CONSENT AGENDA ITEM 2.e.1. – June 22, 2021

Subject: Microsoft Premier Support Services
HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award
(>\$200,000)

Recommended Actions:

- a. Approve the use of the Virginia Information Technologies Agency (VITA) contract for Microsoft Consulting from Microsoft Corporation in the estimated amount of \$55,354 for one year with four annual renewal options and an estimated cumulative value of \$276,770.
- b. Award a contract to Microsoft Corporation in the amount of \$55,354.

HRSD Estimate: \$53,530

Contract Description: The Microsoft Premier Support contract offers end-to-end managed support for HRSD across the spectrum of Microsoft products and services. The contract is tailored to HRSD's business priorities. Having this support helps HRSD maximize our investments by minimizing risk and reducing downtime. Not only does this contract cover basic account support, it also includes problem resolution and system health checks on all Microsoft products HRSD currently has installed.

Analysis of Cost: By utilizing the cooperative contract through VITA, HRSD is receiving 14.9 percent cost savings.

AGENDA ITEM 3. – June 22, 2021

Subject: Atlantic Treatment Plant Solids Storage Pad Improvements
Initial Appropriation (>\$200,000)

Recommended Action: Appropriate total project funding in the amount of \$792,000.

CIP Project: AT015100

Project Description: This project will extend the Atlantic Treatment Plant's biosolids storage walls to seven feet on the south pad and replace the deteriorating walls on the north pad while increasing the height to seven feet. This project will also repair and provide corrosion protection for structural columns for the cover to the two pads.

Funding Description: The total project cost estimate of \$792,000 includes approximately \$72,000 in design phase services, \$600,000 in construction phase costs, and \$120,000 of project contingency and is based on a Class 5 CIP-prioritization level cost estimate prepared by HRSD. Engineering services will be completed by Collins Engineers, Inc. under the Structural Services annual services contract.

<u>Schedule:</u>	Conceptual Drawing	July 2021
	Design	August 2021
	Bid	November 2021
	Construction	March 2022
	Project Completion	August 2022

AGENDA ITEM 4. – June 22, 2021

Subject: Berkley Trunk Sewer Section M Emergency Gravity Sewer Replacement
New CIP and Initial Appropriation

Recommended Actions:

- a. Approve a new CIP project (VP019500) for the Berkley Trunk Sewer Section M Emergency Gravity Sewer Replacement
- b. Appropriate total project funding in the amount of \$750,000

CIP Project: VP019500

Project Description: This emergency repair is still under construction after declaration on May 26, 2021. Work is accomplished with funds from the Operations Department Fiscal Year (FY) 2021 Operating Budget. This work is appropriately capitalized at year-end but in the interim creates stress on the FY 2021 Operations Department Budget. This proposed Commission action creates and fully funds a new CIP project that will allow all future costs as well as all costs already incurred against the Operations Department Budget to be charged to this CIP project restoring the FY 2021 Operations Department Budget balance for use as planned for the remainder of FY 2021.

On May 20, 2021, staff reported a deep sinkhole at the State Street Pump Station. The sinkhole had undermined a large concrete slab that supports piping and appurtenances from a 12-inch bypass pump. After further investigation, a CCTV contractor found the cause of the sinkhole: the 30-inch ductile iron gravity sewer pipeline running under the concrete slab had collapsed. While flow was still getting to the station, a large amount of sand and grit was also being deposited into the station wet well. Flow from the station runs through the Elizabeth River Crossing to the Downtown Norfolk area raising concerns that the material entering the wet well may settle in the river crossing.

This emergency declaration was to utilize Bridgeman Civil, Inc., to establish required traffic control, provide bypass pump and piping for the influent gravity sewer, provide CCTV, remove and replace concrete slab, piping and appurtenances, replace the failed section of pipe, line the remaining sections of pipe from the pump station to the influent manhole, and replace the manhole and utilize Brown and Caldwell, to provide design, construction administration, and construction inspection while Bridgeman Civil, Inc. completes the repair.

Funding Description: The total cost for this project is estimated at \$750,000 based on a Class 5 cost estimate and a 10 percent contingency included in the requested appropriation.

<u>Schedule:</u>	Emergency Declaration	May 2021
	Construction	June 2021
	Project Completion	July 2021

AGENDA ITEM 5. – June 22, 2021

Subject: Boat Harbor Treatment Plant Transmission Force Main Section 2 (Land)
Initial Appropriation and Contract Award (>\$200,000)

Recommended Actions:

- a. Appropriate total project funding in the amount of \$26,424,000.
- b. Award a contract to CDM Smith Inc. in the amount of \$487,710.

CIP Project: BH015720

Type of Procurement: Competitive Negotiation

A Public Notice was issued on February 21, 2021. Six firms submitted proposals on March 31, 2021, and all firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the Professional Services Selection Committee (Committee) and to the requirements in the Request for Proposals. Three firms were short listed, interviewed, and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
CDM Smith Inc.	83.94	1
Kimley Horn and Associates Inc.	82.88	2
Whitman Requardt and Associates LLP	80.31	3

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

Project Description: This project consists of the on-land transmission force main section connecting the subaqueous force main Section 1 (separate project under BH015710) to the Nansemond Treatment Plant. This project will provide an interceptor force main to be installed using both an open cut and a trenchless crossing of I-664. HRSD desires to construct this section of force main separate from Section 1 to accommodate coordination with on-going and proposed development of the multiple privately-owned properties that will be traversed. This project has been revised to include the SWIFT Water and backflush piping from the future Nansemond SWIFT Facility to each of the proposed well sites located west of I-664.

Contract Description and Analysis of Cost: This contract is for professional services for preliminary engineering report services, design services, pre-construction services, contract administration services, and field engineering and inspection services required to complete the Boat Harbor Treatment Plant Transmission Force Main Section 2 (Land) project. The requested funded amount is for the preliminary engineering report only. The cost for this initial task is based on a detailed, bottoms-up estimate of labor hours and direct costs required to execute the agreed-upon scope of work. The current construction cost estimate is \$20,000,000. The ratio of preliminary engineering fee to construction cost is 2.4 percent, which compares well with three recent HRSD force main projects.

<u>Schedule:</u>	PER	June 2021
	Design	November 2021
	Bid	September 2022
	Construction	December 2022
	Project Completion	December 2025

AGENDA ITEM 6. – June 22, 2021

Subject: Great Bridge Interceptor Extension 16-inch Replacement
Initial Appropriation and Task Order (>\$200,000)

Recommended Actions:

- a. Appropriate total project funding in the amount of \$11,915,000.
- b. Approve a task order with Rummel, Klepper & Kahl, LLP (RK&K) in the amount of \$218,740.

CIP Project: AT011900

Contract Status:	Amount
Original Contract with RK&K	\$0
Total Value of Previous Task Orders	\$0
Requested Task Order	\$218,740
Revised Contract Value	\$218,740
Engineering Services as % of Construction	2.4%

Project Description: This project will replace approximately 6,000 linear feet of 16-inch asbestos concrete force main due to risk of failure as a Phase 2 Rehabilitation Action Plan project requiring completion by May 5, 2025. The existing force main is aligned along Battlefield Boulevard from the intersection with Mt. Pleasant Road to just north of Edna Street in Chesapeake. Additionally, a main line valve needs to be replaced due to inability to get spare parts. Since 1989 there have been six documented failures along this force main. The most recent was in September 2016. Current interceptor system configuration sends flow north along Battlefield Boulevard. With growth being planned for the southern portion of Chesapeake that includes unknown industrial flows, it was decided to best serve the area and protect the SWIFT facility at the Nansemond Treatment Plant by sending flows from the growth area to the Atlantic Treatment Plant. With this project, the flow can be routed south allowing for the diversion of flows from the Nansemond Treatment Plant to the Atlantic Treatment Plant that cannot be done with the current configuration of interceptors. This 16-inch section of pipe needs to be upsized to 24-inches per the Hydraulic Analysis Report Team report.

Task Order Description: This task order will provide a preliminary alignment analysis to prioritize a replacement alignment corridor and a preliminary engineering report.

Analysis of Cost: The cost for this task order is based on a detailed scope of work and hourly rates negotiated in the Interceptor System Projects annual services contract. The PER fee to construction ratio, average workforce rate, and number of workforce hours are generally on par with other PER efforts on similar projects. Through our negotiation with RK&K on this effort, we have concluded this fee proposal and scope of services to be appropriate.

Funding Description: The total project cost estimate of \$11,915,000 includes approximately \$959,332 in design phase services, \$8,970,000 in construction phase costs, and a 20 percent contingency allowance of \$1,985,668 and is based on a Class 5 CIP-prioritization level cost estimate.

Schedule:	PER	July 2021
	Design	March 2022
	Bid	March 2023
	Construction	May 2023
	Project Completion	October 2024

AGENDA ITEM 7. – June 22, 2021

Subject: Morrison Pump Station Discharge Force Main Replacement and Capacity Enhancements
Additional Appropriation, Contract Award (>\$200,000), and Task Order (>\$200,000)

Recommended Actions:

- a. Appropriate additional funding in the amount of \$1,111,618.
- b. Award a contract to Bridgeman Civil Inc. in the amount of \$1,758,680.
- c. Approve a task order with Rummer, Klepper and Kahl, LLC (RK&K) in the amount of \$230,199.

CIP Project: JR013000

Budget	\$1,360,000
Previous Expenditures and Encumbrances	(\$350,739)
Available Balance	\$1,009,261
Proposed Contract Award to Bridgeman Civil Inc.	(\$1,758,680)
Requested Task Order to RK&K	(\$230,199)
Proposed Contingency	(\$132,000)
Project Shortage/Requested Additional Funding	(\$1,111,618)
Revised Total Project Authorized Funding	\$2,471,618

Type of Procurement: Competitive Bid

Bidder	Bid Amount
Bridgeman Civil Inc.	\$1,758,680.00
Gaston Brothers Utilities LLC	\$1,919,191.91
Tidewater Utility Construction Inc.	\$1,932,200.00
Garney Companies, Inc.	\$1,987,350.00
MEB General Contractors Inc.	\$2,116,580.00

Engineer Estimate: \$1,625,110.00

Contract Status:	Amount
Original Contract with RK&K	\$47,300
Total Value of Previous Task Orders	\$282,290
Requested Task Order	\$230,199
Total Value of All Task Orders	\$512,489
Revised Contract Value	\$599,789
Engineering Services as % of Construction	32%

Project Description: This project involves replacing and rerouting approximately 850 linear feet of 12-inch Asbestos Cement (AC) Pipe with 16-inch pipe from Morrison Pump Station to the connection point at the main trunk across the CSX railroad.

Funding Description: The original CIP project estimate did not anticipate the complexities of design and construction discovered during the preliminary engineering report (PER) phase. During the PER and design phase, the project team identified the need to install additional features such as improved

yard piping and a flow meter structure. In addition, due to the proximity to a major City of Newport News stormwater channel as well as CSX rail, two trenchless crossings are required on this project. This request includes a \$132,000 contingency to accommodate any additional unforeseen conditions during construction. This project requires additional funding due to the issues mentioned above resulting in an increased construction cost. The amount for this work is \$1,111,618 and exceeds the balance available for this CIP project.

Contract Description and Analysis of Cost: In accordance with HRSD's competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. The project was advertised on May 2, 2021, and five bids were received on May 27, 2021. The Engineer's estimate is lower than the bids received due to recent material price increases and a growing volume of construction projects in the region causing less aggressive bidding by the contractors in Hampton Roads. 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 \$1,758,680.

Task Order Description: This task order will provide construction phase engineering services for the project. A fee of \$230,199 was negotiated with RK&K and is comparable to other projects of similar size and complexity. The engineering services as a percent of construction are higher than normal because this is a small project and because HRSD requested a more conservative re-design of the trenchless crossing of CSX rail, due to issues experienced on recent projects.

Schedule:

Construction	July 2021
Project Completion	May 2022

AGENDA ITEM 8. – June 22, 2021

Subject: Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Phase II Proposal Compensation

Recommended Action: Approve the proposal compensation of \$295,000 for each responsive short-listed team not selected for the Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Phase II project.

CIP Project: NP013820

Brief: The project will design, construct, and commission improvements at the Nansemond Treatment Plant to support reliable treatment of raw, screened wastewater from the Boat Harbor pump station service area and raw influent from the Nansemond Treatment Plant service area. A Capacity Study determined that nutrient removal and hydraulic upgrades would be required to treat both flows and loads to meet the targeted effluent concentrations. The scope includes equalization of primary clarifier effluent and upgrades to primary and secondary treatment, primary gravity thickeners, disinfection facilities, odor control systems, solids handling improvements, effluent pump station and drain pump station upgrades, and plant wide switchgear improvements. This work is necessary to provide stable source water quality that meets the influent requirements of a full-scale SWIFT facility at the Nansemond Treatment Plant (subsequent project). The current estimate of the total contract cost limit (CCL) is \$293,850,000.

This project will be delivered concurrently with multiple capital projects, including the Boat Harbor Treatment Plant to pump station conversion and transmission force main sections (subaqueous and land portions), required to enable the conveyance and treatment of wastewater from both Boat Harbor and at Nansemond by the end of 2025.

The Commission approved the use of the Design-Build project delivery method for the project at the August 2020 meeting. The teams competing for this very large project will incur significant cost to develop the technical approach and CCL required for a complete proposal.

In accordance with HRSD's Procurement Policy, proposal compensation may be used for this selection effort to provide the following benefits:

- Provides a financial incentive to increase competition from the best firms in the industry.
- Encourages proposers to explore innovative ideas during the proposal stage.
- Follows an industry standard and process used by other large public sector organizations.
- Allows HRSD to retain the rights to use innovative ideas from unsuccessful proposers.

For this procurement effort, proposal compensation of \$295,000 is recommended for each unsuccessful, responsive short-listed team.

<u>Schedule:</u>	Preliminary design approval and begin RFQ/RFP process	June 2021
	Selection of Design-Build firm/establish CCL	March 2022
	Detailed design development/Stipulated Fixed Final Price	November 2022
	Construction Completion	September 2025

AGENDA ITEM 9. – June 22, 2021

Subject: SWIFT Research Center Full-Scale Managed Aquifer Recharge (MAR) Well Integration
Additional Appropriation and Contract Award (>\$200,000)

Recommended Actions:

- a. Appropriate additional funding in the amount of \$452,111.
- b. Award a contract to MEB General Contractors Inc. in the amount of \$1,040,000.

CIP Project: GN016220

Budget	\$1,136,000
Previous Expenditures and Encumbrances	(\$221,608)
Available Balance	\$914,392
Proposed Contract Award to MEB General Contractors Inc.	(\$1,040,000)
Proposed Task Order to Hazen and Sawyer, P.C.	(\$146,503)
Proposed Contingency	(\$180,000)
Project Shortage/Requested Additional Funding	(\$452,111)
Revised Total Project Authorized Funding	\$1,588,111

Type of Procurement: Competitive Bid

Bidder	Bid Amount
MEB General Contractors Inc	\$1,040,000
Clark Construction LLC	\$1,284,000
Bridgeman Civil Inc	\$1,488,000

Engineer's Estimate: \$1,300,000

Project Description: This project includes the integration of a full-scale MAR well (NP-RW-1) into the SWIFT Research Center. The site work, process piping, mechanical equipment, backflush pump, instrumentation, and electrical work required to convey SWIFT Water from the Research Center to the new well will be included.

Funding Description: The original CIP project estimate did not anticipate inclusion of a borehole flow meter with enclosure, complexity of the site work associated with City of Suffolk stormwater requirements and Dominion coordination, increased major equipment costs, and significant legal fees to resolve a deed correction. The project will require additional funding of \$452,111 to award the construction contract and issue a task order to Hazen and Sawyer, P.C. for engineering services. This funding request includes a contingency of approximately 11 percent of the revised total project value to accommodate any additional unforeseen conditions.

Contract Description and Analysis of Cost: In accordance with HRSD's competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. The project was advertised on April 11, 2021, and three bids were received on May 13, 2021. The low bid was 20 percent lower than the engineer's estimate and the median bid amount was approximately one percent lower than the engineer's estimate. The main reason for this difference is that a contingency of 10 percent was applied to the engineer's opinion of probable cost estimate to account for recent volatile market conditions. The design engineer, Hazen and Sawyer, P.C., evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder MEB General Contractors Inc. in the amount of \$1,040,000.

Schedule:

Construction	July 2021
Project Completion	June 2022

AGENDA ITEM 10. – June 22, 2021

Subject: Middlesex Interceptor System Program Phase II – Transmission Force Main Acquisition of Real Property – 215 Linden Avenue, Urbanna, VA

Recommended Action: Approve the purchase of property at 215 Linden Avenue (0.365 acres), and associated acquisition costs for \$225,000 in accordance with the terms and conditions of the Purchase and Sale Agreement with Thomas and Karin Armstrong, owner of subject property in Urbanna, Virginia 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 and further authorize the General Manager to execute the forthcoming deed of bargain and sale upon approval of legal counsel.

CIP Project: MP013730

Project Description: This project will develop sewer service areas in Middlesex County and includes the construction of a 3.2-mile force main from Urbanna to Cook's Corner in addition to a 13-mile force main along Route 33 in Middlesex County from Cook's Corner to the Mathews Force Main (FM). This interceptor system will convey wastewater from Middlesex County to the York River Treatment Plant and be able to decommission both the Urbanna Treatment Plant and Central Middlesex Treatment Plant permanently. The system consists of pump stations, potential storage, and an interceptor force main. Replacement of the existing Bonner Street Pump Station is a part of this project.

After a preliminary engineering evaluation, HRSD staff and engineering consultants selected 3 potential sites based on size, location, aesthetics and engineering feasibility factors. After evaluation of these considerations and requests of respective owners, 215 Linden Avenue was determined to be the most feasible site upon which to build.

Attachments: The [Purchase and Sale Agreement](#) is attached and was reviewed by HRSD staff and legal counsel. The deed of bargain and sale is forthcoming and will also be reviewed by HRSD staff and legal counsel before execution. A Facilities Orientation [Plan](#) and Location [Map](#) are provided for clarification purposes.

Analysis of Cost: The acquisition cost of \$225,000 reflects sales of single-family homes in the area as well as a negotiated purchase price with the owner.

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT (this "Agreement") made this _____ day of _____, 2021, by and **THOMAS W. ARMSTRONG and KARIN M. ARMSTRONG**, hereinafter referred to collectively as "Seller", and **HAMPTON ROADS SANITATION DISTRICT**, a political subdivision of the Commonwealth of Virginia ("HRSD"), Purchaser.

RECITALS

- A. Seller is the owner in fee simple absolute of a certain parcel of property approximately .365 acres in area (more or less), located at 215 Linden Avenue in the Town of Urbanna, Virginia, such property being more particularly described in Exhibit A which is attached to and made a part of this Agreement (the "Property").
- B. HRSD desires to purchase the Property from the Seller for the purpose of the Bonner Street Pump Station Improvement Project.
- 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 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, (excluding personal property except to the extent that Seller chooses to leave on premises upon vacation) attached or appurtenant to, located in or on, or used in connection with the real property, if any. The real property and the personal property are called "the Property".
- 2. PURCHASE PRICE. The purchase price ("Purchase Price") for the Property is **TWO HUNDRED, TWENTY-FIVE THOUSAND and 00/100 DOLLARS (\$225,000.00)**; and shall be paid by HRSD to the Seller at Settlement by cash or certified funds.

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, and with all defects.

- 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, HRSD shall notify Seller in writing (an "Objection Notice"), within 15 days of the Effective Date, 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. Possession of the Property will be given to HRSD at Closing, per attached Possession Agreement (attached as Exhibit B) except that HRSD will have access to the Property for the purposes specified herein.
- d. Seller agrees to pay proration of real estate taxes and storm water fees and agrees to deliver possession of the Property to HRSD at settlement, or as per Exhibit B. 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.
- e. Seller and HRSD agree that the attorney selected by HRSD shall act as the Settlement Agent at HRSD's expense. The Settlement Agent shall prepare the settlement statement, update and record the deed, collect and disburse settlement funds in accordance with this Agreement and the settlement statement, and file any required state and federal tax forms or other certifications.
- f. As part of Seller's Relocation Assistance, HRSD will pay Seller Replacement Housing Assistance in the amount of \$2,000 for moving and related expenses.
** Note: Per 49 CFR § 24.209, of the Uniform Relocation and Assistance Act, Relocation Assistance payments for displaced persons are not considered as income.*

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 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. HRSD agrees to indemnify and save harmless the Seller from all claims of liability for any personal injury or property damage or otherwise to any person or property caused by any action or omission of HRSD or its agents on the Property before or after Closing.

5. CONDITIONS PRECEDENT.

- a. Seller hereby acknowledges that Buyer is acquiring the property for the purpose of operating twenty-four hours a day a pump station for use and the infrastructure of the HRSD sewage treatment facilities, in accordance with the ordinances of the City of Hampton, and the parties agree that all Conditions Precedent that are relevant to the Buyer must be satisfied within 180 days of the effective date of this Agreement. Should the Conditions Precedent mentioned herein not be satisfied within the 180-day timeframe, Seller may keep the deposit as liquidated damages, and shall have no other remedies should Buyer terminate this Agreement. Accordingly, during the period of 180 days from the date of the full execution of this Agreement, or as such period may be extended in accordance with the mutual extension agreement of the parties to this Agreement, the parties shall use commercially reasonable efforts to satisfy the following Conditions Precedent: (i) the receipt of satisfactory construction bids and/or cost estimates for Buyer's construction in connection with Buyer's intended use of the property having been obtained which in Buyer's sole opinion makes Buyer's construction and use for its intended use of the property economically feasible; (ii) all permits, licenses, and approvals with conditions acceptable to Buyer required for the construction or installation of Buyer's pump station in accordance with its intended use of the property having been obtained at the expense of Buyer, including without limitation, approvals required under all applicable zoning, environmental, wetlands, subdivision control, sanitary, health, safety and land-use law and regulations of the City of Hampton; (iii) all other operational licenses City and Governmental approvals and conditions acceptable to Buyer required for the completion of construction and operation of the pump station anticipated in accordance with Buyer's intended use; (iv) environmental testing to include wetlands delineation, which reports are satisfactory, in Buyer's sole discretion, to the completion of Buyer's intended use of the property.
- b. In the event these initial Conditions Precedent have not been satisfied or waived by Buyer on or before the conclusion of the 180th day from the effective date of this Agreement, this Agreement may be terminated in its entirety by Buyer sending written notice to Seller of the same in accordance with the Notices paragraph in this Agreement (Paragraph 7).

- c. This Agreement is contingent on the review and approval of 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. 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; other than deeds of trust or other documents of record.
- (iii) There are no unrecorded leases, options, licenses or easements existing in connection with the property to 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 to 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 shall not transfer any interest in, 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.
7. **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: Ayanna R. Williams, R.E. Manager
1434 Air Rail Avenue
Virginia Beach, Virginia 23471-0911
- Copy to: Conway Sheild, III, Esq.
Jones, Blechman, Woltz & Kelly, P.C.
701 Town Center Drive, Suite 800
Newport News, Virginia 23606
- Seller: Thomas and Karin Armstrong
12119 Folkstone Drive
Herndon, VA 20171
8. **CLOSING.** Unless this Agreement is terminated pursuant to its terms or by mutual agreement of the parties, Closing will be made at the offices of the Settlement Agent on or about June 30, 2021.
9. **SURVIVAL.** The provisions contained in this Agreement will be true as of the date of this Agreement and as of the date of Closing.
10. **PRORATIONS.** All rents, interest, taxes, insurance premiums, utility bills, and fuel oil, if any, will be prorated as of the date of Closing.
11. **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.
12. RIGHT OF FIRST REFUSAL. In the event that HRSD shall determine to sell all or a portion of the property for private development within two (2) years of the Settlement Date, it agrees to notify Seller and give Seller first opportunity to purchase the property on such terms as the parties shall mutually agree. Such notice shall be writing addressed in accordance with the provisions of Section 8 herein or such other address provided to HRSD by the Seller and shall provide Seller with at least thirty (30) calendar days to present HRSD with an offer to purchase the property.
13. 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 current means of ingress and egress 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.
14. DEFAULT AND REMEDIES.
- a. If the sale and purchase contemplated by this Agreement is not consummated because of Seller's or HRSD's default, the non-defaulting party may elect to:
 - i. Terminate this Agreement;
 - ii. Seek and obtain specific performance of this Agreement; or
 - iii. Pursue all other rights or remedies available at law or in equity, including an action for damages.
 - b. If either Seller or HRSD defaults under this Agreement, the defaulting party will be liable for any expenses incurred by the non-defaulting party in connection with the enforcement of its rights under this Agreement.

- c. These remedies are cumulative and non-exclusive and may be pursued at the option of the non-defaulting party without a requirement of election of remedies.
15. 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. 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.
16. 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.
17. 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.
18. CAPTIONS. Captions are used in this Agreement for convenience only and will not be used to interpret this Agreement or any part of it.
19. GOVERNING LAW. This Agreement is to be construed in accordance with the laws of the Commonwealth of Virginia.
20. 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 Hampton, 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 Hampton, 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.
21. 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.

22. 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. If this Agreement is assigned by HRSD with Seller's consent, HRSD will nevertheless remain fully liable for its performance.
23. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each will be considered an original, and together they will constitute one Agreement.
24. FACSIMILE SIGNATURES. Facsimile signatures will be considered original signatures for the purpose of execution and enforcement of the rights delineated in this Agreement.

[SIGNATURE PAGES TO FOLLOW]

SELLER:

Thomas W. Armstrong (signature)

Karin M. Armstrong (signature)

COMMONWEALTH OF VIRGINIA
CITY OF Hampton, to-wit:

I, _____, do hereby certify that Thomas W. Armstrong and Karin M. Armstrong, Seller herein, whose name is signed to the foregoing Purchase and Sale Agreement, has acknowledged the same before me in my City and State aforesaid.

Given under my hand this _____ day of _____, 2021.

Notary Public

My Commission Expires: _____

Registration Number: _____

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 June 22, 2021. This Agreement is expressly subject to approval by the HRSD Commission.

HAMPTON ROADS SANITATION DISTRICT

By: _____
Edward G. Henifin, P.E.
General Manager

COMMONWEALTH OF VIRGINIA
CITY OF VIRGINIA BEACH, to-wit:

The foregoing Purchase and Sale Agreement was acknowledged before me this _____ day of _____, 2021, by Edward G. Henifin, P.E., General Manager, Hampton Roads Sanitation District.

Notary Public

My Commission Expires: _____
Registration No.: _____

Exhibit "A"

Legal Property Description (forthcoming)

Exhibit "B"

Post-Closing Agreement

Possible Future Closure of Tabor Lane PS

215 Linden Ave

Close Bonner St Pump Station

Close Urbanna Treatment Plant

Tabor Lane PS

Bonner Street PS

WTP

Facilities Orientation Plan

LINDEN AVE

BONNER ST

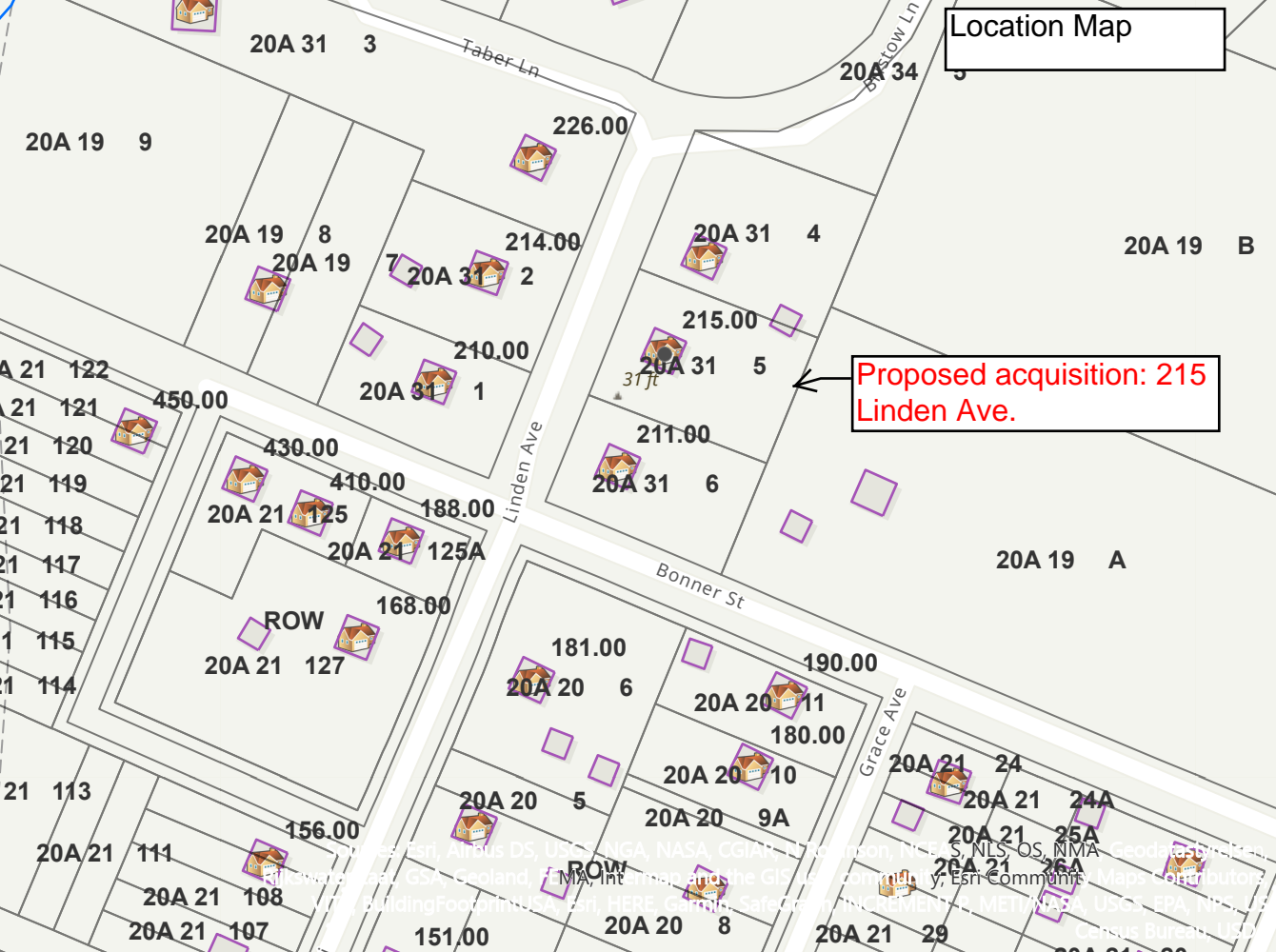
GRACE AVE

RAPPAHANNOCK AVE

VIRGINIA ST

WAVERLY RD

Location Map



Proposed acquisition: 215 Linden Ave.

AGENDA ITEM 11. – June 22, 2021

Subject: Nansemond Treatment Plant
Deed of Correction

Recommended Action: Approve the Deed of Correction and accompanying Resolution for Parcel 6*1D, which is a portion of the Nansemond Treatment Plant property 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 and further authorize the General Manager to execute the forthcoming Resolution upon approval of legal counsel.

CIP Project: N/A

Project Description: As part of the Stormwater Maintenance Agreement in connection with the Treatment Plant Grease Handling Facility project (GN013300) at the Nansemond Treatment Plant, the City of Suffolk requires the correction of the original 1977 conveyance from the Virginia State Board of Community Colleges. This Deed conveyed Parcel 6*1D to “Hampton Roads Sanitation Commission”. The name is corrected to read: “Hampton Roads Sanitation District Commission.”

Attachments: The [Deed of Correction](#) and accompanying [Exhibit](#) (legal description) is attached and was reviewed by HRSD staff and legal counsel. The Resolution is forthcoming and will also be reviewed by HRSD staff and legal counsel before execution.

Analysis of Cost: N/A

PREPARED BY AND RETURN TO:
Conway H. Sheild, III, Esq., VSB #06893
Jones, Blechman, Woltz & Kelly, P.C.
701 Town Center Drive, Suite 800
Newport News, Virginia 23606
GPIN/PARCEL ID # 6*1D
Title Insurance: None Known

THIS DEED IS EXEMPT FROM RECORDATION TAX PURSUANT TO § 58.1-810(2), CODE OF VIRGINIA (1950), AS AMENDED

THIS DEED OF CORRECTION, made this ____ day of July, 2021, by and between **COMMONWEALTH OF VIRGINIA, STATE BOARD FOR COMMUNITY COLLEGES**, Grantor, and the **HAMPTON ROADS SANITATION DISTRICT COMMISSION**, , Grantee, whose mailing address is P. O. Box 5911, Virginia Beach, Virginia 23455.

WITNESSETH:

WHEREAS, the Commonwealth of Virginia, State Board for Community Colleges, by deed dated January 31, 1977, and recorded April 22, 1977, in the Clerk’s Office of the Circuit Court for the City of Suffolk, Virginia, in Deed Book 39, Page 16, did convey to “Hampton Roads Sanitation Commission, a political subdivision of the Commonwealth of Virginia”, the following described real estate, to wit:

See Exhibit A.

WHEREAS, the above described property should have been conveyed by Grantor to Hampton Roads Sanitation District Commission, the correct name of the entity as mandated under the laws of the Commonwealth of Virginia; and

WHEREAS, the parties hereto wish to correct said error and to properly describe the Grantee of the real estate conveyance as above mentioned; and

NOW, THEREFORE, in consideration of the sum of ONE DOLLAR (\$1.00) cash in paid, and the receipt of which is hereby acknowledged by the Grantor and the Grantor does hereby bargain and sell, without covenant or warranty unto Hampton Roads Sanitation District Commission, the following described real estate, to-wit:

See Exhibit A

WITNESS the following signatures and seals:

**COMMONWEALTH OF VIRGINIA,
STATE BOARD FOR COMMUNITY COLLEGES**

By: _____
Glenn DuBois, Chancellor and Secretary to the
State Board

**OFFICE OF THE ATTORNEY GENERAL
Approved as to form:**

By: _____
Thomas S. Cantone
Associate System Counsel & Senior Assistant Attorney General

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF _____, to-wit:

I, the undersigned, a Notary Public in and for the jurisdiction aforesaid, do hereby certify that Glenn DuBois, Chancellor of the Virginia Community College System and Secretary to the State Board for Community Colleges, of the Commonwealth of Virginia, whose name is signed to the foregoing Deed of Correction bearing date of July __, 2021, this day personally appeared before me, and acknowledge the same as the act of the Commonwealth of Virginia, State Board for Community Colleges.

My commission expires: _____

(Notary Seal Required)

Notary Public, Reg. No. _____

Accept Conveyance:

HAMPTON ROADS SANITATION DISTRICT
COMMISSION

By: _____
Frederick N. Elofson, its Chairman

Secretary

COMMONWEALTH OF VIRGINIA
CITY OF VIRGINIA BEACH, to-wit:

I, the undersigned Notary Public in and for the jurisdiction aforesaid, do hereby certify that Frederick N. Elofson and Jennifer Cascio, Chairman and Secretary, respectively, of the Hampton Roads Sanitation District Commission, whose names are signed to the foregoing Deed of Correction bearing date of July _____, 2021, this day personally appeared before me and acknowledge the same.

My commission expires: _____
(Notary Seal Required)

Notary Public, Reg. No. _____

EXHIBIT A

All of that certain piece or parcel of land consisting of 80 acres, more or less, located in Suffolk, Virginia, as shown and designated on the attached plat of survey prepared by McGaughy, Marshall and McMillan, dated December 10, 1976 and entitled Nansemond Wastewater Treatment Plant Site, Hampton Roads Sanitation District.

Being a portion of the same property conveyed to Board by deed from Foundation Boys Academy, Incorporated and the Beazley Foundation, Incorporated, which is dated May 15, 1968, and recorded in the land records of the Circuit Court of the City of Suffolk (formerly Nansemond County), Virginia.

Together with an easement of 50 foot width for the installation, maintenance, and repair of a subsurface outfall pipeline for such time as the outfall is needed, as determined by District, from the above described 80 acres herein conveyed, into the rivers of the Elizabeth River; the location of such easement being more particularly described on the attached plat of survey, prepared by McGaughy, Marshall & McMillan, dated May 21, 1975, and entitled Plat of 50' Easement to be Acquired by Hampton Roads Sanitation District.

It is agreed and understood that Board shall have the right to use this said easement area for its own purposes subject to the requirements of District for the use of said outfall pipeline and provided further, no permanent structures shall be constructed upon the said easement area by District or Board without prior consent of the other; and District shall return the surface of said easement area to substantially the same condition, including grassing and physical contours of land, as existed in such easement area prior to the commencement of any work therein by District. Furthermore, in the event that District is unable to make arrangements satisfactory to it for ingress and egress to the aforesaid eighty (80) acres, more or less, from U.S. 17 over adjoining property of the Chicago Bridge and Iron Company, the Board will grant to District an easement of fifty (50) foot width for ingress and egress, and a subsurface pipeline, to the above described property over other property of Board, the location to be mutually agreed upon by the parties; and District shall absorb all expenses, if any, incurred by Board in granting such easements. In the event that such pipeline is installed, the surface of said easement shall be restored to its former condition at the expense of District. In the event District should abandon any said easement granted District by Board in this paragraph, said easement(s), or portion thereof, abandoned, shall revert to Board at its option.

The property herein conveyed to District shall be used only for the purposes of construction and operation by District of facilities within the lawful purposes of District, and for no other purpose except as shall be approved in advance in writing by Board; this restriction to run with the land.

Should District desire to convey the said property or any part thereof, then Board shall have the first right to purchase such property, or such part thereof at its then fair market value. Should the Board not notify District in writing of its desire to purchase such property within thirty (30) days after Board is notified in writing by District of its desire to sell such property, then District shall be free to sell such property to other parties. In

the event that the Board shall notify District in writing within such thirty (30) days of its desire to purchase such property, or part thereof as aforesaid, then settlement of same shall occur within sixty (60) days of such notification of District by Board, allowing reasonable time for the examination of title and preparation of closing documents.

It is contemplated that Interstate Route 664 (I-664) shall form one of the boundaries of the above described property; but, in the event that I-664 should be located east or west of proposed location as shown on the above mentioned plat, then District agrees to purchase, and Board agrees to sell, such land of Board as lies between the present proposed boundary of the above described property and the line of said interstate highway at a price of Thirty-Five Hundred Sixty-Three Dollars (\$3,563.00) an acre; and, conversely, should the location of said interstate highway result in any part of the above eighty (80) acres, more or less, shown on the aforesaid plat, lying on the opposite side of said highway from the present boundary of property purchased by District hereunder, then Board shall have the right of first refusal to purchase such land at Thirty-Five Hundred Sixty-Three Dollars (\$3,563.00) per acre, if Board shall not settle and pay for such land within thirty (30) days after a written offer to sell the same to Board at such cash price, then such right of first refusal shall become void and extinguished, and a declaration by District made by District in a deed of conveyance of said land that this provision concerning said right of first refusal has been complied with by District shall be, as to the grantee in such deed of conveyance, its successors and assigns conclusive evidence of the satisfaction of the requirements of this paragraph.

This conveyance is made subject to all utility, access and rail spur easements, roadways, and all other matters of record, including two leases covering said property, dated June 1, 1969 and June 5, 1969.

AGENDA ITEM 12. – June 22, 2021

Subject: COVID-19 Wastewater Surveillance Study Update

Recommended Action: No action is required.

Brief: Staff will present the latest data and status of the COVID-19 surveillance work.

AGENDA ITEM 13. – June 25, 2021

Subject: Policies Review
Operations and Nominations Committee Report

Recommended Action: Receive the Operations and Nominations (O&N) Committee report on policies review.

Brief: The O&N Committee regularly reviews the Commission Governance Guidelines, Ethics and Remote Participation Policies. The Committee will present their recommendations to the full Commission during the meeting.

AGENDA ITEM 14. – June 22, 2021

Subject: Election of Officers

Recommended Action: Elect a Chair and Vice-Chair of the Commission for the coming fiscal year.

Brief: The Commission is required by the Enabling Act to elect a Chair and Vice-Chair each year. Chair Elofson appointed Commissioners Glenn and Levenston to the Operations and Nominations Committee in May. The Committee will make its nominating report at the June meeting.

AGENDA ITEM 15. – June 22, 2021

Subject: Finance Committee Appointment
Fiscal Year 2022

Recommended Action: Chair to appoint Finance Committee.

Brief: In accordance with the HRSD Commission Governance Guidelines (adopted October 2013), the Commission maintains two standing committees: (1) Finance and (2) Operations and Nominations. These committees report as needed to the full Commission.

The Finance Committee meets periodically to review HRSD's financing activities, budgets and annual audits. Two members of the Commission are appointed each year by the Chair to serve on the Finance Committee for a one-year term beginning July 1.

The Finance Committee will meet as follows for FY-2022:

- | | |
|--|------------------|
| • Comprehensive Annual Financial Report (CAFR) review | Sep/Oct 2021 |
| • Commissioner budget work session (after regular meeting) | January 25, 2022 |
| • First CIP review and prioritization meeting | TBD March 2022 |
| • Commissioner budget work session (after regular meeting) | March 22, 2022 |
| • Final CIP review meeting | TBD March 2022 |
| • Preliminary annual operating budget review | March/April 2022 |
| • Other financial issues | As needed |

All meetings of the Finance Committee are public meetings subject to the Virginia Freedom of Information Act (FOIA) requirements. Committee members serve at the pleasure of the Chair without limitation as to the number of one-year terms. Committee members continue serving until a replacement is appointed by the Chair.

AGENDA ITEM 16. – June 22, 2021

Subject: Unfinished Business

AGENDA ITEM 17. – June 22, 2021

Subject: New Business

AGENDA ITEM 18. – June 22, 2021

Subject: Commissioner Comments

AGENDA ITEM 19. – June 22, 2021

Subject: Public Comments Not Related to Agenda

AGENDA ITEM 20. – June 22, 2021

Subject: Informational Items

Recommended Action: No action is required.

Brief: The following items listed below are 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 Planning Metrics Summary](#)
- c. [Effluent Summary](#)
- d. [Air Summary](#)
- e. [Emergency Declarations – Berkley Trunk Sewer Replacement](#)



June 16, 2021

Re: General Manager's Report

Dear Commissioners:

HRSD took possession of the Nassawadox Treatment Plant in May. This plant is the first HRSD asset on the Eastern Shore and will ultimately be eliminated when we complete the transmission force main that will pump flows from Nassawadox to the treatment plant in Onancock. As we found in Surry, this treatment plant is challenged to meet permit and the HRSD Operations staff is working on some minor improvements to get the plant in compliance soon. Discussions continue with Onancock to transfer ownership of that system. Due to complications with the actual land transfer for parts of the Onancock collection system, there will likely be two actions, one to transfer the treatment plant in the next few months and another when the land issues are resolved within the next year.

The highlights of May's activities are detailed in the attached monthly reports.

- A. **Treatment Compliance and System Operations:** All plants (except Nassawadox) met permit and there were no spills in the Interceptor System. There was a spill on the collection system in West Point and the newly acquired Nassawadox Plant had two permit exceedances.

- B. **Internal Communications:** I participated in the following meetings/activities (all virtual unless otherwise noted) with HRSD personnel:
 - 1. A meeting to review changes to the agreement with Nestle for reclaimed water from the King William Treatment Plant
 - 2. The final monitoring meeting of the Phase 2 Rehab Action Plan projects – all were completed by the May compliance date
 - 3. Two new employee orientation sessions
 - 4. A meeting to review contract status for the James River Treatment Plant advanced nutrient project and SWIFT
 - 5. A meeting to discuss strategy for requesting American Recovery Plan Act funding
 - 6. The first meeting of the internal Eastern Shore Program Team
 - 7. A meeting to discuss progress and schedule for Promise (mobile based payment plan)



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C. **External Communications:** I participated in the following meetings/activities (all virtual unless otherwise noted):

1. A meeting with the Accomack County Administrator to discuss County-owned sewer assets
2. A meeting with the Town Manager of Onancock regarding the draft agreement
3. Multiple strategic planning sessions for Virginia Forever
4. Delivered a keynote address to the SWAN (**S**mart **W**ater **N**etwork) forum
5. Follow up meetings with the Deputy Commissioner for the Virginia Marine Resources Commission (VMRC) to discuss potential oyster fishery mitigation
6. Participated in a Water Environment Federation (WEF) workshop on delivering presentations
7. A meeting with the Newport News City Manager regarding plans around the Boat Harbor Treatment Plant
8. The monthly meeting of the Hampton Roads Planning District Commission (HRPDC) Director of Utilities meeting
9. An Elizabeth River Watershed Action planning team meeting
10. The US Water Alliance's One Water Council
11. A meeting of the Water Agency Leaders Alliance
12. The first coordination meeting with the City of Newport News for due diligence activities related to the land purchase adjacent to the James River Treatment Plant
13. The final session of the Diversity, Equity, and Inclusion certificate program from the University of South Florida

D. **Consent Decree Update:**

1. The Commonwealth has signed off on the Fifth Amendment. I confirmed that EPA has also signed off on the Fifth Amendment but we are still waiting for DOJ final signatures before lodging with the Norfolk District Court. We continue to anticipate final signatures will be forthcoming, but this unusual delay now threatens the compliance schedule HRSD committed to meeting in the submitted plan. At this pace we will be 2-years into the first 10-year compliance period before we get approval, effectively reducing our compliance period to 8 years.
2. HRSD drafted a response to the stipulated penalty demand related to the January spill in the James River. The final will be sent to EPA in June.

The meeting next week will be another fully electronic meeting using Zoom. As discussed at the May meeting, the June meeting will likely be the last virtual meeting. The July meeting will be in person in Virginia Beach and followed by a dedication celebration for the new Water Quality Service Building.

The leadership and support you provide are the keys to our success as an organization. Thanks for your continued dedicated service to HRSD, the Hampton Roads region, the Commonwealth, and the environment. **I look forward to seeing you (virtually) on Tuesday, June 22, 2021.**

Respectfully submitted,

Ted Henifin, P.E.
General Manager

TO: General Manager
 FROM: Director of Communications
 SUBJECT: Monthly Report for May 2021
 DATE: June 14, 2021





A. Publicity and Promotion

HRSD and/or SWIFT were mentioned or featured in thirteen news stories or media mentions on topics that included:

1. HRSD Director of Engineering’s Letter to the Editor re: United for Infrastructure 2021
2. HRSD tracking COVID-19 in wastewater
3. Exmore/Eastern Shore developments related to HRSD wastewater treatment
4. Middlesex County infrastructure developments

B. Social Media and Online Engagement


1. Metrics

Social Media Metrics May 2021				
METRIC	 FACEBOOK	 LINKEDIN	 TWITTER	 YOUTUBE
Number of Posts *number of published posts	20 -9	7 +1	18 -7	1:43 average view duration
Number of Followers/Likes *total number of fans	1,596 +7	5,276 +17	553 +0	223 +3
Engagement *sum of reactions comments and shares	265 -109	127 +72	36 +2	865 unique viewers +106
Traffic *total clicks on links posted	106 +28	240 +52	75 -11	3.8% click-through +23%

2. Top posts on Facebook, Twitter, and YouTube

a. Top Facebook post

Post Details



HRSD
May 17 · 🌐

If you needed a reminder of what not to flush...
These were found blocking a sample line at one of our pump stations. Among the not so flushable wipes are menstrual product applicatorst
! Remember, only three things are truly flushable: pee, poo, and toilet paper. ... See More

Get More Likes, Comments and Shares
When you boost this post, you'll show it to more people.

1,398 People Reached **112** Engagements [Boost Post](#)

👤 Jen Johnson, Lorene Bruns and 6 others 7 Shares

Performance for Your Post

1,398 People Reached

31 Reactions, Comments & Shares 📊

16 Like	8 On Post	8 On Shares
2 Wow	0 On Post	2 On Shares
6 Comments	0 On Post	6 On Shares
7 Shares	7 On Post	0 On Shares

81 Post Clicks

33 Photo Views	7 Link Clicks 📊	41 Other Clicks 📊
----------------	-----------------	-------------------

NEGATIVE FEEDBACK

0 Hide Post 0 Hide All Posts
0 Report as Spam 0 Unlike Page

Reported stats may be delayed from what appears on posts

b. Top Tweet



HRSD @HRSDVA
Internship Opportunity!
HRSD is hiring a TSD Intern! This position is for undergraduate college students interested in science. <https://www.hrsd.com/careers>
<pic.twitter.com/MQJ5NCEVeQ>

Impressions	1,468
Total engagements	28
Link clicks	10
Detail expands	9
Media engagements	7
Retweets	1
Likes	1

c. Top YouTube Videos

- (1) [The Wastewater Treatment Process](#)
- (2) [HRSD Atlantic Treatment Plant Cambi Tour](#)
- (3) [What is Asset Management? HRSD Celebrates Infrastructure Week | United for Infrastructure](#)
- (4) [SWIFT Research Center: What is the Potomac Aquifer?](#)
- (5) [HRSD's Woodstock Park Wet Weather Storage Tank](#)

3. Impressions and Visits

- a. Facebook: 10,000 page impressions, 8,600 post impressions reaching 8,100 users and Facebook engagement of 265 (212 reactions, 41 shares and 12 comments)
- b. Twitter: 12,600 tweet impressions; 340 profile visits and 11 mentions, 36 engagements
- c. HRSD.com/SWIFTVA.com: 846 page visits
- d. LinkedIn Impressions: 7,200 page impressions and 6,300 post impressions
- e. YouTube: 1,100 views
- f. Next Door unique impressions: 694 post views from two targeted neighborhood postings
- g. Blog Posts: (2) [Putting Trash In Its Place For One Month Straight! HRSD April Community Cleanups](#) and [A Look at An HRSD Sustainable Infrastructure Project: Cambi THP](#)
- h. Construction Project Page Visits – 1226 total visits (not including direct visits from home page, broken down as follows:
 - (1) 841 visits to individual pages
 - (2) 385 to the status page

C. News Releases, Advisories, Advertisements, Project Notices, Community Meetings and Project Web Postings

1. News Releases: 0
2. Traffic Advisories: 1
3. Construction Notices and or notices to neighbors: 1
4. Advertisements: 0
5. Project Notices: 1 (via door hangings reaching approximately 51 residents)
6. Project/Community Meetings: 1
7. New Project Web Pages: 0
8. New Project Videos: 0

D. Special Projects and Highlights

1. Director and staff continued working with the City of Virginia Beach Parks & Recreation staff in planning the upcoming official reopening of Woodstock Park as well as a media sneak peek event scheduled for the day before the event. This event is scheduled for June 16, 2021, at 10:00 a.m.
2. Director attended the Suffolk State of the City (virtual attendance).
3. Staff provided a presentation to the Virginia Beach Art Committee, sharing proposed mural design for solids holding tank at the Atlantic Treatment Plant.
4. Staff participated in the Coastal Virginia STEM Ecosystem Design Studio planning workshop meeting.
5. Staff participated in the Hampton Roads Planning District Commission (HRPDC) askHRGreen FOG and Water Awareness meetings.

E. Internal Communications

1. Director participated in the following internal meetings and events:
 - a. Escorted videographers and coordinated video shoots with staff across several workcenters and locations for Water and Wastewater Professionals Day in late June
 - b. Weekly Leadership and COVID-19 meetings
 - c. Community outreach planning and update meetings related to several projects, including Larchmont Area Sanitary Sewer improvements, South Norfolk projects at Ferebee and Park and the SWIFT full-scale implementation at the James River Treatment Plant
 - d. Discharge Monitoring Report (DMR), SWIFT Quality Steering Team (QST) and QST meetings
 - e. Several meetings related to the Atlantic Treatment Plant mural project
 - f. Meetings with Water Quality for upcoming Water Quality Services Building Opening event
 - g. Participated in DEI Council planning meeting to review applications
 - h. Meetings with Engineering and Asset Management staff to update Hurricane Plan
 - i. SWIFT Community Commitment Plan Steering Committee meeting
2. Director conducted biweekly communications department status meetings and weekly one-on-one and team check-in meetings.
3. Staff attended project progress meetings and presentation and outreach development meetings with various project managers.

F. Metrics

1. Educational and Outreach Activities (all virtual unless otherwise noted): 8
 - a. Self-guided SWIFT Virtual Tours – eight views (represents survey access at the beginning of each tour but does not necessarily represent the actual number of people who may have been watching/participating in the virtual tour at the time)
2. Number of Community Partners: 2
 - a. London Bridge Shopping Center, Virginia Beach (Pollards Chicken)
 - b. HRPDC's AskHRGreen
3. Additional Activities Coordinated by Communications Department: 0
4. Monthly Metrics Summary

Item #	Strategic Planning Measure	Unit	May 2021
M-1.4a	Total Training Hours per Full Time Employee (3) - Current Month	Hours / #FTE	4
M-1.4b	Total Training Hours per Full Time Employee (3) - Cumulative Fiscal Year-to-Date	Hours / #FTE	66.83
M-5.2	Educational and Outreach Events	Number	8
M-5.3	Number of Community Partners	Number	2

Respectfully,

Leila Rice, APR
Director of Communications

TO: General Manager
FROM: Director of Engineering
SUBJECT: Engineering Monthly Report for May 2021
DATE: June 10, 2021

A. General

1. Capital Improvement Program (CIP) spending for the tenth month of Fiscal Year (FY) 2021 was below the planned spending target:

CIP Spending (\$M):

	Current Period	FYTD
Actual	10.84	159.31
Plan	17.00	202.00

2. A procurement effort is underway to select a new General Engineering Services (GES) firm to assist HRSD with a variety of professional services. Technical proposals have been received and interviews have been held with the short-listed firms. This GES firm will supplement the two existing firms already under contract to assist with a wide variety of needs including special studies, design efforts and construction-related matters over the next four fiscal years. A recommendation of award will be made at the June Commission Meeting.

B. Asset Management Division

1. The Asset Management Division is coordinating an update to the HRSD Hurricane Plan. This plan is updated each year to provide staff with the latest information in the event of a hurricane or other inclement weather. Hurricane season officially starts June 1st and although a hurricane is unlikely in June, planning for this possibility is an important and prudent initiative. The plan has numerous resources for staff and provides guidance and documentation for preparedness, response, and recovery efforts.
2. The annual inspection of HRSD's cathodic protection systems was recently completed. This inspection provides a close review of each protection system used primarily as part of the interceptor sewer system. Since corrosion is a major concern with many of HRSD's assets, the cathodic protection system is one way we limit this impact to ferrous materials. Corrosion is possible in many ways, but one of the most common is the impact of corrosive soils on metal pipes and fittings. The inspection report will be received in June with recommended improvements needed to maintain protection of the various assets.

C. North Shore, South Shore and SWIFT Design & Construction Divisions

1. The Lucas Creek Pump Station Replacement project has encountered a difficulty as design continues. The City of Newport News has informed HRSD that the existing zoning of the property will not allow the planned footprint and building height needed for the facility. We will work with City staff to find possible solutions to this issue and make

every effort to redesign the facility to meet the existing zoning requirements when possible. The project is now at the 50% design level and the project will be delayed until a resolution of the zoning requirements can be determined.

2. Construction is nearing completion on the Providence Road Off-Line Storage Facility. The last major feature of the tank to be completed is the automated filling, draining, and cleaning system. Substantial completion is planned for early June with the park re-opening ceremony scheduled for June 16th. The Design-Build team is focused on final acceptance of the tank and all the various landscaping and punch-list items needed prior to turning over the facility to HRSD and the City of Virginia Beach. The project team continues to collaborate well and is working diligently to meet the June 16th deadline.
3. The project team recently completed a multi-day Partnering Session for the James River SWIFT and James River Advanced Nutrient Reduction Improvements projects. The concept of Partnering is used on large projects to address communication, issue resolution and non-technical matters. These are often found to be some of the more difficult issues to address since there are so many diverse individuals working on a project of this size. One outcome from the resulting discussions includes the creation of a number of teams to address issues before they become problems. The session was conducted virtually due to COVID-19 protocols, but it is expected that future partnering efforts will be held in person to facilitate communication and build trust between the team members.

D. Planning & Analysis Division

1. The Planning & Analysis Division has managed an update to the Management, Operations and Maintenance (MOM) Manual. This document was originally required as part of the U.S. EPA Consent Decree to address sanitary sewer overflows in the region. The manual is required to be updated every three years. The MOM update has been managed by the Data Analysis Section and uses the HRSD SharePoint site to store the information and Microsoft Power Business Intelligence (BI) to manage the data. The update will be finalized in June and the manual available for staff in July.
2. An important annual update is underway to the Geographic Information System (GIS) locality sewer information. HRSD acts as a clearinghouse for all data and attributes associated with the sewer system in Hampton Roads. We gather sewer system data from 23 cities and counties in the region as part of this annual update effort. HRSD's GIS can be used by anyone to gain an understanding of the existing regional sewer system. This information is very valuable for many reasons including planning, facility location, development and impacts to other construction.

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 4
 - a. 05/03/2021 – Panel Discussion on “Communicating Project Information to Diverse Audiences” at the Water Environment Federation Student and Young Professional Committee Virtual Workshop.
 - b. 05/04/2021 – Presentation of HRSD's CIP at the Old Dominion University, Civil and Environmental Engineering Visiting Council (CEEVC) Virtual Conference entitled, “What Does the Future Hold?”

- c. 05/18/2021 – Panel Discussion on “Annual Public Works Virtual Roundtable” with the Hampton Roads Chapter American Society of Highway Engineers.
- d. 05/20/2021 – Presentation of HRSD’s SWIFT Program at the Florida Water Environment Association Water Reuse Virtual Specialty Conference.

2. Number of Community Partners: 4

- a. Water Environment Association
- b. Old Dominion University - CEEVC
- c. American Society of Highway Engineers - Hampton Roads Chapter
- d. Florida Water Environment Association - Water Reuse Committee

3. Number of Research Partners: 0

4. Monthly Metrics Summary:

Item #	Strategic Planning Measure	Unit	May 2021
M-1.4a	Total Training Hours per Full Time Employee (44) - Current Month	Hours / #FTE	2.61
M-1.4b	Total Training Hours per Full Time Employee (44) - Cumulative Fiscal Year-to-Date	Hours / #FTE	21.11
M-5.2	Educational and Outreach Events	Number	4
M-5.3	Number of Community Partners	Number	4
M-5.4	Number of Research Partners	Number	0

Bruce W. Husselbee, P.E.

Bruce W. Husselbee, PhD, PE

TO: General Manager
FROM: Director of Finance
SUBJECT: Monthly Report for May 2021
DATE: June 9, 2021

A. General

1. Wastewater billed revenues continue to be above budget as water consumption is 3.1 percent higher than expected. This is likely due to the dry weather and strong regional economy. Indirect Discharge (hailed waste from septic tanks and restaurants) is lower than budget due to the COVID-19 restaurant restrictions reducing the need for pumping out grease control devices. Facility Charges have already exceeded budget as new single family housing permits have increased 18 percent year-over-year. Interest Income will continue to lag as the interest rate is 0.07 percent due to the Federal Reserve keeping short term rates near zero. Build America Bond Subsidies are received twice per year, and both have been recognized at this time. The subsidy was reduced slightly due to a reduction under the sequestration provision of the bonds. Personal services and fringe benefit expenses are each below budget at 90 percent, trending lower than the prior year. Transportation costs are lower than budget due to more meetings being held by virtually due to COVID-19 restrictions. Major repairs and capital assets expenses continue to be significantly lower than budget at this time since many purchases earlier in the fiscal year related to prior year encumbrances and spending has been lower than anticipated. Overall, revenues are above target at 93 percent and expenses and transfers are under budget at 84 percent and continue to be controlled.
2. Higher wastewater billed revenues will be offset by the increasing delinquencies. The 90+ day aging accounts receivable is trending upward again. Staff is working on Phase 2 of the Municipal Utility Relief Program to be launched this summer with PromisePay, which is a technology provider approved by the Commission in September 2020. With approximately \$1.3 million remaining, HRSD will be reaching out to customers who may be impacted by COVID-19 to provide attestations via the PromisePay app. Upon approval, the customer's account will be eligible for a credit toward their past due balance with the remaining amount placed in a customized PromisePay payment plan. At Louisville Water and Louisville MSD, "93 percent of PromisePay payment plan customers successfully kept up with their bills, up from 20 percent before partnering with PromisePay" [from US Water Alliance case study 2021].
3. Procurement was copied on an email from a potential SWaM supplier concerning a solicitation that was being advertised through our online portal and the state's procurement website eVA. The SWaM supplier felt our requirements were restrictive and were purposely put in place to restrict a SWaM suppliers' ability to participate. Procurement took this concern very seriously and reached out to the supplier to find out more details about their concern. They stated that our requirement for a specific type of license was restrictive and that many companies including theirs perform these services without the specific license listed in the solicitation. Research was done to determine if the requirement was a state law requirement or not. After further research and discussions with the work center, it was determined that we could remove the requirement from the solicitation which will hopefully encourage more suppliers, including the SWaM suppliers in the area, to submit a response to the solicitation.

4. Jill Mergen was hired as the new Chief of Customer Care. Ms. Mergen graduated from ODU with a BS in Interdisciplinary Studies and will finish her MBA from the College of William & Mary in June. She has been in Customer Care for eight years leading the Billing and Payments Team. Melissa Josey-White will begin her new role as the Chief of Compliance and Risk. With the recent closing of our historic WIFIA SWIFT loan, there is an important need for someone to ensure all compliance requirements are met. In addition, she will take over all HRSD property and casualty insurance policies and work closely with our insurance broker to ensure HRSD is carrying the appropriate amount of coverage based on our risks.

B. Interim Financial Report

1. Operating Budget for the Period Ended May 31, 2021

	Amended Budget	Current YTD	Current YTD as % of Budget (92% Budget to Date)	Prior YTD as % of Prior Year Budget
Operating Revenues				
Wastewater	\$ 312,218,000	\$ 291,400,271	93%	92%
Surcharge	1,522,000	1,481,418	97%	97%
Indirect Discharge	3,200,000	2,710,148	85%	103%
Fees	3,020,000	(389,442)	-13%	90%
Municipal Assistance	700,000	640,272	91%	82%
Miscellaneous	1,165,000	1,594,025	137%	216%
Total Operating Revenue	321,825,000	297,436,692	92%	92%
Non Operating Revenues				
Facility Charge	6,160,000	7,136,070	116%	94%
Interest Income	1,510,000	550,583	36%	144%
Build America Bond Subsidy	2,292,000	2,167,225	95%	92%
Other	610,000	1,157,648	190%	139%
Total Non Operating Revenue	10,572,000	11,011,526	104%	111%
Total Revenues	332,397,000	308,448,218	93%	93%
Transfers from Reserves	28,765,873	27,567,504	96%	92%
Total Revenues and Transfers	\$ 361,162,873	\$ 336,015,721	93%	93%
Operating Expenses				
Personal Services	\$ 60,952,502	\$ 55,100,244	90%	95%
Fringe Benefits	24,945,953	22,406,111	90%	93%
Materials & Supplies	9,663,402	8,014,427	83%	89%
Transportation	1,579,254	951,909	60%	66%
Utilities	13,019,361	11,428,825	88%	87%
Chemical Purchases	10,500,337	7,057,294	67%	72%
Contractual Services	51,831,008	31,670,924	61%	61%
Major Repairs	13,076,208	6,461,234	49%	50%
Capital Assets	867,079	280,958	32%	38%
Miscellaneous Expense	3,721,391	2,869,087	77%	125%
Total Operating Expenses	190,156,495	146,241,013	77%	81%
Debt Service and Transfers				
Debt Service	61,407,822	57,708,283	94%	91%
Transfer to CIP	109,338,556	98,200,275	90%	92%
Transfer to Risk management	260,000	238,337	92%	92%
Total Debt Service and Transfers	171,006,378	156,146,895	91%	91%
Total Expenses and Transfers	\$ 361,162,873	\$ 302,387,908	84%	86%

4. Capital Improvements Budget and Activity Summary for Active Projects for the Period Ended May 31, 2021

HRSD - PROJECT ANALYSIS

May 31, 2021

Classification/ Treatment Service Area	Appropriated Funds	Expenditures prior to 7/1/2020	Expenditures Year to Date FY2021	Total Project Expenditures	Encumbrances	Available Funds
Administration	47,227,240	15,313,091	11,856,208	27,169,299	2,435,533	17,622,408
Army Base	155,448,800	123,095,232	408,012	123,503,244	2,995,339	28,950,217
Atlantic	114,052,683	76,561,802	5,570,966	82,132,768	5,122,001	26,797,914
Boat Harbor	262,090,388	36,048,636	14,181,090	50,229,726	11,727,647	200,133,015
Ches-Eliz	166,407,309	67,782,112	35,422,075	103,204,187	23,020,135	40,182,987
Eastern Shore	14,000,000	-	55,273	55,273	37,496	13,907,231
James River	309,704,973	38,156,333	4,803,766	42,960,099	219,790,290	46,954,584
Middle Peninsula	70,401,456	10,777,028	2,448,957	13,225,985	9,943,525	47,231,946
Nansemond	347,091,385	23,061,497	15,783,821	38,845,318	11,313,695	296,932,372
Surry	55,505,027	10,875,464	12,693,863	23,569,327	18,081,473	13,854,227
VIP	304,942,874	178,705,768	4,260,027	182,965,795	2,030,499	119,946,580
Williamsburg	34,622,622	17,684,308	9,729,030	27,413,338	4,761,062	2,448,222
York River	76,430,343	25,864,189	4,413,815	30,278,004	3,543,642	42,608,697
General	772,051,204	155,776,300	38,005,288	193,781,588	291,328,475	286,941,141
	\$ 2,729,976,304	\$ 779,701,760	\$ 159,632,191	\$ 939,333,951	\$ 606,130,812	\$ 1,184,511,541

5. Debt Management Overview

HRSD - Debt Outstanding (\$000's)

May 31, 2021

	Principal Apr 2021	Principal Payments	Principal Draws	Principal May 2021	Interest Payments
Fixed Rate					
Senior	198,670	-	-	198,670	(3,226)
Subordinate	560,987	-	3,558	564,545	-
Variable Rate					
Subordinate	50,000	-	-	50,000	(4)
Line of Credit	15,299	-	-	15,299	(6)
Total	\$ 824,956	\$ -	\$ 3,558	\$ 828,514	\$ (3,236)

HRSD- Series 2016VR Bond Analysis

May 28, 2021

	SIFMA Index	HRSD	Spread to SIFMA
Maximum	4.71%	4.95%	0.24%
Average	0.41%	0.52%	0.11%
Minimum	0.01%	0.01%	0.00%
As of 05/28/21	0.05%	0.03%	-0.02%

* Since October 20, 2011 HRSD has averaged 52 basis points on Variable Rate Debt

6. Financial Performance Metrics for the Period Ended May 31, 2021

HRSD - UNRESTRICTED CASH

May 31, 2021

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	\$ 190,490,105		366
Risk Management Reserve	\$ (3,997,872)	(8)	358
Capital (PAYGO only)	\$ (8,298,368)	(16)	342
Adjusted Days Cash on Hand	\$ 178,193,865		342

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

May 31, 2021

Primary Source	Beginning Market Value July 1, 2020	YTD Contributions	YTD Withdrawals	YTD Income Earned	Ending Market Value May 31, 2021	Allocation of Funds	Credit Quality	Current Mo Avg Yield
BAML Corp Disbursement Account	7,339,242	442,315,305	414,103,407	31,795	35,582,936	24.6%	N/A	0.55%
VIP Stable NAV Liquidity Pool	178,660,390	10,000,000	80,000,000	224,287	108,884,677	75.4%	AAAm	0.09%
Total Primary Source	\$ 185,999,632	\$ 452,315,305	\$ 494,103,407	\$ 256,082	\$ 144,467,613	100.0%		

VIP Stable NAV Liquidity Pool out performed Va Local Government Investment Pool (the market benchmark) by 0.01% in the month of May.

Secondary Source	Beginning Market Value July 1, 2020	YTD Contributions	YTD Withdrawals	YTD Income Earned & Realized G/L	Ending Market Value May 31, 2021	Ending Cost	LTD Mkt Adj	Yield to Maturity at Market
VIP 1-3 Year High Quality Bond Fund	64,899,667	-	11,878	643,406	65,148,997	63,368,082	1,780,914	0.17%
Total Secondary Source	\$ 64,899,667	\$ -	\$ 11,878	\$ 643,406	\$ 65,148,997	\$ 63,368,082	\$ 1,780,914	

VIP 1-3 Year High Quality Bond Fund was out performed by ICE BofA ML 1-3 yr AAA-AA Corp/Gov Index (the market benchmark) by 0.01% in the month of May.

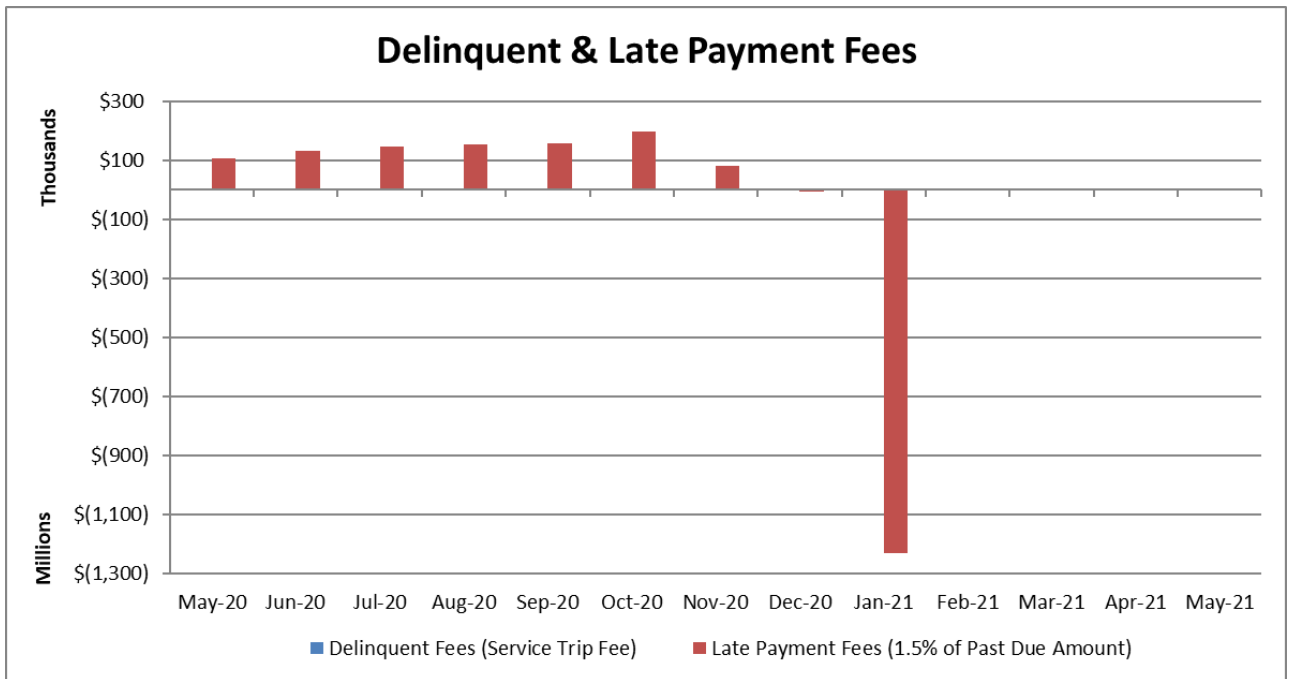
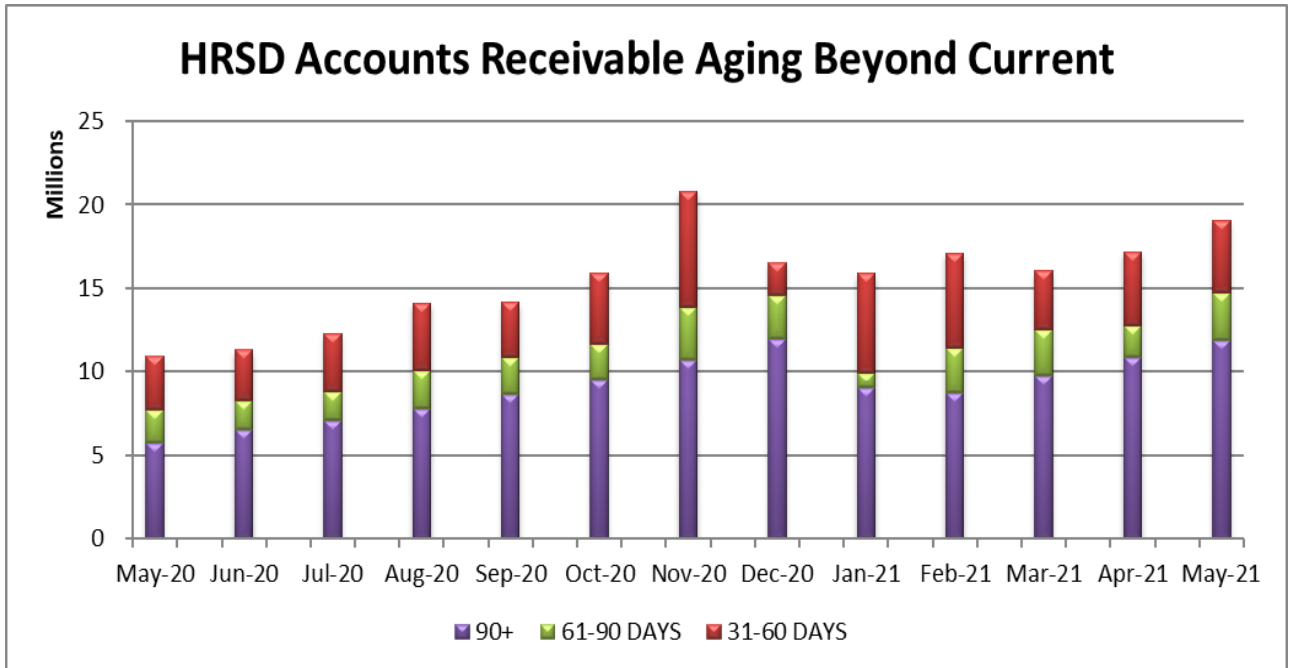
	Total	Fund Alloc
Total Primary Source	\$ 144,467,613	68.9%
Total Secondary Source	\$ 65,148,997	31.1%
TOTAL SOURCES	\$ 209,616,610	100.0%

7. Summary of Billed Consumption

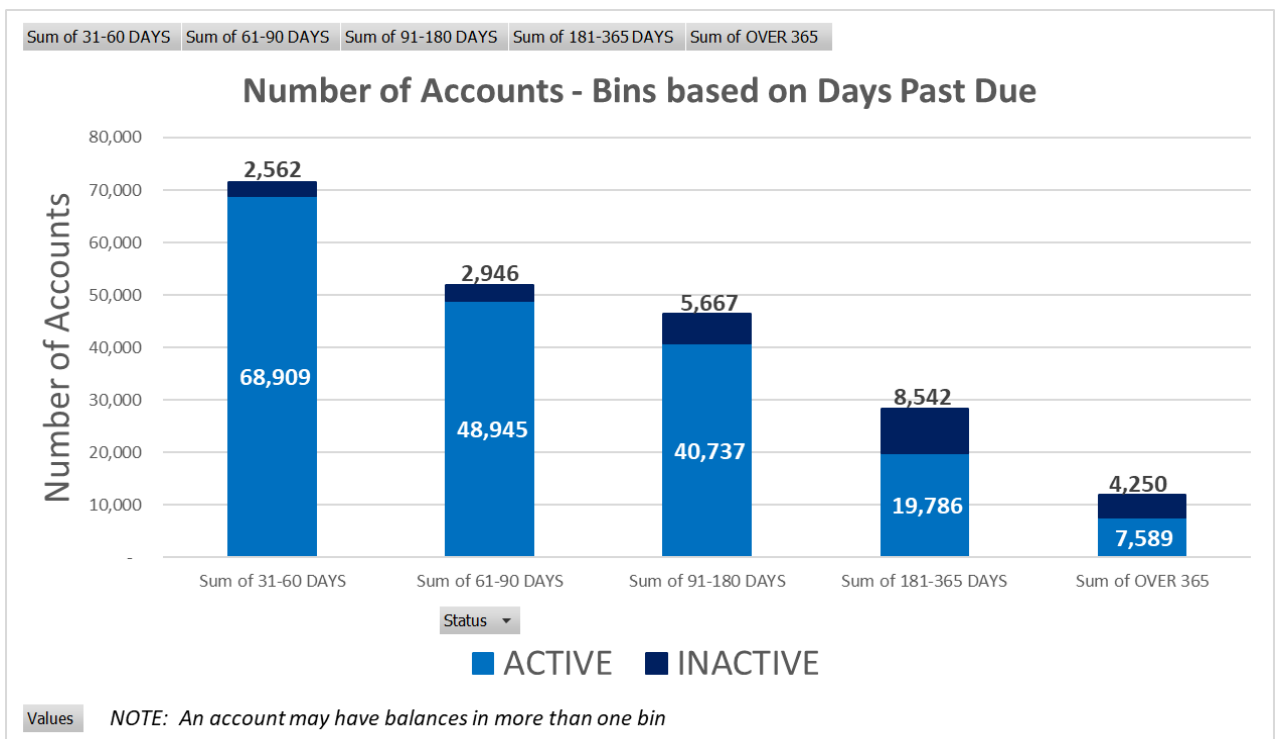
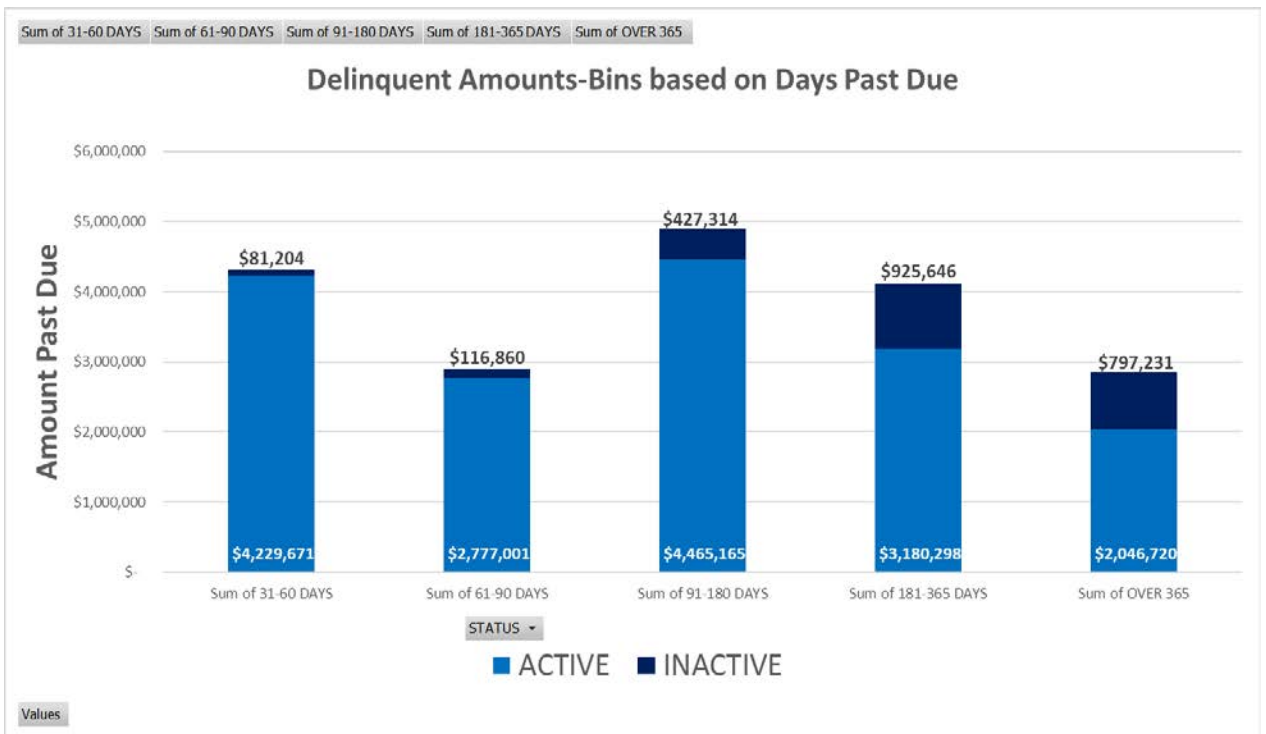
Summary of Billed Consumption (,000s ccf)								
Month	FY2021 Cumulative Budget Estimate	FY2021 Cumulative Actual	% Difference		% Difference		% Difference	
			From Budget	Cumulative FY2020 Actual	From FY2020	Cumulative 3 Year Average	From 3 Year Average	
July	5,086	4,751	-6.6%	5,114	-7.1%	5,045	-5.8%	
Aug	10,047	9,459	-5.8%	9,944	-4.9%	10,026	-5.7%	
Sept	14,477	14,335	-1.0%	14,354	-0.1%	14,389	-0.4%	
Oct	18,951	18,863	-0.5%	18,952	-0.5%	18,966	-0.5%	
Nov	22,937	21,192	-7.6%	23,092	-8.2%	23,160	-8.5%	
Dec	27,268	27,614	1.3%	27,518	0.3%	27,383	0.8%	
Jan	31,818	32,477	2.1%	32,101	1.2%	31,920	1.7%	
Feb	36,287	36,067	-0.6%	36,005	0.2%	36,236	-0.5%	
March	39,495	41,017	3.9%	40,108	2.3%	40,223	2.0%	
Apr	43,441	45,115	3.9%	44,246	2.0%	44,387	1.6%	
May	47,762	49,256	3.1%	48,397	1.8%	48,604	1.3%	
June	52,222	-	N/A	52,535	N/A	52,869	N/A	

C. Customer Care Center

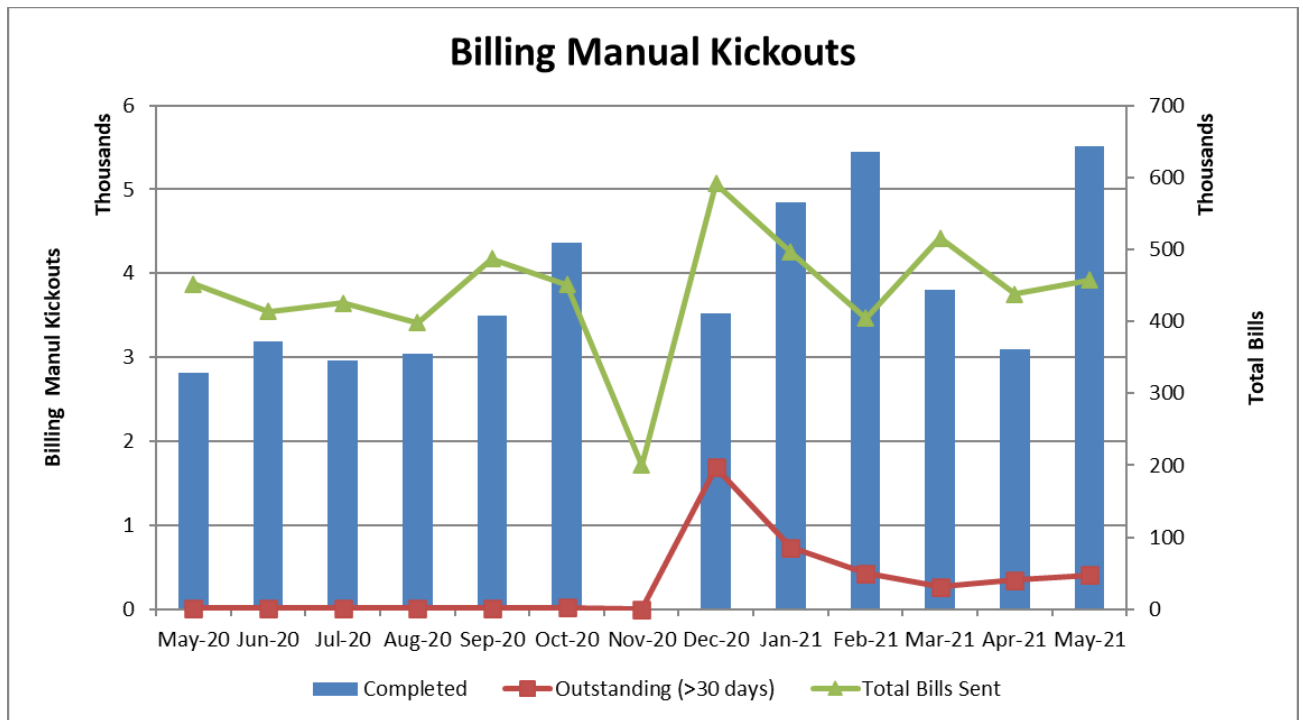
1. Accounts Receivable Overview



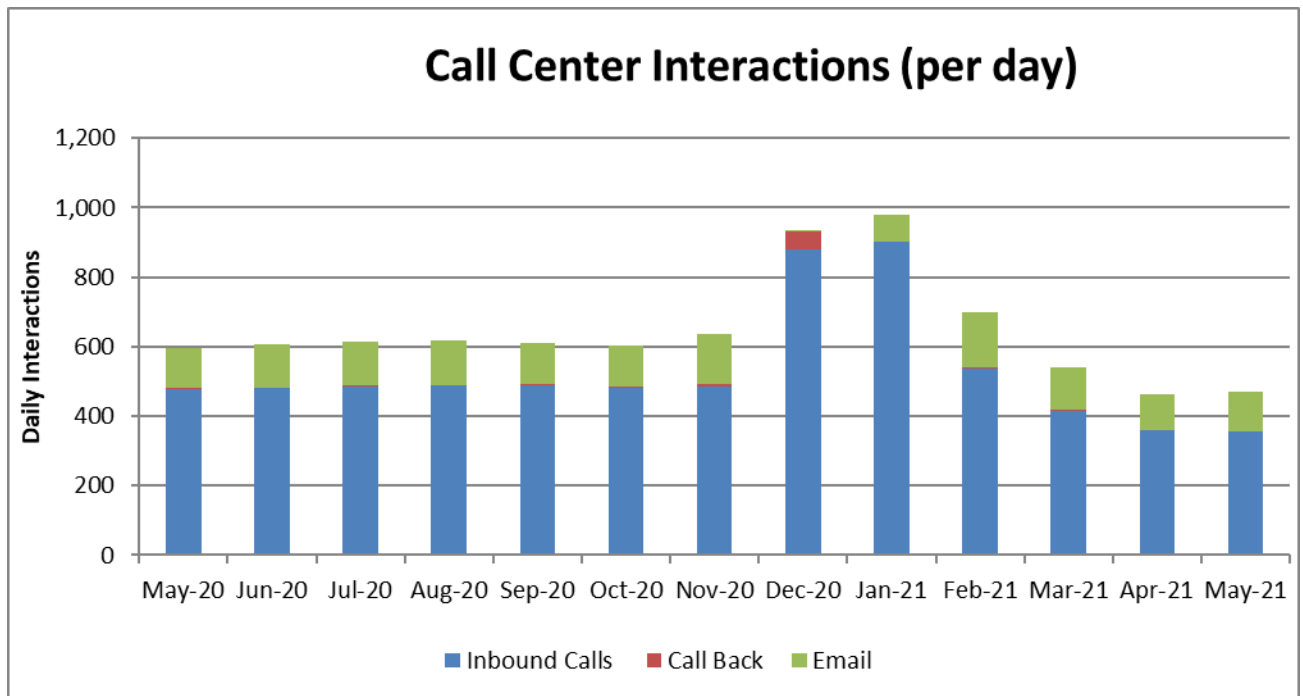
Apr 20-May 21 Field Activity was suspended late March 2020 in response to COVID-19.



2. Customer Care Center Statistics



November data not available due to Ransomware attack



Customer Interaction Statistics	Dec	Jan	Feb	Mar	Apr	May
Calls Answered within 3 minutes	30%	41%	90%	97%	98%	98%
Average Wait Time (seconds)	378	803	48	26	20	16
Calls Abandoned	28%	39%	7%	3%	3%	2%

D. Procurement Statistics

ProCard Fraud	External Fraud Transactions *	Comments
July	0	
August	3	One transaction was caught by the card holder and two transactions were caught by the bank immediately.
September	3	Three caught by card holder
October	2	Caught by bank immediately
November	0	
December	0	
January	1	Caught by bank immediately
February	0	
March	0	
April	1	Transaction was caught by the card holder
May	3	Caught by Cardholder
Total	13	

***External Fraud:** Fraud from outside HRSD (i.e.: a lost or stolen card, phishing, or identity theft)

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 0
2. Community Partners: 0

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	May 2021
M-1.4a	Training During Work Hours Per Full Time Employee (102) – Current Month	Hours / #FTE	1.84
M-1.4b	Total Training During Work Hours Per Full Time Employee (102) – Cumulative Fiscal Year-to-Date	Hours / #FTE	10.08
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	0
	Wastewater Revenue	Percentage of budgeted	104%
	General Reserves	Percentage of Operating Budget less Depreciation	109%
	Liquidity	Days Cash on Hand	366 Days
	Accounts Receivable (HRSD)	Dollars	\$36,752,546
	Aging Accounts Receivable	Percentage of receivables greater than 90 days	32%

Respectfully,

Jay A. Bernas

Jay A. Bernas, P.E.

Director of Finance

TO: General Manager
FROM: Director of Information Technology
SUBJECT: Information Technology Department Report for May 2021
DATE: June 9, 2021

A. General

1. As part of HRSD's technology refresh strategy, preparations are underway for the replacement of network switches in the North Shore Operations Center next month.
2. As the new Water Quality Services Building nears completion, staff are working with the design build contractors to complete the integration of the emergency alarm and backup communications within the building's elevator.
3. ITD continues its work with CEL staff on the software upgrade of the Sample Manager application, which is scheduled for completion next month.
4. In May, the IT Help Desk staff completed over 350 work orders, ensuring availability of computing resources to those working locally and remotely.
5. Staff are preparing to upgrade the Oracle database software supporting the Meridian engineering document management application.
6. Microsoft Premier Support is conducting a series of training sessions for ITD staff in preparation for the migration to Microsoft OneDrive. End user support, system administration, and security are several of the key areas covered.

B. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 0
2. Number of Community Partners: 0

3. Metrics Summary:

Item #	Strategic Planning Measure	Unit	May 2021
M-1.4a	Training During Work Hours Per Full-Time Employee (50) – Current Month	Total Training Hours / # FTE	4.29
M-1.4b	Total Training During Work Hours Per Full-Time Employee (50) – Cumulative Fiscal Year-to-Date	Total Training Hours / # FTE	15.65
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	0

Respectfully,

Don Corrado

TO: General Manager
FROM: Director of Operations
SUBJECT: Operations Report for May 2021
DATE: June 10, 2021

A. Interceptor Systems

1. North Shore (NS) Interceptor Systems

Staff and contractors continued to migrate new sites to the new Supervisory Control and Data Acquisition (SCADA) system. A significant amount of time was spent on cutting over Woodland Road Pump Station (PS), Freeman Drive PS, and Hampton University PS sites.

2. South Shore (SS) Interceptor Systems

On May 20, staff reported a deep sinkhole at the State Street Pump Station in Norfolk. The sinkhole undermined a large concrete slab that supports piping and appurtenances from a 12-inch bypass pump. After investigating, a contractor found the 30-inch ductile iron gravity sewer pipeline running under the concrete slab had collapsed. While flow was still getting to the station, a large amount of sand and grit was also being deposited into the station wet well. Staff is concerned that the material left after being pumped through the station will settle in the pipeline that crosses the Elizabeth River. A contractor will remove the piping, appurtenances, and concrete slab and replace the failed pipeline.

B. Major Treatment Plant Operations

1. Army Base Treatment Plant (ABTP)

A new diffuser pattern and a vortex breaker were installed in aeration tank #3. The new diffuser pattern will maximize the efficiency of air supplied to the aeration zone and the vortex breaker will limit the amount of entrained air in the tank's effluent.

2. Atlantic Treatment Plant (ATP)

Because of repairs at the Williamsburg Treatment Plant and treatment process challenges at the Nansemond and Boat Harbor Treatment Plants, most of the Fat, Oil and Grease (FOG) accepted by HRSD was received at the ATP. Most of the FOG received was accepted at the newly constructed FOG receiving facility and processed through the THP (Thermal Hydrolysis Process). Because the volume of grease loads exceeded the capacity of the tank, some of the FOG was diverted to the head of the plant. To better manage the operation and spread the loads out, we adjusted our FOG receiving hours at the plant to 24 hours per day.

3. Boat Harbor Treatment Plant (BHTP)
 - a. Staff began nitrification efforts by making process changes to create a suitable environment for nitrifier organism growth.
 - b. A contractor removed scum from the primary clarifier influent channels that was caused by the additional FOG loads sent to the treatment plant. FOG loads are currently suspended at BHTP while nitrification efforts are underway.
4. Chesapeake-Elizabeth Treatment Plant (CETP)
 - a. On May 16, a total hydrocarbon (THC) analyzer failed resulting in a failure to record two valid THC readings per hour. The THC analyzer was replaced.
 - b. Staff conducted low solids loading tests on the incinerator to simulate conditions of a 2nd anticipated flow diversion from the CETP to the ATP that will occur as part of the closure plan of the CETP. The second diversion is scheduled to occur in July or August. Staff wants to be prepared for obstacles that may arise with operating an incinerator under lower flow conditions. The tests went well, and staff are encouraged that they may be able to operate the incinerator efficiently after the 2nd flow diversion. If the incinerator cannot be operated effectively after the 2nd diversion, staff are prepared to have the solids hauled away from the plant.
 - c. An expansion joint for sodium hypochlorite storage tank #1 starting leaking. Staff replaced the leaking joint. The leak was small and fully contained within the storage tank's containment area.
5. James River Treatment Plant (JRTP)
 - a. A backup in a pipe caused a loss of approximately 150 gallons of centrifuge centrate to a storm drain. Staff installed an air relief valve to prevent this from occurring in the future.
 - b. Staff adjusted pH control setpoints after two odor exceptions occurred.
 - c. Staff continued work on a new materials storage yard near the administration building. This storage yard will temporarily replace the existing yard that must be moved for Sustainable Water Initiative for Tomorrow (SWIFT) construction.
6. Nansemond Treatment Plant (NTP)
 - a. Staff completed repairs on secondary clarifier #5; however, while testing the unit before placing it into service, staff noticed the rake arm was considerably out of balance and scraping the bottom of the clarifier. Staff is developing a plan on how to proceed.
 - b. Staff attempted to take aeration tank #4 out of service but had to return it to service when they discovered the influent gate was stuck. A diver will attempt to close the tank's gate in June.

- c. Contractors continue construction of a new FOG handling facility. The estimated completion date is March 2023. This new facility will provide another receiving facility for the region, help keep FOG out of the waste stream in the plant, and convert the FOG received into a usable biofuel.
- d. Staff completed repairs of the scum arm and returned primary clarifier #4 back into service on May 4th. The scum arm broke last month after it was inundated with grease.
- e. Sustainable Water Initiative for Tomorrow (SWIFT) Research Center (RC)
 - (1) The total volume of SWIFT recharge into the Potomac aquifer for the month of May was 18.18 MG (59% Recharge Time).
 - (2) The recharge flow rate continues to be at 600 gallons per minute (gpm), keeping injectivity very stable.
 - (3) On May 4, the granular activated carbon (GAC) flow split set point was changed from a 90/10 to an 80/20 (80% of the flow going to GAC #1 and 20% to GAC #2) ratio to keep the total organic carbon (TOC) concentration below 4 mg/L. This allows staff to extend the life of the GAC.

7. Virginia Initiative Plant (VIP)

Staff completed repairs on three band screens. Welds on the drive shafts of all three screens had cracked, allowing free movement of the sprockets on the drive shafts. This situation could have caused major damage to the screens had it not been discovered and remedied.

8. Williamsburg Treatment Plant (WBTP)

- a. The three-week monitoring frequency for NO_x and TN was not met for the week of May 9 when staff missed a final effluent sample on May 11. Additional samples were scheduled and taken on May 14 and 15 to make up for the missed sample.
- b. The FOG receiving, thickening and water tanks were all cleaned and inspected. The inspection revealed severe damage and corrosion to the FOG thickening tank rake, some corrosion on the FOG water tank rake, and some concrete corrosion in various spots throughout the FOG system. Discharge of FOG by haulers to the WBTP will remain suspended for about four months to allow for steel repair and coating of the FOG thickening and water tank rake arms. Concrete corrosion and other improvements needed will likely become a future Capital Improvement Project.
- c. Staff completed cleaning and inspecting oxidation tower #2. Staff seeded the tower with activated solids and returned it to service.

9. York River Treatment Plant (YRTP)

- a. Two odor complaints were received from a resident in a neighborhood, approximately one-half mile from the plant. Staff detected very low levels of hydrogen sulfide during their investigation of the neighborhood. Staff increased the feed of ferric chloride to the grit tanks to eliminate hydrogen sulfide odors that may be coming from the primary clarifiers. A digester out of service may also have been the cause of the odor.
- b. Staff diverted grit effluent flow past the primary clarifiers to the aeration influent using temporary piping and pumps so that the primary effluent piping could be inspected. The inspection revealed corrosion at the top of all three primary effluent pipes. A plan is being developed to address this corrosion and determine the condition of the pipes.
- c. The contractor responsible for replacing the corroded pipeline from the headworks to the primary clarifier distribution chamber demobilized piping and pumps, replaced broken sidewalks, landscaped, and performed general cleanup of the area.

10. Incinerator Operations Events Summary

Total Hydrocarbon (THC) monthly averages (not to exceed 100 parts per million) were met by all five treatment plants with incinerators with a THC continuous emissions monitoring (CEM) valid data captured of greater than 92%. There were three deviations from the required minimum operating parameters and four minor bypass events (<60 minutes).

C. Small Communities (SC)

1. Middle Peninsula Small Communities Treatment and Collections

a. West Point Treatment Plant (WPTP) and Collections

On May 20 a reportable spill caused by a circumferential crack on the discharge force main piping from the 13th and Lee PS resulted in a spill of 100 gallons. The area was excavated and repaired soon after being discovered that same afternoon.

b. King Williams Treatment Plant (KWTP) and Collections

A clean-in-place was performed on both membranes this month. The current zinc media system is being evaluated to increase capacity as it has not been able to keep up with increased flow. , Operational changes were made in the short term to maximize offline storage when the process is discharging through the outfall to the receiving stream, thus allowing the zinc system to treat all flow.

2. Small Communities – Surry Systems

Staff collaborated with the Sussex Service Authority (SSA) on process improvements needed at the town plant to correct the high total suspended solids levels.

3. Small Communities – Eastern Shore (Riverside System)

HRSD became the owner of the Riverside Treatment facility during May. The facility reported two exceedances this month. Staff initiated a program of minor upgrades and process improvements to improve compliance with permit limits until the closure of the facility which is anticipated in 2024.

	Permit Limit	Reported Value
Ammonia	1.7 mg/L	2.8 mg/L
Copper	23 µg/L	29 µg/L

4. Small Communities – Lawne’s Point

The pond dewatering operation continued throughout the month. Pond #1 was completed in May and Pond 2 #will be complete in June.

D. Energy Management (EM)

1. The solar array construction at North Shore (NS) OPS Building is fully operational. The solar array is producing 35 percent of the building’s power needs.
2. The oxidation catalyst installations on the diesel generators (DG’s) at ATP and YRTP are complete and operational. This effort will help clean the DG exhaust, allow additional hours of DG operation, and allow participation in the demand response program.

E. Electrical & Instrumentation (E&I)

1. Staff assisted a contractor in replacing two Variable Frequency Drive’s (VFD’s) for Centrifuge #2 and #3 back-drive motors at ABTP. The back-drive motor VFD for Centrifuge #3 failed and Centrifuge #2 was showing similar symptoms. Both VFD’s were successfully replaced, tested, and returned to normal service.
2. Staff continues to work with contractors to complete several pressure reducing station (PRS) upgrades in preparation of the CETP closure.
3. Staff worked with a contractor to replace Motor Control Center’s (MCC’s) 300 and 400 at NTP.
4. Staff assisted in successfully testing the new control panels and top end SCADA system integration of Freeman PS.
5. Staff installed the manufacturer’s modified Programmable Logic Controller (PLC) program at the Matthews Main Vacuum PS. The program changes were implemented to eliminate excessive pump run time issues.

F. Water Technology and Research

HRSD initiated pilot testing of a new technology concept that was developed by Xylem and partners. This technology is known as the Taron dynamic membrane and is a radically different approach for membrane bioreactors that uses a temporary layer of mixed liquor itself to achieve the separate of biomass from secondary effluent. The pilot is located at the NTP and is expected to continue for about 2-3 months. This is a very preliminary test of the technology, because the pilot is using NTP aeration tank effluent as the feed, which is an unrealistic condition in terms of mixed liquor filterability, but it is a first step on the way to Xylem constructing a full biological process pilot system with this filtration approach. This technology is relevant to HRSD small community facilities in the future.

G. MOM reporting numbers

MOM Reporting #	Measure Name	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
2.7	# of PS Annual PMs Performed (NS)	4	2	4	3	3	3	4	4	3	2	3	
2.7	# of PS Annual PMs Performed (SS)	5	7	5	5	5	3	4	5	4	2	1	
2.7	# of Backup Generator PMs Performed (Target is 4.6)	7	15	6	17	10	5	7	9	15	3	10	
2.8	# of FM Air Release Valve PMs Performed (NS)	114	42	187	264	182	186	161	43	185	235	233	
2.8	# of FM Air Release Valve PMs Performed (SS)	220	243	200	316	108	152	249	163	309	244	213	
2.9	# of Linear Feet of Gravity Clean (NS) (Target is 2,417 for HRSD)	9,394	3,605	5,057	6,050	1,467	3,320	2,062	4,862	3,404	2,692	1,383	
2.9	# of Linear Feet of Gravity Clean (SS) (Target is 2,417 for HRSD)	10,686	2,217	1,100	6,245	3,687	3,370	1,876	756	759	4,637	7,135	
2.9	# of Linear Feet of Gravity CCTV Inspection (HRSD Target 3,300 LF)	0	0	0	0	0	0	0	0	0	3,589	23,972	

H. Strategic Measurement Data

1. Education and Outreach Events: 0
2. Community Partners: 4
 - a. Chesapeake Bay Foundation-oyster cage maintenance at BHTP for oyster garden project
 - b. Jefferson Lab
 - c. Old Dominion University (ODU)
 - d. United Way Williamsburg House
3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	May 2021
M-1.4a	Training During Work Hours per Full Time Employee (FTE) (526) – Current Month	Hours / FTE	4.29
M-1.4b	Total Training During Work Hours per FTE (526) – Cumulative Year-to-Date	Hours / FTE	25.55
M-2.3a	Planned Maintenance Total Maintenance Hours	Total Recorded Maintenance Labor Hours	27,780.28
M-2.3b	Planned Maintenance – Preventive and Condition Based	% of Total Maintenance Hours	60.89%
M-2.3c	Planned Maintenance - Corrective Maintenance	% of Total Maintenance Hours	15.28%
M-2.3d	Planned Maintenance - Projects	% of Total Maintenance Hours	23.83%
M- 4.1a	Energy Use: Treatment *reported for April 2021	kWh/MG	2,606
M-4.1b	Energy Use: Pump Stations *reported for April 2021	kWh/MG	188
M-4.1c	Energy Use: Office Building *reported for April 2021	kWh/MG	91
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	4

Respectfully submitted,
Steve de Mik
 Director of Operations

TO: General Manager

FROM: Director of Talent Management (TM)

SUBJECT: Monthly Report for May 2021

DATE: June 9, 2021

A. Talent Management Executive Summary

1. Recruitment

a. Summary

New Recruitment Campaigns	8
Job Offers Accepted – Internal Selections	11
Job Offers Accepted – External Selections	9
Average Days to Fill Position	98

b. Interviews were completed for recruitment of Hampton Roads Public Works Academy (HRPWA) summer interns. A total of nine candidates from Virginia Beach Technical Education and Career Center, City of Suffolk Pruden Center and New Horizons Technical Education Center accepted internships in Operations, Information Technology and Talent Management.

2. The following were performed in response to the COVID-19 pandemic:

a. Continued addressing and monitoring suspected COVID-19 cases and potential close contact exposures based on Virginia Department of Health (VDH) guidelines:

Description	May 2021	Total (March 2020- May 2021)
Quarantines due to illness or direct exposure (household or external)	4	329
Work Related Quarantines	0	34
Personal Travel Quarantines	0	52
Confirmed Employee COVID-19 Cases	0	67
Work Related COVID-19 Cases	0	1
Contractor COVID-19 Cases on HRSD Work Sites*	0	11
Vaccine Acknowledgements	309	572

*No direct exposure to HRSD employees

- b. The HRSD's Infectious Disease Preparedness and Response Plan and associated training was updated to incorporate new VDH and Center for Disease Control (CDC) guidelines for fully vaccinated employees.
 - c. Several COVID-19 Temporary Policies were updated based on changes to CDC guidelines including the *Vaccination Policy*, *Temporary Leave Policies* and *Employee Return to Work Following Personal Travel*.
 - d. Twenty-six employees and family members received first dose COVID-19 vaccines at two on-site vaccination clinics. A follow-up clinic for second and additional first dose vaccines is planned in June.
 - e. Work was completed with IT on the COVID-19 Resources SharePoint page.
 - f. Safety Notice #169, *COVID-19 Face Mask Requirements*, was updated based on new CDC guidelines.
3. Benefits and Compensation
- a. 367 employees participated in 12 Virtual Open Enrollment meetings. The meetings addressed questions on current benefits and highlighted three new voluntary benefit offerings, Accidental/Injury, Critical Illness and Hospitalization plans. There were over 400 enrollments over the three plans.
 - b. Additional plan information was provided to voluntary long-term disability benefit program participants. The current benefit will no longer be offered in the 2022/2023 plan year. Staff will evaluate replacement options over the next year.
 - c. HR staff worked with Accounting to implement the \$15 hourly minimum wage.
 - d. Information was provided to the Northeast Ohio Regional Sewerage District representatives on HRSD Compensation policies and market evaluation studies.
4. TM staff worked with the General Manager, Director of Communications, and the Organizational training and Development (OD&T) consultant on recruitment of Diversity Equity and Inclusion (DE&I) Council members.
5. HR staff continued to review and revise the following HR Policies based on recent Virginia legislative changes:
- a. Work with Accounting to review overtime pay policies and payroll set up based on the Virginia Overtime Wage Act
 - b. Continued Substance Abuse Policy revisions
 - c. Work with the Substance Abuse Testing provider to discuss recommendations for updating HRSD's drug testing program and training.

6. Wellness Program

a. Participation

Year Nine Participation Activities	Unit	May 2021	Year to Date (March 2021– February 2022)
Biometric Screenings	Number	4	187
Preventive Health Exams	Number	5	164
Preventive Health Assessments	Number	9	36
Online Health Improvement Programs	Number	4	40
Web-MD Online Health Tracking	Number	32	87
Challenges: W.M. Jordon Team to Team Weight Loss Challenge	Number	50	156
Fit-Bit Promotion	Number	7	15

b. Year 8 Incentives were paid out to employees and spouses.

c. A meeting was held with the Diabetes Prevention Program Provider to launch a new enrollment campaign. Weekly promotional e-mail communications were sent to all employees.

d. The Wellness Specialist presented a health education seminar to Virginia Initiative Plant (VIP), Army Base Treatment Plant (TP) and Chesapeake Elizabeth TP employees and provided requested health education resources.

e. The Wellness Specialist worked on several upcoming projects:

- (1) Updated files for tracking Wellness Program vaccine incentives
- (2) Development of a lunch time cooking demonstration
- (3) Creation of a *Clear the Clutter* challenge

7. Staff worked with the internal auditor to finalize the Succession Planning internal audit report.

8. OD&T

a. Work Continued with Hicks Carter Hicks, the OD&T consultant:

- (1) The six-month Supervisory Knowledge and Information Program (SKIP) began. The program includes the following workshops: *Essential Skills of Communication, Communicating Up, Essential Skills of Leadership, Delegating, Resolving Conflict, Managing Complaints, Supporting Change and Transition.*
- (2) Continued development of a virtual coaching program, including invitation of interested candidates and deployment of a pulse survey for program development.

- (3) Worked with HRSD Leadership on several DE&I actions and strategies as a follow-up to Courageous Conversations.
 - (4) Worked with the Customer Care Division to curate online learning paths for staff members.
- b. The Facilitator team conducted the sixth Leadership and Management Academy (LAMA) workshop, *Covey-7 Habits of Highly Effective People*. Participants continued working on their capstone project. Next month, the *Motivation and Change* workshop will be held.
9. Progress was made on several Apprenticeship Program improvements and the following improvements were initiated:
- a. Supervisor Training Program
 - b. Standard Operating Procedure (SOP) Updates
10. The Safety Division continued respirator fit testing and coordinating medical screenings and onsite physicals to meet Respiratory Protection Program requirements.
11. Mishaps and Work-Related Injuries Status to Date (OSHA Recordable)

	<u>2020</u>	<u>2021</u>
Mishaps	32	11
Lost Time Mishaps	8	4
<i>Numbers subject to change pending HR review of each case.</i>		

12. Safety Division Monthly Activities

Safety Training Classes	21
Work Center Safety Inspections	7
Reported Accident Investigations	0
Construction Site Safety Evaluations	16
Contractor Safety Briefings	7
Hot Work Permits Issued	6
Confined Space Permits Issued/Reviewed	150
Industrial Hygiene Monitoring Events	3

13. Staff participated in the following external activities:

- a. Water Environment Federation (WEF) DE&I Focus Group
- b. Virginia Water Environment Association (VWEA)/ American Water Works Association (AWWA) DE&I Task Force meeting.
- c. VWEA Education and Development Committee meeting
- d. Monthly Hampton Roads Society of Human Resources Management (HR-SHRM) Board of Directors meeting

B. Monthly Strategic Planning Metrics Summary

1. Education and Outreach Events: (1)
 - a. 5/28/2021 - Hampton Roads Public Works Academy (HRPWA) Intern Interviews
2. Community Partners: (1)
 - a. HRPWA
3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	May 2021
M-1.1a	Employee Turnover Rate (Total)	Percentage	0.73%
M-1.1b	Employee Turnover - Service Retirements	Percentage	0%
M-1.4a	Total Training Hours Per Full Time Employee (17)	Total Training Hours/ FTE	5.15
M-1.4b	Total Training During Work Hours Per Full Time Employee (17) – Cumulative Fiscal Year-to-Date	Hours / FTE	33.23
M-5.2	Educational and Outreach Events	Number	1
M-5.3	Community Partners	Number	1

Respectfully submitted,
Paula A. Hogg
Director of Talent Management

TO: General Manager
FROM: Director of Water Quality (WQ)
SUBJECT: Monthly Report for May 2021
DATE: June 10, 2021

A. General

Pretreatment and Pollution Prevention (P3) division staff assessed one civil penalty this month.

Culpepper Radiator Service, Incorporated – Portsmouth

An Enforcement Order was issued to Culpepper Radiator Service, Incorporated in May 2021 for a series of technical violations associated with the #1 batch tank sample point. The Enforcement Order contained an invoice for a \$3,000 Civil Penalty. The permittee exceeded the monthly average permit limit for copper in October 2020 and December 2020 and exceeded the daily max permit limit for copper in February 2021, resulting in a chronic occurrence. The permittee also violated the daily max for nickel in February 2021. A Show Cause meeting was held on March 25, 2021, in which the permittee explained the causes of the technical violations and what steps were being taken to prevent the recurrence of copper and nickel exceedances.

The permittee stated that the exceedances were due to employee error and their coagulation pretreatment chemical not properly binding with the metals in the wastewater. The permittee no longer employs the individual responsible for one of the violations and has changed its pretreatment chemical which appears to have addressed the coagulation issue. The Enforcement Order was accepted, and the Civil Penalty was paid in full on May 18, 2021.

B. Quality Improvement and Strategic Activities

1. The Sustainability Environment Advocacy (SEA) Group reported no activities for the month of May.
2. The WQ Communication Team continues monitoring and measuring inter-divisional communication issues within the WQ Department.

C. Municipal Assistance

HRSD provided sampling and analytical services to Frederick County, Northumberland County, Spotsylvania County, Westmoreland County, and the Town of Lawrenceville to support monitoring required for their respective Virginia Pollution Discharge Elimination System (VPDES) permits.

D. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 0
2. Community Partners: 4
 - a. American Red Cross
 - b. Clean the Bay Day
 - c. Hampton Roads Planning District Commission
 - d. Three Rivers Health District
3. Odor Complaints
 - May 14 – York River Treatment Plant received an odor complaint from the nearby Sommerville neighborhood. Plant operations responded and determined the source of the complaint was from the process of taking a digester out of service for maintenance, (coatings work) during which digester gas was released. This, coupled with worst-case meteorological (wind) conditions prompted plant operations to immediately stop the maintenance effort to preclude any further release of gas until winds were favorable for the maintenance activity. The coatings work was successfully completed, and the digester placed back into service with no other complaints.
4. Monthly Metrics

Item #	Strategic Planning Measure	Unit	May 2021
M-1.4a	Training During Work Hours Per Full Time Employee (118) (Current Month)	Total Hours / # FTE	7.82
M-1.4b	Total Training During Work Hours Per Full Time Employee (118) (Cumulative Fiscal Year-to-Date)	Total Hours / # FTE	51.75
M-2.5	North Shore/South Shore Capacity Related Overflows	# within Level of Service	0
M-3.1	Permit Compliance	# of Exceedances: # of Permitted Parameters	20:55,806
M-3.2	Odor Complaints	#	1
M-3.4	Pollutant Removal	Total Pounds Removed	167,633,415
M-3.5	Pollutant Discharge	% Pounds Discharged/ Pounds Permitted	21%
M-5.2	Educational and Outreach Events	#	0

Item #	Strategic Planning Measure	Unit	May 2021
M-5.3	Community Partners	#	4
	Average Daily Flow	Total MGD for all Treatment Plants	123.96
	Pretreatment Related System Issues	#	0

Respectfully submitted,
James Platt, Ph.D
 Director of Water Quality



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 audits, and the status of current management action plan (MAP) monitoring.

I. Projects in Process

Succession Planning

- **Upcoming Tasks (May 2021)**
 - Finalized Audit Report with Management

WIFIA Compliance

- **Tasks Completed (May 2021)**
 - Drafted and shared project deliverables (e.g. checklists and requirements database)
 - Conducted follow-up meetings as necessary
- **Upcoming Tasks (June 2021)**
 - Conduct follow-up meetings as necessary
 - Refine/finalize deliverables based on Management feedback
 - Continue drafting remaining checklists

Emergency Repairs

- **Tasks Completed (May 2021)**
 - Scheduled follow-up process understanding meetings
 - Completed draft flowcharts and risk and control matrices
 - Developed and presented Fieldwork Audit Program
- **Upcoming Tasks (June 2021)**
 - Send initial documentation requests
 - Begin Fieldwork Procedures

Model 3 Billing

- **Upcoming Tasks (June 2021)**
 - Schedule and conduct scope planning meeting with HRSD Leadership
 - Schedule and conduct entrance meeting
 - Begin planning phase procedures

Business Continuity and Disaster Recovery (Audit Fieldwork Complete/ Management Response in Process)

- SC&H is working with HRSD process owners and management to finalize the audit report, incorporating management action plans.

II. Management Action Plan (MAP) Monitoring

SC&H is performing on-going MAP monitoring for internal audits previously conducted for HRSD. SC&H begins MAP follow-up approximately one year following the completion of each audit and will assess bi-annually.

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	Report Date	Next Follow-up	Recommendations		
			Closed	Open	Total
D&C: CIP Project Management	5/11/16	Closed	13	0	13
Biosolids Recycling	10/8/16	Pending Permit	7	1	8
HR Benefits	11/22/16	Closed	15	0	15
Inventory	4/20/17	Closed	5	0	5
Procurement/ ProCard	8/23/17	In process*	8	3	11
Engineering Procurement	4/20/18	Closed	8	0	8
Corporate Governance: Ethics Function	3/21/18	In process*	3	2	5
Treatment Plant Operations	10/15/18	July 2021	5	4	9
Customer Care Division	7/26/19	December 2022	2	2	4
Safety Division	9/12/19	February 2022	0	3	3
Permitting	2/4/20	In process*	0	2	2
Payroll	3/27/20	In process*	0	3	3
Pollution Source Control	6/2/20	January 2022	3	5	8
SWIFT Program	2/24/2021	February 2022	0	12	12
Fleet Services	2/24/2021	February 2022	0	17	17
Totals			69	54	123

*Indicates follow-up is ongoing and have been sent to Management for comment.

Annual Metrics														
Item	Strategic Planning Measure	Unit	Target	FY-10	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20
M-1.1a	Employee Turnover Rate (Total)	Percentage	< 8%	5.63%	4.09%	6.64%	7.62%	8.22%	9.97%	6.75%	6.66%	9.99%	6.63%	6.78%
M-1.1b	Employee Turnover Rate within Probationary Period		0%		2.22%	8.16%	14.58%	9.68%	0.66%	0.13%	0.90%	1.01%	2.10%	3.08%
M-1.2	Internal Employee Promotion Eligible	Percentage	100%		59%	80%	70%	71%	64%	69%	68%	85%	85%	63%
M-1.3	Average Time to Fill a Position	Calendar Days	< 30		70	60	52	43.76	51	56	67	67	66	60
M-1.4	Training Hours per Employee - cumulative fiscal year-to-date	Hours	> 40		30.0	43.8	37.5	35.9	42.8	49.0	48.4	41.1	40.9	39.3
M-1.5a	Safety OSHA 300 Incidence Rate Total Cases	# per 100 Employees	< 3.5	6.57	6.15	5.8	11.2	5.07	3.87	7	5.5	5.7	4.1	4.8
M-1.5b	Safety OSHA 300 Incidence Rate Cases with Days Away	# per 100 Employees	< 1.1	0.74	1.13	1.33	0.96	1.4	0.82	1.9	1	1.1	0.8	1.34
M-1.5c	Safety OSHA 300 Incidence Rate Cases with Restriction, etc.	# per 100 Employees	< 0.8	3.72	4.27	2.55	4.5	2	1.76	3.6	2.8	2.8	1.8	1.6
M-2.1	CIP Delivery - Budget	Percentage			113%	96%	124%	149%	160%	151%	156%	160%	170%	170%
M-2.2	CIP Delivery - Schedule	Percentage			169%	169%	161%	150%	190%	172%	173%	167%	159%	159%
M-2.3a	Total Maintenance Hours	Total Available Mtc Labor Hours Monthly Avg			16,495	22,347	27,615	30,863	35,431	34,168	28,786	28,372	31,887	29,596
M-2.3b	Planned Maintenance	Percentage of Total Mtc Hours Monthly Avg			20%	27%	70%	73%	48%	41%	43%	44%	59%	59%
M-2.3c	Corrective Maintenance	Percentage of Total Mtc Hours Monthly Avg			63%	51%	12%	10%	18%	25%	25%	24%	18%	19%
M-2.3d	Projects	Percentage of Total Mtc Hours Monthly Avg			18%	22%	20%	18%	32%	34%	32%	32%	27%	25%
M-2.4	Infrastructure Investment	Percentage of Total Cost of Infrastructure	2%		8.18%	6%	6%	4%	7%	7%	5%	5%	4	5%
M-3.3	Carbon Footprint	Tons per MG Annual Total			1.61	1.57	1.47	1.46	1.44	1.45	1.58	1.66	1.58	1.7
M-3.6	Alternate Energy (Incl. Green Energy as of FY19)	Total KWH			0	0	0	5,911,289	6,123,399	6,555,096	6,052,142	5,862,256	47,375,940	56,473,800
M-4.1a	Energy Use: Treatment	kWh/MG Monthly Avg			2,473	2,571	2,229	2,189	2,176	2,205	2,294	2,395	2,277	2,408
M-4.1b	Energy Use: Pump Stations	kWh/MG Monthly Avg			197	173	152	159	168	163	173	170	181	174
M-4.1c	Energy Use: Office Buildings	kWh/MG Monthly Avg			84	77	102	96	104	97	104	104	95	102
M-4.2	R&D Budget	Percentage of Total Revenue	> 0.5%		1.0%	1.4%	1.0%	1.3%	1.0%	0.8%	1.3%	1.4%	1.8%	1.3%
M-4.3	Total Labor Cost/MGD	Personal Services + Fringe Benefits/365/5-Year Average Daily Flow		\$1,028	\$1,095	\$1,174	\$1,232	\$1,249	\$1,279	\$1,246	\$1,285	\$1,423	\$1,348	\$1,487
M-4.4	Affordability	8 CCF Monthly Charge/ Median Household Income	< 0.5%		0.48%	0.48%	0.41%	0.43%	0.53%	0.55%	0.59%	0.60%	0.64%	0.71%
M-4.5	Total Operating Cost/MGD	Total Operating Expense/ 365/5-Year Average Daily Flow		\$2,741	\$2,970	\$3,262	\$3,316	\$3,305	\$3,526	\$3,434	\$3,592	\$3,959	\$3,823	\$4,048
M-5.1	Name Recognition	Percentage (Survey Result)	100%	67%	71%	N/A	62%	N/A	60%	N/A	N/A	53%	N/A	53%
M-5.4	Value of Research	Percentage - Total Value/HRSD Investment			129%	235%	177%	149%	181%	178%	143%	114%	117%	143%
M-5.5	Number of Research Partners	Annual Total Number			42	36	31	33	28	35	15	20	26	32
	Rolling 5 Year Average Daily Flow	MGD		157.8	155.3	152	154.36	155.2	151.51	153.09	154.24	152.8	152.23	149.84
	Rainfall	Annual Total Inches		66.9	44.21	56.21	46.65	46.52	51.95	54.14	66.66	49.24	53.1	48.49
	Billed Flow	Annual Percentage of Total Treated		71.9%	82.6%	78%	71%	73%	74%	72%	73%	76%	72%	78%
	Senior Debt Coverage	Net Revenue/Senior Annual Debt Service	> 1.5	2.51%	2.30%	2.07%	1.88%	1.72%	1.90%	2.56%	3.10%	3.59%	4.84%	5.80%
	Total Debt Coverage	Net Revenue/Total Annual Debt	>1.4	1.67%	1.67%	1.46%	1.45%	1.32%	1.46%	1.77%	1.93%	2.03%	2.62%	2.81%

*to be reported

Monthly Updated Metrics															FY-21	FY-21
Item	Strategic Planning Measure	Unit	Target	FY-10	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20	Apr-21	May-21
	Average Daily Flow	MGD at the Plants	< 249		136	146.5	158.7	156.3	153.5	155.8	153.5	145.8	152.7	141.5	143.1	124.0
	Industrial Waste Related System Issues	Number	0		3	6	6	6	2	4	7	4	7	1	0	0
	Wastewater Revenue	Percentage of budgeted	100%		97%	96%	98%	107%	102%	104%	103%	103%	104%	104%	102%	104%
	General Reserves	Percentage of Operating and Improvement Budget	75% - 100%		72%	82%	84%	92%	94%	95%	104%	112%	117%	119%	107%	109%
	Accounts Receivable (HRSD)	Dollars (Monthly Avg)			\$17,013,784	\$17,359,488	\$18,795,475	\$20,524,316	\$20,758,439	\$22,444,273	\$22,572,788	\$22,243,447	\$23,900,803	\$27,335,100	\$31,888,280	\$36,752,546
	Aging Accounts Receivable	Percentage of receivables greater than 90 days			21%	20%	18%	19%	21%	20%	18%	18%	17%	18%	34%	32%
M-2.5	Capacity Related Overflows	Number within Level of Service	0		25	1	30	5	11	16	6	10	5	2	0	0
M-3.1	Permit Compliance	# of Exceedances to # of Permitted Parameters	0		12:55,045	1:51995	2:52491	1:52491	2:52491	2:52,491	9:53236	9:58338	2:60879	9:60879	20:50733	20:55806
M-3.2	Odor Complaints	Number	0		6	2	7	11	5	9	7	6	9	15	3	1
M-3.4	Pollutant Removal (total)	Total Pounds Removed			178,163,629	171,247,526	176,102,248	185,677,185	180,168,546	193,247,790	189,765,922	190,536,910	187,612,572	182,759,003	152,752,514	167,633,415
M-3.5	Pollutant Discharge (% of permitted)	Pounds Discharged/Pounds Removed	< 40%		25%	22%	25%	22%	22%	20%	22%	17%	17%	17%	21%	21%
M-5.2	Educational and Outreach Events	Number			302	184	238	322	334	443	502	432	367	256	16	13
M-5.3	Number of Community Partners	Number			280	289	286	297	321	354	345	381	293	230	12	14

EFFLUENT SUMMARY FOR MAY 2021

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	TKN mg/l	NH3 mg/l	CONTACT TANK EX
ARMY BASE	7.50	42%	5	6.8	1	2	0.26	0.53	2.9	4.4	NA	NA	3
ATLANTIC	28.66	53%	16	10	4	1	NA	NA	NA	NA	NA	NA	10
BOAT HARBOR	10.70	43%	8	5.2	2	1	0.44	0.42	31	20	NA	NA	5
CENT. MIDDLESEX	0.010	40%	<2	2.5	<1	1	NA	NA	NA	NA	NA	NA	NA
CHES-ELIZ	9.75	41%	15	7.7	2	2	0.47	1.1	32	30	NA	NA	10
JAMES RIVER	11.60	58%	6	3.3	1	1	0.32	0.35	8.1	6.8	NA	NA	0
KING WILLIAM	0.070	70%	<2	<1.0	NA	<1	0.043	0.034	1.7	2.5	0.35	NA	NA
NANSEMOND	14.62	49%	3	3.7	2	1	0.57	0.62	3.9	4.8	NA	NA	2
SURRY, COUNTY	0.038	59%	7	1.0	NA	NA	NA	NA	NA	NA	0.87	NA	0
SURRY, TOWN	0.044	74%	3	9.3	NA	47	NA	NA	NA	NA	1.0	<0.10	NA
URBANNA	0.054	54%	3	8.9	6	6	1.3	0.70	12	11	NA	1.79	NA
VIP	22.34	56%	1	2.5	1	<1	0.50	0.40	2.3	3.2	NA	NA	7
WEST POINT	0.351	58%	20	8.8	<1	1	3.8	2.5	20	14	NA	NA	0
WILLIAMSBURG	7.54	34%	3	3.1	8	2	0.76	0.55	2.9	4.7	NA	NA	2
YORK RIVER	10.68	71%	3	0.88	1	2	0.37	0.21	5.2	5.3	NA	NA	3
	<u>123.96</u>												

	% of Capacity
North Shore	49%
South Shore	50%
Small Communities	57%

Tributaries	Tributary Summary					
	Annual Total Nitrogen			Annual Total Phosphorus		
	Discharged	Operational		Discharged	Operational	
	YTD	Projection CY21		YTD	Projection CY21	
	%	Lbs	%	%	Lbs	%
James River	32%	3,695,024	81%	27%	247,369	78%
York River	39%	258,575	90%	29%	15,561	81%
Rappahannock	27%	NA	NA	6%	NA	NA

Permit Exceedances: Total Possible Exceedances, FY21 to Date: 20:55,806
Pounds of Pollutants Removed in FY21 to Date: 167,663,415
Pollutant Lbs Discharged/Permitted Discharge FY21 to Date: 21%

	Rainfall (inch)		
	North Shore (PHF)	South Shore (ORF)	Small Communities (FYJ)
Month	1.75"	2.26"	2.88"
Normal for Month	3.94"	4.07"	4.26"
Year to Date Total	17.47"	17.17"	19.76"
Normal for YTD	18.33"	16.76"	18.17"

AIR EMISSIONS SUMMARY FOR MAY 2021

MHI PLANT	No. of Permit Deviations below 129 SSI Rule Minimum Operating Parameters								Part 503e Limits		
	Temp 12 hr ave (F)	Venturi(s) PD 12 hr ave (in. WC)	Precooler Flow 12 hr ave (GPM)	Spray Flow 12 hr ave (GPM)	Venturi Flow 12 hr ave (GPM)	Tray/PBs Flow 12 hr ave (GPM)	Scrubber pH 3 hr ave	Any Bypass Stack Use	THC Mo. Ave (PPM)	THC DC (%)	BZ Temp Daily Ave Days >Max
ARMY BASE	0	2	0	0	0	0	0	0	61	97	0
BOAT HARBOR	0	0	0	n/a	0	0	0	0	5	92	0
CHES-ELIZ	0	0	0	0	0	0	0	0	15	95	0
VIP	0	1	0	n/a	0	0	0	0	30	100	0
WILLIAMSBURG	0	0	0	n/a	0	0	0	4	35	98	0

ALL OPERATIONS

DEQ Reportable Air Incidents:	0
DEQ Request for Corrective Action:	0
DEQ Warning Letter:	0
DEQ Notice of Violation:	0
Other Air Permit Deviations:	0
Odor Complaints Received:	1
HRSD Odor Scrubber H2S Exceptions:	6

AGENDA ITEM 21.e. – June 22, 2021

Subject: Berkley Trunk Sewer Section M Emergency Gravity Sewer Replacement
Emergency Declaration

Recommended Actions: No action is required. Information Only

CIP Project: VP019500

Brief: On May 20, 2021, staff reported a deep sinkhole at the State Street Pump Station. The sinkhole had undermined a large concrete slab that supports piping and appurtenances from a 12-inch bypass pump. After further investigation, a CCTV contractor found the cause of the sinkhole: the 30-inch ductile iron gravity sewer pipeline running under the concrete slab had collapsed. While flow was still getting to the station, a large amount of sand and grit was also being deposited into the station wet well. Flow from the station runs through the Elizabeth River Crossing to the Downtown Norfolk area raising concerns that the material entering the wet well may settle in the river crossing.

An emergency declaration was authorized on May 26, 2021.

This emergency declaration was to utilize Bridgeman Civil, Inc., to establish required traffic control, provide bypass pump and piping for the influent gravity sewer, provide CCTV, remove and replace concrete slab, piping and appurtenances, replace the failed section of pipe, line the remaining sections of pipe from the pump station to the influent manhole, and replace the manhole and utilize Brown and Caldwell, to provide design, construction administration, and construction inspection while Bridgeman Civil, Inc. completes the repair.

The cost of the work is estimated to be \$750,000.